



Massachusetts Institute of Technology
Sloan School of Management

Business Strategy and the Role of IT¹
15.571

Spring 2012

Course Leader: Professor Jeanne W. Ross
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Class time: Mondays 4:00-7:00 PM

Class Location: E51-149

Course website: <http://stellar.mit.edu/S/course/15/sp12/15.571/>

Office Hours By appointment

Teaching Assistant (TA): Eugene Min
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Texts:

1. A required Course Pack available at Copy Tech in E52 (basement). *need to get*
2. Optional text (this book summarizes much of the research base for this course—it is not required): *Enterprise Architecture as Strategy: Creating a Foundation for Business Execution*, J. Ross, P. Weill, and D. Robertson, Harvard Business School Press, 2006, ISBN 1-59139-839-8. *have on kindle*

¹ This course is only open to masters' level students unless permission is granted by the professor.

COURSE DESCRIPTION

In a digital economy, information technology and business strategy are inextricably linked. As a result, every manager must think strategically about how to identify the opportunities that IT creates and how to manage it effectively. This course covers what every senior manager needs to know about using IT to define and execute business strategy. Based primarily on research conducted at MIT Sloan's Center for Information Systems Research (CISR), this course is intended to make you a more effective general manager in an increasingly global and fast-paced business environment.

Only a few firms (e.g. Amazon, USAA, 7-Eleven Japan) use IT strategically. At most firms, IT is a strategic liability. We will explore, through case studies, in-class exercises, and executive in-class visits, what firms must do to convert this liability into an asset. Students will then apply key concepts to a project they will complete for a CISR sponsor. Case studies will explore strategies at 7-Eleven Japan, Southwest Airlines, Supervalu, Trinity Health, and UPS. Invited guests speakers include the CIOs of CBS, CVS, Akamai, and Cr dit Agricole Investment Bank, as well as business executives at USAA, IBM, AECOM, Trinity Health, Grupo Plenia Locatel, and The Boston Consulting Group.

This course neither assumes nor requires a technical background. In fact, a mix of technical and non-technical participants offers a valuable opportunity for students to learn from one another. In many firms, a lack of mutual understanding between business and IT executives limits the firm's ability to use IT strategically. This course offers an opportunity for both parties to gain experience communicating with managers with very different knowledge and perspectives.

COURSE GOALS AND GRADES

- Understand why some firms are better able to convert their IT investments into business value and identify steps to ensure evidence-based decision making
- Understand how to design enterprise-wide business processes and learn to debate alternative business architectures and their implications
- Prepare managers to design and lead technology-enabled organizational change
- Enable managers to map a road to sustained business success in a digital economy

Grades will be determined as follows:

- 50% on your weekly in-class assignments—this works out to be 5% for each of the first 10 (of a total of 11) classes. These assignments will require individual preparation and will be completed in group discussions in class. In some cases, your grade for the day will be based on your contribution to group discussion (as assessed by members of your group); in other cases, your grade will be based on the content of the assignment you hand in.
- 50% on your semester-long group project—half of this grade (25%) is comprised of the sponsor's assessment; the other half (25%) comes from your presentation to the class. Details of the project assignment—and descriptions of project proposals—are available on Stellar.
- There will be no final exam.

COURSE NORMS AND EXPECTATIONS

This is an experiential course, thus class attendance (there are only 11 classes!) is mandatory. It is also essential that you do the readings and assignments for each class. We will post on Stellar specifics about each session's discussion topics at least one week in advance. This will include discussion questions for case studies, as well as details of what you will hand in. This year, I am taking a fresh approach to the class design. Please feel free to offer suggestions at any time to Eugene, Kate or myself as to how we can improve the experience and the learning.

Please observe the following norms and expectations:

- Arrive on time. We'll be assigning you to different groups each class so that, hopefully, you can work with all your classmates over the course of the semester. To facilitate the logistics of the group work, we'll be specifying where you will sit each day as you enter the classroom.
- Bring your name card to every class, as we will be hosting a number of guest speakers.
- Professional & ethical behavior is expected at all times. In particular, treat everyone in the room with respect.
- Long, rambling comments detract from the class. Please make your point or ask your question and then allow an opportunity for others to agree or challenge your point.
- Turn off cell phones and disconnect computers from the Internet, unless needed for group research.
- Have fun! This is an incredibly exciting topic and the readings, exercises, and speakers are designed to highlight what's happening in the business world and the challenges that await you when you leave the classroom. Ponder the issues.

TENTATIVE COURSE OUTLINE

Monday, February 13: Succeeding in a Digital Economy

In this introductory session, we will explore the dilemma of firms born prior to the emergence of the digital economy and now trying to succeed in it. Whereas companies like Google and Amazon were 'born on the web,' many other companies (think IBM, PepsiCo, Bank of America, and McGraw-Hill) developed their corporate cultures and core competencies in a very different economy. The success of these "bricks and mortar" firms is important, not just to the firms themselves, but to consultants, suppliers, and partners (not to mention employees and investors). But many firms are challenged to identify and respond to the opportunities that digital companies seize naturally. We will spend part of the class in groups to consider the implications of the IT and information-economy for well-established, successful companies. In doing so, the class will focus on three successful companies: Wal-Mart, News Corporation (Rupert Murdoch's publishing and communications empire), and ING (global financial services). We will then discuss some of the key concepts important to understanding the role of IT in formulating and executing business strategy.

Readings:

- Article: Manjoo, Farhad. "The Great Tech War." *Fast Company*, October 19, 2011.
- Chapter 1: "IT Savvy: What Top Executives Must Know to Go from Pain to Gain"

Tuesday, February 21: IT as a Platform for Doing Business

An important theme of this course is the critical role of a digitized platform—a coherent set of business processes, data, and underlying technology—in enabling efficient and reliable core transactions. The digitized platform provides a stable base for growth in a digital economy. It is the source of business agility. In this session, we explore how companies define, build, and leverage digitized platforms. The Swiss Re briefing helps to define the digitized platform. The class will examine the digitized platforms of two other companies: 7-Eleven Japan and UPS, two companies who have relied on platforms to deliver extraordinary growth, innovation, and profitability. We will examine what enabled that success and what they must do going forward to sustain business performance. Then Stuart McGuigan, CIO of

CVS, will take the floor to discuss the challenges of building a digitized platform for efficiency, agility, and business innovation.

Readings

- CISR Case Study: “7-Eleven Japan Co., Ltd., Reinventing the Retail Business Model”
- CISR Case Study: “United Parcel Service: Delivering Packages and E-Commerce Solutions”
- CISR Briefing: “Building a Global Operating Platform at Swiss Reinsurance Company”

Monday, February 27: Defining and Delivering an Operating Model

Before a firm can build a digitized platform, management must clarify the firm’s operating model. Otherwise, business and IT leaders will either be unable to design a platform or the platform is unlikely to support business initiatives. But clarifying an operating model, particularly in volatile industries, is fraught with uncertainty and risks. Management often fails to articulate a long-term vision or does not commit to it. In this session, we discuss how successful firms define an operating model that can generate long-term business benefits. We will examine the operating model at PepsiAmericas and discuss how it is similar to—and different from—that of UPS and 7-Eleven Japan. Then we will watch a video of Tesco and break into groups to discuss the implications of the operating model decision.

Readings:

- CISR Briefing: “Managing the IT-Enabled Innovation Portfolio”
- CISR Case Study: “PepsiAmericas: Building an Information Savvy Company”
- CISR Briefing: “Forget Strategy: Focus IT on Your Operating Model”
- Optional: Chapters 1-3 from “Enterprise Architecture as Strategy” (can skip “Forget Strategy” briefing)

Monday, March 5: Business Transformation

Articulating an operating model will help a firm define needed capabilities, but then the firm must actually develop the capabilities. And that is a long-distance journey. Invariably, when a firm adopts a new operating model, it is embarking on a business transformation. This transformation involves a change in IT capabilities. More importantly, it involves significant business changes. In this session, we study the nature of the transformation journey. To do so, we’ll engage in a discussion of transformations at Southwest Airlines and IBM. Then Pat Toole, General Manager, Maintenance and Technical Support Services at IBM Global Technology Services organization, will share his reactions to our discussion and offer his insights on the challenges of IT-enabled business transformations.

Readings

- CISR Briefing: “Maturity Matters: How Firms Generate Value From Enterprise Architecture”
- CISR Case Study: “Building Business Agility at Southwest Airlines”
- CISR Case Study: “IBM: Building the IT Function for a Global Business”
- Optional: Chapters 4-5 in “Enterprise Architecture as Strategy” (can skip “Maturity Matters” briefing)

Monday, March 12: Prioritizing and Funding Business Change Projects

Companies face many opportunities to invest in technology, for example, to create new digital products, to enhance customer services, to reengineer internal business processes, to provide decision making data, and to support business analytics. People throughout a firm have ideas that require IT support. But limited time and money means that management will have to make tough decisions about what investments they will make. This is a critical decision and it requires effective IT governance. In this session, we will explore the challenge of IT governance. A group exercise will offer an opportunity to experience the challenge of making IT investment decisions. Then we'll discuss how USAA goes about making governance decisions. Finally, Cynthia Coombs, SVP, Business Solutions at USAA, will share her perspectives on IT governance at USAA.

Readings

- CISR Case Study: "USAA: Organizing for Innovation and Superior Customer Service"
- Article: Ward, John, Elizabeth Daniel, and Joe Peppard. "Building Better Business Cases for IT Investments." *MIS Quarterly Executive*. 7. no. 1 (2008): 1-15.

March 19: SIP Week**March 26: Spring Break****Monday, April 2: Working Smarter on a Digitized Platform**

Building a digitized platform does not guarantee business success. More important than the platform is how the company uses it. MIT CISR research has found that companies generating the most value from their platforms are those that focus on what we call, "working smarter." Working smarter involves putting information into the hands of decision makers at all levels of the firm and then providing clear business rules so that decision makers use the data effectively. In this session we will examine how two companies, Protection 1 and Trinity Health, have approached working smarter. Tom Centlivre, Director of Strategic Planning at Trinity Health, will share his reactions to our discussion. We will then hear from the CIO of Crédit Agricole's Investment Bank and his business partner at BCG to learn how corporate leaders and consultants partnered to ensure an effective business transformation. After class, BCG will host a reception for all students to exchange ideas with our guest speakers.

Readings:

- Article: Davenport, Thomas. "Make Better Decisions," *Harvard Business Review*, November 2009.
- CISR Case Study: "Trinity Health: Using Digitization, Unification, and Data Analytics to Tame the Quality, Cost, and Accessibility Problems of Healthcare"
- CISR Case Study: "Protection 1" (will be posted to Stellar)

Monday, April 9: Business Impacts of Social Media

On a personal level—and on the political scene—the impacts of social media are quite apparent. But the impact of social media on businesses—their internal business processes and relationships with customers—is still emerging. In this session, we'll examine the impact of social media in a number of ways. We'll start with a discussion of the gamification opportunities you will research prior to class. You'll be asked to identify the potential, and the risks, of gamification for consumer-oriented

companies. Then we'll discuss the SUPERVALU case and consider the potential of social media to support business transformations. We'll finish with a discussion of the travel industry and how social media is changing industry dynamics.

Readings:

- CISR Case Study: "SUPERVALU" (will be posted to Stellar)
- Video: TED talk on gamification and article on Wal-Mart's gamification
- CISR Briefing: "How Social Media Can Disrupt Your Industry: A Case Study in the Travel Sector"

Monday, April 23: Digital Business Models

Established businesses are finding that doing business on the web can require an entirely different business model from the model that enabled success off-line. They need to recognize what they will do to maximize the customer experience and also consider what they can charge for—and what they must do to simply keep customers coming. In this session, we will examine digital business models—how companies can define the way they'll succeed in doing business on the web. We'll look at examples of successful business models and analyze the business models of companies you already know. Then we'll allot class time to prep your group presentation next week on IT technology services.

Readings

- CISR Briefing: "How LexisNexis Strengthened Its Digital Business Model"
- CISR Briefing: "What Is Your Digital Business Model?"
- Individualized background reading on assigned technology services topic

Monday, April 30: Models for Delivering Technology Services

The IT unit in companies has long been tasked with delivering efficient and effective technology capabilities and solutions. But companies' reliance on internal IT units for technical expertise is shifting—and in some cases, diminishing. In this session, we examine the innovations and business models that are fundamentally transforming how IT services are delivered in companies. Small groups will share their understanding of important developments in the delivery of IT services in companies. Then two executives, Jim Walsh, CTO of AECOM, and Doug Rousso, CIO of CBS, will debate the future of the IT unit and the provisioning of technology services in companies.

Readings:

- CISR Briefing: "The IT Unit of the Future: New Approaches to Run and Build"
- CISR Briefing: "The IT Unit of the Future: Creating Strategic Value From IT"
- CISR Briefing: "How Other CXOs Think CIOs Should Spend Their Time"
- CISR Briefing: "The Future of the CIO"
- Optional: Chapter 7 in "Enterprise Architecture as Strategy"

Monday, May 7: Globalization and IT

In this session we will reference the material in the class to consider the needs of a successful Venezuelan company attempting to globalize. Ari Levy, an executive at Grupo Plenia Locatel and a Sloan MBA, will visit class to discuss his company's options for global growth and hear your ideas.

Then Kumud Kahlia, CIO at Akamai, will share his thoughts on the discussion and provide some summary thoughts on how technology, and companies like Akamai, are changing IT and businesses.

Reading:

- CISR Case Study: “Grupo Plenia Locatel Case Study” (will be posted to Stellar)

Monday, May 14 (Last class): Project Presentations

The last class session will be devoted to presentations of class projects. Each team will have less than 15 minutes to highlight key learning and recommendations, so the challenge will be to give the class the best possible understanding of the project and findings in a very short time. We will have a reception after class to celebrate the term.

Michael E Plasmeier

From: Jeanne W Ross <jross@MIT.EDU>
Sent: Tuesday, February 07, 2012 5:04 PM
To: Jeanne W Ross
Subject: [15.571] Welcome Message: 15.571 Business Strategy and the Role of IT

Follow Up Flag: Follow up
Flag Status: Completed

To: Enrollees in 15.571 Business Strategy and the Role of IT

Welcome to 15.571, there's so much going on in IT! And we'll do our best to cover the landscape and see why companies find that, even as digital natives descend on the business world, companies' data, systems, and processes often constitute a strategic liability.

We have redesigned this course to help you experience the challenges that corporate executives face as they try to use information and information technologies to gain some kind of competitive advantage. We think the result will be provocative and fun. Over the course of the semester, we'll examine how over twenty successful companies are positioning themselves for the digital economy. Nine corporate executives will visit us to share their strategies and insights. And 17 companies have submitted project proposals so that you can apply your knowledge and creativity to helping them address an IT-related issue in their companies. You will love working with these companies.

We welcome those with IT experience and those without. It makes for rich classroom discussion. But the success of the course depends on you. It is essential that you come to class prepared to explore the issues. That means reading the cases, completing the exercises, and being prepared to defend your positions. And this all starts next Monday.

Eugene Min, the TA for 15.571, will send you Monday's assignment shortly. He will also post the readings and the assignment on Stellar. Be sure to read the articles and spend some time browsing the web for relevant material. We'll be examining what Wal-Mart, News Corporation, and ING can learn from Google, Amazon, Apple, and Facebook.

If you have any questions, don't hesitate to contact me. I look forward to meeting you on Monday.

Warm regards,

Jeanne Ross

617-253-9461

jross@mit.edu

The 2 IT classes seem similar...

Michael E Plasmeier

From: Eugene Min <emaileugenemin@gmail.com>
Sent: Tuesday, February 07, 2012 7:49 PM
To: eugene.min@sloan.mit.edu
Subject: RE: Your 15.571 Week #1 Assignment - (News Corporation)

Welcome everyone to 15.571. I'm Eugene Min, a 2012 MBA, and I'll be your TA for this class this semester.

**YOUR COMPANY IS NEWS CORPORATION

For our first class, read the Fast Company article and the chapter from IT Savvy (both available on Stellar). These readings provide some background on how "born on the web" companies are competing and what established firms are trying to do to leverage the opportunities created by information technology. Your assignment is to think about the challenges faced by long-established companies in adjusting to the challenges of the digital economy. We will focus on three successful companies in this discussion.

To prepare for the discussion, you should learn about your assigned company on its website—at a minimum, read the CEO's letter in the company's annual report and consider the following questions:

- 1) What can your assigned company learn from the success of Google, Amazon, Apple, and Facebook?
- 2) What important strategies or tactics do you think your assigned company must pursue in order to succeed in the digital economy (feel free to include things they are already doing)?

In class you will be asked to discuss these two questions, and you will hand in a one-page summary of three strategies that you think are critical to your assigned company. In addition, your group may be called on in class to share those strategies.

*hmm News Corp
lots of divisions...*

We are looking forward to a lively discussion! See you Monday.

Paywall

social w/ News - Wash Po social reader

Avoid another myspace

Kindle, etc content

Unique content

-Eugene

Michael E Plasmeier

From: email Eugenemin@gmail.com on behalf of Eugene Min <eugene.min@sloan.mit.edu>
Sent: Tuesday, February 07, 2012 10:56 PM
To: eugene.min@sloan.mit.edu
Subject: RE: Quick Clarification on Week 1 Assignment

Follow Up Flag: Follow up
Flag Status: Flagged

I've been getting some questions about it being a group vs. individual assignment, so here is some clarification:

- * You will need to prepare individually by reading the 2 readings
- * Doing your own outside research on the company you have been assigned
- * Come prepared to class based on the questions in the assignment
- * In class, you will work in groups to discuss the questions for your company (which you will have in common)
- * Each person will have some time to write their own answers and hand in their own assignment

Have a good rest of the week guys,

Eugene

So don't write till after class?
Or are we writing in class
pre draft - just in case...



Rupert Murdoch
Chairman and
Chief Executive Officer
News Corporation

A Letter from Rupert Murdoch

Dear Fellow Stockholders:

I have always said that the News Corporation ethos is to see opportunity where others see only challenge. In 2011, we proved these are not just words. In the teeth of a world economy struggling with uncertainty, our Company has had a very good year.

In 2011, our revenues rose two percent to \$33.4 billion, while adjusted operating income increased 12 percent to \$4.98 billion. We are generating strong cash flow; we have the most robust balance sheet in our history; and we are successfully executing our strategy to expand our wildly popular content into even more countries and onto more platforms.

Web?
MySpace

Spy scandal?

Here are just a few of our major initiatives:

- We successfully negotiated important carriage renewals that include critical retransmission consent agreements with significant players. These agreements are a critical step toward securing fair market value for our top-rated, free-to-air network – Fox Broadcasting Company – as well as for our ever-growing stable of cable channels. At the same time, we increased our ownership in Sky Deutschland – Germany’s premiere pay-TV platform – and saw substantial progress across all of its metrics last year.
- We grew our total newspaper circulations in the U.S. and U.K. markets by increasing our digital subscriptions, even as the number of print subscribers declined. At *The Wall Street Journal* – America’s number one daily, and arguably the best newspaper in the English language – print and digital circulation has risen in every quarter since we acquired Dow Jones in 2007. A good chunk of this growth comes from the increasing number of people who now subscribe to their favorite paper digitally via their iPads or Android tablets – more than 200,000 at last count. Yet even as we are now trying to do the same for our British and Australian publications, we are not content simply to migrate existing publications. To the contrary, at a time when other media companies are retrenching, we launched

how has that gone?

a totally new publication called *The Daily* that takes full advantage of the unique digital capabilities of the tablet. We believe the market for these products will only expand as tablets, like mobile phones before them, become inexpensive and ubiquitous.

- We continued to expand our digital publication of books. Today, e-books represent approximately 2.5 percent of U.S. general book revenues when both formats are available, and HarperCollins is well situated to expand its extensive library onto these new platforms.
- We launched a major new initiative that we believe will help change the future of education. In almost every area of modern life, digital advances have improved productivity. Not education. That's changing, and we've brought in the former chancellor of the New York City schools, Joel Klein, to help us tap into what we see as a \$500-billion market in the U.S. alone. Our goal is clear: to become the leader in advanced digital solutions for the K-12 market, delivering highly engaging, content-rich interactive products that will allow teachers and schools to measure and improve student achievement, while alleviating one of the biggest constraints of our existing school systems – the unsustainable escalation in labor costs. We entered this market with the acquisition of Wireless Generation, an entrepreneurial company specializing in individualized, technology-based learning. And we believe we are poised to revolutionize public education for a whole new generation of students.
- We also extended our large and varied content creation activities with the acquisition of Shine Limited. In Shine, we have not only bought a strong business, we have also brought into our Company a creative team with an outstanding track record of hit shows and new formats. In a rapidly consolidating global television industry, Shine will be a key part of our expansion strategy.
- Finally, we disposed of certain non-strategic or underperforming assets, including Fox Mobile, Myspace, and News Outdoor in Russia.

Every step we have taken has been guided by a strategy designed to build on our greatest strength: the creation and distribution of the world's most sought-after news, sports and entertainment. At our heart, we are a content company. Maintaining our lead in content is the key to our continued high growth. To that end, we are continually evaluating our operating and capital strategies.

Fast Growing Cable Channels

Nowhere is our strength in content more apparent than at the businesses that represent our most important growth driver, as well as our fastest growing segment: our Cable Network Programming.

Revenues at the cable network programming segment were up by 14 percent last year, with operating income up 22 percent. This segment airs some of the world's most intriguing content, and it accounts for more than half of the Company's total adjusted segment operating income based on continued growth in affiliate and advertising revenues.

The News Corporation ethos is to see opportunity where others see only challenge... In 2011, we proved these are not just words.

See big \$

same at Disney

A Letter from Rupert Murdoch

Every step we have taken has been guided by a strategy designed to build on our greatest strength: the creation and distribution of the world's most sought-after news, sports and entertainment.

These numbers are impressive, and I am proud of them. I'm even more proud of the people behind the figures. News Corporation leads because we attract and retain experienced and talented people who have proven themselves exceptionally prescient in determining consumer tastes and expectations.

At FOX News, for example, Roger Ailes and his team have built television's undisputed news leader – not just in cable network news, but in all television news. Later this calendar year, FOX News will celebrate its fifteenth anniversary, and I couldn't be more pleased with its success. Over at the FOX Business Network our ratings are improving – and at certain times of the day we're head to head with CNBC, and sometimes beating them. In these tough economic times more and more people on Main Street look to Fox Business for guidance, and with more distribution we will continue to grow our ratings. *haha*

Our FX cable channel also showed impressive strength and is on track to deliver its most-watched calendar year in its history, with viewer growth in key demographics far surpassing its general entertainment competitors. Our Fox Sports Networks, Fox Soccer and the Big Ten Network have all become leaders in their fields. Fox Deportes was the number one-rated Spanish cable sports network in prime time.

Across the globe, our Fox International Channels (FIC) operate in 41 languages in 144 countries, mostly under the Fox and National Geographic brands, which are growing apace. In fact, FIC surpassed one billion viewing subscribers at the end of the fiscal year. Already FIC is registering growth rates that equal or exceed those in the U.S. particularly in markets such as Latin America and Asia. What all these places have in common is a burgeoning consumer class hungry for the quality products we deliver.

One such area where we have quality assets in a market with very attractive growth prospects is India. STAR India is now that nation's leading pay-TV platform in both viewer numbers and advertising revenue share – in Hindi and non-Hindi markets alike. The talented men and women at STAR India have taken great steps to unlock subscription value in that vast and diverse region. They illustrate just one of the many ways News Corporation brings unique, competitive strengths to drive growth.

Strong Television Performance

Turning to our Television segment, profits tripled. Fox Broadcasting Company benefited not only from improving advertising trends overall, but also from a carefully selected slate of immensely popular shows, as well as world-class sports and event programming like the newly reinvigorated American Idol, which saw 5 percent viewership increases.

FOX Sports remained number one for the fourteenth consecutive year. In February, we made history when the Super Bowl on FOX became the most-watched U.S. television program ever, with an average audience of 111 million viewers.

We have a strong relationship with the NFL, and our television ratings in general have been incredible, with viewership up 5 percent over last year.

Simply put, there is no better place to draw an enormous audience than broadcast television. Sporting events in particular deliver the mass audience that advertisers crave, with a very predictable and desirable demographic. These events are also relatively DVR-proof and will remain a critical driver of our growth.

Leading Franchise in Filmed Entertainment

Sometimes, our biggest competition is ourselves. Our Filmed Entertainment segment, for example, experienced a difficult comparison to the prior year's groundbreaking blockbuster, *Avatar*, and the very popular *Ice Age: Dawn of the Dinosaurs*. As a result, earnings were down 31 percent year over year. Even so, the animated *Rio* has generated more than \$475 million in worldwide box office. And the summer got off to an impressive start with *X-Men: First Class*, which achieved \$350 million in worldwide box office. As I write this letter, *Rise of the Planet of the Apes* is off to a strong start with worldwide grosses topping \$250 million. We are confident in our slate of upcoming films. Looking out at the longer term, we believe this segment will see more opportunity to profit not only from growth in international markets, but also from the roll-out of new electronic distribution technologies everywhere.

One of the brightest spots in this segment was our television production business. Here we outperformed our expectations – led by results from hit shows such as *Glee* on FOX and *Modern Family* – and burnished our reputation as an industry leader.

We are also excited by the opportunities Netflix and other emerging platforms are creating for new and incremental sources of revenue for library rights to our shows. We incessantly monitor this changing landscape to ensure the windowing of our products aligns with the needs of both our consumer and business partners, and to protect the value of our series. We remain confident about our current approach.

Growth on Pay-TV Platforms

At our Direct Broadcast Satellite Television segment, satellite pay-TV platforms continued to focus on growth as they strengthened their competitive positions. At Sky Italia, these efforts are paying off: last year the number of subscribers increased by 230,000 – and we expect the total number of Sky Italia subscribers will very soon pass the five million mark, an important milestone.

In Germany, our investment, Sky Deutschland, also showed steady and substantial improvements across key metrics like subscriptions and churn rate. And our joint venture, Tata Sky, which operates in the highly competitive Indian market, has increased its subscriber base to record levels. Each is now in its strongest competitive position ever. We are proud of our performance. By renewing our focus on technology, content and service, we believe we have positioned this segment for strong, continued growth.

News Corporation leads because we attract and retain experienced and talented people who have proven themselves exceptionally prescient in determining consumer tastes and expectations.

A Letter from Rupert Murdoch

Our most fundamental belief is that the combination of free speech and free markets is the most effective guarantee of a free society.

Headwinds in Publishing

Looking at our Publishing segment, we experienced significant momentum in the first half of last year. However, a softening ad market at our U.K. and Australian newspapers, as well as challenges to News America Marketing in the U.S., offset many of those early gains. Clearly we have some hurdles, but the geographic mix of the business and its growth prospects remain highly attractive.

The Wall Street Journal is a good example of what we can do. Earlier I mentioned that our expansion onto digital platforms has helped boost circulation. That has translated into revenue: in 2011, print and digital circulation revenues were up 12 percent over the year before, while our print and digital advertising revenues were up 11 percent.

Positioning for Improvement in Digital

Finally, in our Other segment, we experienced a difficult year. The disposition of Myspace was a necessary adjustment to new realities. When we bought Myspace, our digital strategy centered on acquiring standalone properties. Going forward, our focus is on extending our core businesses and popular brands over emerging digital platforms, including tablets and smart phones, along with expanding services such as iTunes and Netflix. At the same time, we are zeroing in on rights clearances to ensure that we can better profit from our overall monetization from these trends.

I believe the opportunities digital has put before us are virtually boundless. Yes, they pose some obvious challenges. We have, however, learned a great deal from our hands-on experience these last few years. Going forward, we will capitalize on taking what we do best – telling stories, entertaining people around the globe and bringing the best news and information to consumers across a broad spectrum – and extending this content to new platforms, all while developing new business models to support these new consumer experiences.

Issues Surrounding *News of the World*

As has been widely publicized, our Company has received a major black eye from the phone hacking scandal at our *News of the World* newspaper in the U.K. As I said at a Parliamentary hearing, this episode has been the most humbling of my career.

Let me be clear: the behavior carried out by some employees of *News of the World* is unacceptable and does not represent who we are as a Company. It went against everything that I stand for. That behavior betrayed not only our readers, but also the many thousands of magnificent professionals in every one of our other divisions around the world. It was a painful decision to shut down the *News of the World*, but it was the right thing to do.

As I write this letter, our Board of Directors and senior management are acting decisively to get to the bottom of what happened. I have asked Joel Klein, who formerly served in the U.S. Justice Department, to lead our efforts in this matter. He reports to independent director Viet Dinh, who in turn is having regular meetings with all the other independent directors. The Board of Directors and the Company have retained independent counsel, and we are cooperating with the relevant authorities in both the U.K. and the U.S. In sum, we have taken decisive actions to hold people accountable – and we will do whatever is necessary to prevent something like this from ever occurring again. We will put things right.

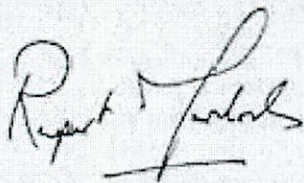
News Corporation Has a Great Future

Notwithstanding the difficult chapter represented by *News of the World*, I wish to reiterate my enthusiasm for where News Corporation is today and where we are going. I realize the current flavor of the day is economic pessimism, and it is clear that Europe in particular is in the midst of a period of extreme volatility. However, I am optimistic about the future because I believe that News Corporation – the most global of media companies with the most compelling content – will continue to shape it. We are better positioned financially and operationally than we have ever been. Our culture is, and always has been, entrepreneurial. As we proved this past year, News Corporation is not the kind of company – and we are not the kind of people – to fear a changing market.

Across the world, our 51,000 employees are working every day to discover new and profitable ways to create and deliver our content for the benefit of our stockholders and global viewers and readers. That means looking for – and delivering – the inventive solution where others simply throw up their hands in despair. Every day some new technology up-ends somebody's old established business model. Our people recognize that as an opportunity.

I could not be more impressed with the caliber of our colleagues or their performance this past year. I congratulate them on their efforts. I continue to count on them to turn opportunity into profit ... to keep our Company a leader in every area where we compete ... and at all times to be guided by our most fundamental belief that the combination of free speech and free markets is the most effective guarantee of a free society.

Sincerely,



Rupert Murdoch
Chairman and Chief Executive Officer
News Corporation

lots of disparate assets vs Disney 20th Century is global as well

Cable Network Programming

United States

- FOX News Channel
- FOX Business Network
- Fox Cable Networks
- FX
- Fox Movie Channel
- Fox Regional Sports Networks
- Fox Soccer Channel
- SPEED
- FUEL TV
- FSN
- Fox College Sports
- Big Ten Network 51%
- Fox Pan American Sports 33%
- National Geographic Channel 70%
- STATS 50%

Australia

- Premier Media Group 50%

Latin America

- LAPT 55%
- Telecine 13%
- FOX Telecolombia 51%

India

- STAR Plus
- STAR Utsav
- STAR One
- STAR Gold
- STAR World India
- STAR Movies India
- Channel [V] India
- STAR Jalsha
- STAR Pravah
- Vijay 81%
- Asianet 75%
- Asianet Plus 75%

- Suvarna 75%
- Sitara 75%
- STAR CJ Alive 50%
- STAR News 26%
- STAR Ananda 26%
- STARMajha 26%
- Hathway Cable and Datacom 17%
- STAR DEN Media Services 50%

Taiwan

- STAR Chinese Channel
- STAR Chinese Movies
- Channel [V] Taiwan

China

- Xing Kong 47%
- Channel [V] China 47%

Other Asian Interests

- ESPN STAR Sports 50%
- Phoenix Satellite Television 18%

Middle East & Africa

- Rotana 15%
- Farsi1 50%
- Zemzemeh 50%

International

- FOX International Channels
- Fox Europe, Africa, Asia and Latin America
- Fox Life Europe, Asia and Latin America
- FX Europe, Africa, Asia and Latin America
- Fox Crime Europe and Asia
- Fox Retro Europe and Africa
- Fox Next Europe
- Fox Sports Europe, Africa and Latin America

- VOYAGE Europe
- BabyTV Europe, Asia and Latin America
- UTILISIMA Latin America
- SPEED Latin America
- TVN Asia
- Fox Movies Asia
- Aquavision Africa
- National Geographic International Channels 52%

Filmed Entertainment

United States

- Fox Filmed Entertainment
- Twentieth Century Fox Film Corporation
- Fox 2000 Pictures
- Fox Searchlight Pictures
- Fox Music
- Twentieth Century Fox Home Entertainment
- Twentieth Century Fox Licensing and Merchandising
- Blue Sky Studios
- Twentieth Century Fox Television
- Fox Television Studios
- Twentieth Television

United States, Europe, Australia, New Zealand

- Shine Limited
- Kudos
- Dragonfly
- Princess Productions
- Shine TV
- Reveille
- Metronome Film & Television
- Shine International
- Shine Australia
- Shine France

- Shine Germany

Television

United States

- FOX Broadcasting Company
- MyNetworkTV
- FOXSports.com
- Fox Television Stations
 - WNYW New York, NY
 - WWOR New York, NY
 - KTTV Los Angeles, CA
 - KCOP Los Angeles, CA
 - WFLD Chicago, IL
 - WPWR Chicago, IL
 - WTXF Philadelphia, PA
 - KDFW Dallas, TX
 - KDFI Dallas, TX
 - WFXT Boston, MA
 - WAGA Atlanta, GA
 - WTTG Washington, DC
 - WDCA Washington, DC
 - WJBK Detroit, MI
 - KRIV Houston, TX
 - KTXH Houston, TX
 - KSAZ Phoenix, AZ
 - KUTP Phoenix, AZ
 - WTVT Tampa Bay, FL
 - KMSP Minneapolis, MN
 - WFTC Minneapolis, MN
 - WRBW Orlando, FL
 - WOFL Orlando, FL
 - WUTB Baltimore, MD
 - WHBQ Memphis, TN
 - KTBC Austin, TX
 - WOGX Gainesville, FL

Australia and New Zealand

- Premium Movie Partnership 20%

Direct Broadcast Satellite Television

Europe

- SKY Italia
 - Sky Sport
 - Sky Calcio
 - Sky Cinema
 - Sky TG24
 - Sky Uno
 - Cielo
- British Sky Broadcasting 39%
 - Sky 1
 - Sky Living
 - Sky Atlantic
 - Sky Arts
 - Sky News
 - Sky Movies
 - Sky Sports
 - Sky Sports News
 - Challenge
 - Pick TV
- Sky Deutschland 49.9%
- Sky Cinema
- Sky Action
- Sky Comedy
- Sky Emotion
- Sky Nostalgie
- Sky Cinema Hits
- Sky Sport
- Sky Sport Austria
- Sky Fußball Bundesliga

Asia

- Tata Sky Limited 30%

Australia and New Zealand

FOXTEL 25%

Sky Network Television Limited 44%

Publishing

United States

- Dow Jones & Company, Inc.
 - The Wall Street Journal
 - Barron's
 - Dow Jones Corporate Markets
 - Dow Jones Financial Markets
 - Dow Jones Newswires
 - Dow Jones Private Markets
 - Dow Jones Reprints Solutions
 - Factiva
 - MarketWatch
 - Dow Jones Local Media Group
 - SmartMoney
- New York Post
- Community Newspaper Group
- The Daily

United States and Canada

- News America Marketing Group
 - In-Store
 - FSI (SmartSource Magazine)
 - SmartSource iGroup
 - News Marketing Canada

United States, Canada, Europe, New Zealand and Australia

- HarperCollins Publishers

Europe

- The Times
- The Sunday Times
- The Sun
- The Wall Street Journal Europe

- eFinancialNews
- The Times Literary Supplement

Australia

Almost 150 national, metropolitan, suburban, regional and Sunday titles, including the following:

- The Australian
- The Weekend Australian
- The Daily Telegraph
- The Sunday Telegraph
- Herald Sun
- Sunday Herald Sun
- The Courier-Mail
- Sunday Mail (Brisbane)
- The Advertiser
- Sunday Mail (Adelaide)
- The Mercury
- mX
- Sunday Tasmanian
- The Sunday Times
- Northern Territory News
- Sunday Territorian

Asia

- The Wall Street Journal Asia
- HarperCollins India 40%

Papua New Guinea

- Post Courier 63%

Other

United States

- News Corp Digital Media Group
 - IGN Entertainment
 - UGO.com
 - 1UP.com
 - AskMen
- Wireless Generation

- Hulu 32%

Europe

- NDS 49%
- BrandAlley UK 49%
- News Outdoor Group 79%
- News Corporation Stations Europe
- Milkround.com

Australia and New Zealand

- National Rugby League 50%
- News Digital Media
- Realestate.com.au 61%

From book

Characteristics of four operating models

Business process integration	High	Coordination <ul style="list-style-type: none">• Shared customers, products, or suppliers• Impact on other business unit transactions• Operationally unique business units or functions• Autonomous business management• Business unit control over business process design• Shared customer/supplier/product data• Consensus processes for designing IT infrastructure services; IT application decisions made in business units	Unification <ul style="list-style-type: none">• Customers and suppliers may be local or global• Globally integrated business processes often with support of enterprise systems• Business units with similar or overlapping operations• Centralized management often applying functional/process/business unit matrices• High-level process owners design standardized processes• Centrally mandated databases• IT decisions made centrally
	Low	Diversification <ul style="list-style-type: none">• Few, if any, shared customers or suppliers• Independent transactions• Operationally unique business units• Autonomous business management• Business unit control over business process design• Few data standards across business units• Most IT decisions made within business units	Replication <ul style="list-style-type: none">• Few, if any, shared customers• Independent transactions aggregated at a high level• Operationally similar business units• Autonomous business unit leaders with limited discretion over processes• Centralized (or federal) control over business process design• Standardized data definitions but data locally owned with some aggregation at corporate• Centrally mandated IT services
		Low	High
		Business process standardization	

IT for internal use, or tech for customer ^{question 1}
So many disparate groups/companies ← this glass seems internal (question 2)

In the book the matrix

Diversification or Replication

Similar biz units

So offer shared db to track sources/leads

Or on the ad side - sales

- common apps local bizs can adopt
- "app store"

Common layout/publishing best practices

- may be too soon

On consumer side doing right thing

- except Myspace
- Kindle, Netflix partnerships
- own 32% Hulu
- ~~Facebook~~ Facebook deal
 - WashPo social reader
- Pay wall - WashPo

②

but he does not like Google News

- should prob put up w/ it
- has not actually pulled content
- could be politically positioning

So that is 2 - 1 IT and 1 consumer/product

IPTV

- delivering cable packages online
- at the cable rate
- no current infrastructure in US
- is in Europe

- Oh we planning June 7th 2010

- only w/ a package

- (So much cheaper in the UK!)

So now 3

(I spilled someone's coffee)

(Prof trying to pronounce everyone's name)

Prof. Jeanne Ross
NE 25-777

4th time taught - totally revamped

- first time 3 hrs

Relationship b/w Biz Strategy + IT

- she's passionate about it

'Making IT a strategic resource - not a liability

Not much science around it yet

CISA

- global list of cos

- all very large, been around a while

- how old cos are surviving

Apply wisdom of web from new cos to old cos

And how old cos can teach new cos

②

Strategy \leftrightarrow IT

Generally Strategy \rightarrow IT - forcing IT to do stuff

Or ~~IT \rightarrow Strategy~~

Strategy \leftarrow IT

- can't be done says IT

All 3 are true in some orgs

But which in which org?

Also Strategy \neq IT
- disconnected

Look at how to resolve this

NY Times

Venerable paper

Trying to remain relevant in 21st century

Others free ride on their news

Too serious?

3

Can the NYT be different?

What is their value prop?

Quality journalism

I'm more worried about local papers

How to make ad \$ online

It's a big change

- need to rethink about how they use IT

~~can they~~

- this class more about can they ~~all~~ operate well

- not just what biz model

Problem w/ IT

Strategic
Initiatives

→

Solution
Design

→

Data
Apps

Infrastructure



(4)

When she teaches IT for non IT-exec

- people upset at IT

- someone comes up w/ idea

- they ask IT if they can build it

- they do

But gets lots of ind. solutions

No feedback

Just lots of strategic initiatives
- individually good

But all together - messy

Linear process → lags

Lots of individual solutions

They need to talk w/ each other

So they wire together

(Class split 50-50 IT and Non IT experience)

5

IT and Biz people often speak different languages
- they don't get along in IT

Today its easier to build systems w/ foresight
- but even many born-on-the-web cos
move too fast

Hard to change things
- used to doing it that way (processes embedded)
- and you're worried about your jobs
~~code~~

Also acquisitions
- disastrous to IT

This is why IT feels like a liability

But how to make it a strategic asset?
- digitized platforms
- what about this ^{Co} platform is not changing
- airlines: seats, reservations, bag tracking
- telecoms: billing

(6)

If you can automate some of these simple things

↳ can cut costs

Or normal corp tasks - finance, HR, etc

↳ Shared Services org

- so don't have to spend time on it

Digitized platform: Want predictable platform

- not just for costs

- can be behind the scenes

It's not just the product - but the whole process

- McDonalds

Scale makes it harder

But tech enables the processes

- web based appointment system

- global

- everyone uses them the same way

They don't change mind frequently

- allows stability

- lag not important

⑦

Some other cos need more variability

Only stabilize a little bit

Depends if cos want a predictable ~~the~~ cust platform

Does the digitized platform help the co do well
or they are doing well so can implement one.

When she researchs great cos - they all
have great platforms

Dell - you used to pick components in PCs
had very good end to end supply ~~the~~ chain
but people don't really care now

This world is filled w/ risk

Tied w/ corp strategy

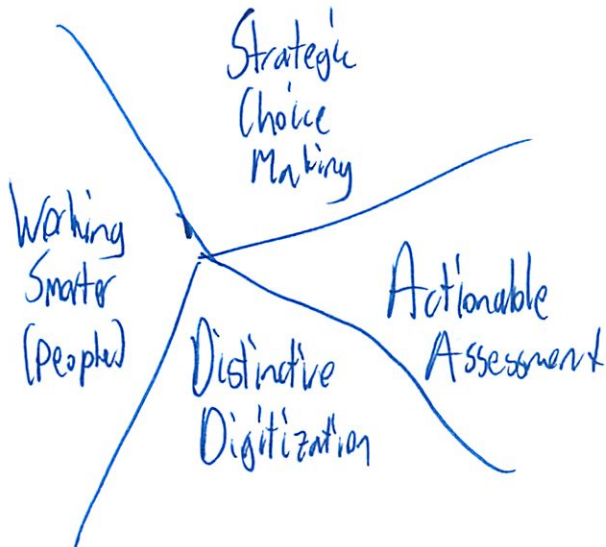
- ~~do~~ do you put off tie in

- or do you blow out the acquiree's IT
and replace it w/ your own

8

Then if you are thinking about ~~resellers~~ reselling biz...

Unified Theory



Other things they haven't really studied

biz model
culture
Structure
market

1. Make commitments up front - real alternatives
2. Build underlying capabilities
- Critical, reusable capabilities
3. People need to use their IT components well
4. Need to measure

(9)

Q: Do you invest in cost facing stuff or behind the scenes?

- Will see this often
- Every Co has its cobweb
- ~~Great~~ Great Cos set priorities

Syllabus Review

Group Work

- in every class
- short write-up due at end of class
- can write same thing as teammates or different
- rate ~~them~~ teammate
 - Great cos good a personal development
 - Honest discussions on how you can do better
 - Develop skills of reviewing people
 - Practice assessment
 - initially confidential
 - today: no CUIVE - can give everyone a 5

(10)

(talked w/ prof about my jobs

- pointed out Lotus Notes litmus card ^e ^{said it will be hard for} ^{cos to hire people}
- said Disney could either be fun or not
- was rushing to cover at the end)

Group Projects

options on Stellar

Signup wed @ 10PM - Thur @ 8

Can sign up as a team or individually

~~the~~ team ~ 5 people

from sponsors - very excited

look at it as a consulting project

first come first serve

Some cos flying out to meet teams

don't all have to be there

next week in MA - vacation week

①

Alaama: Lead to Cash assessment
need some formal processes

Biogen Idec: ID + Access management
roles is not working
(sounds like they need moira)
want a behavioral assessment

BNP Paribas: global communications

BBOT: Platform agility
tear off worse mess
more agile
behaviorally

Commonwealth Bank Australia: transformed a lot since '06
What expertise does IT need?

EMC: 3 projects

formalizing IT innovation

want better mobile tech

- competency center?

framework for big data analytics

- think they can do more

(12)

Exxon: has a very disciplined IT org

Think not moving aggressively on new opportunities
analytics on data

Fidelity: teaching financial responsibility

- before Hotel room

Personal finance tools + gamification

IT wants to engage internal costs better

IFC/World Bank

- want an R+D program

(? Media Lab)

JD Power + Assoc

- cer opps from existing data

NASA

Knowledge Management for IT innovation

- know what each is doing

Oliver Wyman

- survey on managing IT demand

- how to make decisions

- social media use for insurance cos

13

Origin Energy : Australia

Combine Op tech and IT

Reed Elsevier : Lexus Nexus

building Reliability, Accessibility, Performance
how to ~~make~~ make this a new culture:

Sears : Social Media tool

~~be~~ buying stuff on iPads

Tata : contacts in US

Sharing knowledge of IT innovation

IT as a tool to enable def on strategy
- lit review

Biz IT alignment

Trinity Health : Electronic Health Records survey

13,000 results

analyze data

(none particularly stand out

Some ~~are~~ somewhat interesting

Go w/ something I know or something new)

(4)

They told 5 hrs/week/student

Go over expectations ~~on~~ on 1st phone call

She can tell projects that will fail after 2 weeks

Ask for a backup contact

Use Stellar Forum

News Corp

lots of diff divisions

letter: deliver + monetize content

What threatens the most:

- One tied to content
- Google since Google News
 - pick random content
 - not branded
- Whomever threatens TV
 - FB adds content, not trying to remove
- People surfing FB instead

(15)

Whats their value prop?

- creating + distributing news, sports, games

Each sector has a diff threat

- creation or distribution
- and diff sector

Big threat: TV distribution disruption

Then that can hurt ~~the~~ content

almost all the cos have a play

Strategy: IPTV platform

- alt method

- no cable plant in US

- \$70/month

- cannibalize \$10/month

- and makes their own content more distributable

Other grps

Walmart - on your mobile device

- be better online

- leverage data to get better

16) ~~Initial~~ - get head start in other countries

News ING - leverage cost info

More target their products

FB + Google to advertise more

Partner w/ FB

Do more on mobile

- mobile payments is a threat

Apple + Google are threats

News - make sure distribution is not owned by someone else

- more exclusive licensing

Class 1: Succeeding in the Digital Economy
February 13, 2012

15.571: Business Strategy and the Role of IT

Dr. Jeanne W. Ross
Director & Principal Research Scientist
Center for Information Systems Research (CISR)
MIT Sloan School of Management
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Consider 3 possibilities

- Strategy → IT
- Strategy ↔ IT
- Strategy ← IT



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Bank of America	France Telecom	Swiss Reinsurance Co. Ltd. (Switzerland)
BBVA (Spain)	Grupo Santander Brazil	TD Bank (Canada)
Biogen Idec	Holdim Brasil S.A.	Teck Resources Ltd. (Canada)
Blue Cross Blue Shield of Massachusetts	International Finance Corp.	Telstra Corp. (Australia)
BNP Paribas (France)	Itau - Unibanco S.A. (Brazil)	Tetra Pak (Sweden)
BP (U.K.)	Johnson & Johnson	Time Warner Cable
BT Group (U.K.)	Leighton Holdings Ltd. (Australia)	Trinity Health
Campbell Soup Co.	Level 3 Communications	USAA
Canada Pension Plan Investment Board	Marathon Oil Corp.	VF Corporation
Canadian Imperial Bank of Commerce	MetLife	Westpac Banking Corp. (Australia)
Capital One Services, LLC	NASA	Woolworths Limited (Australia)
CareFirst BlueCross BlueShield	Nomura Research Institute, Ltd. (Japan)	World Bank
	Origin Energy (Australia)	

MIT CISR's Mission

- Founded in 1974, MIT CISR delivers practical, research-based insights on how digitization enables enterprises to thrive in a fast-changing global economy.
- MIT CISR engages its community through research, electronic research briefings, working papers, meetings, and executive education.

2012 MIT CISR Research Projects

- Doing Business Digitally*
 - Strengthening Your Digital Business Model
 - Building Digitized Platforms Can Be Slow: What Are the Alternatives?
 - Digital Innovation: Designing Customer-centric Products and Services
 - Redesigning Organizations for the Digital Economy*
 - Mapping the Genome of the Next Generation Organization
 - Case Studies in Social Media Innovations
 - BYOD: Radical Changes to Managing Technology and the People and Processes Relying on It*
 - Working Smarter: Seizing the Opportunities Created by Ubiquitous Data
 - Rethinking the Role of the IT Unit*
 - Managing Your Firm's Total Digitization: The Next Frontier
 - Business Complexity: Shifting IT from Problem to Solution
 - Managing IT Supply and Demand: How to Build a World-Class Service Organization
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1 February 2012

Today's agenda

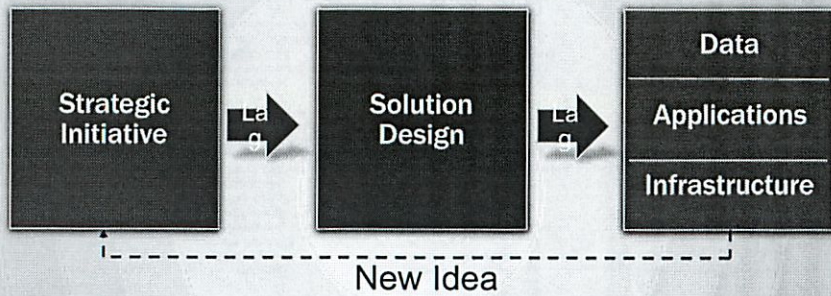
- Challenges of the Digital Economy
 - Discussion of challenges to the New York Times
 - Why IT is often a strategic liability
 - How IT becomes a strategic asset
- Course expectations and projects
- 10-minute break
- Group work



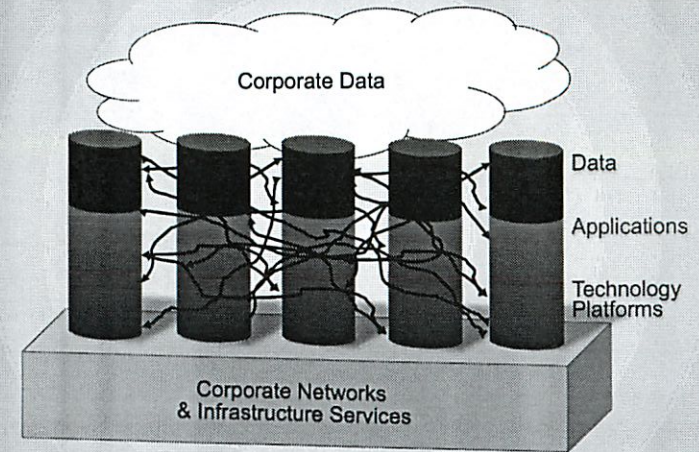
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2/13

The problem with IT

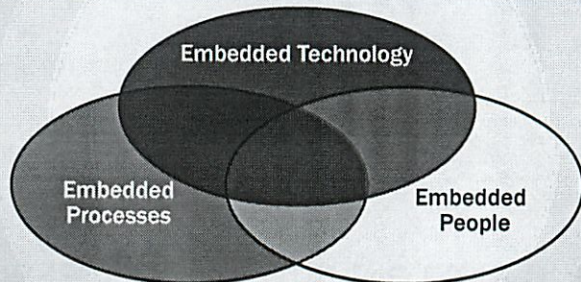


The result of traditional approaches to delivering systems



The issue this course addresses

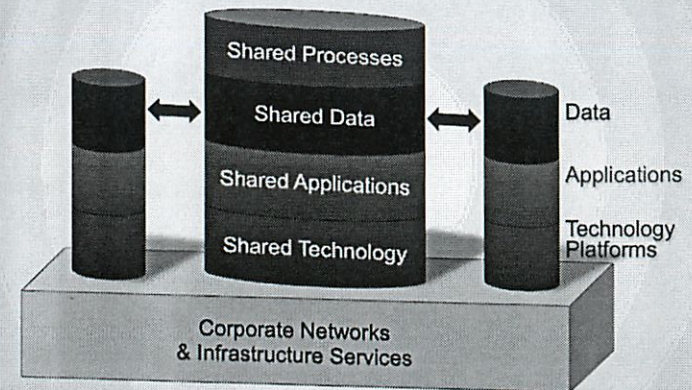
- IT invariably provides a long-lived solution to an immediate business problem or opportunity. This sets of solutions, over time, becomes an inhibitor rather than enabler of change.



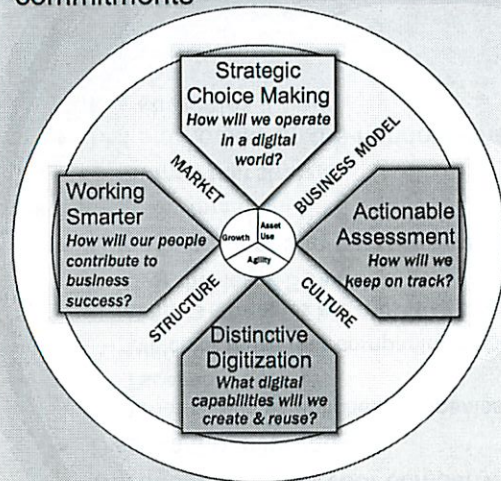
How do we make IT a strategic asset instead of a liability?



In top performing firms IT builds and maintains a digitized process platform...



Where IT is a strategic asset, management has made four commitments¹



- A commitment is an explicit, high-level agreement to manage in a given way (e.g., "Provide enterprise-wide shared services including finance, sourcing, IT, and HR")
- Commitments are concrete, actionable, relatively stable, and have a high degree of buy-in
- Commitments offer real alternatives; in most cases, the commitment to the alternative is more important than the alternative pursued (or not)
- Higher levels of commitment are associated with significantly higher ROE

Source: P. Weill, J. Ross, and A. Quaadras, "Achieving Superior Value from Digitization: The MIT CISR Value Framework," MIT CISR Research Briefing, Vol. X, No. 8, August 2010.
¹2010 MIT CISR survey of respondents from 450 firms having over 500 FTE. Regressions of each commitment vs. digitization impact were significant ($p < .001$), explaining between 22% and 32% of variance while controlling for firm size and industry.

The 15.571 course outline

- Strategic choice making
 - UPS, 7-Eleven Japan, PepsiAmericas, CVS
- Distinctive digitization
 - Southwest Airlines, IBM, Credit Agricole
- Working smarter on a digitized platform
 - Protection 1, Trinity Health
- Assessing outcomes
 - USAA
- IT as a strategic asset
 - Supervalu, LexisNexis, Grupo Locatel Plenia

Guest speakers

- Stuart McGulgan, CIO, CVS
- Pat Toole, General Manager, IBM Global Technology Services
- Cynthia Coombs, SVP Business Solutions, USAA
- Tom Centlivre, Director of Strategic Planning, Trinity Health
- Antoine Gourevitch, BCG, and Eric Baudson, CIO, Crédit Agricole Investment Bank
- Jim Walsh, CTO, AECOM and Doug Rousso, SVP CTO/CIO, CBS
- Ari Levy, Grupo Plenia Locatel, and Kumud Kahllia, CIO, Akamal

Course expectations

- Come to class prepared. Homework will be posted on Stellar.
- Arrive on time and sit with your group for that day.
- Assess your teammates' performance.
- Bring your name card to every class, as we will be hosting a number of guest speakers.
- Professional & ethical behavior is expected at all times. In particular, treat everyone in the room with respect.
- Keep comments short and to the point.
- Turn off cell phones and disconnect computers from the Internet, unless needed for group research.
- Have fun! Think hard.
- Let Eugene, Kate or me know if you have any issues.

How to reach us

- Jeanne Ross: jross@mit.edu; 617-253-9461
- Kate Moloney: kmoloney@mit.edu; 617-253-6768
- Eugene Min: eugenem@mit.edu

Group Projects

- Project options are listed on Stellar
- Project sign-ups start Wednesday at 10:00 pm and ends Thursday at 8:00 pm (see Stellar for instructions)
- You can sign up with a team—all sign up at same time for same project—or as an individual
- As soon as you receive a confirmation email, contact your project sponsor to set up an introductory call or meeting



MIT CISR Sponsor Project Opportunities

- Akamai
 - Lead-to-Cash Assessment
- Biogen Idec
 - Identity & Access Management
- BNP Paribas
 - Enhancing Global Communication
- BT
 - Platform Agility
- Commonwealth Bank of Australia
 - Future IT Unit Capabilities
- EMC
 - Formalizing IT Innovation
 - Developing Mobility Competency Center
 - Framework for Big Data Analytics
- Exxon
 - High-end Analytics in Oil and Gas
- Fidelity Investments
 - Disruption of Financial Education through Technology
 - Personal Finance Tools and Gamification
 - Customer Engagement for Dynamic IT
- IFC (World Bank)
 - Establish an R&D Program
- J.D. Power & Associates
 - Revenue Opportunities from Existing Data
- NASA
 - Knowledge Management for IT Innovation
- Oliver Wyman
 - Demand Management Maturity Survey
- Origin Energy
 - Convergence of OT and IT
- Reed Elsevier
 - Building Reliability, Accessibility, and Performance
- Sears
 - Implementation of Direct Selling Social Media Tool
- TATA Consultancy Services
 - Knowledge Management Through IT for Innovation
 - IT As Tool for Enabling Definitions of Strategy
 - Business IT Alignment
- Trinity Health
 - Electronic Health Records Survey Analysis



Group assignment

- Get into a group for your company, 6 people per group
- Discuss the following:
 - What should established companies learn from Amazon, Apple, Facebook, Google?
 - Which of these four companies might threaten your company?
 - What 3 strategies are most key to the success of your company over the next 2-5 years?
- Choose someone to present your analysis
 - 1 key threat
 - 1 important strategy
- List individually on the handout what you think are the three key strategies





Massachusetts Institute of Technology
Sloan School of Management

Business Strategy and the Role of IT
15.571

Student Project Requirements

CHOOSING A PROJECT

The project's primary objective is to apply the concepts from the course to a particular organization's business needs. We will offer connections to companies who sponsor the MIT Sloan Center for Information Systems Research (see attached proposals). Students will sign up for projects online beginning February 15 at 7AM EST. There will be five slots for each project. Once all slots are populated, we will notify the sponsor of the team members. We have almost twice as many project proposals as we need. As a result, at the end of the sign-up period, we expect that some projects will have fewer than five students. We will contact students on those partially staffed projects to do some reassigning. You are not required to form teams before signing up, but if you have a group you'd like to work with, you are welcome to have one person enter all the names on Google Docs when the projects are posted. (We suggest you get online early.)

KEY DELIVERABLES

1. **Sponsor Deliverable:** You are expected to determine with your sponsor what your final deliverable will be. Traditionally, this has taken the form of a presentation but a written report is also acceptable. A copy of the team's sponsor deliverable must also be submitted to the professor for assessment. Your sponsor will submit a grade for your deliverable, so be sure you understand the expectations.
2. **Class Presentation of Sponsor Deliverable:** Your team will present a project summary to the class on May 14, during our regularly scheduled class. Your entire presentation will be about 15 minutes, which includes Q&A. Please use this time to inform your classmates about your specific project objectives and the insights you gained from the project. You should provide just enough information about the firm you've studied to enable the class to understand the context of the problem you are trying to solve. Then you should explain (a) the problem you were addressing, (b) the methodology you used to study the problem, and (c) your key findings, insights, and recommendations. Your presentation will be evaluated for clarity, quality of insights, and professionalism in both the slides and the delivery. It is not essential that all team members present. We will be on a strict schedule, so be sure to rehearse! We don't want to cut you off in the middle of a sentence—but we will do so when the buzzer goes off.

CRITICAL SUCCESS FACTORS

From experience we have learned that three key factors determine a team's success.

1. Successful teams meet with their sponsor weekly.
2. Successful teams handle problems with sponsors quickly by seeking guidance from faculty or the course TA.
3. Successful teams divide and conquer by having different team members handle different tasks.

KEY DATES

Due Date	Deliverable
No later than February 21	Contact your Sponsor. Contact your sponsor the day you receive confirmation of your placement on a team. This will come as an email from professor to sponsor with all team members copied.
No later than February 27	Statement of scope and description of methodology (1-2 pages double-spaced): This document should outline the project scope and objectives agreed upon with the project sponsor. Submit on Stellar.
April 6	Interim report (1-2 pages double-spaced; Word or PowerPoint). Summary of the team's major activities, key findings to date, and proposed next steps. Any obstacles the team is experiencing should also be identified.
April 6-30	Checkpoint meeting with Professor/TA (15 mins or more if needed): Meet with Professor/TA to discuss project progress or any roadblocks.
May 15	Presentation (approximately 15 mins, including Q&A) Teams should also schedule a separate meeting to present their findings to their sponsors. This can be done based on the teams' and sponsors' schedule.

Interested

2/13

BT Platform Agility - vague

(2)

Fidelity Gamification

- experience in

- would I learn much?

IFC R+D - pretty interested

(1)

Media Center model ...

NASA Knowledge Management

(3)

Oliver Wyman Social Media
experience in

↑ or at least top 3
refine those

Sears affiliate marketing
experience in



Proposal: Establish an R&D Program for IT at IFC

Sponsor: Stephanie von Friedeburg
CIO and Director, Corporate Business Technologies
International Finance Corporation
2121 Pennsylvania Ave., NW
Washington, DC 20433

MBA Sloan Class Project Objectives:

The International Finance Corporation CIO plans to establish a Research and Development (R&D) function within Corporate Business Technologies (CBT) at IFC. The objective of the Sloan Class project is to establish the structure for the R&D function, to identify the critical success factors and measurement framework to operate and monitor the R&D program, and to define the terms of reference for the board that will provide oversight.

Expected Deliverables:

1. Description for a Research and Development program to support IT innovation at IFC.
2. Terms of reference for a Research and Development function, taking into account fit within CBT's organizational structure, mandate, accountabilities, deliverables and proposed resources.
3. Terms of reference for a governing body ("Innovation Board"), including recommended roles, membership, and required skills and knowledge.
4. Process map and supporting frameworks and documentation for innovation proposals to be submitted, evaluated, and selected by the Board, and for monitoring ongoing efforts.
5. Recommendations for integrating external knowledge from industry experts.
6. Recommendations for integrating internal demand (e.g., consumerization of technologies, applications, mobility and user devices).
7. Measurement framework to evaluate the effectiveness of the R&D program and business benefits realization.
8. Amplification strategy for innovations that demonstrate promise.

Required Background:

- Interest in current trends in IT innovation, including consumerization of IT
- Understanding of opportunities to leverage IT innovation to transform business and deliver competitive advantage
- Appreciation for the value of experimentation
- Also useful: familiarity with the challenges of supporting global business operations

About IFC:

The International Finance Corporation, the private sector arm of the World Bank Group, is the largest multilateral provider of financing for private enterprise in developing countries. IFC finances private sector investments, mobilizes capital in international financial markets, facilitates trade, helps clients improve social and environmental sustainability, and provides technical assistance and advisory services to businesses and governments.

As IFC's IT department, Corporate Business Technologies (CBT) is responsible for delivering high-quality, business driven IT solutions and services which enable IFC staff to conduct their business worldwide.

15.571 Business Strategy and the Role of IT

Class 2 Assignment

**Our next guest speaker will be Stuart McGuigan, CIO of CVS. Read an article about CVS and/or go to their website, and try to get a feel for how CVS uses IT. What kind of digitized platform do you think CVS needs?

Next read the UPS & 7-Eleven Japan case and the briefing on Swiss Re. Consider the following discussion questions:

1. What is a digitized platform?
2. 7-Eleven Japan refers to its Total Information System. What is it and why is it important to SEJ's growth and profitability?
3. 7-Eleven Japan recently purchased 7-Eleven U.S. and its 6,000 stores. Can SEJ replicate its systems, processes, and business success in the U.S.?
4. Critique UPS' approach to IT capabilities. How well do these capabilities prepare UPS for: (1) extending the core business and, (2) entering new businesses?
5. How does Swiss Re's digitized platform differ from that of 7-Eleven Japan? UPS? What are the performance implications and risks for these platforms?

I know CVS tried ~~RFID~~ RFID

Also they did the biz process thing where they altered their POS to match desired workflow

How come people do IT so poorly?

15,571
Class 2

2/21

(Hard to do 1x week classes)

Guest speaker dropped out - sick

Today: ~~Platform~~ Platform

Later: Using the platform

~~Seven Elements Japan~~

Group Projects In class assignments

- hard to grade on quality
 - just get pts for handing in (2)
 - other 3 pts for students waiting
 - on a curve
 - have no more than 2 5s
-

The 4 components of IT from before

Building critical capabilities

Making strategic choices

Distinctive Digitization

②

Digitize platform

Innovate on edges - beat competitors

Shared Processes

Order to Cash

Make to ~~Cash~~ Ship

Hire to Retire

Shared data to do this well

Seven Eleven Japan

Data: inventory data

Processes: Operations Centers

- Best practices

- Advising

- Helping clerks w/ hypotheses

- Trying to forecast trends

Like would stock umbrellas if will rain

- what type of food to stock

③

Data {
- Market Research
- Sensors
- Trials Results

Many ^{are} family businesses

Data: transactions

Data: Purchasing

Now 14,000 stores in Japan

Process: Make → DC → Store

Data: Partners

Use data to actually improve ops

- not just track finances
- but core about actual operations

Apps: Sharing of data / Partner logistics

Need a strategy team?

↳ they have part time clerks hypothesizing

(4)

Do store managers like this?

One student. No "We're from Corp. We're here to help"

Can clerks analyze?

Or need more skills? (MBA)

Too bothered w/ day to day activities

Or actually has hands-on insite.

Those who

Those closest to work best understand it

↳ Toyota Production System

Is it cultural?

One student: don't even give store managers ordering power - can't trust them

They are paying 43% of sales

Culture of Japan

- work well w/ hierarchical system

More of an ownership of the store

↳ since owners/operators

⑤ What is ~~what~~ accountability? / reward?

Clerks get promoted to counselor

Counselors help them order

Tech: Network / Redundency important

70,000 nodes on the network

Paid for by Corp

- every 7 years

- from the 43%

Vendor managed inventory:

Split clerk relationships by section of store

Decide

① Process

② Data

③ Apps

④ Tech

- 6
- Many cos can't fully understand the ~~all~~ processes
- don't have as clear a view about their strategy

Outsourcing

- Strategic choice
- What assets are on the 7-11 Japan balance sheet?
 - Patents?
 - Largest: accounts receivables
 - Headquarters building
 - Outsource most thing
 - Partners actually own the stuff
 - Or the franchisees
- Open innovation
 - develop w/ partners
- Made strategic choice to focus on quality - not price
- What are the boundaries + constraints on the ordering?
 - Economies of scale

①

Consistency of SKUs b/w stores:

- need to buy st. items

~~III~~

Strategic choices: Inventory turnover key metric

(EO) just looks at data

Central meeting 1x a year

How does the business grow?

up to 13,000 in Japan

new channels

- kiosks

- banking

How would this work in US?

diff strategic choices made before

~~existing~~
~~existing~~

still there

who are the clerks?

diff food dist system?

more corp owned than franchise

⑧

So SEJ bought 7/11 US

- believe they can replicate
- 5 years ago
- said its hard

Walmart couldn't bring model to Germany
Struggling in China

Legal requirements

UPS

Think about some thing for UPS

- what is in platform
 - How can they use it to grow?
-

What is def of platform?

- the 4 layers inc. process

④

Like myChoice

- really shows the power of the platform
- able to roll out stuff

(Use frameworks when it helps - know what it helps in -
don't mindlessly stick to it)

Platform

Package tracking system

Tech: Driver DTA

Process: Shipping - Pickup - Sorting
- Routing - Delivery

Org: QA research group

billing process

Data: Customer, Packages, Pricing

Apps: Price Quote, Ship Time

Tech: Redundancy

Add Growth

- additional services
 - logistics
 - tracking api
 - MyChoice

⑩ As a class

Standardized main core business processes

- tracking
- fulfilment
- Global network
- Shared data

Wanted package tracking capability, not app
Displined co - inc telecom, etc

- study closely

CEO did it in reaction to FedEx

My Choice

- they wanted to do 10 years ago
- finally did it now
- prioritization

Adjacent industries

- warehouse services
- may leverage ~~the~~ more physical assets than digital

Abstract ideas

- have ad-hoc UPS drivers
- just sign up + drive

- (11)
- New deliveries
 - Perishables for Seven 11
 - Groceries

~~Amazon~~ - Digitized platform adopts well

- Use data to see new niche of services

UPS has found it hard to use platform for growth

- very easy for profitability
- E-commerce was a gift to them
- FedEx didn't have the ground ~~option~~ capability
- Able to expand to some countries
- Taking biz from FedEx 'international' hard
 - USPS cheap
 - adj' biz - not really an advantage
 - can't put logistics on top
 - need diff platforms
 - can share some stuff
- Not possible to do better - she thinks

(12)

They think of the adjs. businesses as feeding their engines

Arbitrage w/ Mail Innovations

So both compete + work w/ local post office

Q: How would this differ for FedEx?

- very diff
- UPS package data > Cust. data
 - she thinks unrealistic
- FedEx bought small delivery cos
- designed more on cust. data
- still differences today, though decreasing
 - UPS: efficiency + lower cost
 - FedEx: more flexible

Need to recognize when platform is good or not
~~we~~ know when to replatform

(13)

CVS

3 biz

- Retail pharmacy + convenience store - CVS
- Minute Clinic
- Pharmacy Benefits Management - Caremark

Where put platform?

- in each business?
- centrally?

ExtraCare loyalty card

Big time strategic choice

- May not have made

Target's NYT article

If you buy a pregnancy test from CVS -

and CVS sells that to an insurance co. (C) /

and then your premiums go ?

(14)

Strategic choices about the operating model

helps you decide what to put in the platform

Do you want 3 ind. businesses?

- integrating will slow you down

Or is their value in all 3 working together

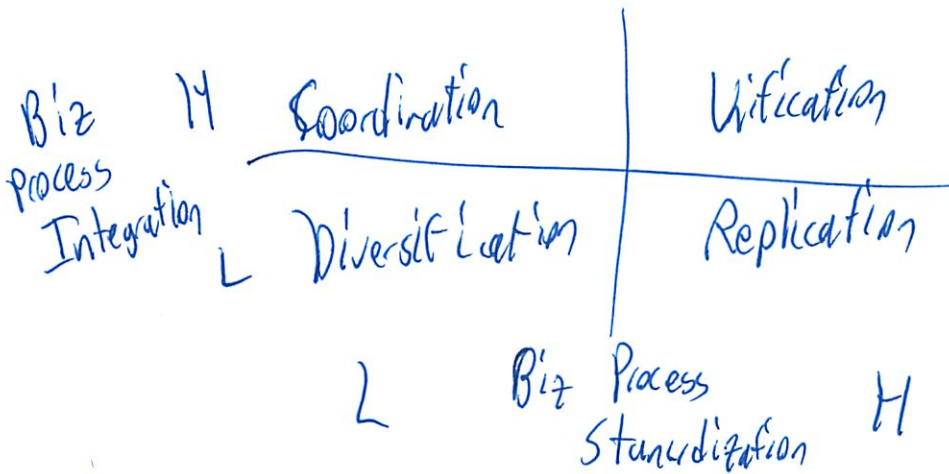
- slow down ind. business for the greater good

Must make a choice or you dillydally

1. What do you want to standardize?

integrate/share?

2. "



Integration is hard

- need a reason to do it

Cos can go in 4 diff choices

(15)

HW Pepsi

was Diversified - 13 ind. regions

Over time → it didn't work

Now what

15.571: Business Strategy and the Role of IT

Dr. Jeanne W. Ross

Director & Principal Research Scientist
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MIT Sloan School of Management
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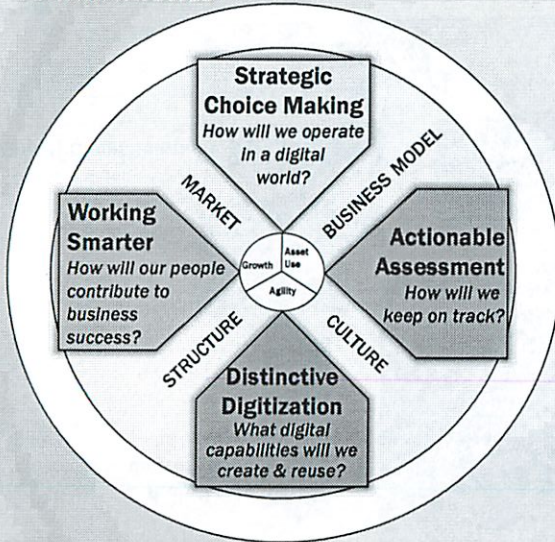


Today's agenda

- Class discussion of 7-Eleven Japan
 - Nature of its platform
 - Impacts of its platform
 - Key strategic choices that make it work
- Group work on UPS
- 10-minute break
- Report backs on UPS
- Discussion of CVS's platform options
- Introduction to operating model concepts



Where IT is a strategic asset, management has made four commitments¹

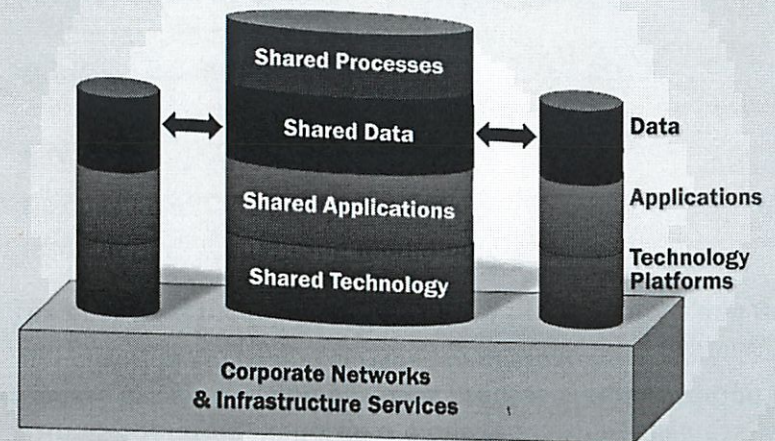


- A commitment is an explicit, high-level agreement to manage in a given way (e.g., "Provide enterprise-wide shared services including finance, sourcing, IT, and HR")
- Commitments are concrete, actionable, relatively stable, and have a high degree of buy-in
- Commitments offer real alternatives; in most cases, the commitment to the alternative is more important than the alternative pursued (or not)
- Higher levels of commitment are associated with significantly higher ROE

Source: P. Weill, J. Ross, and A. Quaadras, "Achieving Superior Value from Digitization: The MIT CISR Value Framework," MIT CISR Research Briefing, Vol. X, No. 8, August 2010.
¹ 2010 MIT CISR survey of respondents from 450 firms having over 500 FTE. Regressions of each commitment vs. digitization impact were significant (p<.001), explaining between 22% and 32% of variance while controlling for firm size and industry.

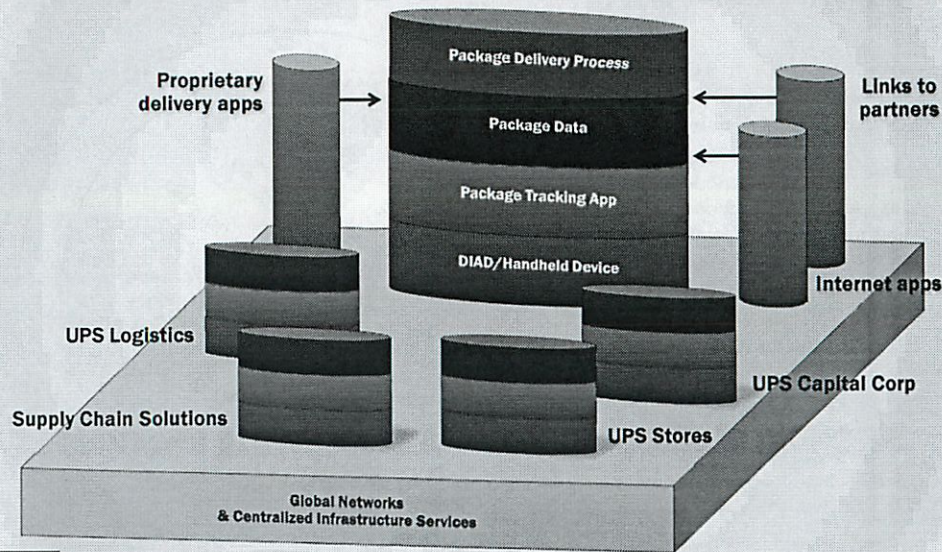


In top performing firms IT builds and maintains a digitized process platform...



2/21

To facilitate growth UPS is building multiple platforms



A digitized platform reflects the requirements of the firm's operating model

- A firm's operating model is: *the desired level of business process integration and business process standardization for delivering goods and services to customers.*
- The operating model describes how a firm will profit and grow.

Four operating models

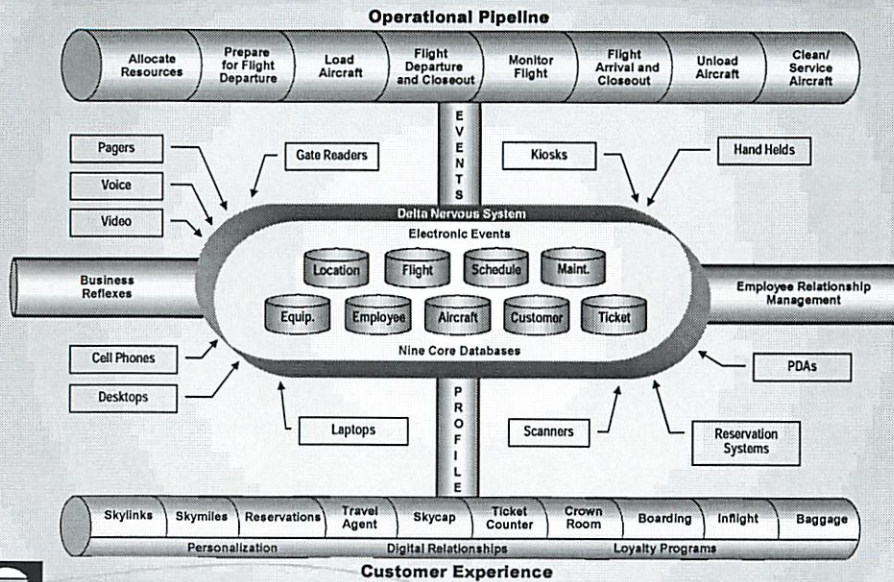
Business Process Integration	High	<p>Coordination</p> <ul style="list-style-type: none"> ▪ Unique business units with a need to know each other's transactions ▪ Examples: Commonwealth Bank of Australia, MetLife, Aetna ▪ Key IT capability: access to shared data, through standard technology interfaces 	<p>Unification</p> <ul style="list-style-type: none"> ▪ Single business with global process standards and global data access ▪ Examples: Southwest Airlines, Dow Chemical, UPS Package Delivery ▪ Key IT capability: enterprise systems reinforcing standard processes and providing global data access
	Low	<p>Diversification</p> <ul style="list-style-type: none"> ▪ Independent business units with different customers and expertise ▪ Examples: Johnson & Johnson, Pacific Life, ING ▪ Key IT capability: provide economies of scale without limiting independence 	<p>Replication</p> <ul style="list-style-type: none"> ▪ Independent but similar business units sharing best practice ▪ Examples: Marriott, 7-Eleven Japan, ING DIRECT ▪ Key IT capability: provide standard infrastructure and application components for global efficiencies
		Low	High
Business Process Standardization			



Different standardization requirements of the four operating models

Business Process Integration	High	<p>Coordination</p> <ul style="list-style-type: none"> ▪ Customer and product data ▪ Shared administrative services ▪ Infrastructure, portal, and middleware technology 	<p>Unification</p> <ul style="list-style-type: none"> ▪ Operational and decision making processes ▪ Customer and product data ▪ Shared administrative services ▪ Infrastructure technology and application systems
	Low	<p>Diversification</p> <ul style="list-style-type: none"> ▪ Shared administrative services ▪ Infrastructure technology 	<p>Replication</p> <ul style="list-style-type: none"> ▪ Operational processes ▪ Shared administrative services ▪ Infrastructure technology and application systems
		Low	High
Business Process Standardization			

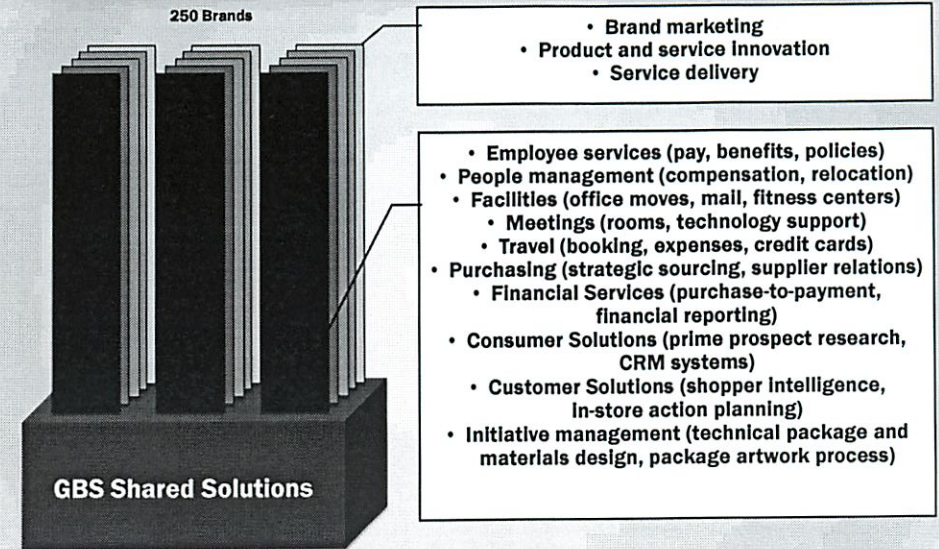
Delta's unification operating model



Center for Information Systems Research (CISR) Source: Adapted from Delta Air Lines documents. Used with permission.
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Procter & Gamble's diversification model

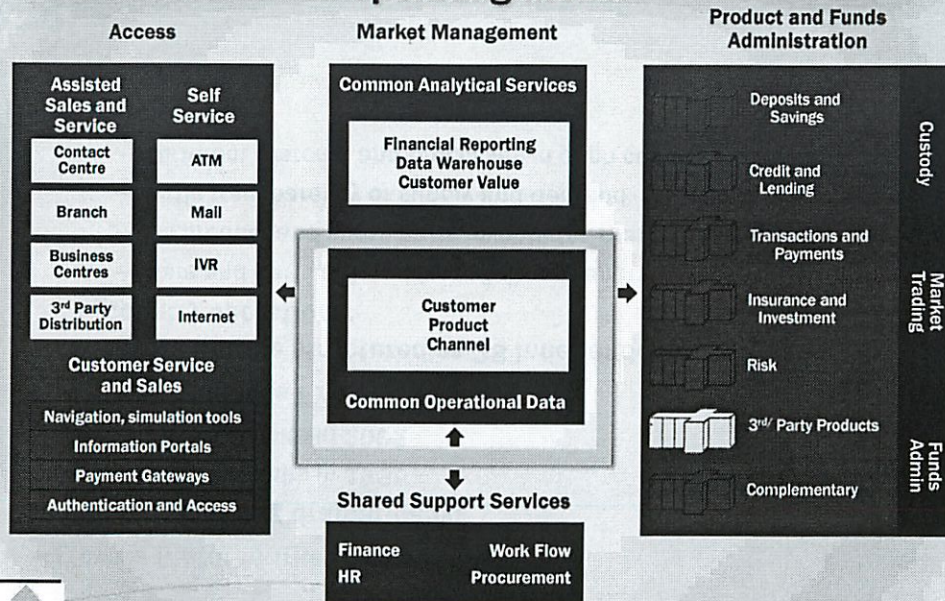


Source: "Governance of Global Shared Solutions at Procter & Gamble," P. Weill, C. Soh, and S. Kien Sia, MIT CISR Research Briefing, Vol. VII, No. 3A, December 2007; P&G 2006 Annual Report and Interviews of P&G executives in Asia and the U.S. by C. Soh, S. Kien Sia (Nanyang Technological University-NTU), and P. Weill.

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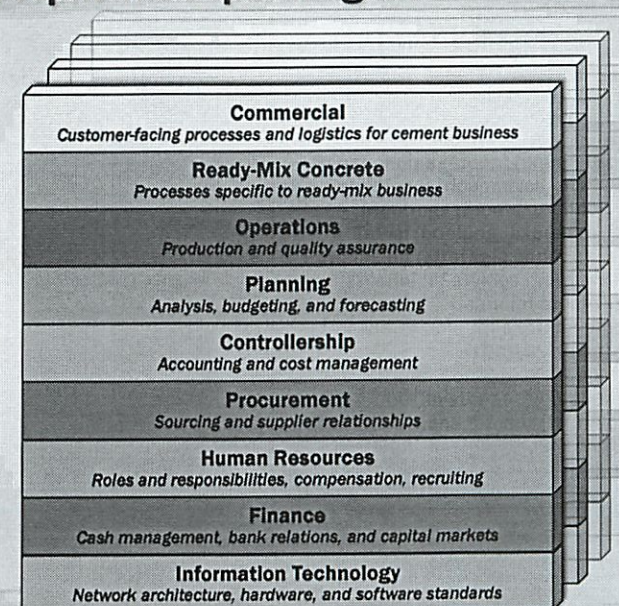
CBA's Coordination Operating Model



Center for Information Systems Research (CISR) Source: CBA documents. Used with permission.
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Cemex's replication operating model



Center for Information Systems Research (CISR) Source: Corporate Dealmaker, February 15, 2004.
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11

Business transformation at Toyota Europe

Toyota Motor Marketing Europe 2002

- Sales growing dramatically:
 - 384,000 units in 1995
 - 727,000 units in 2002
- Operating loss FY 2002 ¥9.9B
- Toyota Europe structured as 28 independently managed country operations:
 - Cars and parts ordered from 9 European manufacturing plants
 - All product and spare parts inventories managed within countries
 - Little transparency of supply and demand
 - Different systems and processes in each country



15.571 Generating Business Value from IT

Class 3 Assignment

PART 1

Read the Forget Strategy and IT-enabled Innovation briefings and then the PepsiAmericas case study. Prepare the following discussion questions:

1. What was the role of IT in PepsiAmericas before 2000?
2. What IT-enabled capabilities (i.e. platform components) are important to PepsiAmericas at the time of the case?
3. PepsiCo purchased PepsiAmericas in 2010. Given that PepsiCo has its own bottling systems and processes, will PepsiCo realize any value from PepsiAmericas' IT assets and operating model?

PART 2

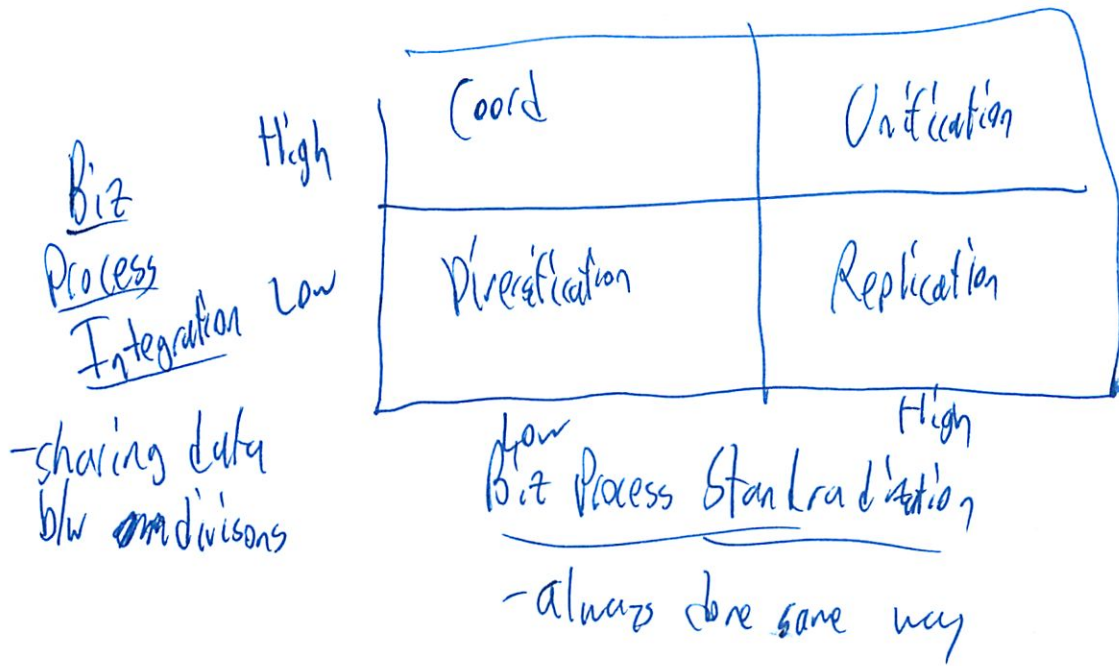
Watch the following brief video about Tesco, the British supermarket chain: <http://www.youtube.com/watch?v=nJVoYsBym88> and prepare the following questions:

1. Does Tesco need a digitized platform to enable the kind of innovation described in the video?
2. Like 7-Eleven Japan, Tesco wants to expand globally with stores and online services. What kinds of processes, data, and technology should be standardized?

Today: Operating Model
Pepsi Americas

Tesco
Ent. Architecture

Op Model and Innovation



Diversification extreme → Berkshire Hathaway

What is the value of this?

- some econ of scale
 - some cross selling
- Really ↓
only investor - cos left

②
It becomes harder + harder to drive value here

Or in poor capital markets

Samsung, Tata

GE: Six Sigma management practices

- a bit of value add

- but still Diversified

Perhaps shared fin and HR

- like GE → shared payment model

Usually exceptions in some

- but pick a clear model

- who you are trying to be

Or in specific division/unit - org does something diff locally

Real impacts on growth

of the models

Diversification: easy to integrate (since no integration) ^{acquisition}
but no value add

③

And how to sell

- Very hard to sell a unified biz group
- then the remaining IT costs are split among less ways
- Still same platform costs

PE portfolio cos are very separate

Centralized vs Decentralized - paradox

↑
save

↑
Growth
Innovation

too stark?

So Coord + Repl are in the middle

↑
Some shared
things

↑ Franchise model

United - had 17 systems that operated independently

9

(I think I kinda implicitly understand this - but its good to see it clearly - ~~the~~ Rumpelstitskin Principle)

United's Picture Unification (very nice)

- 60 iterations
- 6 weeks
- Could a cost build this in 2 weeks
- They lost sight of what it means to be a customer

United is Unified

Out of fashion: Now take 2 years to fill in the details

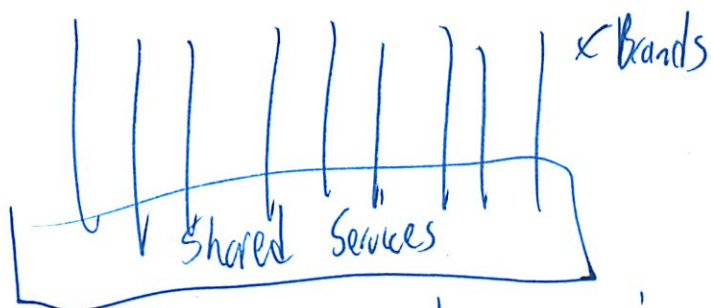
Low cost and high predictability

But only in commodity industry

5

P+G's Diversification Model

- kinda fell apart a bit w/ int'l
- all the power is in the brand manager



- employee services
- people management
- meetings
- facilities
- purchasing
- fin services
- cust solutions & shopper intelligence
- package + material design

Built one at a time

lot of facilities, h.r, finance

put good people in charge

very little pushback

6

Some are req

But some are optional

Gave CIO some marketers

- told them how much costing
- promised them a 10% cost cut
- then cut costs every year

Did start w/ SAP

Level 1, 2, 3, 4 processes

- will see lang
- what are we standardizing and what are we not

Sometimes do this for outsourcing to India

- Must record processes in mind during detail

Com. Bank Australia Coordination

- costs were too high
- costs complaining
- think of it as we need to know cost
- put cost in middle of pic
- info was not centralized

⑦

Any front end people wanted to use

Normally clean up data lot

But they cleaned cust front end lot

Then make it work in back end

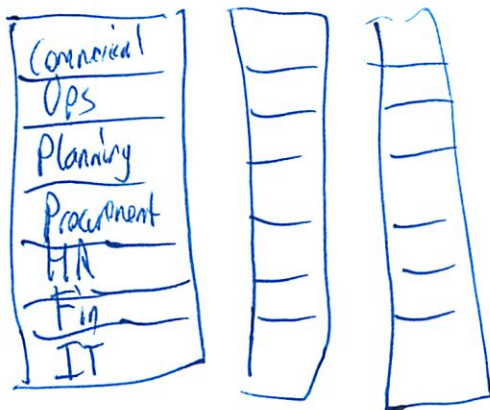
Still very hard to swap out banking systems w/ SAP

She thinks many datas' co is so bad - why

Are they messing w/ analytics

Comex Replication Operating Model

- have local cust not global



- Co heard had best processes

- So bought up Cos

- replaced their platform w/ them

- replication; SEJ, McDonald

⑧

easy to acquire

Still franchises ~~open~~ go out on their own
+ try to win bit

autonomy

data sharing

Sometimes this fails

Schneider Electric

170 cos

wanted single view of cost

Op Model is comm tool

- show people if useful

When she does this at cos

- they want a bigger piece of paper

- think everything is important

- can't leave it at

Toyota Europe 2002

Selling lots of car, but losing \$

⑨

Had each individual co a company
9 plants

could deal w/ as many plants as ya wanted

What op model in 2002: ~~Unit~~ Division

What should do: Stand ↑ Int ↓ Replication

A group ~~was~~ argued for Coord, Unit, Rep

Is EU start up mean anything?

She said all ans are right

~~There~~ In real life, more detail needed

All 3 can be justified

- You make it right

They said coord 1st

then unified

" Europeans don't like one another "

Rep → would be hard to get everyone to do it

Got them to prepare this 1 daily inventory file

- 3 smallest co put in SAP w/ central help

(10)

You could see who had what

Could order from ~~more~~ sources and each other
Then back to making \$

but each to value info

2008: Much more unified

Pepsi Americas

Transformation of Co

Was very regional

Unification at end

Standardization + Integration
↑
Same processes ↑ sharing data

excluding 'international'

Segmentation kinda unique

Were originally thinking coord

- since diff front ends

- but highly standardized back end

(11)

Individual pricing was huge for them

Just be able to draw a pic + explain it

Also change incentives

- no bonuses on sales

- drivers lost paid

- lots of difficulties here

- need to teach sales people how making profitability

 - easy to do

Hardest part: make the change

- management committee

- Project Management Office (PMO)

- Analytics

Made a mistake - 1st tried to get

the 13 regional heads on committee

- they decided to keep things as is

- Joint IT/Biz collab

 - She can see ~~when~~ when they go into writing a case - who they talked to

(12)

- Had a crisis w/ too many items

Data Warehouse - for analytics

Pepsico said they could not scale up ~~in~~ PepsiAmericas behavior

- Since PepsiAmericas was smallest

Tesco

3rd largest retailer in world

UK-based

Goal be 1 or 2 in co they enter

By buying #5 or 6

Op proj

Disagreement on what to put for projects

Large grps

Warehouse

~~Dist~~ Transition

SAP process names

Concept to Market

- products diff
- put process same?
- differs from culture to culture

13

What is biz process

Tesco CIO

Distribution center - all done the same

Where dictate op model - no reason to do this different

Developed over 30-40 years

If see competitive advantage in being different

Entire System same

- but parameters set locally

Tube

- Marketing led

- (His attitude was this was gimmicky)

- Problem led / data driven innovation

- need time to sift

- get practitioners to do

See what vendors are up to

Well designed platform: just launch new product

(14)

lots of cos overwhelmed w/ suggestions

~~then~~



1. Get platform

2. Use it

Next week IBM

15.571: Business Strategy and the Role of IT

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Today's agenda

- Overview of Operating Model
 - Examples
 - Brief Toyota Europe exercise
- Class discussion of PepsiAmericas
 - Role of IT as competitive environment changes
 - Ability of acquirer to leverage the platform
- 10-minute break
- The Operating Model and Business Innovation
- Group work on Tesco
- An overview of enterprise architecture



Four operating models

Business Process Integration	High	<p>Coordination</p> <ul style="list-style-type: none"> ▪ Unique business units with a need to know each other's transactions ▪ Examples: Commonwealth Bank of Australia, MetLife, Aetna ▪ Key IT capability: access to shared data, through standard technology interfaces 	<p>Unification</p> <ul style="list-style-type: none"> ▪ Single business with global process standards and global data access ▪ Examples: Southwest Airlines, Dow Chemical, UPS Package Delivery ▪ Key IT capability: enterprise systems reinforcing standard processes and providing global data access
	Low	<p>Diversification</p> <ul style="list-style-type: none"> ▪ Independent business units with different customers and expertise ▪ Examples: Johnson & Johnson, Pacific Life, ING ▪ Key IT capability: provide economies of scale without limiting independence 	<p>Replication</p> <ul style="list-style-type: none"> ▪ Independent but similar business units sharing best practice ▪ Examples: Marriott, 7-Eleven Japan, ING DIRECT ▪ Key IT capability: provide standard infrastructure and application components for global efficiencies
		Low	High
		Business Process Standardization	



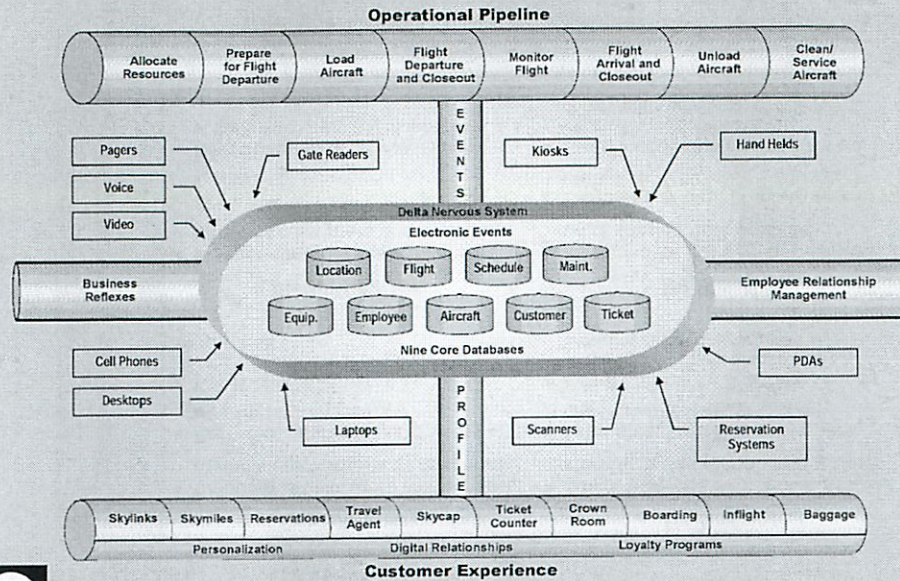
Different standardization requirements of the four operating models

Business Process Integration	High	<p>Coordination</p> <ul style="list-style-type: none"> ▪ Customer and product data ▪ Shared administrative services (e.g., HR, finance, purchasing, facilities) ▪ Infrastructure, portal, and middleware technology 	<p>Unification</p> <ul style="list-style-type: none"> ▪ Operational and decision making processes (e.g. supply chain, sales, customer relationship management, customer service, production) ▪ Customer and product data ▪ Shared administrative services (e.g., HR, finance, purchasing, facilities) ▪ Infrastructure technology and application systems
	Low	<p>Diversification</p> <ul style="list-style-type: none"> ▪ Shared administrative services (e.g., HR, finance, purchasing, facilities) ▪ Infrastructure technology 	<p>Replication</p> <ul style="list-style-type: none"> ▪ Operational processes (e.g. supply chain, sales, customer relationship management, customer service, production) ▪ Shared administrative services (e.g., HR, finance, purchasing, facilities) ▪ Infrastructure technology and application systems
		Low	High
		Business Process Standardization	



2/27

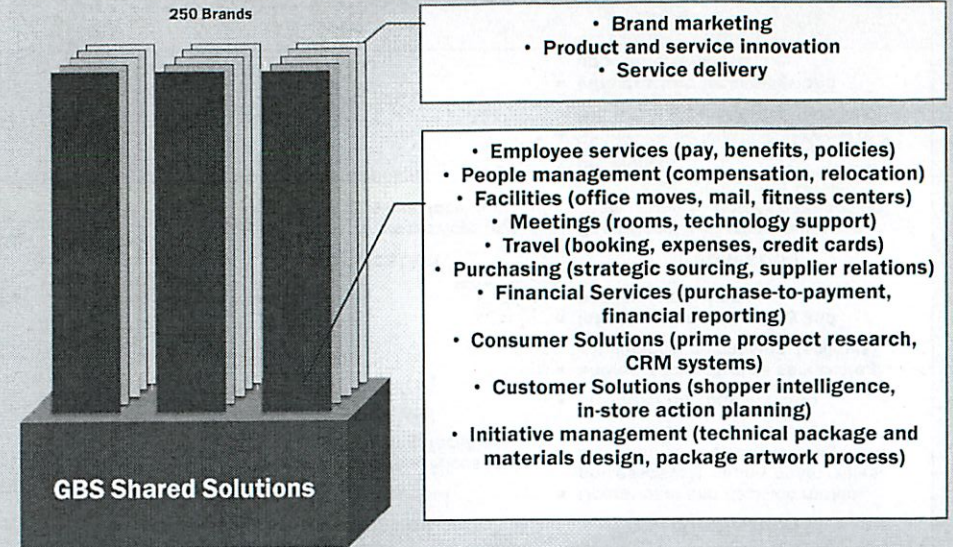
Delta's unification operating model



Center for Information Systems Research (CISR) Source: Adapted from Delta Air Lines documents. Used with permission.
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Procter & Gamble's diversification model

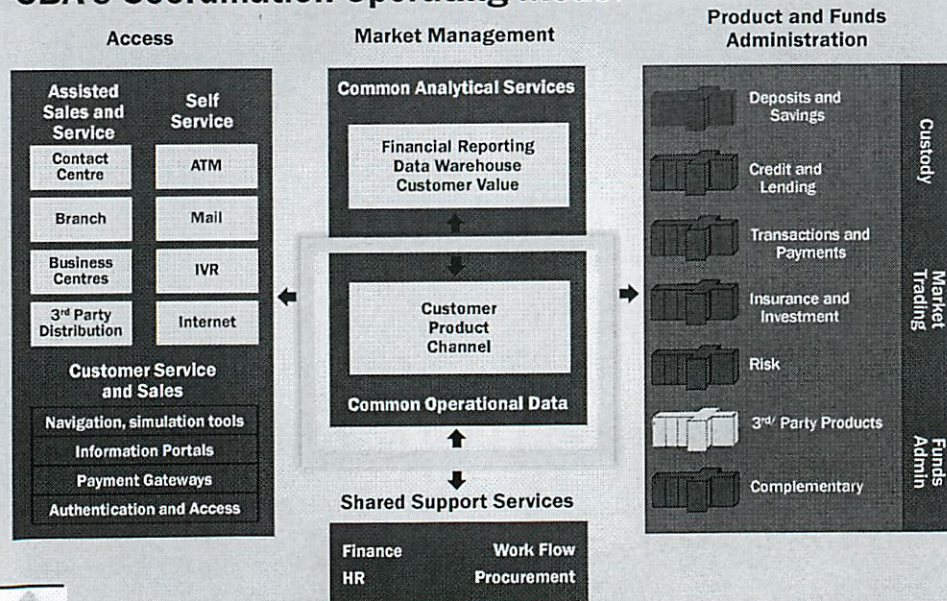


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Source: "Governance of Global Shared Solutions at Procter & Gamble," P. Weill, C. Soh, and S. Kien Sia, MIT CISR Research Briefing, Vol. VII, No. 3A, December 2007; P&G 2006 Annual Report and interviews of P&G executives in Asia and the U.S. by C. Soh, S. Kien Sia (Nanyang Technological University-NTU), and P. Weill.

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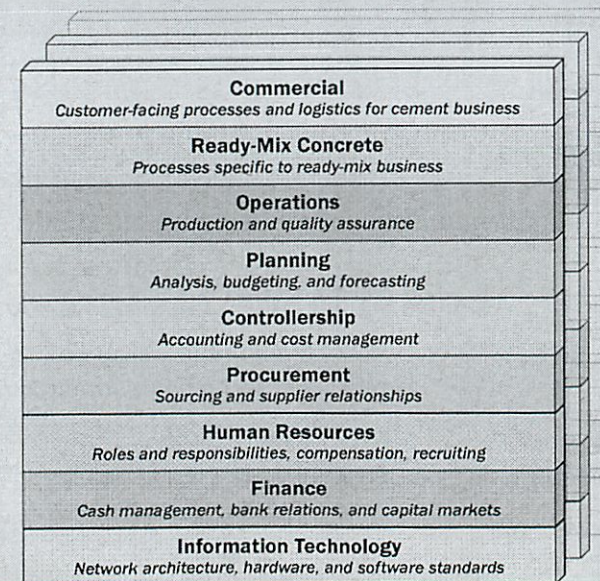
CBA's Coordination Operating Model



Center for Information Systems Research (CISR) Source: CBA documents. Used with permission.
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Cemex's replication operating model



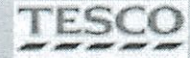
Center for Information Systems Research (CISR) Source: Corporate Dealmaker, February 15, 2004.
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Business transformation at Toyota Europe

Toyota Motor Marketing Europe 2002

- **Sales growing dramatically:**
 - 384,000 units in 1995
 - 727,000 units in 2002
- **Operating loss FY 2002 ¥9.9B**
- **Toyota Europe structured as 28 independently managed country operations:**
 - Cars and parts ordered from 9 European manufacturing plants
 - All product and spare parts inventories managed within countries
 - Little transparency of supply and demand
 - Different systems and processes in each country

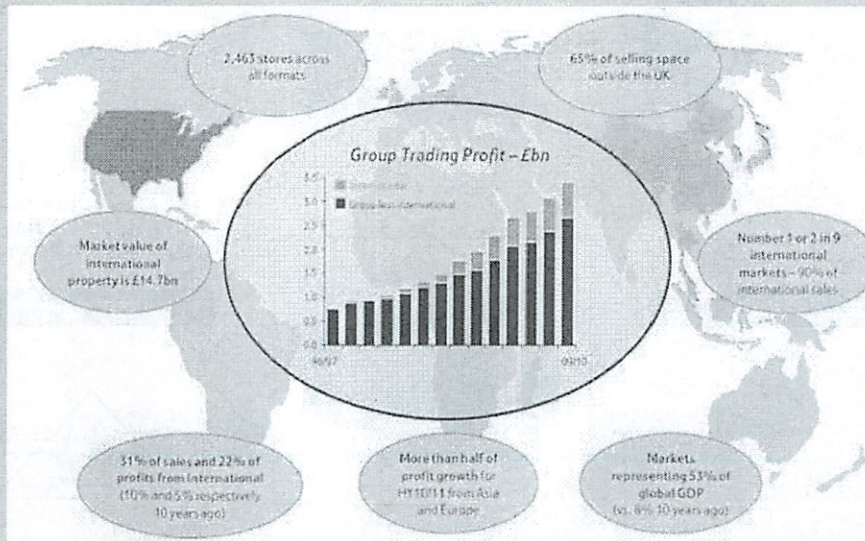


Company overview

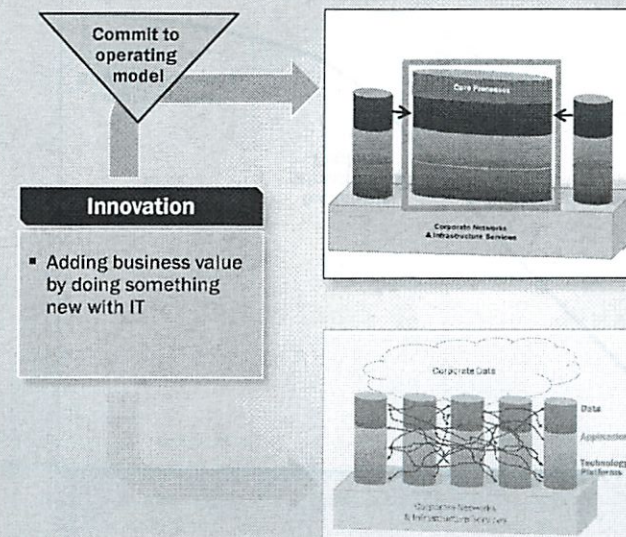
- **Global grocery and general merchandise retailer:**
 - Market leader in the UK (30 per cent market share, 3rd largest retailer in world¹)
 - 492,000 staff in 14 countries across Asia, Europe and North America
 - Diversified into hard-lines (including retailing of books, clothing, electronics, furniture) services (banking, telecoms, retail analytics)
- **FY 2010/11**
 - Group sales £67.6bn (up 8.1%),
 - Operating profit £3.8bn (up 10.2%)
- **Growth strategy:**
 - Attempting to be Number 1 or 2 in every market in which they operate; buy companies that are maybe number 5 or 6 in their market
 - Grow in UK by diversifying into online channels and banking services



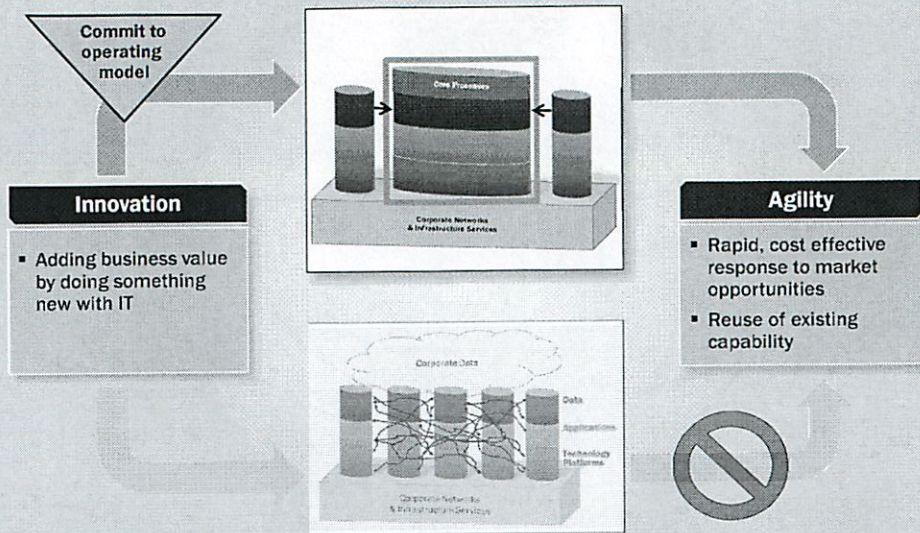
Tesco international: An engine for growth



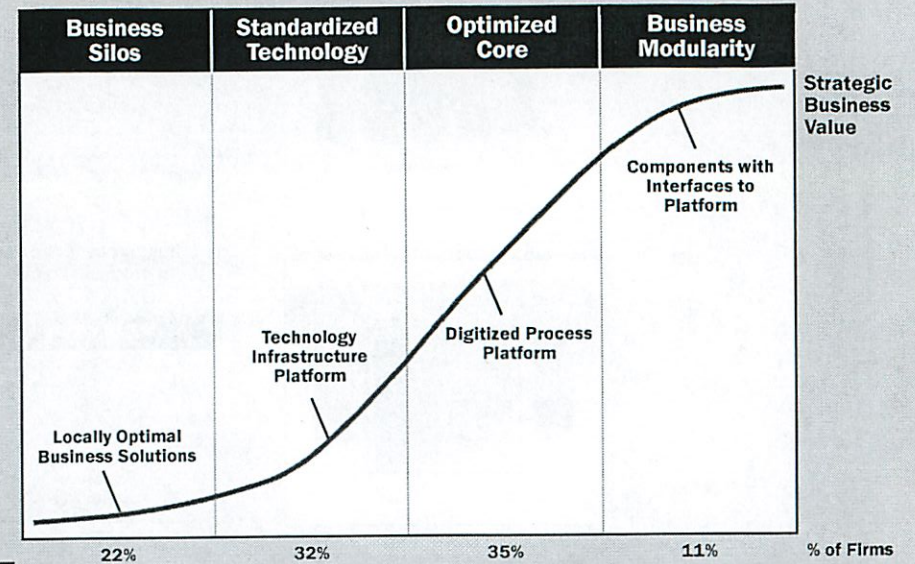
Innovation Can Facilitate or Impede Business Agility



Innovation Can Facilitate or Impede Business Agility

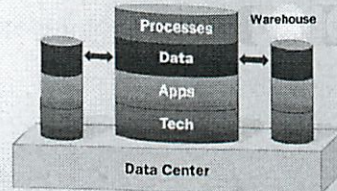


Firms design and build digitized platforms in stages

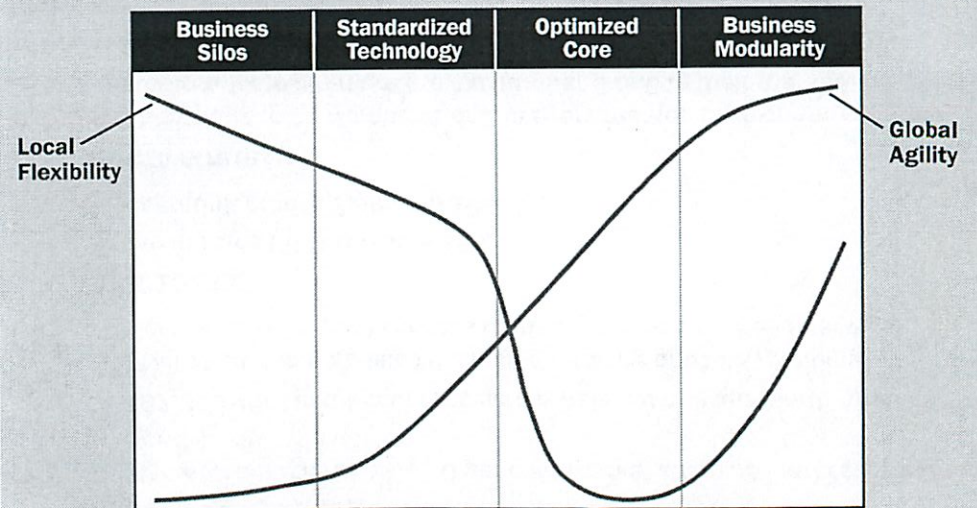


Enterprise architecture

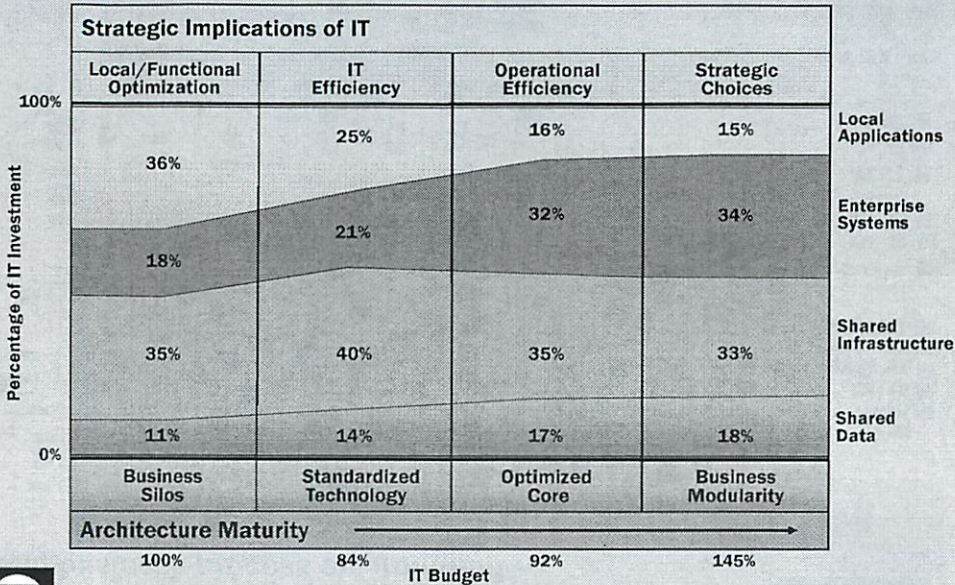
- The organizing logic for business process and IT capabilities reflecting the integration and standardization requirements of the firm's operating model and providing the design for one or more digitized platforms.



These stages involve buying into enterprise objectives



Firms transform as architecture matures



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IT budgets are based on surveys of 103 firms and corrected for industry differences. Business silos budget is the baseline. Budgets for other stages are represented as a percentage of the baseline budget. Only five firms in stage four reported their IT budgets so data is not reliable.

16

Organizational learning is key to advancing through stages

	Business Silos	Standardized Technology	Optimized Core	Business Modularity
IT Capability	Local IT applications	Shared technical platforms	Enterprise-wide hardwired processes or databases	Plug and play business process modules
Business Objectives	ROI of local business initiatives	Reduced IT costs	Cost and quality of business operations	Speed to market; strategic agility
Funding Priorities	Individual applications	Shared infrastructure services	Enterprise applications and data stores	Reusable business process components
Who Defines Applications	Local business leaders	IT and business unit leaders	Senior management and process leaders	IT, business and industry leaders
Leadership Tasks	Measure and communicate value Lead change	Design and fund shared IT services Monitor standards and exceptions	Define digitized platform Align project priorities with enterprise objectives	Define, source and fund business and IT modules

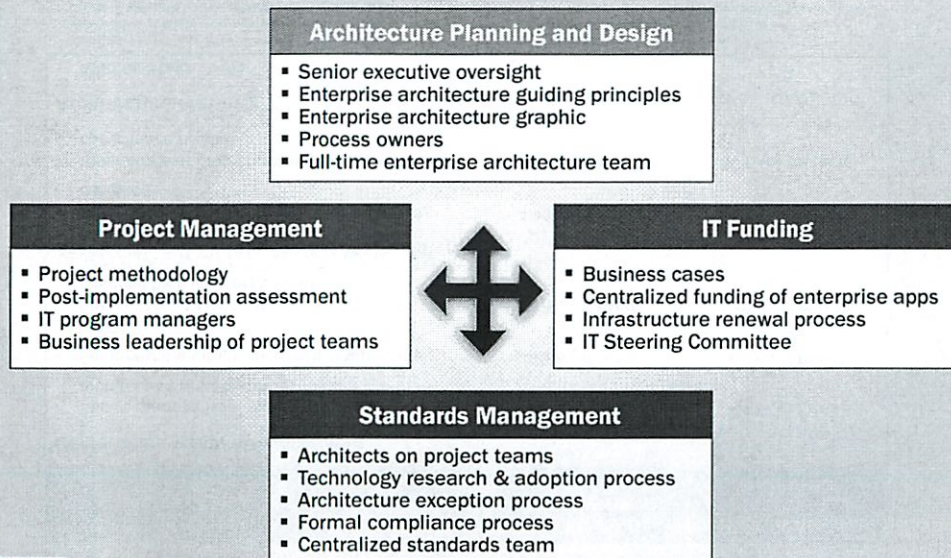


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Source: *Enterprise Architecture as Strategy: Creating a Foundation for Business Execution*, J. Ross, P. Weill, D. Robertson, HBS Press, 2006.

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Firms learn by building management competencies

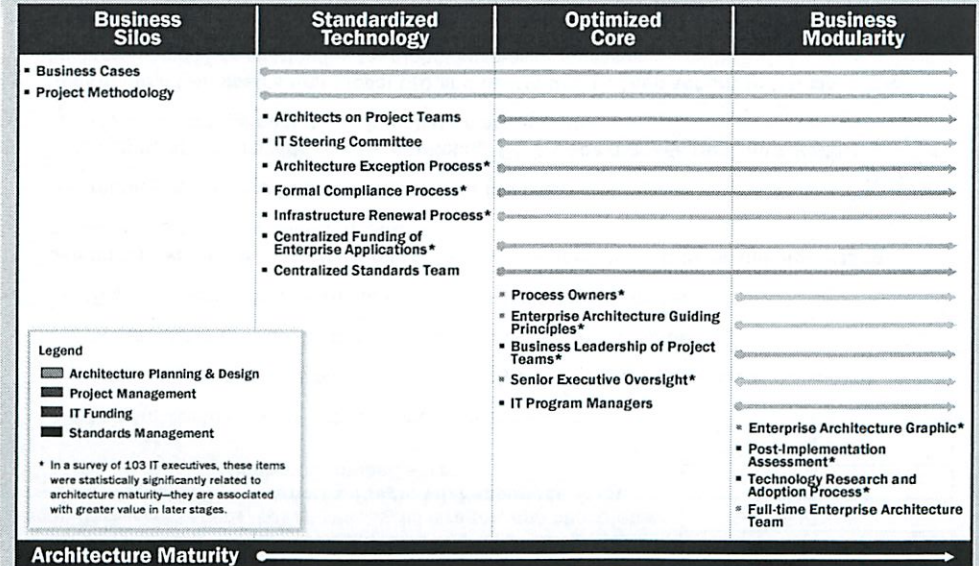


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Management practices within each practice set are statistically significantly correlated with each other. All four competencies are significantly correlated with architecture benefits.

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Firms build competencies in stages



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Source: *Enterprise Architecture as Strategy: Creating a Foundation for Business Execution*, J. Ross, P. Weill, D. Robertson, HBS Press, 2006.

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Top Performing Companies Do Three Things Better

Characteristic	Low Strategic Effectiveness (n=78 firms)	High Strategic Effectiveness (n=25 firms)
Senior Management Involvement		
• Senior management explicitly defined architecture requirements	25% (of firms)	44% (of firms)
• Senior management oversees architecture initiatives	45% (of firms)	60% (of firms)
• Percentage of senior managers who can describe high level architecture	19% (of mgrs)	39% (of mgrs)
Architecture Built into Project Methodology		
• Percentage of project teams with architects assigned	49% (of projects)	81% (of projects)
• Percentage of projects subjected to architecture compliance review	60% (of projects)	80% (of projects)
Architecture Maturity		
• Median Stage (1-4)	2	3

• Statistically significant difference between the responses of top 25% of firms on strategic effectiveness. Strategic effectiveness is measured as strategic outcomes (operational excellence, customer intimacy, product innovation, and strategic agility) of architecture initiatives weighted by their relative importance to each firm. The top 25% of firms on strategic effectiveness reported significantly higher profitability which correlated with industry adjusted measures of firm-wide profitability.



Transforming a 132-year old soup company



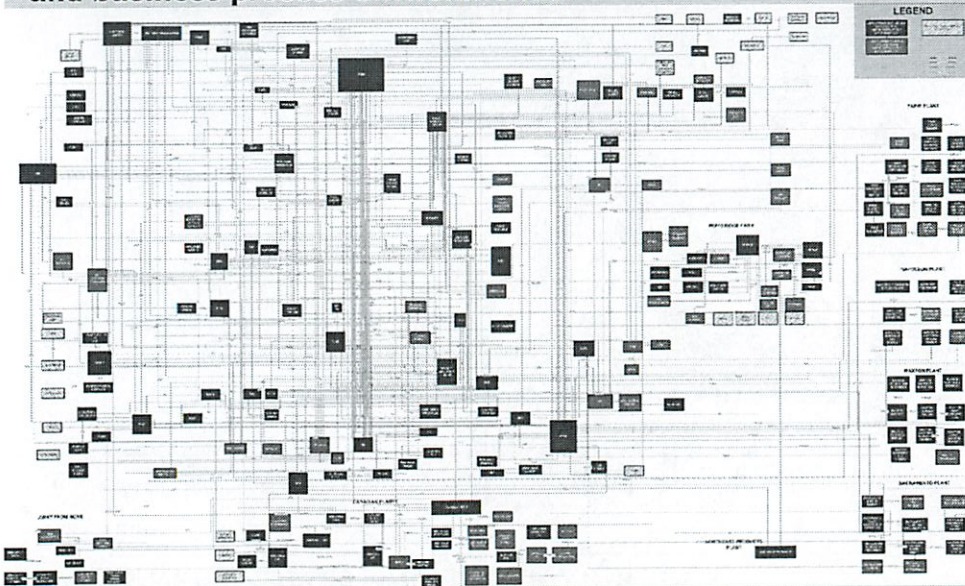
In 2001 Douglas Conant took the reins of a \$6 billion global manufacturer of soups, baked snacks, beverages, and chocolates (e.g., Campbell Soup, Arnett's, Prego, V8, Pepperidge Farm, Godiva). Campbell's was

2010 Net sales	\$7.7B
2010 EBIT	\$1.3B
Sales offices	120 countries
Employees	18,400

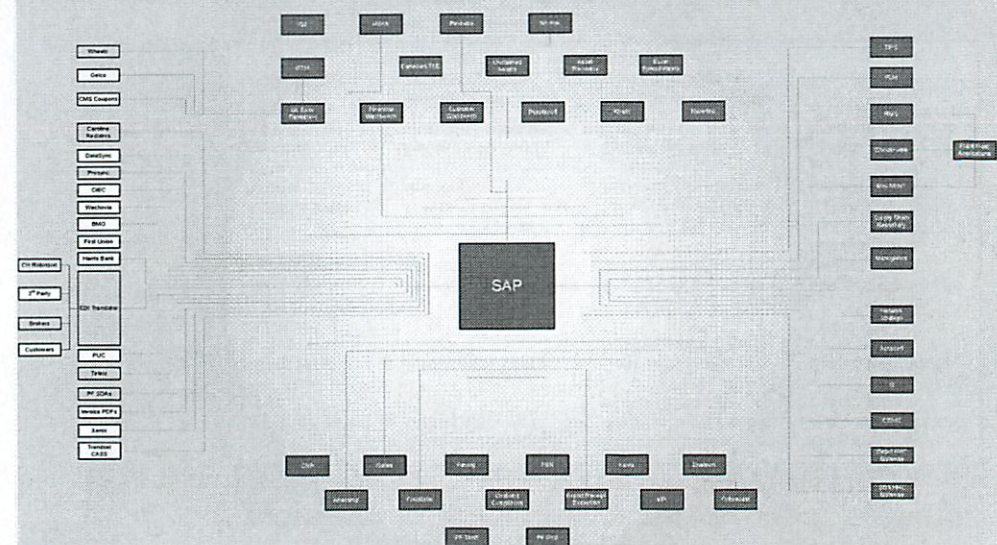
- Lagging competitors in financial and market performance
 - Attempting to meet the needs of increasingly price and health conscious consumers
 - Competing in an industry dominated by giants (e.g. Kraft, Nestle)
 - Facing increasingly powerful upstream and downstream partners
- Conant's strategic vision focused on revitalizing the portfolio of brands and products to emphasize growth. His operating strategy:
 - managing non-core business activities for low cost
 - managing core activities (sales, marketing, R&D, trade management, and product lifecycle management) for differentiation and growth.
 - Conant hired Campbell's first global CIO and centralized IT. Then set out to transform the business using IT as scaffolding for global business processes.
 - As of 2010, 6-year cumulative Total Shareholder Returns (stock price plus dividends) nearly twice that of the S&P Packaged Foods Index (64% versus 38%).



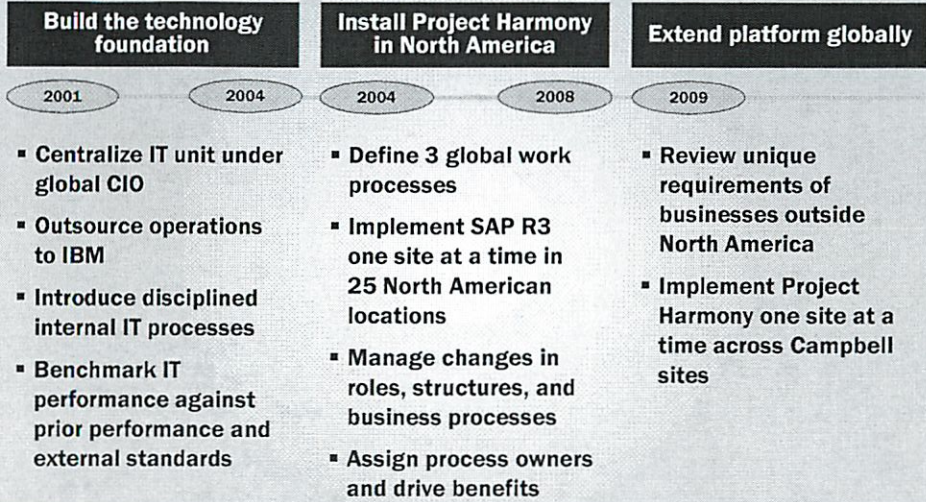
Campbell's needed to convert its legacy IT and business process environment...



... to a digitized process platform



Key stages in Campbell transformation



15.571 Generating Business Value from IT

Class 4 Assignment

PART 1

Read the Maturity Matters briefing (or alternatively, the chapters from the Enterprise Architecture as Strategy book). Then read the Southwest and IBM case studies, reflecting on the following discussion questions:

1. What is Southwest's targeted operating model? What are the critical capabilities it must develop to achieve that operating model?
2. Southwest is attempting a major organizational change. What do you think will be the major obstacles to that change and what do you think Southwest should do to address the obstacles?
3. How would you classify IBM's operating model? How has it evolved? What are the risks and potential benefits of the operating model it is implementing?
4. Describe how IBM is pursuing business process optimization. What are the key challenges and critical success factors for driving benefits from these efforts?
5. IBM is a highly distributed global firm with a proud history and cultural identity. What must IBM do to maintain its culture across its many sites and work-at-home style?

Today: Southwest and IBM

Projects

Every group knows deliverables

many teams unclear on how going to deliver those

If/Re comments from prof

Thinks projects look good

Should not overwhelm

Southwest Fun, good culture

Only sells on its website

Free bags

- She likes it not since she has bags
- But because no one else is trying to squeeze bags over her head

2006

Feeling serious challenges from other low cost airlines
Low cost, high tech

② Standardized model
But lower tech - challenging to do

Growing world require change in standardized model

- smaller cities → diff. planes
- code sharing → IT does not do
- international → IT does not do

Post 9/11 slump - other airlines restructured
are now more competitive

What's new

- need better tech
- processes are now siloed by function
- want to centralize on 1 platform

Biz is running IT stuff

~~Think they can~~ - goes around IT's back

- think they can do it better, cheaper than IT
- short term ~~gain~~ gain, long term ~~gain~~ pain

③

IT more expensive upfront - so platform standardized
Sometimes speed to market important
But long term mess + cost

Why is it cheaper outside?

- economies of scale

- no learning curve

- reusing old solution

- IT trying to avoid your business

- external focuses on current, small scale

- or external changes more later (ballon)

Want to integrate.

Why: Capabilities

~~on~~ Governance - standardized way

- want to know if actually cheaper external

- better tracking

- prioritizing

~~Have~~ Have sure is

Alignment - ~~Q~~ make sure still meeting needs
more agility

④

IT acts as a glue

- Does it still remain a service
- want it to still be automated

(~~the~~ These answers don't really seem it - but I don't think better)

Automation - efficiency

reduce mistakes

save \$

Automate non core competency

- focus on unique

- Standardize ~~not~~ ^{non} distinctive ways

Data Visibility - helps w/ CS

- consistency - one version of facts

Analytics

Basically they want to operate differently

CS wants to know when a plane breaks down

Scheduling wants to know if route is profitable

5

Huge change at SWA

- Finance people need to not just care about Finance but whole company

What are the challenges?

(group question)

- Investment seems a long way off
 - risky
 - how to measure
 - what is Rate of Return
 - ~~not work~~ platform - who to charge back
- Every airport is different
 - local kingdoms
 - buy in
- No good overview of project
 - strat team
- IT took too long

(6)

- Need to make a scary strategic decision about future

Fixing plane in mid air

- replace pieces while still ~~running~~ running an airline

Clear Quality process

- Employees
- Projects: toll gate

Care about corp culture

Open data

- we will succeed
- large team sense

Debrief

More of a change management challenge than the tech part

↑ Biggest flaw that companies can face

Now: United + Continental integration

Had not sufficiently trained people on system

⑦

Training - was it sufficient

Crew who actually flew

was not that bad

had a team captain who knew what they were doing in each airport

Change management consultant

Sometimes smooth

Other times implementation weekend blows up

Always a tendency to underestimate change management

Obstacles @ Southwest

- ability to build momentum

- some amt of art there

- great leaders (CEO) can stage change

- that see results

- making progress

8

Way tech org is designed

- centralized

Can Emp comfortable w/ change

Way Biz + IT work together

Steering Committee

- next week

- right people

- do people feel confident in decision making

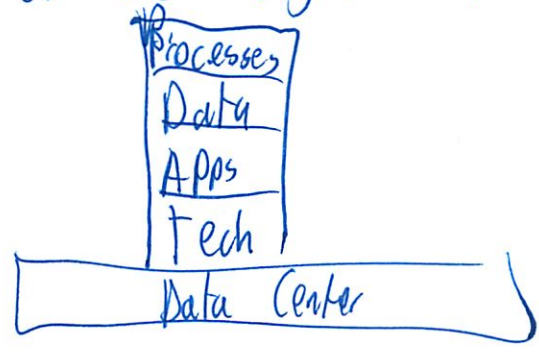
Enterprise Architecture

People can ask for ∞ stuff from IT

What capabilities do they want the most?

Where is the mess?

How do we figure out what matters the most

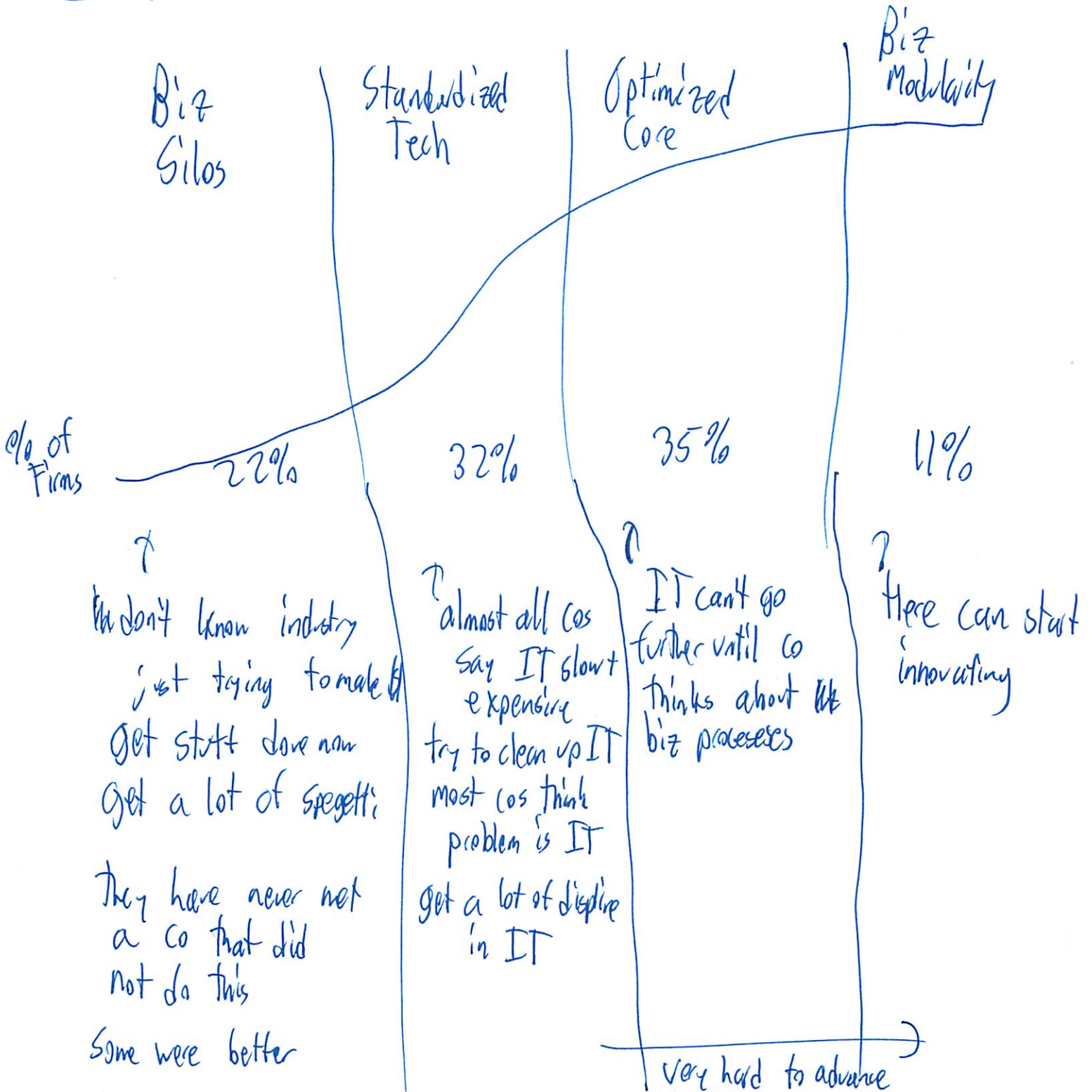


4

Stability of core

And able to innovate around the edges

Journey / Stages



10

IBM

(reading case → very abstract

what are they talking about)

Q) What are they trying to do?

- Consolidate IT

- Reinvent IBM

HW/sw → Services

- Globalize

- Standardize

- Control of IT Budgeting / Investment / Governance

- Regain profitability

AND

Is it really possible to standardize over countries?

→ Extent you want to centralize

128 CIOs

- fiefdoms

- don't want to give up power

Same w/ asking about

IBM's biz in general

I don't have too much of an insight

②
Solution: career dev - transition elsewhere

Present biz people w/ a proposition they can not refuse

Focus on cust satisfaction of internal cust

Does happiness = better performance

Moving processes based - less vertical base

How do you have multiple things sustainability

1/3 of Big Dig budget was change + sustain
Still allowing traffic while building

Morale

Does centralization slow things down

How do people unlearn

People do 80-90% of things out of habit

People who have been there a while feel like
their knowledge does not matter

Manage expectations

(2)

Does not charge for cost savings

- So trade off not as harsh
- bottom line better short term

Will the services ~~stay~~ stay efficient?

Or will biz crits abuse it?

Will we miss doing new/strategic innovative things?

How do acquire?

Loss of flexibility

- we cut costs
- but we also need to grow

Diminishing return

Pat Toole

And did stuff before
 CIO of IBM last year
 (confidential) - now something else

He is on op side

So was hired as CIO

Before him it was a ceremonial role

(13)

Had to get rid of most of people

- Cut 240% of exec team
- Some got better jobs
 - at other cos

Had a corp CIO group

- ivory tower

and biz level

- more hands on

Decentralized - feels like says yes to everyone

Needed to get people who could say no

Was focused on ↑ ~~EPS~~ EPS

Who is your cust?

- before cust was way to low
- need ~~the~~ big projects to move the needle
- they defined cust very high level
 - Senior VPs
 - every 6 or weeks

(14)

Q How hard is this on morale?

Train people to thrive on that

Entitlement attitude

↳ Big momma

90s 400,000 emp → 220,000

His father was the # 3 guy

Needed to break full emp policy

2 weeks how many + who
Very difficult

Tried to make people want to work there

Developed leadership competency

how to stive in high pressure

05: doing XBOX CPU

Not a military culture

↳ but will always be under pressure

Pressure on your self

(15)

Don't want to go back to 40s

McKinsey - kinda ~~east~~ coast at Sr. Partner

Q How did you do it?

Great people

Tech company at core

40,000 patents

Pride

Saw it at home

People can leave a legacy

Lose people if not challenged

(Emp in class: you rediscover yourself)

EPS roadmap

- explicit goals to investors

- must fit into it

He had all the money

- so job much easier

- Procurement put rule that had to go via him

(6)

Put CFO as bad guy

"if you don't like it → talk to the CIO"

Was messy

- his people were beat up

- so when got to him - agreed to

CIO: Reengineer processes to save \$
make sure driving hard benefits

\$ 1.2 - 1.5 billion

measured by controller

Told them - you will cut 18% of your people

Or make 10% more revenue

Teams: Run, Transform, Integrate

? they were like PMs/account managers
biz line would select people
were physically in geographies

Whole Co is matrix of Gen and Biz Areas Divisions

17

China person has no vote on where to spend \$

Went \$16 bil → 12 bil by shared services consolidation

Built CIO dashboard

- best things did
- outcomes → enables → EPS

Cut Run cost 10% in 1st year

- Year to build
- galvanize people in same direction
- he was accountable for rev loss when down
- commit SLA on biz process not app

25-35% of his time w/ external custo

Want to make sure actually using it

his peers have sales quota

every co is so-so different

CIO tech co

- everyone thought they could do it better
- but always leading tech
- and people to fix it

(18)

Picking video conferencing

- all were big client of his
- clear procurement documentation
- lots of legal issues too

Have ~~also~~ 20 people change management

- would work w/ SVP
- did it every day

Would pull "red team" assessments

- for ind assessments

Look through Ent. Process Lead

- 15

- each has a handpicked senior leader

Procurement can commit hard benefits

- spend less \$

He now owns a process - Tech Support

25,000 people

to support product + services

19

No right ans

take data you have, decide, watch, fix

not flex on who decides
but when to fix

They were 7th shared service

Finance was 1st

Had to manually collect everything in 90s

Said never again

Made it easy to do IT

Shared services good w/ global scale

Can enter new country quickly

Q Virtual Co

Lots don't have offices

Big challenge to lead

People might not meet manager

Build virtual communities

(20)

Give developers points for quality, re usability

Managers can see who they are hiring

Developers like the transparency

People trying to improve skills so get pts

TopCoder - benchmark vs internal group

50% cost cut

(But more pressured - depends what their baseline is)

Q: But this is your biz

He "outsources" to IBM

Feedback they can use

He could find jobs for his people into commercial accounts

Q: What to keep?

Ent arch.

Biz processes

Innovation team

etc

Change process

← 50 people
could work on anything
end up in biz
turned over in 3 years

(4)

Now: need tech to get to next level

Can't push cost cutting in more

Need new tech

They do 30-50 acq / year - each has own IT
how does their IT remain flexible enough

Set up Sandbox - TAP

Any one can go into env and early adopters can use
If getting adoption can easily push it over
Want innovation → but not reckless

Legal: Whats in license agreement

100k seed \$

Q: How pick idea:

Governance

Ent. process

Controller

Biz Unit

Geo

2x/year

draw an affordability line

15.571: Business Strategy and the Role of IT

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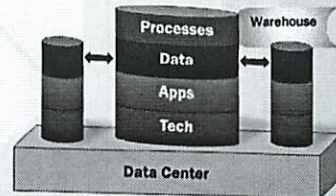
Today's agenda

- Comments on projects (5 minutes)
- Discuss Southwest's operating model and capabilities. (15 minutes)
- Group work on Southwest (25 minutes)
- Lecture on architecture maturity (25 minutes)
- Break (5:15-5:30)
- Class discussion of IBM (30 minutes)
- Pat Toole comments and questions (55 minutes)

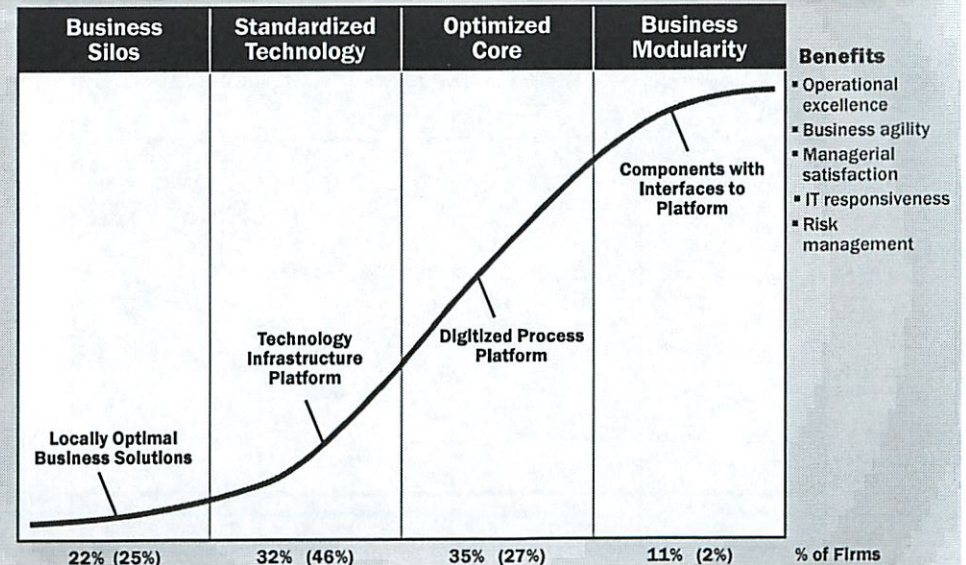


Enterprise architecture

- *The organizing logic for business process and IT capabilities reflecting the integration and standardization requirements of the firm's operating model.*
- Enterprise architecture provides the design for one or more digitized platforms.
- Enterprise architecture consists of both IT and business architecture.

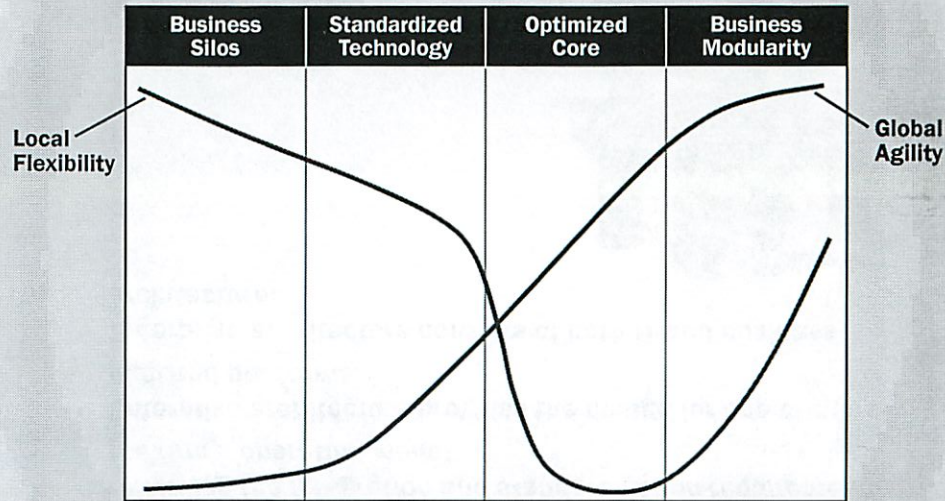


Firms design and build platforms in stages



315

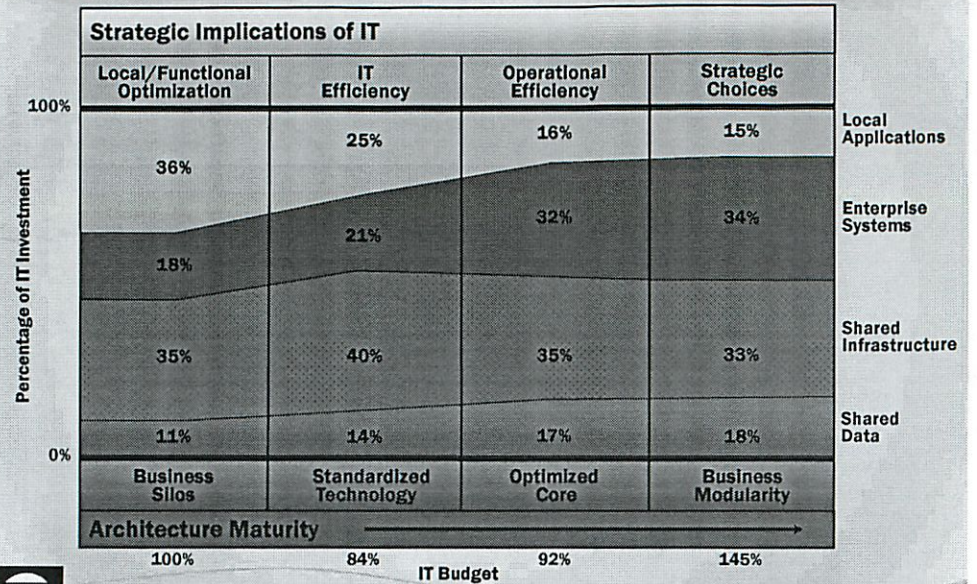
Architecture maturity requires buy-in to enterprise objectives



Center for Information Systems Research (CISR) Source: *Enterprise Architecture as Strategy: Creating a Foundation for Business Execution*, J. Ross, P. Weill, D. Robertson, HBS Press, 2006. © 2011 MIT Sloan CISR - Ross

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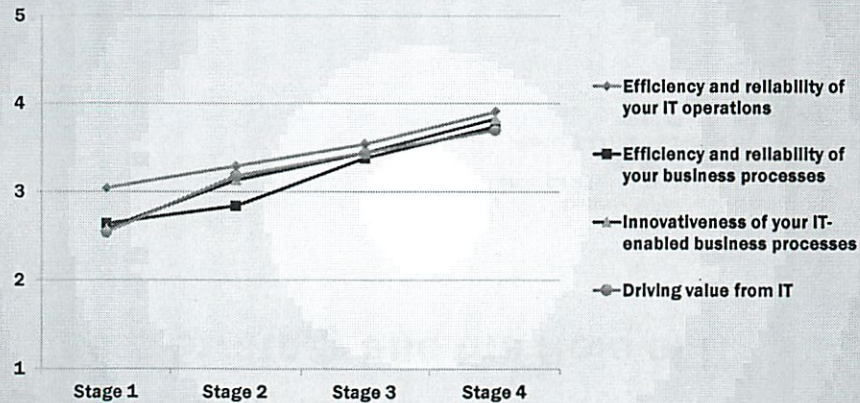
Firms transform as architecture matures



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5

Competitive comparisons of business capabilities relative to architecture stage



Ratings of 206 CIOs on a scale of 1=significantly below competitors to 5=far better than competitors



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6

Organizational learning is key to advancing through stages

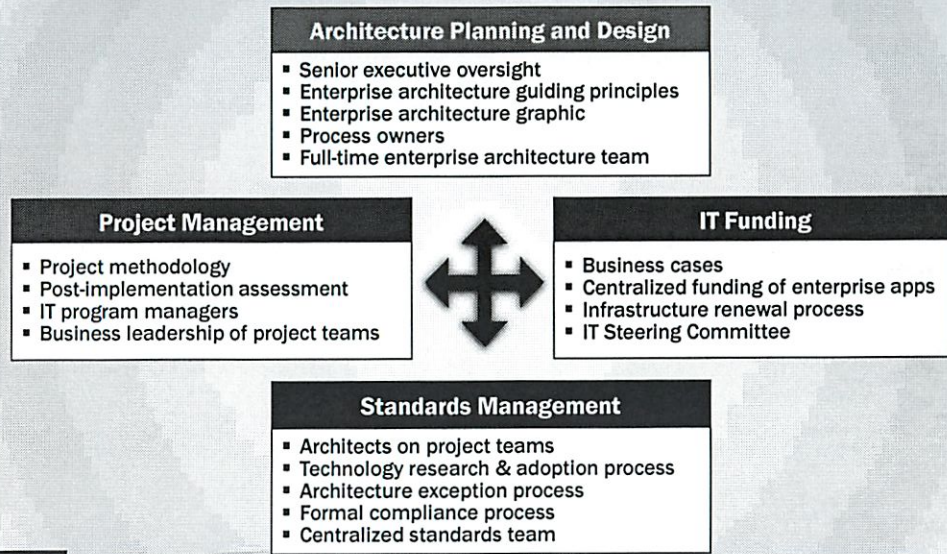
	Business Silos	Standardized Technology	Optimized Core	Business Modularity
IT Capability	Local IT applications	Shared technical platforms	Enterprise-wide hardwired processes or databases	Plug and play business process modules
Business Objectives	ROI of local business initiatives	Reduced IT costs	Cost and quality of business operations	Speed to market; strategic agility
Funding Priorities	Individual applications	Shared Infrastructure services	Enterprise applications and data stores	Reusable business process components



Center for Information Systems Research (CISR) Source: *Enterprise Architecture as Strategy: Creating a Foundation for Business Execution*, J. Ross, P. Weill, D. Robertson, HBS Press, 2006. © 2011 MIT Sloan CISR - Ross

7

Firms learn by building management competencies

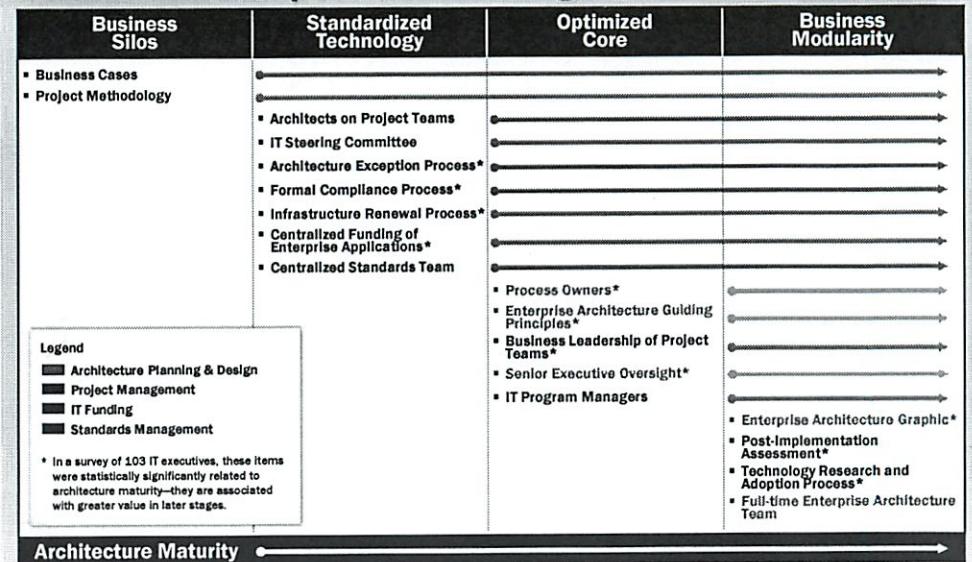


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Management practices within each practice set are statistically significantly correlated with each other. All four competencies are significantly correlated with architecture benefits.

8

Firms build competencies in stages



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Source: *Enterprise Architecture as Strategy: Creating a Foundation for Business Execution*, J. Ross, P. Weil, D. Robertson, HBS Press, 2006.

9

Key learning about the importance of architecture

- Firms are maturing. Enterprise architecture is becoming a competitive necessity.
- The impact of architecture on the business is escalating. A digitized platform is table stakes for digital capabilities like business process optimization, business intelligence, master data management, collaboration, mobility, etc.
- Architecture must move beyond IT. But outside IT, most firms have limited enterprise thinking and/or capability.



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10

15.565 Research

3/6

IBM Innovation Jam

Innocentive

Idea Storm

all in OneNote



IBM Innovation Jams

Tuesday, March 06, 2012
11:57 PM

From back in 2001

Collect ideas from anyone

Values in 2003
Brainstorming 2006
Run for clients

<https://www.collaborationjam.com/>

Or open to the public
Like a security Jam in March
 Journalists must identify
 No screenshots
 Individual names private

Jams Program office
[Liam Cleaver](#) or [Kristine Lawas](#).

Pasted from <<https://www.collaborationjam.com/>>

Online collaborative discussions
Harness creativity of group

Focused around a theme

Trial and Error

Selective crowd
Core question

After jam
Get to core ideas
Jam analytics

Values jam was most impactful

Misconception: just a tool
Underlying: process - what is a jam about
Strategic corp communication
What is the jam about

Depth and quality of conversation

Create communities which didn't exist before

Fix: How to keep going

Innocentive

Wednesday, March 07, 2012
12:12 AM

2 sided market

Put out challenges
Or be a solver

Like Reduce Surface Damage on Chocolate

Have to transfer IP rights

Several thousand dollar prize
Seems kinda cheap...

Several diff type of questions..

Sign agreement to participate

Open Innovation...

Source co not always used...

Or just find partners...

Can run internal challenges

Platform <https://www.innocentive.com/innovation-solutions/innocentivework>

The cloud-based ICCP is the first and only innovation system-of-record for managing all needs, ideas, problems, Challenges, problem Solver communities, and solutions within organizations of all shapes and sizes. It is the only enterprise-class business application that enables organizations to harness the power of crowds and give everyone a voice – employees, customers, partners, suppliers, and the world’s largest problem solving network that reaches into the millions. And, by incorporating powerful dashboards and analytics, the ICCP provides a complete and integrated view of an organization’s innovation portfolio and strategy.

Pasted from <<https://www.innocentive.com/innovation-solutions/innocentivework>>

Training and consulting as well...

<http://www.innovationnewsdaily.com/914-idea-turns-tv-tubes-ray-shielding-tiles.html>

<https://www.innocentive.com/files/node/casestudy/total-economic-impacttm-innocentives-enterprise-solution-challenges-innocentivework-and-onramp.pdf>

Based on its analysis, Syngenta estimates that at a minimum, each moderately successful solution has yielded on average the equivalent of one FTE or \$120,000 in annual cost savings. The organization also expects to post 21 Challenges in years 2 and 3 on the Open Innovation Marketplace through InnoCentive Challenges. Based on the current success rate of 86%, Forrester projects that 16 of those 21 Challenges will result in moderately successful solutions. The cost savings from these successful Challenges over a three-year analysis total \$9,720,000.

Screen clipping taken: 3/7/2012 12:34 AM

Dell Idea Storm

Wednesday, March 07, 2012
12:36 AM

External facing

Post ideas for improvements for dell products
Up and down vote them
Or comment

Dell comments on them: under review, implemented, etc

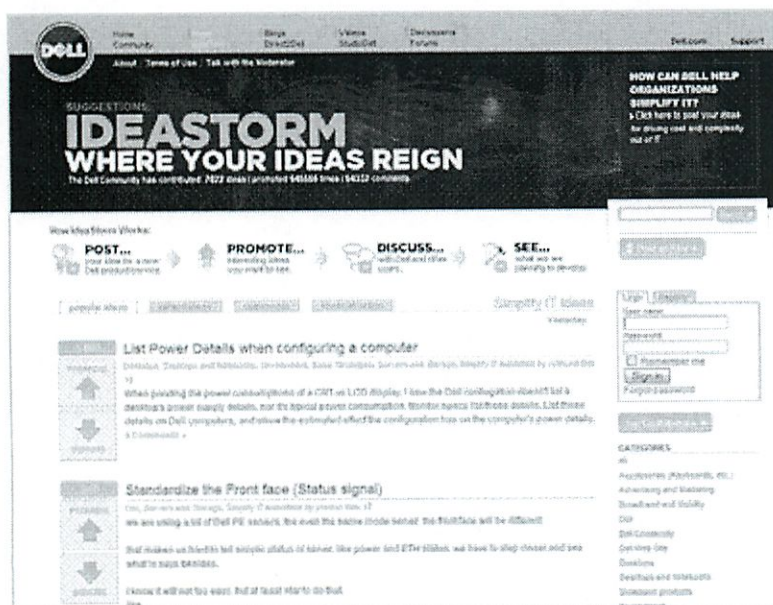
Custs tell you what they want
With ranked voting and comments lets you understand magnitude.

Post of your ideas in action
Implemented 482 ideas of 16,781
737,000 votes
95,000 comments

Seems to be random employees
<http://www.ideastorm.com/apex/IdeaStormPartnerBio>
And really bad pictures!

Powered by salesforce.com

Old look



Screen clipping taken: 3/7/2012 12:42 AM

Salesforce Ideas Application <http://www.salesforce.com/company/news-press/press-releases/2007/09/070917-02.jsp>

Have an employee version: EmployeeStorm

15.571 Generating Business Value from IT

Class 5 Assignment

actual HW!

Download the UPS IT Investment Options document. Reflecting on the article “Building Better Business Cases for IT Investments,” complete the assignment as described. You’ll be discussing your choice of the top priority investment in your group. Then read the USAA case study and reflect on two questions:

1. What do you feel are the advantages and disadvantages of USAA’s approach to IT investment decisions?

2. USAA has been extraordinarily innovative in its use of technology both within the firm and in developing new products. To what do you attribute USAA’s innovativeness?

UPS IT Investment Options

Instructions: The following list has descriptions of 4 of the hundreds of IT project proposals that UPS is considering for the coming year. These proposals will go to its senior investment committee who will decide what projects to approve. Pick one project that you would consider the highest priority. Why do you think this project should be favored? What criteria do you think are important to UPS' investment decision making process?

Option 1: DIAD Replacement

Since 1993, UPS drivers have relied on their DIADs to transmit package delivery data back to the company. This provides the company with complete information on the package from pickup to delivery and thus allows UPS to respond to any customer inquiries about the location of a package. UPS allocates a DIAD to each of its almost 100,000 trucks at a cost of \$750 per unit. The DIAD has been through several upgrades over the years to capture more data. The 2009 version was implemented in 2005 and UPS has been replacing DIADs on 2-year cycle.

The current DIAD has not proved very robust. About a dozen break every day leaving the driver to manually feed some part of the day's delivery data back to headquarters. The driver has a printout with the package data so this manual transmission usually takes less than half an hour for the very small number of drivers experiencing problems. Thus, driver overtime is a negligible expense. However, the manual transmission does lead to errors in data entry and UPS is concerned that some delivery data is inaccurate as a result of the breakage. Furthermore, the current DIAD can accept very limited information on the location of packages that are dropped off without a signature. These packages are the ones most likely to be lost or stolen. UPS incurs \$20 million in expense annually to compensate for lost or stolen packages. By improving information on where packages were dropped and eliminating the inaccuracies from manually fed data, UPS estimates it reduce the costs of lost and stolen packages by at least 25%.

upgradable? The COO of UPS's package delivery business is considering implementing a new, more robust DIAD that tests suggest would allow a shift to a 3-year replacement cycle and would rarely break down during that time. The new unit would cost \$1000 and would require a \$25 million investment in software development to interface with existing systems and expand the capability of the DIAD. UPS is very interested in keeping its drivers equipped with functioning, powerful equipment to maximize their efficiency and their individual satisfaction.

Option 2: Telematics for data mining

An innovation unit at UPS has been piloting a system that equips each truck with a monitoring box to collect a stream of data about the state of the vehicle. The box would be GPS equipped and thus able to record location while collecting data on speed, condition of the equipment, and miscellaneous information like whether the driver is wearing a seatbelt.

UPS expects to use the data collected from these devices in a number of ways. First, UPS will be able to better monitor the safety habits of its drivers by recognizing behaviors such as whether they are wearing seatbelts, how often they back up their trucks (a leading cause of accidents), and speed. Second, they will be able to analyze data that will lead to reduced fuel consumption and less CO2 emission. This will involve better identifying optimal routes, optimal speeds, and new behaviors, such as when it is better to idle the truck and when it is better to turn it off. Third, the monitoring data will allow UPS to automate maintenance rather than rely on regular maintenance checks. This will keep trucks on the road longer and avoid some unnecessary replacement of equipment. Discussions with drivers indicate that, with appropriate incentives in place, drivers will accept the new technology.

when did they last replace?

about the same

The new monitoring device will cost \$1000 per unit. Software development for the data warehouse (where all the monitoring data would be stored and analyzed) and initial setup would cost \$20 million. Annual operating costs could be as high as \$100 per truck. The benefits would depend on the uses of the data. The initial application would focus on automated maintenance, which could provide annual savings of as much as \$10 million per year. A series of 5 additional applications would enable analysis and monitoring of safety behaviors and fuel consumption. Each of these applications could lead to savings of \$5-10 million per year. On average, each additional application would cost \$5 million. UPS feels compelled to cut fuel consumption for both cost and environmental reasons.

Option 3: Expanded service parts logistics

UPS' service parts logistics business is a \$.5 billion dollar business that provides warehousing of parts for high-tech manufacturers' products. When a manufacturer needs a new part to make a rapid repair for a customer, UPS can deliver the part within a pre-arranged time (e.g. 4 hours). UPS maintains a set of warehouses in the countries it serves to optimize its ability to deliver spare parts. Usually, these warehouses are tiered so that UPS is sustaining a constant flow of parts from major warehouses that serve hundreds of customers to local warehouses serving a small set of customers (or even just one) and then making shipments as needed to meet specific demands.

UPS has high visibility into the warehouses and their inventory but it relies on individual decision makers to decide when and how to move inventory, including decisions as to when and how to ship an item when demanded. As the business grows, UPS believes it will benefit from more automated systems for moving inventory. UPS can also benefit from algorithms that will help it identify where best to locate warehouses in the future. The head of the service parts logistics business has proposed an investment to develop algorithms that focus first on automating the inventory flow decisions. With an initial investment of \$20 million, and about a half million in annual operations and service costs, UPS expects it can save \$10 million a year on its current level of business. UPS believe the service parts logistics business will grow about 10% a year for at least the next few years.

Yes

Option 4: Package forwarding service

UPS stores and many other retailers throughout the United States and Europe serve as pick-up spots for individuals expecting packages but who do not expect to be home when the packages are delivered. UPS has identified a growing need for individuals to be able to re-route their packages to these locations when they realize they will not be home to receive a package and it is not safe for the driver to leave the package. Currently, UPS is not able to re-route packages that are already en route.

my choice?

The general manager of the package delivery business wants to introduce a service that would permit such re-routing even after it is placed on the delivery truck. Customers are very interested in this service. They would be able to go to the web, track their package, and enter a revised delivery address. Management believes this will be an attractive service to major retailers who ship packages to individuals' homes, so UPS hopes the service will generate \$250 million in new business each year (assume net margins of around 10%). UPS would also benefit by reducing the number of lost and stolen packages, which currently costs \$20 million a year. UPS estimates this could reduce the number of lost and stolen packages by as much as 50%. The software development for this new service involves changes to UPS' major package data base and thus would cost around \$75 million. Operations and maintenance of the systems will cost around \$2 million each year. Over time, UPS believes that major competitors will offer this service.

Note: Management completely understands that you will be doing "back of the envelope" calculations on the financial impacts of these alternatives so they will not make a final decision until more thorough analysis is completed. In other words, don't worry about incomplete information. UPS's cost of capital is 15%.

better opportunities -- ?

Should we pick based on strategy or ROI? calc both!

Project 1

Cost	2012	2013	2014	2015
Devices	\$ 100,000,000			\$100,000,000.00
Software	\$ 25,000,000			\$25,000,000.00
Benefits				
Less Lost Packages	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	\$11,416,125.59
NPV				(\$136,416,125.59)

But also need to consider normal replacement (for which clear info is not provided)

Project 2

Cost	2012	2013	2014	2015
Devices	\$ 100,000,000			\$100,000,000.00
Annual Op Cost	\$ 10,000,000	\$ 10,000,000	\$ 10,000,000	\$22,832,251.17
Software	\$ 20,000,000			\$20,000,000.00
App 1	\$ 5,000,000			\$5,000,000.00
App 2	\$ 5,000,000			\$5,000,000.00
App 3	\$ 5,000,000			\$5,000,000.00
App 4	\$ 5,000,000			\$5,000,000.00
App 5	\$ 5,000,000			\$5,000,000.00
Benefits				
Auto Maintenance	\$ 10,000,000	\$ 10,000,000	\$ 10,000,000	\$22,832,251.17
App 1	\$ 7,500,000	\$ 7,500,000	\$ 7,500,000	\$17,124,188.38
App 2	\$ 7,500,000	\$ 7,500,000	\$ 7,500,000	\$17,124,188.38
App 3	\$ 7,500,000	\$ 7,500,000	\$ 7,500,000	\$17,124,188.38
App 4	\$ 7,500,000	\$ 7,500,000	\$ 7,500,000	\$17,124,188.38
App 5	\$ 7,500,000	\$ 7,500,000	\$ 7,500,000	\$17,124,188.38
NPV				(\$59,379,058.11)

Project 3

Cost	2012	2013	2014	2015
Initial	\$ 20,000,000			\$20,000,000.00
Annual Op Cost	\$ 500,000	\$ 500,000	\$ 500,000	\$1,141,612.56
Benefits				
Biz Size	\$ 500,000,000	\$ 550,000,000	\$ 605,000,000	\$ 665,500,000
Savings	\$ 11,000,000	\$ 12,100,000	\$ 13,310,000	\$27,466,096.82
NPV				\$6,324,484.26
Savings			2%	
Based off current estimates				

Project 4

Cost	2012	2013	2014	2015
------	------	------	------	------

Could have done perpetuity

Initial	\$	75,000,000					\$75,000,000.00		
Annual Op Cost			\$	2,000,000	\$	2,000,000	\$	2,000,000	\$4,566,450.23
Benefits									
New Revenue			\$	250,000,000	\$	250,000,000	\$	250,000,000	
New Profit			\$	25,000,000	\$	25,000,000	\$	25,000,000	\$57,080,627.93
Less Lost Packages			\$	10,000,000	\$	10,000,000	\$	10,000,000	\$22,832,251.17
NPV									\$346,428.86

Only profitable at 50% reduction

(Beautiful weather)

Today: Half way point

Next week: SIP week

Feedback^{on} performance coming via email

Group: Agree on a single project

~~Don't~~ Argue on decision criteria

Then Governance in general

So get good value

Delta - for better DIAD

DIAD - already had

Qualitative

? Grow option 3

- need to automate 3

I did 3 year horizon - not perpetuity

②

Our criteria

NPV

Future Group

Costs Reduction / Profitability

Letting it Scale

Core biz vs new biz

Competitive Landscape

Groups

7 groups #4 (inc mine)

1 group #3

Why

High ROI / NPV

Only customer facing

#3 Take lead in value-add warehouse market

Prof: Animosity: on marketing vs IT

- they sell stuff +, IT has to build it
- IT most process oriented, marketing least

(3)

Agreeing on criteria is hard

- fudge #s
- diff priorities
- people defending their position / their group
- what assumptions are you making

Prof asking people did you make the right decision

~~MANNA~~

Do you Be Bold and fix it or not
Can't do half way

People willing to spend may not spend
it right

intuition more important ~~than~~ than ROI
Strategy

Prof: disagrees. Don't rely on ~~the~~ intuition
Student: It's the CEO's + boards' intuition
Can we pull this off?

(4)

Incentives:

Firms just don't understand each others' dept

Stage Model

Stage 1 Can just look at isolated ROI
But lots of siloed apps
Don't build an enterprise w/ lasting power

Stage 2 Clean up

↓ Build Add'l capabilities

How cos actually get through stages: Organization
Learning

As we start to clean up org

↳ need shared services

How to pull out cost in IT? ↻

(4)

Stage 3 Understand end to end business processes
What is reusable

What helps enterprise as a whole?

Stage 4 Reuse what's in place + add new capabilities

Companies Develop 4 Competencies

Arch Planning + Design

IT Funding

Standards Management
- so reuse capabilities

← quite a bother if not used to it

Project Management

Companies learn these things in Stages

Stage 1 is good for startups

Just be good at writing biz cases and
doing Project Methodology

5

Stage 2 A lot of no fun things - bureaucracy

- People need to see how to drive benefits

(I don't know how much I trust this
- prob I do at a lower level
- but w/ diff team)

Maintenance - people don't like spending \$ or
don't want to replace the roof

Stage 3 Start putting things in as an enterprise

All of that takes a while to learn to do

Esp. Steering Committee

* Very hard to balance long-term ent health
vs getting projects done

Hard to get people interested in ent
not just their biz line
- Can cycle people around

6

Post-Implementation Assessment should be in Step 1

- is now in Step 4

- or is it obvious in Stage 1?

- but also care about ^{other} investments you didn't make

Prof:

- if you don't care about it - you'll never

get better

- The one thing that distinguishes great cos
from ~~the~~ good cos

- Since it's very hard for org change to actually
happen

USAA

Looked at things from a customer POV

Clear ownership of things

↳ systems + processes

Elaborate process?

↳ slow?

6

Staff development of IT staff

Outsource a lot

- allow them to $\uparrow \downarrow$ capacity quickly
- but need to do well!

But is focus on ~~250~~ 250 projects means not focusing on big projects

Prof: One of the few companies that is proud about \uparrow # projects / year

Student: Or do we just cut ~~out~~ out the extra regions

Top formal structure kills good idea

Other cos (IBM) has a sandbox

Small projects?

- Excessive overhead

Gate process discourages innovation?

- ^{instead} constructive feedback why it didn't work

Where get people on alignment team?

⑧
Choices

Part time committees

Full time?

- add. headcount

Innovative:

Yes - Deposit on Mobile

Auto circle

- silos before

- systems don't talk to each other

- need to good at every piece

One student i like a fairy tale

gov-affiliated better than private co

Net Promoter Score - pos vs neg comments

Life events i Clear vision on operating model

①

- very mission driven

Cynthia USAA

SVP Biz Solutions

- She wants to talk about RYAN VRS

- would rather talk about larger issues

- Culture they have is not easily replicated

- Member owned company, but any one can buy some products

- Their culture: what's best for members

not just ROI

looking at biz result

- Program (5-10 years) to digitize mortgage

- know program will \uparrow capacity 35 FTE

- already in

- when projects slips ...

- Biz problem is not ROI - it's short on headcount

- grow at 8.5-9%/year

- but want workforce flat

(10)

They are clear what is important: cost value
Their target: retention
98%

What drives their behavior to leave?

Their ~~cost~~ ^{cost driver} was $\pm 100\%$

How do you assess risk?
Risk taking concurrently?

Every project part of a 3-7 year program
Milestone every year
Biz leader accountable for each

1. Design w/ opportunity

2. Then drop costs

Get 17,000 ideas in per year
from all employees

* What problem trying to solve

(11)

3 buckets

1. R + D

- no gates

- need a senior leader to run it

- fraud guys didn't want to do it

- takes to exec council to find support

- 2-3 a year

2. Employee Engagement

- want people to feel integrated/enthusiastic

- Voting

- Review board

- I/O

- Legal

- Rewards

- Fund 3 projects

3. Normal ideas

- not radical/in groundswell

- what is it trying to drive

(12)

Ideas no better than the others
If pick, goes through gated process

Accountability

- Collaborative
- identify someone as responsible
- if people complain about you - I'm replacing you
- no hiding behind committee
- ~~transparency~~ 25/10
- Succession Planning

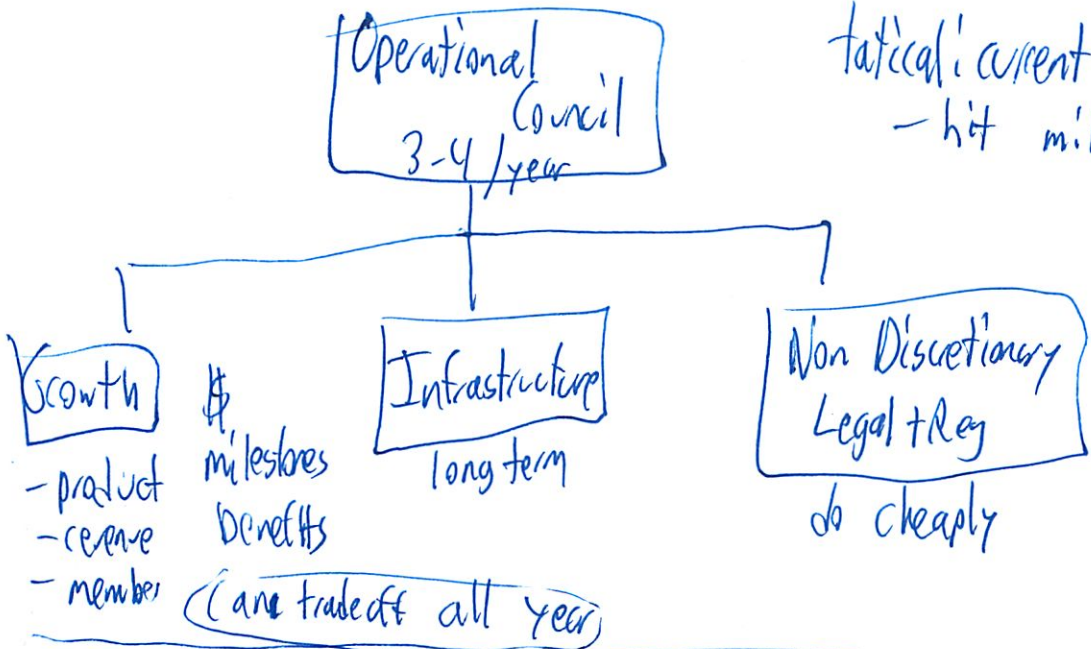
Governance Structure

evolved over time

- originally: live of biz
- then work streams

tactical: current year

- hit milestones



pick people from succession planning - represent USAA not their job

(13)

\$25 mill for small projects

< \$100,000

Can just do it

Opportunistic

- if quick switch on resources (< 6 weeks)

- small work to fill in

(I very much like this)

A few set asides

Small modifications \$45 mil

Cyber security - no tradeoff

Innovations that came up that year

Not intended to be slow

- Sometimes it seems

Its not often you get stuff done fast

One day 4 days - round the clock

If really important -> process shall not be in way

(14)

They don't do IT

Had 128 people ^{went to} → 48 people

Large cost of Ad hoc

Must have high performing IT team

She reads down to scope level

is it really a regulatory issue?

look at design

is it needed

Compliance mushroomed since 08 \$150 mill

Needed to work together to survive

Moved A to her at Enterprise

Satisfied to pick most important things

I must know what is important

(15)

Harvy Balls on importance

1. Member Satisfaction

2. Growth Member

3. Product Growth (deepen)

← how many lines of biz

4. ↑ Revenue

↓ Expenses ← would rather ~~PTI~~ PTI (pre-taxable income)

→ must keep margins steady
so cut prices

Then weight the diff categories based on priorities
each year

(I really like how she looks at this)

Need executable plan

Risk



Return



Deposit @ mobile - higher risk
• only do 1-2/year

(16)

Like Fin Risk
Not like Op Risk
Hate Brand Risk

Revenue best thing they value
↓ Exp
↑ Depth
↑ Members
↓ better

	legal	best	
	no	Sometimes	return

risk

But must need framework for decision making

People calling bureaucracy - b/c their idea will fail

Now manual

- but want to think about tool

Buy lot

- but 10x to integrate

But dev has a lot of maintenance

Now 50-50 split maint - build new

(17)

Use 3rd Party

Since 1999

Went in 98

Wanted staff 3-4 years

- didn't want to lay off people

They don't lead teams

- for career growth for emp

Can scale very quickly

good quality if deal well

- long term commitments

- no lowball

CMM Level 5

- good processes

25 cents on the \$

* Only works if you know exactly what you want *

(18)

Have off shore labs

Rotate an exec that's over there

They take long term view

Some people from 3rd party ~~people~~ there for 10 years

3% IT turnover

Partners kept some people in training

They have not seen much risk

- at first FUD

- Patriotism from customers

- ~~gone~~ grown w/ it

She goes every 2 years

What biz problems trying to solve

Look at implications about long vs short

If ≥ 2 biz want to use it

will build reusable

(19)

She worked there 22 years
was a MBS programmer

Evolution - no magic formula

How be more efficient

Not about rev goals

Have New Exec Orientation

Meri How to be a change agent

Did a peer ranking

< 10% gone

Stere Jobs culture would not work here

admire co

Apple Focus

USAA Balance

Spend a lot on training

20

They are lower than most on IT spending

↳ Since reusability,

stretch dollar further

Have talked about cust idea base

- the 17,000 ideas is hard to handle already

- how handle more

Q: Internal App Store

Not really

Their secret sauce is integration

Have developers compete 5-6 weeks

But \$2 mill to integrate

For example if you issue a new CC

Must update Auto Insurance billing

Q: Big Data scientists

Level 1 Have data

Level 2 Draw conclusions

What to do w/ data?

(21)

Industry: Sells new products

They are still figuring out

(was a very good speaker)

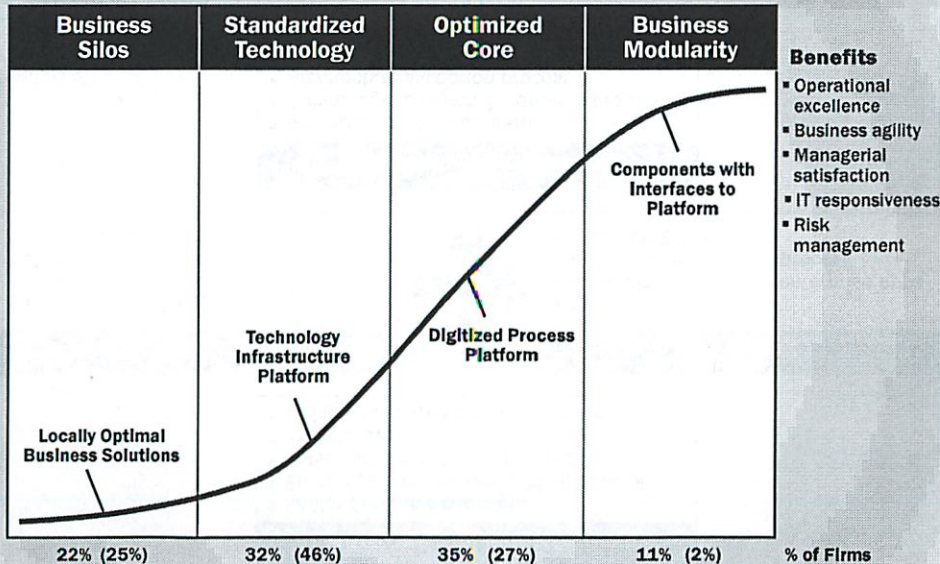
15.571: Business Strategy and the Role of IT

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Today's agenda

- Comments on group work (5 minutes)
- Group work UPS' investment choices (25 minutes)
- Discuss challenges of IT investment choices and other governance issues (25 minutes)
- Break (5:15-5:30)
- Class discussion of USAA case (25 minutes)
- Cynthia Combs comments and questions (60 minutes)

Firms design and build platforms in stages

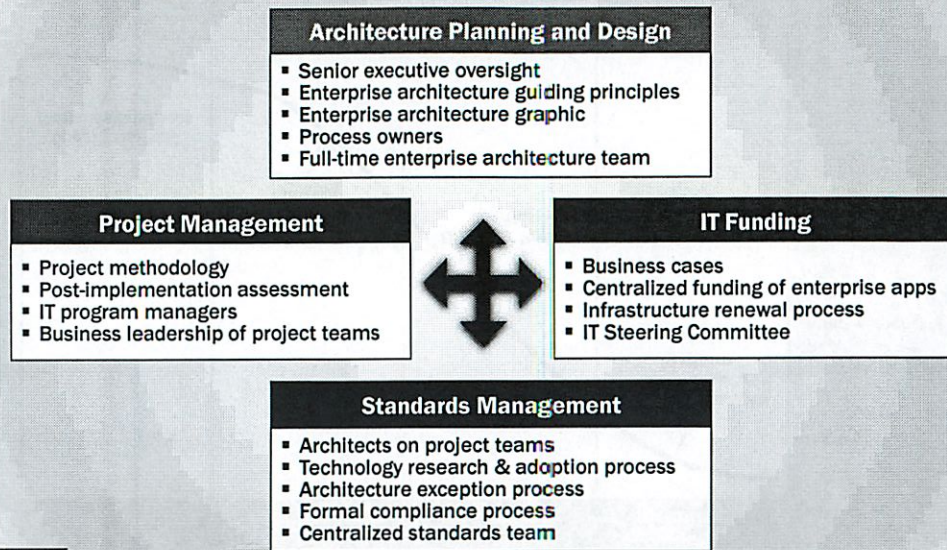


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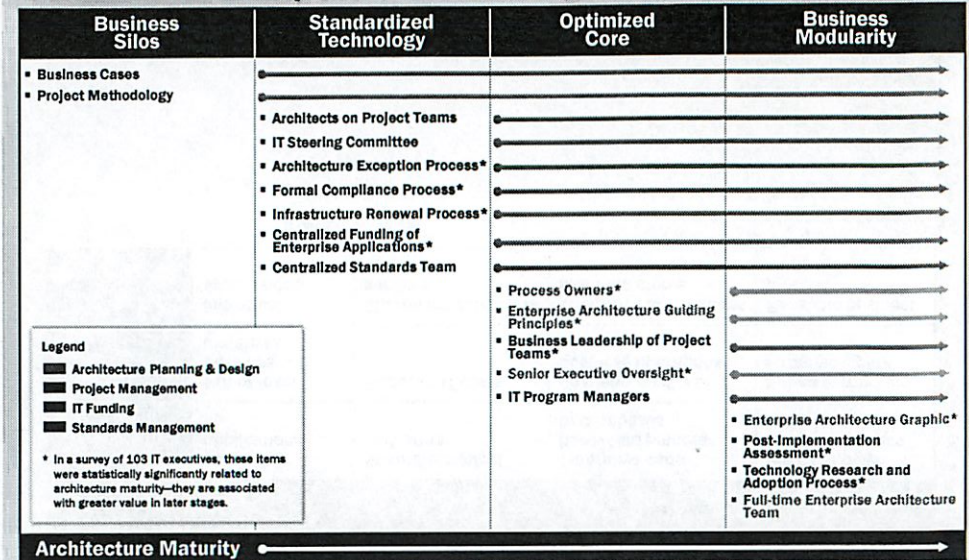
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Funding Priorities	Individual applications	Shared infrastructure services	Enterprise applications and data stores	Reusable business process components

3/12

Firms learn by building management competencies



Firms build competencies in stages



Symptoms of Poor IT Governance—partial list

- Senior executives can't describe IT governance; other managers are not sure how decisions are made
- Decision processes for funding projects, adopting standards, granting exceptions to standards, defining shared assets, and others are seen as "red tape"
- The organization consumes energy looking for people to blame for failures
- Project leaders find no clear decision rules for addressing tradeoffs among time, cost, functionality, architecture, happy business partners.
- Sum across all projects (Project ROI_{PIR} - Project ROI_{Business Case}) is negative¹
- IT projects often lack strategic impact
- By the time a project is implemented, the reason for the project is no longer salient

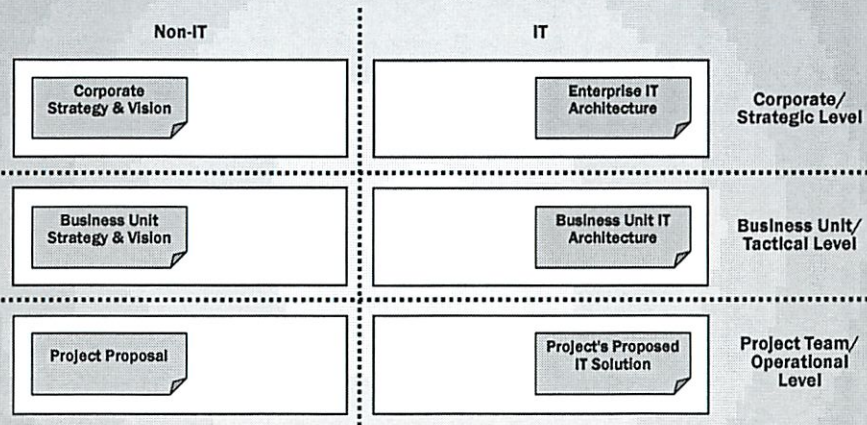


Five key IT decisions need to be governed

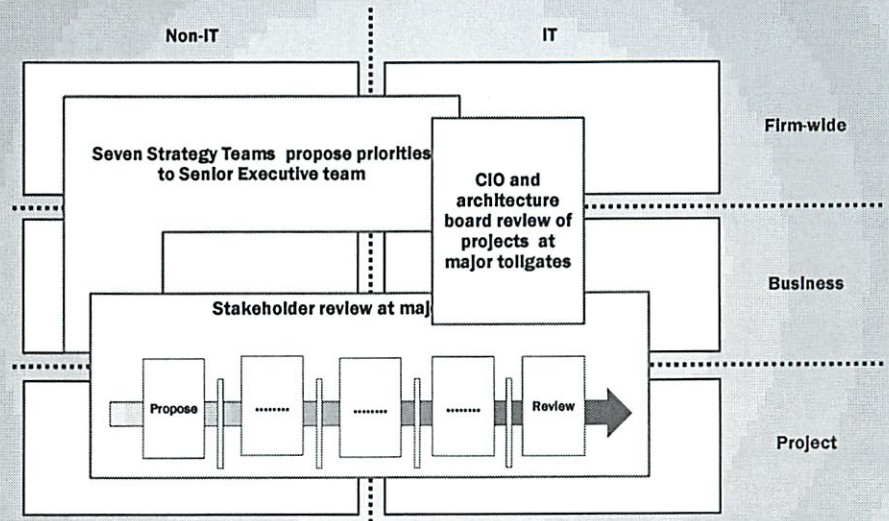
Principles for IT	High level statements about how IT is to be used. Driven by business principles (e.g., operating model)
Enterprise Architecture	Organizing logic for business process, data, and IT capabilities reflecting the integration and standardization requirements of the firm's operating model.
IT Infrastructure Strategies	Strategies for shared IT capability (both technical and human) delivered as reliable services (e.g., network, help desk, shared data)
Business Application Needs	Specifying the business need for purchased or internally developed IT applications
IT Investment and Prioritization	Decisions about how much and where to invest in IT including project approvals and justification techniques



Effective governance engages six key internal stakeholder groups



Key governance processes at Southwest Airlines



IT-ENABLING INNOVATION AT INTEL

George Westerman, *Research Scientist*
MIT Sloan Center for Information Systems Research
Martin Curley, *Senior Principal Engineer*
Intel and Co-Director, Innovation Value Institute

Organizations face three major obstacles to innovation:

- **Opportunity Gap:** The culture or incentives of the organization prevent individuals from seeing innovation opportunities or from acting on those ideas.
- **Implementation Gap:** The organization lacks the skills to implement an innovation or the internal processes to help an innovation make the leap from technology solution to adopted business practice.
- **Resource Gap:** The organization is not willing to provide resources for innovation infrastructure or projects, often because innovative activities are seen as high risk or speculative.

These gaps can doom innovation by limiting innovative ideas, hampering the harvest of innovation benefits, or starving innovative efforts of key resources. At Intel, IT executives have used a variety of tools and activities to address the three gaps. They have succeeded in increasing innovation capabilities not only in IT but also in the business and its partners.

Intel's IT-Enabled Innovation Approach

The mission of IT@Intel is to "keep Intel running and growing." From 1999-2002, the IT unit focused on improving service quality and cost. This gave IT the credibility to take the next step: improving business value and growth through innovation. In 2003, the IT unit built a dedicated team, IT Innovation, to foster systemic innovation inside and outside of Intel's IT unit. This team later became IT Innovation and Research (ITIR) as it assumed responsibility for managing the IT research portfolio which was an important input to the innovation pipeline.

Much of the ITIR staff is housed in a global network of Innovation Centers. Each Center plays multiple

roles, providing personnel, space, and tools to investigate innovations, train employees, conduct customer executive workshops, and showcase emerging technologies and practices. One integrated element is the *Innovation Delivery Team*. This team's broad skill mix and flexible resourcing approach enable it to implement proofs-of-concept and full innovations quickly and creatively. Other ITIR people build tools and methods to enable Intel employees to identify and implement innovations in a virtual collaborative environment.

As shown in Figure 1, ITIR conducts many activities to address the three innovation gaps. For each gap, ITIR developed capability to innovate on behalf of IT and the company, and then built and diffused tools, capabilities, and awareness through which all Intel employees can innovate more effectively for themselves.

1. Opportunity Gap

ITIR addresses the opportunity gap by improving the way Intel employees identify promising opportunities and by promoting a culture where people feel motivated and capable to innovate. The Innovation Centers host numerous workshops with Intel employees and customers to identify promising opportunities IT can pursue. Meanwhile, members of the *Innovation Delivery Team* actively scout for innovation opportunities they can address.

ITIR also works to spur creativity and capture useful ideas outside of IT. The *Innovation Engine*, a hub for gathering, managing and leveraging employee ideas, captured more than 300 usage models for Intel dual core technology and more than 3,000 ideas to improve Intel's efficiency. It links people with ideas to people with implementation skills, motivating creative people to submit their ideas even if they cannot implement them. In addition, the Innovation Centers conduct joint workshops to help business units or customers identify innovative ideas. For example, ITIR and Intel's sales organization won an Intel Achievement Award for their joint workshops helping government Ministries of Education identify innovation opportunities.

Read
4/1

shall start drafting my output

internal deadline soon

idea book

Training and awareness programs further diffuse capabilities to address the opportunity gap. For example, Imagination Camps focus on creative brainstorming techniques, and another course teaches a creative problem-solving methodology called TRIZ. Alongside training, ITIR actively promotes awareness of innovation "wins" and of new technologies to inform and motivate creative people throughout the organization.

Training

2. Implementation Gap

To address the implementation gap within IT, the Innovation Delivery Team builds and launches innovative solutions and proofs-of-concept. For example, they built "PC Basics," an e-learning solution to help people learn how to use their PCs. More than 250,000 copies, in more than 15 languages, have been shipped by OEMs worldwide. ITIR has also developed the Innovation Pipeline Process to help innovative ideas become implemented reality. This process focuses on actively managing innovations "across the chasm" and into value creation.

product or internal

The Innovation Delivery Team has expanded its scope, actively working to assist others to innovate. The team focuses on managing six dimensions of implementation: vision, IT-enabled solution, business case, business process change, organizational change, and customer or societal change. Addressing each dimension helps innovators vet proposals more effectively and improves an innovation's chance of success.

Collaborative tools enable the broader community to work together on innovations. Innovation Studios provide a testbed to investigate advanced research on Intel products. One testbed, "GoPro," enabled the first production-worthy implementation of Intel® vPro™ processor technology. The Innovation Collaboratory, currently implemented in three Intel locations, is a virtual environment that aims to be "better than being there." The IT Innovation Zone is a hub that provides early access to innovations by exchanging ideas and prototypes. More than 10,000 Intel employees are registered as users.

phy or virtual

not well described

New roles and assignments link people inside and outside ITIR for specific projects. Innovation Assignments allow employees to invest time away from their "day job" to make an innovation a reality, with approval and funding from ITIR and the employee's manager. An IT employee took an assignment to investigate how remote wireless technologies and the new Intel® ViiV™ processor technology could help innovate in the home, leading to a sophisticated

so approved

"20% time"

could be good - good for morale

air conditioning efficiency algorithm. The engineer now leads a small team in Intel's Digital Home group while continuing to reside in the Innovation Center. Employees can also play the role of Innovation Catalysts, creating the environment for, or providing a critical 'assist' in, scoring an innovation goal.

explain

ITIR-led training and awareness activities help the broader enterprise address the implementation gap. The 15-minute Innovation Self-Assessment helps managers and employees diagnose innovation capability issues and identify specific action steps. "Systemic Innovation for Teams (SIFT)" helps to manage the innovation process in a controlled fashion. The Intellectual Property Workshop aims to increase invention disclosures and patents by IT employees.

Incentives and awards recognize people who discover, implement, or catalyze key innovations. An IT employee received an Innovator of the Year award for reusing existing code from a now-defunct internal lab to build a product that has been licensed for commercial development by an external company.

3. Resource Gap

Addressing the resource gap is vital for innovation to be sustainable. ITIR could not work as its own island of innovation. It would be hampered by a limited view of opportunities, limited resources, and by a "not invented here" mentality that could prevent business units from adopting innovations developed by ITIR. When budgets became tight, innovation efforts could be among the first cut back.

exactly

As with the other gaps, ITIR began internally and increased its scope to the broader environment. ITIR began with a small seed investment from Intel IT. Then it started scouting out co-investment opportunities from government and other institutions, for example, by helping the City of Westminster identify and implement wireless-enabled innovations. ITIR also actively seeks out key business units, such as the sales organization, who are willing to provide co-investment to try out ITIR's capabilities.

To show progress and impact, the unit systematically gathers many process and output metrics. For example, the Innovation Index is a weighted index of more than a dozen innovation outputs including innovation pipeline yield, ideas submitted, innovations adopted, and invention disclosure forms. ITIR also measures innovation-related business value using a methodology created with, and reviewed by, the finance staff.

media lab doesn't really do

By working with other organizations, and continuously showing progress through metrics, ITIR generates funding, credibility, and momentum. Furthermore, as ITIR continues to diffuse innovation awareness and capabilities, business units have begun investing in their own innovative capabilities. This meets the goal of fostering systemic innovation without requiring additional resources from IT.

Progress to Date *Show best practices*

6 years! → While still relatively new, ITIR's efforts have begun to produce important benefits for Intel. By 2006, three years after ITIR's inception, the Innovation Centers had delivered \$83million Net Present Value to the firm. IT was the fastest growing contributor to

Intel's intellectual capital, with more than 85 invention disclosures approved for patent filing or trade secret in 2006, compared with less than five patents approved in 1997–2000. ITIR's total innovation investment, co-funded approximately 50% by business units and other sources such as government R&D grants, has produced greater than 300% return in business value. Intel IT received CIO 100 status in 2006 based on its innovation accomplishments, and the firm was highlighted by the Boston Consulting Group as a leader in the field of IT innovation. *lea*

TM Intel vPro and Intel ViiV are trademarks of Intel Corporation in the U.S. and other countries.

Figure 1: Intel IT's Innovation Activities Addressing the Three Innovation Gaps

	INNOVATING FOR THE ORGANIZATION Identifying and building innovations for the business	DIFFUSING INNOVATION CAPABILITIES Helping people to innovate for themselves
OPPORTUNITY GAP Failure to see or act on innovative opportunities	<ul style="list-style-type: none"> ▪ Innovation Center workshops on IT innovation opportunities ▪ Innovation Delivery Team searching out opportunities 	<ul style="list-style-type: none"> ▪ Innovation Engine ▪ Joint workshops ▪ Training and awareness programs
IMPLEMENTATION GAP Failure to implement ideas or adopt for business use	<ul style="list-style-type: none"> ▪ Innovation Delivery Team implementing innovations ▪ Innovation Pipeline Process 	<ul style="list-style-type: none"> ▪ Innovation Delivery Team assisting others to innovate ▪ Innovation Collaboratory and Studios ▪ IT Innovation Zone ▪ Innovation Assignments and Catalysts ▪ Training and Self-Assessment ▪ Incentives and awards
RESOURCE GAP Failure to gain or sustain funding and staffing for innovation projects or capabilities	<ul style="list-style-type: none"> ▪ Investment from IT ▪ Business and government co-investment on ITIR-led innovation projects 	<ul style="list-style-type: none"> ▪ Co-investment on ITIR-assisted projects ▪ Metrics of progress and impact to build credibility and momentum ▪ Business unit investments in their own innovation projects and capabilities

patents are intel's biz too - that helps

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- Effective IT Oversight
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- Enterprise Architecture as Strategy
- IT Portfolio Investment Benchmarks & Links to Firm Performance
- Reducing IT-Related Risk
- An IT Manifesto for Business Agility
- Business Models and IT Investment and Capabilities
- IT-Enabling Business Innovation and Transformation
- Effective Governance of Outsourcing
- IT Engagement Models and Business Performance

Since July 2000, CISR has been directed by Peter Weill, formerly of the Melbourne Business School. Drs. Jeanne Ross, George Westerman and Nils Fonstad are full time CISR researchers. CISR is co-located with MIT Sloan's Center for Digital Business and Center for Collective Intelligence to facilitate collaboration between faculty and researchers.

CISR is funded in part by Research Patrons and Sponsors and we gratefully acknowledge the support and contributions of its current Research Patrons and Sponsors.

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BUILD INNOVATIVE CAPABILITY THROUGH AN INNOVATION TEAM

George Westerman, *Research Scientist, MIT Sloan Center for Information Systems Research*
Kristin Gundersen, *Research Assistant, MIT Sloan Center for Information Systems Research*

Now, more than ever, innovation is essential for success. Innovators can find ways not only to cut costs but also to improve customer service and increase revenues. Innovation can be a powerful motivating force for employees in tough economic times, too. But innovation doesn't just happen. It takes concerted effort and leadership.

Some companies have a culture where innovation is just business as usual. Senior executives established the culture long ago and they reinforce it every day. Unfortunately, most companies are not blessed with such a culture, and changing a company culture is slow, difficult, and risky work.

Our study of more than two dozen companies over the past three years shows that there is a way to improve innovation even in a company whose culture is not innovative: building an innovation team. Innovators on this team examine problems and opportunities the rest of the company would not consider, conduct experiments the rest of the company might not conduct, and produce evidence the rest of the company can use to innovatively improve their processes, products, and services.

Six Innovation Success Factors

Many companies have tried to establish innovation teams over the years, and many teams have failed. Our findings show innovation teams that achieve sustained success have six characteristics (see Figure 1). These Innovation Success Factors (ISFs) play important roles in

helping the teams succeed by protecting the innovators, ensuring they have the right culture and internal processes, and linking them to the rest of the company. No innovation unit in our study was successful with less than five of the six ISFs. Furthermore, when a successful innovation team lacked an ISF, it either was for a well-defined reason or led to a predictable issue.

The first three success factors relate to the innovation team itself.

Separate

The innovation team is a distinct organizational unit whose core staff people work full-time on innovation. When the innovation team is not separate, or when innovators are not full-time, "business as usual" tends to distract them from innovating. Separating the team from other parts of the company—organizationally, not necessarily physically—enables leaders to hire the right mix of people and create an innovative culture regardless of the culture of the rest of the company. The core team identifies and conducts innovation experiments that the rest of the company does not have time or focus to do. Often, the team also orchestrates the work of others who provide ideas or work on innovation projects part-time.

Systematic

Although many innovators avow the need for freedom and lack of structure, our research finds that the most effective innovation teams have a systematic innovation process. The word systematic in this context does not mean a rigid bureaucratic process for innovation. Rather, it means that innovators follow a well-defined set of checkpoints and processes to prioritize work, assess project performance, and continue (or kill) projects for fact-based reasons. Merck and Banco Real (now part of Grupo Santander Brasil), for example, set clear criteria for every

What I
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Should be mixed in

they want

experiment, including hypotheses that are testable through specific measures. Intel conducts a risk assessment at the start of each project to understand how much change will be required on each of six dimensions, from technology to business process to customer behavior. Xcel Energy and ExxonMobil ensure staffing roles are clear before any project moves into proof of concept. Being systematic helps innovators produce outputs more efficiently (and convincingly) than they would otherwise. It also helps outsiders understand that the innovators are not just playing games.

Small

The innovation team is typically no more than six to eight people. Smallness provides numerous advantages. Small teams are able to “fly under the radar,” producing value without being seen as using too many resources. Small teams can also be highly productive because everyone knows each others’ strengths, what they are doing, and how to coordinate with them. While larger innovation teams can sometimes be successful, most teams strive to maintain a size that ensures close knit organizational culture and process, and to be no more than “rounding error” in the overall budget. Intel IT has a little over twenty full-time innovators; BP about a dozen. However both companies fund their innovation teams from IT budgets larger than \$1Billion, and Intel subdivides its innovation staff into smaller teams at multiple Innovation Centers.

The other three success factors relate to how the innovation team interacts with the rest of the organization: where it gets its resources and ideas, and what it does with its outputs.

Sponsored

No innovation team in the study was able to start or survive without strong sponsorship. The sponsor’s position, whether CIO, head of architecture, head of application development, or even CEO, is less important than her actions. Effective sponsors do more than just provide funding; they actively protect and promote the team. Leaders of successful innovation teams talk of how their sponsors frequently “go to bat” or

“provide cover” to protect the team’s funding or justify its methods. Active sponsors also encourage people throughout the company to engage with the team’s activities by appearing at innovation events, issuing formal communications, and informally promoting the team to other executives. Although sponsorship is required throughout the innovation team’s life, it is particularly important early, when the team is starting to build its capabilities, credibility and relationships.

Shared

Innovators, valuing their independence, often become too separated from the rest of the company. When this happens, they can produce innovations that look interesting but that nobody wants to use. Successful innovation teams realize they must complement the creativity and focus of separateness with the relevance of working with other units. They actively involve others in identifying ideas and opportunities through innovation contests, “jams,” and advisory groups. They also find ways to include other people in projects before they have spent very much money, and certainly before the proof of concept. Intel, ExxonMobil, and Raytheon ensure they do not advance a project beyond a certain stage unless they have funding and staffing from the business unit that will benefit from the innovation.

Seen

Successful innovation teams engage in regular self-promotion. Being seen as productive helps the team to engage with other parts of the firm and makes the sponsor’s job easier. Innovation teams start by showing process measures such as ideas generated, prototypes generated, experiments conducted, and employee participation in activities. As their efforts begin to produce fruit, they show actual innovation outcomes such as adopted innovations, cost savings, intellectual property generation, or new revenues. When the innovation team fosters cross-company innovation activities, it may even claim credit for innovations created elsewhere in the firm (while also giving credit to the original innovators). Successful innovation

Good PM
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I think should be a how can we help you attitude

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teams promote their work through many methods including websites, internal press releases, launch events, innovation conferences, and innovation centers. *be visible*

Review the Innovation Success Factors in Your Organization

In successful innovation teams, the six ISFs are interdependent. Being *small* helps the sponsor protect the team’s funding and separateness, but being *shared* expands the reach of the small team. Being *systematic* not only improves productivity but also provides activities and metrics to help the team be *seen*. Being *seen* as effective not only helps the *sponsor* do his job, but also encourages other executives to engage in *shared* work, further easing the sponsor’s job. *Separateness*, so important for innovativeness, is protected by the *sponsor* but tempered by being *shared*.

Since the ISFs are interdependent, missing any one of them (without good reason) can cause problems for the innovation team. Weak *spon-*

sorship in a financial services company meant that the innovation team was forced to constantly justify why it wasn’t following corporate software development methods or technology standards. Teams that *shared* only during idea generation suffered from adoption problems, reducing their ability to be *seen* as effective, and making the *sponsor’s* job more difficult. *Oh good grief!*

Whether you are building a new innovation team or improving an existing one, pay attention to the Innovation Success Factors. Does your team have all six? If not, is there a good reason for the missing one? At TCS, for example, the innovation team is not small, but it has CEO-level mandate and funding to support double-digit company growth. If your innovation team is missing an ISF (without good reason), then take steps right away to resolve the issue. Small innovation teams can pay big returns, but only if they are structured—and managed—to deliver.

Figure 1: Innovation Success Factors (ISFs)

	Description	Benefit
Separate	Distinct team of full-time people	Leader can build the right culture and skills; Complete focus on innovation
Systematic	Clear but flexible criteria and methods to gather and filter ideas, and plan and conduct experiments	Improves team productivity and measurement; Improves credibility to rest of the business
Small	Typically no more than six to eight people (“rounding error”)	“Fly under the radar”; Forces a focus on delivery and “failing smart” <i>should be an article on this</i>
Sponsored	Strong executive (at any level) funds, protects, and promotes the team	Team can concentrate on innovating, not protecting its existence
Shared	Rest of business co-funds, co-staffs, provides sites for projects; not just providing ideas	Promotes adoption; Improves engagement; Other business leaders promote innovation team
Seen	Regular self-promotion of process measures, stories, and innovations	Helps build and sustain momentum; Reduces dependence on sponsor

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Effective Post-Implementation Reviews
- Benchmarks for IT Decision Making
- Leading the Transition to the Digitized Platform
- Designing and Managing Shared Services
- Managing the Information Explosion
- Making Sense of “the Cloud”

In July of 2008, Jeanne W. Ross succeeded Peter Weill as the new director of CISR. Peter Weill became chairman of CISR, with a focus on globalizing CISR research and delivery. Drs. George Westerman, Stephanie L. Woerner, and Anne Quaadgras are full time CISR research scientists. CISR is co-located with MIT Sloan's Center for Digital Business and Center for Collective Intelligence to facilitate collaboration between faculty and researchers.

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MAKING AN INNOVATION TEAM SUSTAINABLE: INNOVATION SUCCESS FACTORS AT BP

George Westerman, *Research Scientist, MIT Sloan
Center for Information Systems Research*

Deborah Soule, *Principal, Soule Solutions*

MIT CISR research has shown that the most effective way for many IT executives to foster innovation is to create an innovation team. Effective teams display six Innovation Success Factors (ISFs): Separate, Small, Systematic, Sponsored, Shared, and Seen.¹ While it can be difficult to ensure that all six ISFs are mature from the start, all are required for the team to achieve success beyond its first two to three years. In this briefing we share the case of BP's innovation team to illustrate how the team built and matured its ISFs to create a sustainable innovation capability.

Getting Started

Creating an innovation team is a strategic bet by a senior executive. This sponsor identifies an energetic team leader and tasks him with recruiting team members and developing a plan. The sponsor funds the team, gives it a strong innovation mandate, and then protects the team against people who would question its purpose or methods. Initially, the team should be both separate and small. Being separate allows team members to focus full-time on innovating without the distractions of near-term operational goals. Separateness also allows the team leader to select people with the right set of skills and build the right culture to succeed. Being small is also important; having more than six to eight members early in the team's life can inhibit internal cohesiveness while also attracting unwanted attention from skeptics.

Early in the team's history, success is typically driven through the passion of team members. While

¹ "Build Innovative Capability through an Innovation Team," G. Westerman and K. Gundersen, MIT Sloan CISR Research Briefing, Vol. IX, No. 6, June 2009.

effective teams possess all six ISFs, many take informal approaches to systematic, shared and seen while the team is getting started. Innovators often work long hours, leveraging personal contacts and evolving their outreach activities to scan the technology landscape, elicit business needs, and deliver solutions. Initial innovations, while exciting, are often low-hanging fruit.

BP established its team at the impetus of its CEO and CIO. While the company prized its culture of business unit autonomy, the CEO wanted to identify "intellectual economies of scale" whereby units could learn from each other. The CIO believed that digital technologies provided potential for faster-cycle innovation than petroleum exploration and processing technologies did. In 2000, Phiroz Darukhanavala (Daru) was named CTO and charged with leading a BP-wide digital innovation effort.

Daru initially recruited six team members through a highly selective process. The team's size was an intentional decision: a much smaller team could not generate a critical mass of projects; one much larger would require too much administration. Daru sought a combination of strong IT knowledge and a deep understanding of the business areas. He wanted creative people, but only self-starters who could get things done. There was no hierarchy within the team, and it had no formal power.

The team began to build its innovation capability on a "venture capital" model of leveraging funds and expertise. Relying initially on existing contacts and knowledge, team members started with relatively informal offerings: technology consulting to businesses and technology scouting to identify relevant technology trends. They also initiated relationship-building efforts with IT suppliers, research firms, consultants, academics, VCs, government agencies, industry groups, and major customers. Together, external activities yielded a wealth of technology insights and built a resource to tap for solutions, while internal activities increased the group's visibility and identified innovation opportunities.

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Maturing the Team's Capability

Although innovation teams often generate early momentum through the passion of their members, many fail to make the transition to sustainable capability. Over time, being *small* can limit the team's outputs unless team members improve their reach and productivity. Similarly, being *separate* can cause the team to become disconnected from the rest of the company, reducing engagement and generating innovations that few managers see as relevant. Warning signs include slowing momentum, innovations not adopted, or lack of engagement by business executives.

Typically, within three years, passion must give way to mature practice. Effective sponsors challenge their teams to improve their processes, demonstrate legitimacy and build a sustainable book of business. Sustainably effective teams complement the benefits (and address the downsides) of being *separate* and *small* by maturing their efforts to be *systematic*, *shared* and *seen*. Being more *systematic*—concentrating on specific activities and improving clarity of roles, decision criteria, and performance metrics—helps the team improve its productivity and contribution despite remaining small. Insisting on *shared* funding, participation, and ownership by business units—not just shared ideation—helps the small team expand its capacity while making innovations more relevant to prospective adopters. Being *seen* as successful—by actively publicizing measures of the systematic process and successful innovations—builds credibility and encourages others to engage with the team. The end result is a sustainable cycle in which early success leads to higher engagement and further success. A good sign is when annual budget justification is not a struggle anymore, and when managers from other parts of the business seek out the innovation team without prompting.

Table 1 shows how BP built and matured its ISFs. Over time, the CTO team became increasingly systematic in its role as broker between technology sources and BP needs. It evolved a series of specific processes to facilitate the flow of knowledge, expertise, and technologies between its innovation ecosystem and BP's global business units. Formal activities included:

- Conducting regular Executive Events to educate business leaders about technology trends and encourage them to envision technology-based solutions to business problems;

- Adding structure to the Technology Transfer process by creating clearly defined criteria to manage risks in evaluating emerging technologies;
- Executing Game Changers—annual programs aimed at investigating sets of technologies (such as sensory networks) that represented significant transformative potential for BP business. *JEMS*
- Engaging in Business Unit Partnering to better focus technology scouting and problem solving efforts on business leaders' most pressing challenges. *and external?*

Delivery responsibilities for each process were increasingly *shared* by team members and business units. Each Executive Event was co-sponsored by a senior business unit partner. In technology transfer, after the team filtered ideas from ecosystem partners down to 40–50 high-potential technologies, business executive sponsors selected five to ten pilot projects and assisted in developing business cases. And, although BP's innovation team provided seed funding to verify the potential of promising technologies, implementation required sponsorship and full funding from business units. Insisting on shared responsibility allowed the innovation team to build stronger relationships, gather more business intelligence, deliver more useful innovations, and assume a legitimate position in the organizational network.

The BP team complemented its collaborative approach with efforts to be *seen* by other people. Team members ran extensive awareness workshops sharing successes with BP businesses. Over the period 2000–2009—through two recessions—the team drove many millions of dollars in business value from a small annual budget. The team gained wide recognition both inside and outside BP for dozens of innovations, including multiple awards. The team's processes and innovations earned the company considerable returns in terms of reputation and internal employee engagement.

For example, the CTO team's 2004 game-changer activities around sensory networks (SN) made BP a recognized leader in using wireless sensing to solve business problems. SN activities were *systematic*. Each opportunity was judged on scalability, practicality, and impact before being selected as a project. The team had measures of business value, a formal dashboard of SN ideas, projects and opportunities, and weekly team reviews to examine progress, resources, challenges, and potential solutions. The *shared* approach was critical; every project had a business sponsor and business staffing and funding

*3 years
make
mature*

*basically
can help
out -
not
do it
all themselves*

to complement the CTO owner's resources. To ensure SN activities were *seen*, the team ran many workshops across BP businesses to create awareness and visibility of the SN successes and encourage greater adoption. Collectively, the CTO team's sensory network project implementations won internal BP Helios awards in 2004 and 2005, as well as awards from *InfoWorld*, *Computerworld* and *CIO Magazine*.

Is Your Innovation Team Sustainable?

To build a sustainable team, start simply: be a strong *sponsor* (or find one). Then, find an energetic leader to build a *separate* and *small* team of talented

individuals. Give the team an inspiring mandate and stay out of its way. As team members start to achieve success through passion and long hours, challenge them to make their capability more sustainable. Ask them how they'll keep up the same pace for another three years without burning out. Then encourage them to mature their practices—becoming more systematic, shared, and seen. With the right balance of passion and practice, the team will have a full pipeline of activity with people throughout the firm, team members will have full lives inside and outside of work, and the company will repeatedly benefit from its sustainable innovation capability.

Table 1: Transition in Innovation Success Factors at BP

	STARTUP PHASE (2000–2002)	SUSTAINING PHASE (2002→)
Sponsored	<ul style="list-style-type: none"> CIO provided funding and protection Additional political protection from CEO vision 	<ul style="list-style-type: none"> Continued sponsorship and funding from CIO role Sponsor's protection role less difficult due to increased credibility and business buy-in
Separate	<ul style="list-style-type: none"> Separate unit in IT under CTO 	<ul style="list-style-type: none"> Continued as separate unit Increasingly the center of an innovation network
Small	<ul style="list-style-type: none"> Started with six people; Budget of a few million dollars out of IT budget >\$1 billion 	<ul style="list-style-type: none"> Continued small; about 12 people and budget of a few million dollars out of IT budget >\$1 billion
Systematic	<ul style="list-style-type: none"> Broad set of interlinked tasks (technology scanning, needs elicitation, technology consulting) Informal approach to sources; experimentation and learning Driven by energy and inventiveness of team 	Refined tasks into distinct and mature processes: <ul style="list-style-type: none"> Executive Education Events Technology Transfer Game-Changers Business Unit Partnering <p><i>best practices that are fluid</i></p>
Shared	Informal relationships with: <ul style="list-style-type: none"> External partners for technology ideas, trends, and expertise Internal business partners for business needs and solution ideas 	<ul style="list-style-type: none"> Concrete engagement with business units to ensure shared responsibility for prioritizing, resourcing, and implementing projects Systematized external engagement Shared project publicity and accolades
Seen	Emphasized technology workshops and building external ecosystems to generate team visibility: <ul style="list-style-type: none"> Individual contacts with technology firms and potential BP adopters Focus on quick wins and filling the project pipeline 	Gained widespread awareness of process and successes <ul style="list-style-type: none"> Dozens of innovations, hundreds of participants Many of millions of dollars in value Internal and external awards (e.g. BP Helios, <i>CIO Magazine</i>, and others) Numerous keynote speeches at conferences Articles in BP and external publications Publicizing successes to increase uptake by other business units

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- Operating Model
- IT Management Oversight
- Business Models
- IT-Enabled Change
- IT Innovation
- Business Agility
- The IT Engagement Models

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MIT CISR is funded by Research Patrons and Sponsors and we gratefully acknowledge the support and contributions of its current Research Patrons and Sponsors.

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LEARNING TO FOSTER BREAKTHROUGH INNOVATION: THE EVOLUTION OF EMC'S INNOVATION CONFERENCE

George Westerman, *Research Scientist,*
MIT Sloan Center for Information Systems Research
Deborah Soule, *Principal, Soule Solutions*

Many companies, hoping to be more innovative, start with opportunity generation. Mechanisms such as idea management systems, innovation contests, and innovation jams offer great promise. However, in many cases, momentum and excitement generated in the initial launch quickly diminish, leaving little to show for the effort. In other cases, the effort produces many good ideas, but those ideas fail to turn into working innovations.

Some companies have been able to overcome these challenges to develop opportunity generation mechanisms that work well. These companies gain not only a source of good ideas but also a way to energize and foster connections among their employees. EMC is one example. Its CTO-led innovation contest has evolved over four years to be a sustainable source of breakthrough ideas. It has also helped to motivate a large group of potential innovators and forge connections among the company's most innovative employees, with benefits for the company and the employees themselves.

The EMC Innovation Contest: Then and Now

EMC's first innovation contest was a relatively simple affair. In an effort to improve idea generation and integration of effort across EMC's many divisions, EMC SVP and CTO Jeff Nick, together with another senior executive, Mark Lewis, issued a "call for innovative ideas" in spring 2007. Employees throughout the company could submit their ideas via e-mail using a simple template. The process gathered about 400 ideas that varied from useful product innovations and business process enhancements to ideas that were well outside the scope of EMC's business. Over the course of two months, a committee of volunteer subject matter experts winnowed the field

to 30 finalists. These finalists had the opportunity to present their ideas, in a large conference room poster session, to a panel of EMC executive judges. The winning idea received publicity, and the CTO office invested some development resources in the idea, but the rest of the finalists did not have a formal path to enlist volunteer collaborators or find a corporate executive willing to invest in taking their ideas to the next stage.

?
did not
good

Three years later, the innovation showcase is radically different in process, level of involvement, and extent of impact (see Figure 1 for a description of the process). In all, 1509 ideas were winnowed to 47 finalists and eventually 15 winning ideas. Winning ideas ranged from new product offerings to new combinations of existing technologies to improvements in sustainability or employee diversity. Each winner was backed by an executive ready to invest in moving the idea into design and potential adoption.

Notable 2010 winners included a low-cost sustainable data storage system for developing nations, a home entertainment storage solution, and a framework for easy software application deployment and integration in storage devices. Winners in 2009 included an award-winning virtualization product for home computers and a TCO business case tool, suggested by a relatively junior sales engineer, which is now available to all EMC salespeople.

The innovation process yielded benefits beyond a set of good ideas. Individuals who were relatively junior or worked in more remote locations found willing listeners for their ideas. More than 4000 EMC employees participated as idea contributors, contributors of online comments, or voters in the community review process. Some contributors were becoming known as serial innovators and finding willing collaborators for their next projects. The concept was spreading, with some regions, such as China, running their own local contests. What EMC's CTO began as a simple idea contest was rapidly becoming a way to build an innovative culture that spanned geographies, professions, and business units.

wow
low tech!

Practices for Improving the Opportunity Generation Process

Over four years, EMC learned important lessons about how to manage an innovation contest, improve contest outcomes, and foster an innovative culture. Effective practices included the following:

1. Building a scalable idea review process

After submissions grew from 400 in 2007 to 1000 in 2008, organizers became concerned that their volunteer-driven review effort would not continue to scale effectively. They adopted an online tool—first assembled as part of a local contest at the company's China office—through which EMC community members can review, comment on, and vote on ideas. EMC chose to keep the community and expert ranking processes separate, and then combine the rankings into a single set of finalists.

EMC refined the process further by creating a set of “challenge tracks,” each sponsored by a senior executive. Innovators could submit their ideas to challenge tracks such as sustainability, social innovation, or corporate IT, or to product categories such as security, unified storage, or information intelligence. Community members and subject matter experts then focused on areas with which they had greatest familiarity. The conference committee narrowed 1509 ideas to a set of 47 finalists by integrating results from community voting, subject matter ratings, and interest from each area's sponsor. Each track or product category had approximately three finalists that judges and sponsors could investigate in more detail.

Final judging changed from an in-person poster session to a more virtual interview process. Each sponsor personally interviewed all three finalists in her track to make a selection. Meanwhile, the senior executives discussed all finalists to choose “Best in Show” winners. Finally, a “People's Choice” award went to the innovation that was ranked highest in a community review process.

The review and judging process enables EMC to identify a solid list of winning ideas through a low-cost scalable process. According to organizer Burt Kaliski:

The review process doesn't have to find the absolute best idea across all the submissions; it must just find a number of great ideas that can garner resources enough to be tested, because any one of these ideas could help to advance the company.

2. Linking ideas and resource commitment throughout the process

An ongoing concern was that ideas often failed to move to the next stage of design and adoption. Although innovators had good ideas, most did not have the resources or contacts to move ideas forward on their own. Recognizing a lack of formal senior-level commitment in the 2007 process, the CTO office promised to champion the top three ideas in 2008. However, while the top idea that year moved forward, most of the other 29 finalists “fell on dry ground.” In an effort to change this dynamic, EMC now asks senior executives who participate in the process to commit to providing resources for any winning idea related to their business domain. The “challenge track” approach formalizes this, with each sponsor committing in advance to fund the winner in that area. *ham*

The track approach improves the linkage between ideas and eventual resource commitment at several steps in the process. Track sponsorship is a volunteer process, so executives can choose whether to use this particular platform for corporate innovation to advance their business objectives. The inclusion of sponsors in finalist selection ensures that finalists are aligned with sponsor goals. Then, by interviewing each finalist in their areas, sponsors gain comfort with the ideas and the innovating teams. The track process also improves executive attention to non-winning ideas, with several sponsors publicly stating, “I am funding the winner, but I'll be happy to champion the other finalists if you need me.” *or fund them*

The introduction of tracks allowed good ideas in corporate areas such as diversity and sustainability to receive recognition, in addition to innovations in products or customer-facing processes that might have previously dominated the process. Meanwhile, the CTO office can pay attention to other deserving ideas. According to SVP and CTO Jeff Nick:

Unlike prior years, the CTO office doesn't need to commit to carrying all of the water uphill. Now we can focus on disruptive ideas or ideas that fall through the cracks.

3. Enabling and encouraging engagement at many levels

The goal of the innovation contest extended beyond gathering ideas to include creating enthusiasm for innovation across EMC's many organizational units. The contest itself helped raise awareness, especially when people outside of traditional product development roles began to get recognition as innovators.

Why did they fail?

yes

or fund them as well if better than the rest!

Good for your career

Introducing the community review and comment process further extended enthusiasm. People could contribute to innovations without coming up with the original idea. People with good ideas and comments also became known to the community through their contributions.

Another important element is the annual innovation conference. The conference, initially created to announce and celebrate the winners, quickly expanded in both scope and attendance. It is now a global innovation showcase connecting events at 15 locations (plus individuals joining virtually) on a single October day. Each location plans its own set of presentations and recognitions, while also incorporating video feeds of the award presentations and other topics from a central location (Bangalore in 2009, Cork in 2010). Attendance at the local events is by invitation only, with general managers often nominating attendees as a reward for individual performance or for submitting ideas. The hybrid local and global event helps generate a feeling of being part of a global innovation network while fostering opportunities for local innovators to get to know

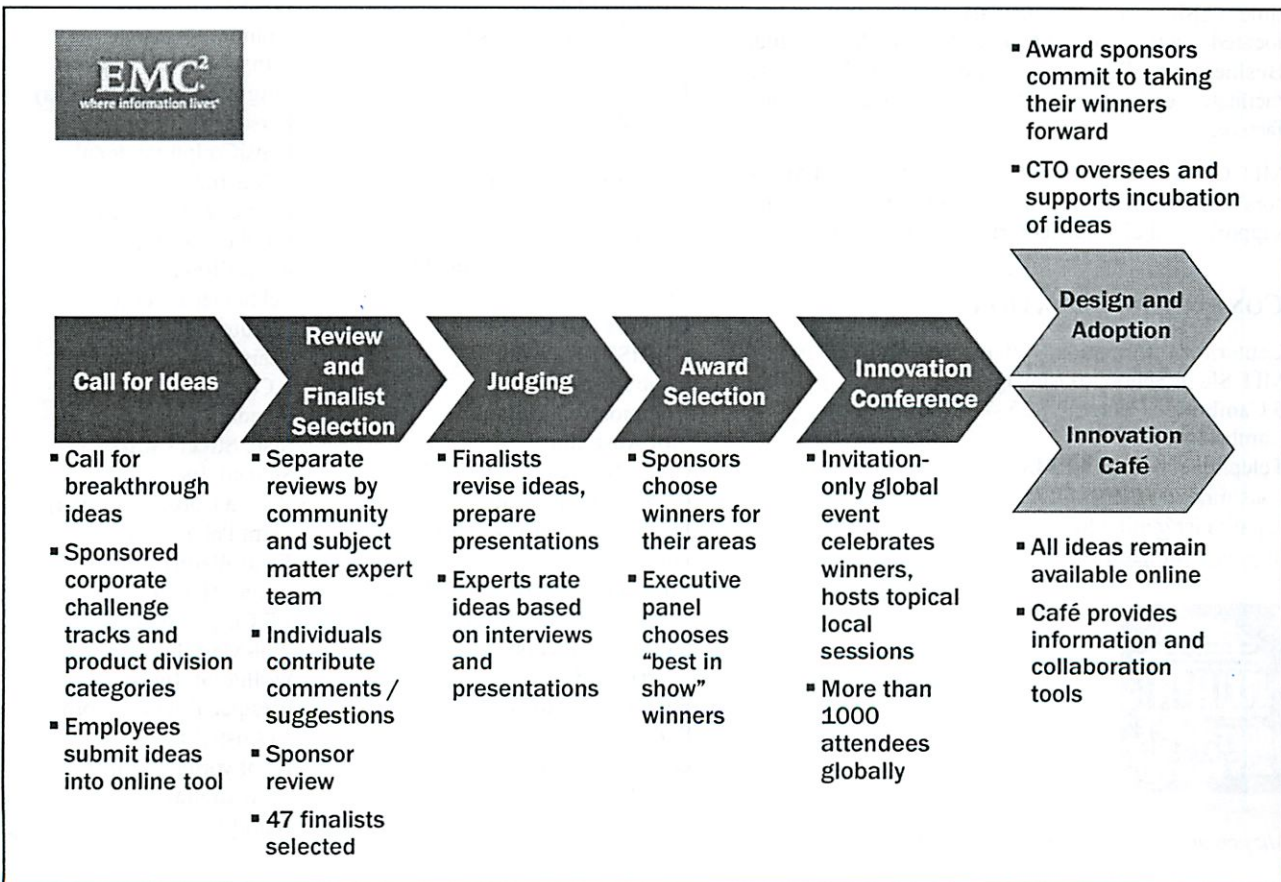
I don't know -

each other. Furthermore, the online tool, with its related collaboration areas, remains open after the event. It serves as a virtual innovation café providing willing innovators with information to find collaborators and create new innovation ideas.

Building a Culture of Innovation

Improving a company's innovative capacity requires far more than just asking employees for good ideas. It requires executives to foster an environment that sustains momentum around the ideas and the idea process. By evolving its methods over four years, EMC created a process that not only selects winning ideas, but also sets the stage to move those ideas forward. Furthermore, by involving employees in the community review process, and fostering a feeling of energy and community through global conference, EMC's process helps employees find a voice, celebrate others' ideas, find potential collaborators, and see how they themselves might be successful as innovators. This has a snowball effect, producing an innovation capability that can be a sustainable source of ideas, energy, and breakthrough value for the company.

Figure 1: EMC 2010 Annual Innovation Showcase



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15.571 Generating Business Value from IT

Class 6 Assignment

For our next class, Tom Centlivre from Trinity Health will join us for the Trinity Healthcare discussion. Since we have BCG and Credit Agricole visiting for the second half of class, we won't have time for a group discussion. Instead of preparing for a group discussion, please write 2-3 sentence answers to each of the homework questions and bring it to class to turn in.

(Read the Davenport article and the Protection 1 briefing which is now posted on Stellar—not in your packets) to get a feel for the Working Smarter concept.

Where is the Trinity leading?
-in bank

1. How is Trinity Health working smarter?
2. What capabilities are most important to Trinity's ability to work smarter?
3. What do you think are the key obstacles to working smarter at Trinity Health or anywhere?



WORKING SMARTER: THE DIGITAL ECONOMY IS ALL ABOUT YOUR PEOPLE

Jeanne W. Ross, Director & Principal Research Scientist
MIT Center for Information Systems Research

Cynthia M. Beath, Professor Emeritus
University of Texas, Austin

Read 3/21

While the term “digital economy” stirs visions of cool devices and friendly interfaces, business success in the digital economy will rarely be a function of technology. New technologies are widely available and applications of technologies are readily mimicked. Thus, companies that succeed in the digital economy will more likely distinguish themselves by working smarter.¹

We characterize companies as working smarter when they have *an organization-wide habit of using a digitized platform to optimize each individual's contribution to enterprise business objectives.* Working smarter starts at the operational level. In the digital economy, customers expect fast, accurate, and high-quality products and services. To meet these expectations, front-line employees must execute their responsibilities flawlessly. Accordingly, most companies have implemented digitized platforms

to support their core transactions. But these platforms will have limited value unless people are using them to work smarter. And that, it so happens, is rare.

Prior MIT CISR briefings have described the critical components of working smarter.² In this briefing, we describe how Protection 1, the U.S.'s second largest security firm, has enabled its people to work smarter.

Protection 1: A Turnaround Based on Working Smarter

At Protection 1, CEO Tim Whall has a habit of asking people throughout the organization two questions: “Are you having a good day?” and “How do you know?” These are hardly remarkable questions. What's remarkable

¹ In a 2010 survey of 207 public companies, higher scores on the practices associated with Working Smarter were significantly correlated with higher business impact from IT. And higher impact from IT was, in turn, significantly (and positively) associated with return on equity.

² J. Ross, C. Beath, and K. Johnsen, “Driving Value from the Data Deluge: Lessons from PepsiAmericas,” MIT CISR Research Briefing, Vol. X, No. 3, March 2010.

is that individuals throughout the company can answer both questions in terms of Protection 1's business objectives.

When Whall took the reins of Protection 1 (P1) in June 2010, the company was enduring its fifth consecutive year of declining revenues. He immediately announced a growth strategy that involved retaining existing commercial and residential customers and growing national accounts. His strategy depended on delivering outstanding customer service, and he set out to explain how individual employees throughout the company could contribute to this goal—in other words, how they could work smarter. One year after Whall arrived and combined the talent of existing leadership with that of hand-picked senior executives, working smarter was becoming pervasive. Not coincidentally, the company had reversed performance trends and started growing revenues.

Developing a Daily Scorecard

In emphasizing customer service as the path to growth, Whall specified five customer touchpoints where P1 could make or break customer relationships: sales, monitoring, billing, installation, and service response. CIO Don Young, who arrived with Whall, needed just five months to extract data from P1's existing systems and data warehouse and deliver a daily scorecard capturing metrics that related to these customer touchpoints. These metrics included time to installation, time to service, number of sales activities, number of cancellations, retained monthly revenue, and new sales.

Originally a spreadsheet, P1's scorecard now provides online access to both summary and detailed results at the enterprise, regional, and branch levels. The scorecard enables managers at P1's sixty-five branches and four regional offices to compare the previous day's outcomes and month-to-date results to expectations. P1

What can be do to ↑ lives/job of emp's?

Cool

maximizes the utility of the scorecard by reconciling the numbers on a daily basis. Thus, line managers have come to see it as a reliable gauge of their daily operating performance.

Many companies have scorecards or dashboards. What is unique about P1's scorecard is that it does not report financial data. Rather, management has designed the scorecard to capture the daily operational outcomes they know will trigger strong financial performance:

How to think objectively about this!

The P&L will take care of itself if we make sure that the metrics on the scorecard are all up to par.

—Don Young, CIO

The daily scorecard at P1 has provoked visible changes in behavior throughout the company. Instead of starting their day with a cup of coffee and a chat with staff to learn how things are going, branch managers start with a review of their scorecard from the preceding day (albeit with a cup of coffee) and a directed chat with individuals who can affect any numbers that aren't up to par. Branch managers know they'll get a call from their regional vice president, or even the CEO, if branch performance slipped yesterday:

There's no analysis paralysis going on here. You want to have a good day? You know what's on the scorecard.

—Joe Sanchez,

SVP, Customer Operations

Tracking Individual Performance

Each day at 4:30 a.m., P1 distributes a second report with a set of ten metrics

The power of the daily scorecard is that the underlying data can be traced back to the daily performance of front-line workers.

that combine financial, customer growth, and sales results. Branch and regional managers at Protection 1 use this report to compare their performance with that of their peers and seek help

where they need it. Accountability for these metrics is clear: the sales team is responsible

for three metrics; the operational team is responsible for four metrics; and the branch manager is responsible for the remaining three metrics, which result from the combined efforts of sales and operations.

P1 aims to provide this kind of clarity about individual performance at all organizational levels. The power of the daily scorecard is that the underlying data can be traced back to the daily performance of front-line employees. All front-line employees have a small set of targets that allow them to understand how they contribute to business outcomes and to track their own performance.

Real push to improve

For example, every installer chooses three goals from a potential list of ten. One goal might be to ensure that all new installations are complete within one day after a sale—a goal that Tim Whall has repeatedly emphasized. A second goal might be to have fewer than 15% of installations result in a customer callback within twenty days. Those two goals are in partial conflict since completing installations is dependent on working reasonably quickly, while reducing callbacks requires taking time with the customer to explain how everything works. As a result, it can take some time for an installer to succeed. But once an installer learns how to address those conflicts and consistently meet his first three goals, he adds another goal.

To encourage individuals to achieve their goals, P1 rewards excellence. Each year fifty top employees across all functions are named to the President's Circle, an honor that includes an all-inclusive luxury trip with their spouse or a guest to a resort location. Whall acknowledges their individual accomplishments at a banquet during the trip.

Improving Systems

Tim Whall proclaimed his insistence on outstanding customer service early in his tenure. He removed the IVR so that customers would immediately talk with humans when they called. And he mandated that every call would be answered within sixty seconds. He required the branches to eliminate their service backlogs, so that P1 could offer one-day service. He also insisted that installers and service technicians show up for 8:00 a.m. appointments no later than 8:00 a.m. These pronouncements established expectations for customer service.

But management recognized that many customer service improvements depended on better technology. For example, P1 installed intelligent call routing so that customers would automatically be connected with a customer service representative who understood their installation. Customers were happier (making the reps happier) and call handling time went down. Customers again responded favorably when P1 introduced "Tech Tracker," a system that not only tracks technicians' progress during the day, keeping customers updated on the approximate arrival time of their technician, but also includes a photo and the qualifications of the tech coming to see them.

nice

more transparency

P1 also overhauled its sales process. Salespeople had been using a spreadsheet-based system to develop quotes, passing new contracts to administrators to key in to the CRM and correct specifics, after which the same data would be entered into the purchasing system by other clerks. This process was slow and error-prone. The IT unit developed Sales Central to automate the process of developing a quote, obtaining needed approvals, submitting the contract to the customer for an e-signature, recording the sale, ordering parts, and calculating and triggering payment of commissions. Although many salespeople resisted using Sales Central, they came around as P1 made it the sole system for processing commissions.

haha

Coaching

Companies that are working smarter recognize that every individual makes the company better—or makes it worse. Management elevates company performance by elevating individuals' performance. But elevating individual performance is a daily challenge. Recognizing that challenge, P1's leaders think of themselves as coaches rather than managers, and they encourage line managers to think the same way.

yes

They have focused particularly on developing the coaching skills of first-level supervisors, such as branch managers, sales managers, and call center managers. These managers directly impact many people's lives, but they typically have little experience in motivating and teaching.

Tim Whall has mandated monthly "conversations" about individual performance between managers and their reports. The objective of these conversations is to identify how each em-

ployee can address gaps between goals and outcomes and how the individual's manager can help:

It's geared to be a five to fifteen minute conversation, and I say the word conversation because I mean that. It's not a confrontation. The purpose is, "I'm your supervisor, these are the things you're focusing on. My role is to help you be successful at achieving those."
 —Tim Whall, CEO

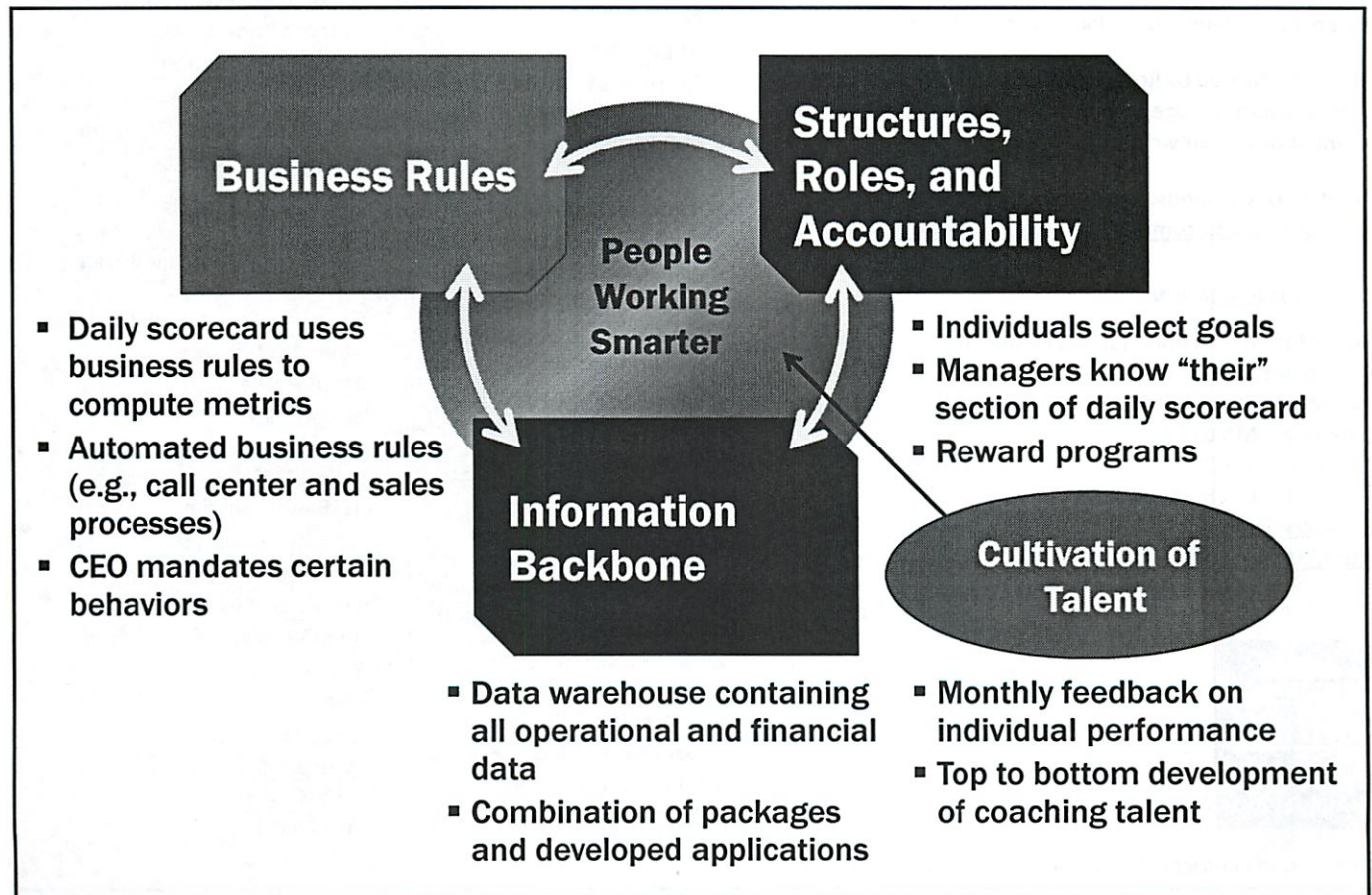
To support these conversations, P1 rolled out Leadership Training, where front-line managers have come together to learn the skills they need to be effective coaches and leaders.

w/ right personality people this can work

Leveraging the Digitized Platform

In companies that are working smarter, leaders focus attention, not on stock price or quarterly P&L, but on determining every day whether everyone is having a good day. Protection 1 achieves working smarter by (1) developing and constantly enhancing the underlying information; (2) articulating and, where appropriate, automating business expectations; (3) clarifying individual accountabilities; and then (4) persistently coaching individuals to ensure they understand how they contribute to business success (see figure 1). This is hard work. But if management doesn't commit to helping everyone work smarter, no company can expect its technology to lead to success in the digital economy.

Figure 1: How Protection 1 Works Smarter



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- Information Sharing
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- IT Unit Design and Leadership
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FOXTEL (Australia)	Woolworths Limited (Australia)
France Telecom	World Bank

Class 6: Trinity Health

Michael Plasmeier

1. Trinity Health is working smarter by sharing its best practices across the organization. It is doing that by implementing a digital platform (electronic medical records), ensuring that that platform is used consistently, and then mining that platform for data to improve its care.
2. Trinity is only able to work smarter because it has a standardized, tech-supported platform, backed up with standardized procedures that are followed. This ensures that things are handled the same way across the country. It is also careful to adopt the best practices as standard and to update those as needed.
3. First, personnel do not like changing the way they have been doing things, nor being told they have to do things a certain way. Second, it is not easy to find the people who can identify these best practices (either qualitatively or quantitatively), and then convince people to adopt them.

Reaching Trinity

4/2

lots of moving parts they want to move together
- to save it

Very inconsistent

Benefits of standardization
(any downsides?)

Should create the best process from the batch
and iterate

Econ of scale across units

Obama's pushing integration

↳ too complex for ind docs?

-but HLC delivery is complex

Confidence in data

non-profit but finance still important

Why → cause + effect
↳ predict

2)

T analytics

integrate hospital, long term and home care

- new areas that didn't exist before

Jordan Peck would be perfect for this job

(What if a little variation - like evolution
see it better?)

(Finding my unique skills)

15.571

4/2

~~amp~~

Lots of guests

• Prep project's 2 pg overview what we've done
what we will do

• Do it before meeting w/ her

↳ April 6 is preferable

Call Kate to schedule

Air your dirty laundry so can fix

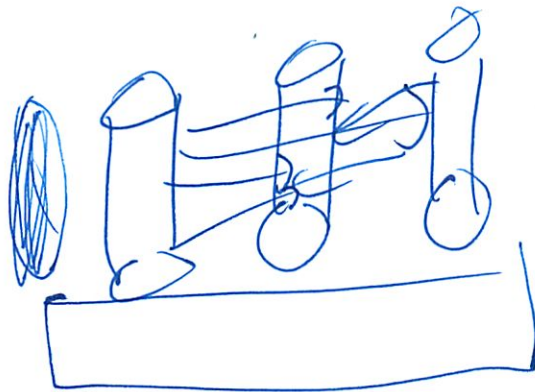
Working Smarter

Use electronic data more ~~effectively~~ effectively

Some justified - some leads you down a rat hole

②

Many Cos



↑ limitation on what you can do

Big Data

Biz Intelligence

Data Analytics

) Use data to optimize

10 years ago stored carefully

Now store any way

And still able to organize

Exponential ↑ in # of analysts as job title

Appears to have paid off

(3)

Solve big problems
No gut feeling

lots of data

↳ How manage + draw insights out of

Traps

1. Data may not be good enough
 - bad data
2. Co may not know what it wants to do
 - what apps. to sieze

Even if rec. app - still must deliver

Tech Overview

- Data.
1. Master File
 - ID # and attrbs
 2. Transaction Files

(9)

Warehouse - long term storage

Innumerable way things can go wrong

Real mess

Started in 70s

Acquired ~~smaller~~ cos

Decentralized

etc

1. Must collect data
w/ platform

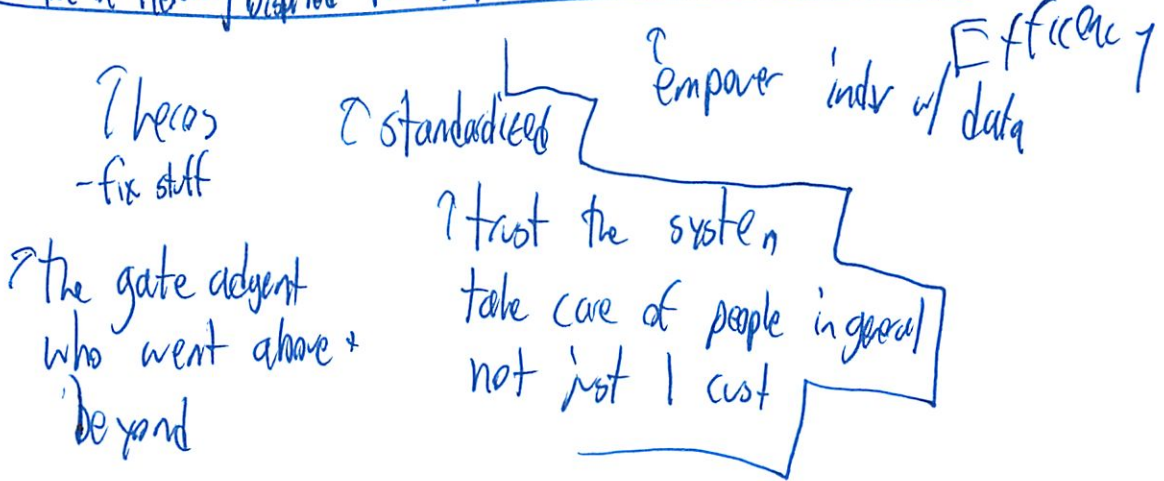
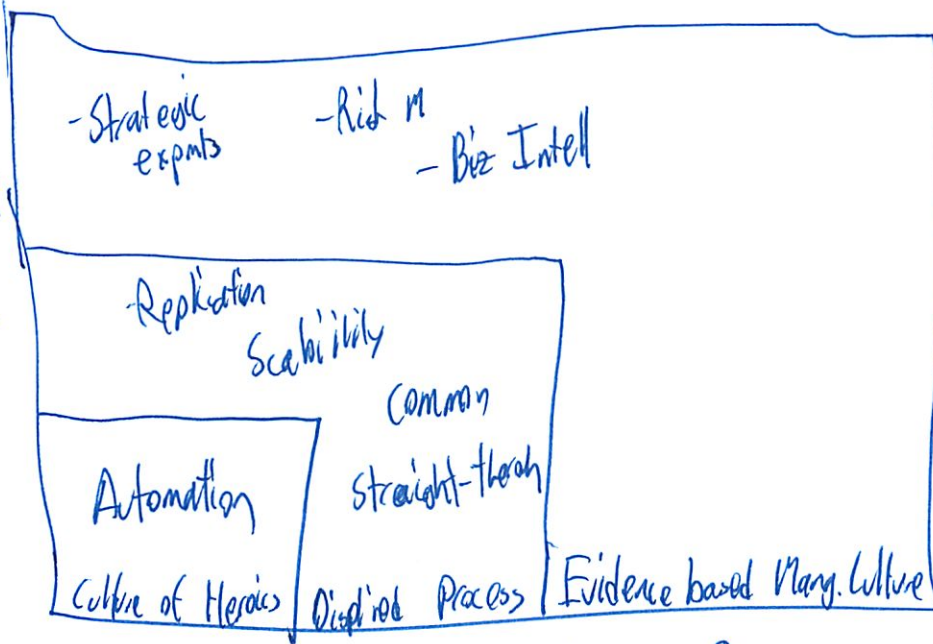
2. Then use it by ~~using~~ using analytics

- Should be performing better
- By using data

Working Smarter: habit of using digitized platform to
optimize each ind's contribution

5

Strategic
Agility



It all comes back to people

At the end - people who can use data better than others

Big Data - much more integration b/w IT + Biz
IT can not solve this problem alone
Can't just send people off to build something

(6)

Protection 1

- under half bill
- can easily see the data usage
- single source of truth
- must know if performing good or bad

Each emp sees on a daily basis if they are meeting their goals

- boss coaches them
- empower emp to make decisions
- pricing
- sales
- assign accountability

Trinity Health

- Goals:
- lower costs
 - improve health outcome
 - consistent, high-quality
 - more agile
 - regulation

⑦ (this class really helps you see what makes a successful class)

- accessibility / mission

Standardized

Shared Services

Standardized Processes

- Centralization + Standardization
- Develop Common Processes - did common systems lot only - to encourage adoption = not glamorous
but have to do
- Gradually digitized
- Added analytics to data warehouse
 - To identify best processes
 - look for upward / downward trends
 - Can recognize certain depts not performing well
- Scorecard how units were performing
 - what are the objectives
 - iterative

⑧

Ming - Fai (student) worked on EMR at
Singapore ~~Spa~~ Health (National)

- smaller than Trinity
- Doctors are very hard to change "special-people"
- impressed they were able to do
- Gov dangled \$ to do

V_Y - B - still work to do
~~still~~ still need to standardize

Me - Incomplete

Prof: Can't just throw a few ^{million} \$ towards analytics

Guest: Tom VP Strategy

lots of states

Lots of variation

hard to unify

9
More best practice than standardized

"quit" - figure 3

Top Down push to do Clinical Info System

- only big ~~the~~ systems in big cities did it

- home grown

→ went w/ vendors

Has been a journey

- working w/ ~~a~~ lots of people

Everyone wants data in HC

Must evolve as env changes

"Accelerated integration"

↳ high quality, effective care

In the 90s - put computers on the nursing stations

Lunch w/ the psycians

(10)

Machine gun questions + concerns

Why have to type all this in?

HC appears behind

But trying to make their orgs more cutting edge
while serving the poor

2000: Mercy + ~~Health~~^{Health} (cross merger)

more centralized
but variation

~~stand.~~ stand.
but decent.

lots of trouble over integrating

↳ what makes life interesting

Key Processes

Gensis - not a ^{IT} project

a complete rethinking of how we do biz

a whole IT transformation

1, Methodical pediness approach

18-24 months to prepare ~~team~~ that org to
convert

①

Is always an immediate drop/dip in performance

- study ~~when~~ how long drop is 3 → 12 months
- how long to recover + past

> 100 project managers
PMT

structured approach to review projects

~200 projects at once
- vary in size

- help complete on time + budget

- Charter + Statement of Work
 ^{dream} ?20-25 pgs
 detailed
 risk + benefits

Genesis → 12 years and \$400 mill

What are the org things we want to change

(12)

Benchmarks - 6 months before and after
Predict before implementation

Q: ~~Were~~ Were not as predictive when started

1st one was very cocky

2 year delay till site 2

Then said no more per site customization
instead - standardized

Always have more projects than we need

Credit Agricole / BCG
Corp + Investment Bank

- are co-authors of a book

↳ IT Darwinism (French)

- work closely together

Eric → CIO, Credit Agricole

Antwan → BCG, IT, France

(13)

Same patterns of transformation over + over again

(Eric not good at printing)

(Slides remind me of DB - Very angular
- lots of boxes)

Eric ~~was~~ had not IT bg

- They didn't even know how many emp

- first had to implement the monitoring

- invoicing to front office

evaluation back + forth

Antuan: This seems so basic

But many people don't do it!

First time bank had this visibility

Each biz line was autonomous

(Move to more centralized IT strategy)

Traders very demanding cust of IT

(14)

2006: Biz growing fast

How to staff people:

↳ people w/ knowledge of corp markets

Just strengthen the management

Move away from all contractors

BCG: Must make sure plan applied

- don't just hand off nice slides

8 major streams

HR Plan

Sourcing / Off shore

RUN

Architecture

Project Management

Tools + Reporting

Organisation

Monitoring

(15)

Must ~~the~~ overcome "activation energy"

Had to transform while retaining delivery

BCG: Looking at # levels and span of control
of managers tells you a lot about an org

Build win-win - to be on good client list
You still keep the risk \hookrightarrow critical size

BCG: The more automated - the larger the span of control
 ~ 11

They were at 4 go to 8-9

Transform some to Experts / PMs

Eric: HR doesn't totally understand IT
must manage differently

Still follow rules

BCG: That is why Accenture makes \$

26

Q: Did you keep banking titles?

When is expert good?

↳ Does he/she want to manage?

Define steps for expert

- A
- Quality of projects
- People who can talk to

BCG: Eisner in a engineering Co

- He can understand it more

Q: Why decide to rearchitect top down

or no pilot project

Org was out of control

BCG: How fast and how far to go?

Pilots don't do transform in 2-3 years

Must "go" at some point?

Do you want to take the risk?

(17)

If too long - lose the commitment of team

Fear from team

He wants Quick win - to prove on right track

Must still manage Contractor day to day

BCO: You are still responsible for the risk

"Management by Magazine"

Tech won't solve your issues

Must still do it right

How long to transform an org?

People

← eaiser

IT - legacy apps

Merged the 2 IT orgs

merged in 2 months

Orgs very diff

- one very real time
- other more relaxed

Student: Conflict in my biz

(18)

BCG: Each ~~management~~ division still has its own teams

Projects are managed by dept, not IT

Not by the body

↳ but get this to work 1st

BCG: Merger

3 days to decide who

3 weeks to decide model

3 months to do

People will leave if don't merge it quickly

But 08 everything is fine

Then Global crisis

Cut _{dev} budget by 50%

19

Ask top management which projects to cut

But costs move slowly

- 3-4 months

- so must cut 60-70%

Q: ~~How~~ What to outsource

How do you control what people are doing

Must still have good arch + dev

Do strategic apps yourself

Outsource commodity

- contract management

What are key jobs from contractor that you will ~~keep~~
in house?

Post crisis: service centers

(shared services)

Merge all the Murex, etc teams

→ Outsourcing

20-30% to outshare

"captive" center in Singapore

20

Do it slowly + strategically

Some teams 100% offshore . some 0%

Go to staff lowest point ASAP

July 09: Restart

Time for the real transformation

Paris 250 € / day for good dev

Singapore 320

India 200

but then need more wrappers

BCG - best saw 30% savings
avg 28%

better in capital markets - were once big

all in - inc local manager etc

(Silicon Valley way can react faster)

(21)

After 3 years ↑ maturity

Need more integrated - but keep visibility to biz

Future

Be integrator

Be innovative biz partner

Be one IT

Develop + engage team

- is a future for you here

- sent to Accenture PM training

Saved 18 mil € on offshoring

Q: How measure?

Function points?

- more than SLOC

- but points data in/out

Financial

- but productivity varies widely

22

No real way to measure productivity

But can push team

Many metrics

Work Break Down Structures

Trust your managers

Must stay agile

IT Transformation is not a 1-stop project

Next challenge: Rationalize IT

Q: Cloud

- internal for developers

15.571 Business Strategy and the Role of IT

Class 7 Assignment

This week's class will be divided into 2 topics and there is an assignment for each of the two. Please read carefully as this week's class format will be different than previous sessions.

We are dropping one of the readings because we won't have time for it, so you need NOT read the briefing "How Social Media Can Disrupt Your Industry: A Case Study in the Travel Sector."

Oh good - ^{was} weird

Assignment 1 : Read the Supervalu case study (this case was just approved so you need to download it from Stellar), and prepare the questions below for class discussion.

(FOR EXTRA CREDIT PREPARE A WRITEUP TO TURN IN – DETAILS BELOW)

Discussion questions:

1. Consider the current allocation of decision rights at Supervalu (i.e., what's decided centrally? what's decided in the stores?) Why doesn't management give store managers greater decision making power?
2. Based on your reading of the case, is Yammer having an effect on stores' performance? What infrastructure, tools, training, and/or organizational changes are most critical for store directors to be effective?
3. Supervalu's 2011 financials are weak. Do you think management's current initiatives will succeed in turning around business performance? Why or why not?

***Extra Credit Details:** You are not required to hand in your answers to these discussion questions, but you can earn 1 Point on your participation grade if you hand in thoughtful responses to these three questions. Answers that are not well thought out will not receive the 1 pt extra credit. The assignment must be handed to Eugene before class starts.

*↑ - 1 point
haha*

Assignment 2: Watch the TED video on gamification at http://www.ted.com/talks/lang/en/seth_priebatsch_the_game_layer_on_top_of_the_world.html. (about 8 minutes). Then read the following article on one of Wal-Mart's gaming efforts: <http://www.latimes.com/business/money/la-fi-mo-walmart-contest-20120118,0,7301045.story>. You'll note that gaming has potential applications inside companies and as a tool to attract customers and new

also kinda weird

revenues. For example, internally gaming can enhance training, knowledge sharing, innovation, or other processes. Externally, gaming can create quests, award participation, or generate competitions.

Your assignment is to find a published example of gamification/gaming. In your assigned group on Monday, each person will briefly describe his/her example. Then the group will pick the example that it believes will have the biggest impact on the firm's performance. Each group will have up to 4 minutes to present its example to the rest of the class describing what the group believes the firm must do to make that gaming initiative successful, and convince the class that the impact will be significant. The class will then vote on the best example of gamification.

***Your grade** for this week's Assignment 2 will be awarded to your entire group—50% depends on the outcome of the class vote; 50% on the Ross/Min assessment of your ability to present an example of gamification, explain its critical success factors, and identify its potential impact.

Michael E Plasmeier

From: Eugene Min <eugenem@MIT.EDU>
Sent: Tuesday, April 03, 2012 8:19 PM
To: Eugene Min
Subject: [15.571] A few important details for Week 7's class

Hey everyone,

Professor Ross has a few wrinkles in store for next week:

- Week 7's assignment has 2 parts
- Part 1 will prepare you for class discussion
- The case for Part 1 is not in your reader, and has just been uploaded to Stellar
- For EXTRA CREDIT, you can write up answers to receive up to 1 point (see assignment for details)

- Part 2 will require good preparation before class. Then each group will make a 3-4 minute presentation in-class
- The grade on this presentation will your participation grade for this week (see assignment for details)

That's it. Have a great week!

Eugene

15.571: Business Strategy and the Role of IT

Dr. Jeanne W. Ross

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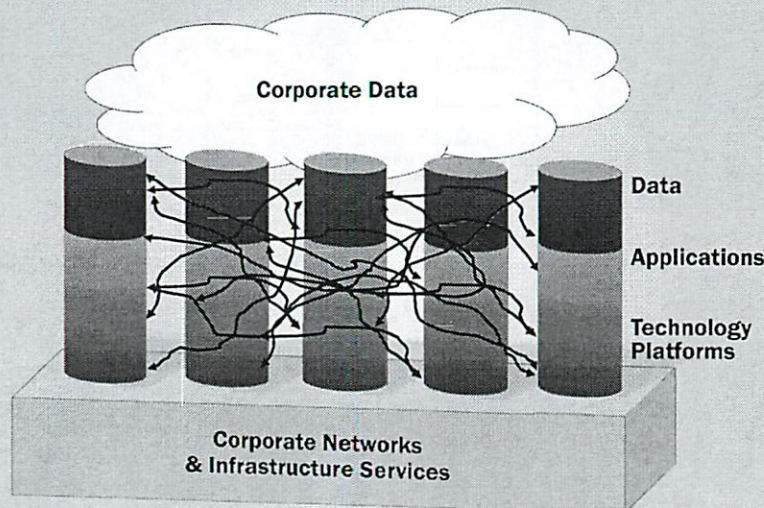


Today's agenda

- **Comments on Group Assignment and Project Team Meetings (5 minutes)**
 - Summarize key activities; key findings; next steps
 - Send summary prior to our meeting (not graded)
 - Call Kate Moloney to arrange meeting with me and as many teammates as possible: 617-253-6768
- **Introduction to working smarter concepts (25 minutes)**
 - Avoiding the “Big Data” trap
 - Driving value from a digitized platform
- **Discuss Trinity Health case (45 minutes)**
- **Break (5:20-5:35)**
- **Credit Agricole/BCG case study (80 minutes)**
- **Reception**



The result of traditional approaches to delivering systems



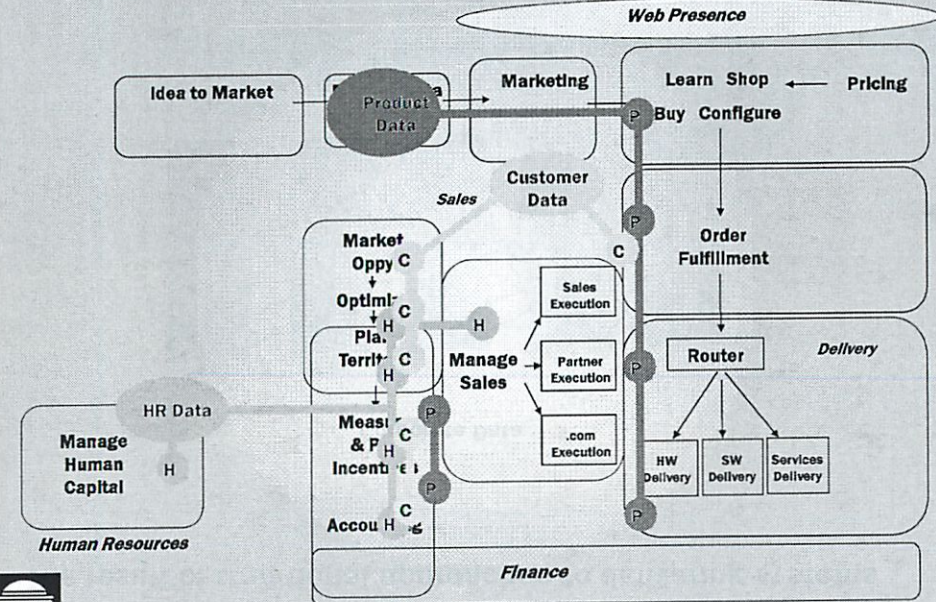
Data Integration Requirements for initiatives like “Big Data,” Business Intelligence, and Data Analytics

- **The Data Repositories**
 - Master Data Files storing attributes (e.g., ID, name, size, address) of key entities (e.g. product, customer, and employee)
 - Transaction Files recording specifics on individual activities (i.e., transactions such as order, shipment, purchase)
- **Data Collection:**
 - Relies on applications
 - Ideally data is collected once and available to all applications/people who need it
- **Data Storage and Use:**
 - Master data files should be centrally available to all people/applications (customer service reps, sales reps, billing systems, commissioning systems) that need them
 - Transaction files use, and often update, master files. With master files they can then be useful for data analytics
 - Data used for business operations is usually made available real-time in what is called a “production” environment
 - Data used for analytics is kept in a data warehouse



Handwritten signature or initials in blue ink.

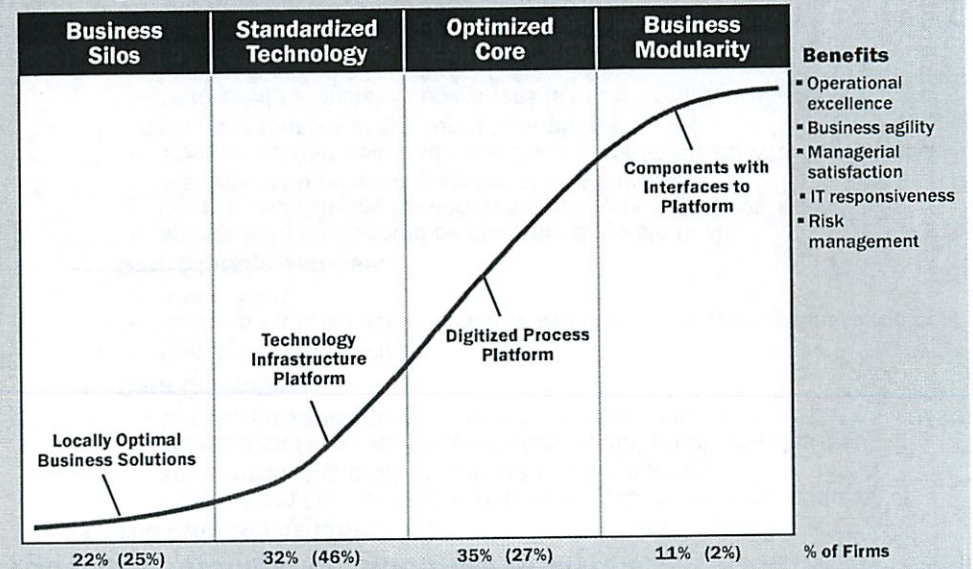
Why data is such an issue (an IBM example)



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4

Building the digitized platform: a transformation journey



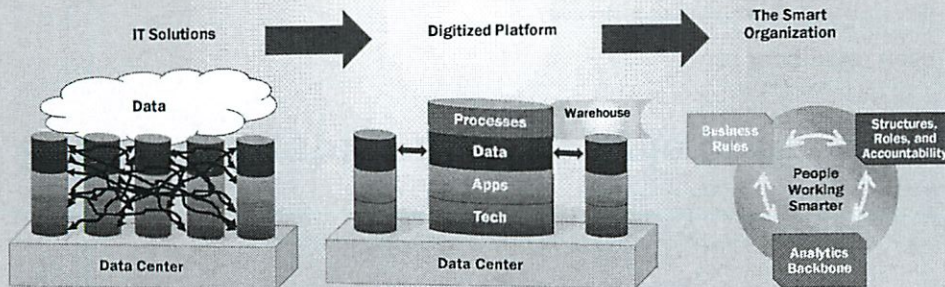
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Percentage of firms in each stage updated based on a 2010 CIO Magazine/ MIT CISR survey of 206 IT executives. Numbers in parentheses show percentages in 2007 from a survey of 1508 CIOs, conducted with Gartner.

5

The competitive advantage of a digitized platform results from working smarter

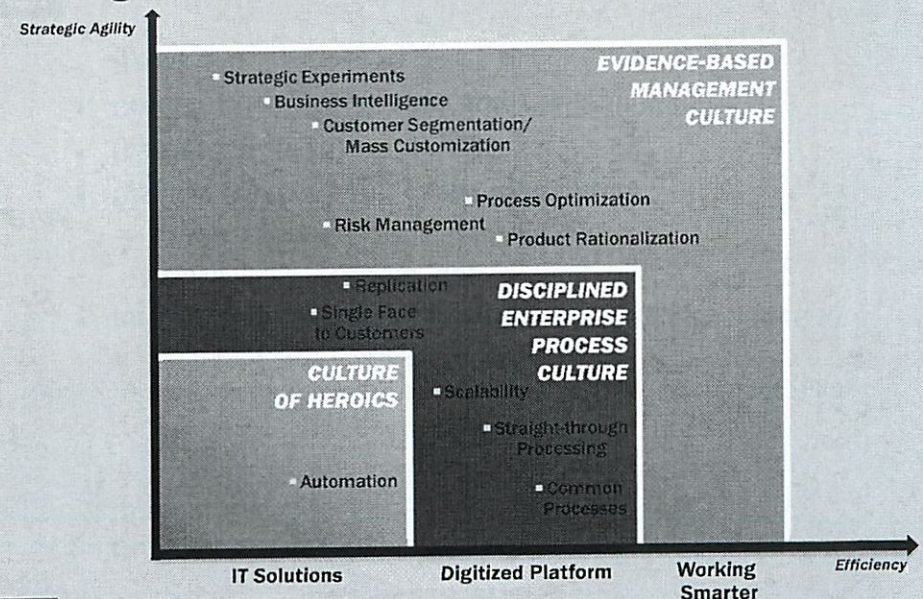
- Digitized platforms improve business processes through automation, standardization, and integration
- The next challenge involves using the platform to work smarter
- Working smarter: An organization-wide habit of using a digitized platform to optimize each individual's contribution to enterprise objectives (i.e., using people's smarts more effectively).



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6

Working smarter: A culture of evidence-based management



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Relationships depicted in this graphic are indicative of findings in three MIT CISR studies: Enterprise Architecture as Strategy, IT Sevy, and the MIT CISR Value Framework.

7

Protection 1 depends on branch managers to grow revenues

Increase revenues by retaining current customers & growing national accts. Install and fix equipment within 24 hours of order; alert customers as arrival nears

CEO

Daily Scorecard



Daily sales, pending cancels, sales activities, installs, service backlog, false alarms

Daily Scorecard

Personal Goals

Transaction activities

(Future) Individual Scorecard; Customer Profitability Data

Branch manager

- On time service
- <15% callbacks
- Hit sales quota
- Meet sales activity expectations

Sales, installation, and repair people in the field



Class 7: Supervalu

Michael Plasmeier

1. I think that management centralized decision making previously because they thought they could do it better. First, managers come from different backgrounds. Instead of training them in decision making, Supervalu just wants to give them a plan to execute. Many chains work on this basis of nationwide standardization. As they said in the case, they are preventing incompetent managers from really messing up. Second, Supervalu probably thought that they could make centralized decisions better. More time and energy can be invested into each decision when it affects many stores. Third, I know that placement is often something that is very politicized in supermarkets. Suppliers are willing to pay extra for placement. Supervalu might have been making those deals.
2. Yammer seems to be helping about 20% of the store directors communicate. Those that use it seem to be doing well because they can share tips and tricks to other store managers. The average store is now losing only 2% as opposed to 5%. I don't believe those figures were broken out for stores on Yammer and not.
3. I think these management initiatives are a good step. I don't know enough about the other aspects of the business (competition, labor costs, real estate, etc) to say whether the whole business will be turned around.

Gamification

4/17

TEDx Videos

At infinity

influence

loyalty programs use it

4 Dynamics

1. Appointment - predefined

Happy Mr

Farmville

Take medicine on time

(I would not have started)

2. Influence + Status

- black CC

- schools - Valadictorian

- focus on level up

3. Progression Dynamic

Linked to 85% completed

easy granular steps

②

4. Communal Discovery

Digg

McD monopoly sharing

DARPA ballon

I read book at NxJ

More hands on

About freq flyer programs

leveling up

points

badges

Use NxJ's site as example

- Oh published example only ...

- published online - the website - not a write up!

③

NxJ wellness

- Perfect

15.571

4/19

(2-3 min late)

What model in

~~the~~ Diversification is not a bad model
Could do none
Or do them jointly

~~was~~ Centralized decision making in decentralized env

~~the~~ We decide, you execute - worst case
of accountability - but very common!

Move to 'right' → standard systems + processes

What is going on at the banner level?

Standardizing process - not much detail

Yanner to share

Some Coord + Some repl = Unit?

②

Not there yet?

What data sharing?

What processes to standardize?

Only went through lot stage?

Moving slowly

Model Over Simplification?

Prof: More to pick on

What is ~~standardization~~

Replication vs unification?

How diff are they?

(Pointed at my loyalty card story

And the raceway)

Products: Same except for little box

Or Old Navy / Gap / B R stores

-sell diff clothes

(3)

Don't need to call banners the same

Prof: Don't soften model

→ Biz make decisions about integration

Does it create value

Should Shaws manager care about Jewel

Is there value into knowing my Shaws
card in Jewel

Not value there?

Replication - Standard process

↳ What they are pursuing

Not a little bit of anything

Walmart

↳ Started unification

Unification - Need Coord + Replication

9

Data they are sharing is to standardize process

Q: Look at data level?

Prof: You can paralyze yourself - since didn't decide

Then no focus on new capabilities

Once everyone gets your model can make
small tweaks

But do decide how you will operate

Name does not matter for execution

Standardizing, not centralizing biz process

Very little value add of Boston using data
from Chicago

Could do it in the future - not trivial, but not hard

BoA has stores - but must centralize data → BoA
since variation in recording

⑤
Prof This stuff is very important to strategy
- hear often about marketing, acquisition

What stage in?

Meilne blw Silos + Standardized tech

Everyone thinks Stage 1: Biz Silos

Yammer helps w/ "Commanders Intelligence"
"Lead user innovations"

Putting conditions in place to move to Step 2

But 20% only?

Alarming so low

No pressure to use

No exponential growth

They seem to go a little bit
- but not all the way

Culture Change hardest

6

What is the strategy?

Cost?

Service?

Doing some process standardization, so ~~can~~ hope
have IT base

Is it hard to change culture by 'inserting' IT?

Will Yammer ~~pre~~ help it?

Pat Toole / IBM: No choice

~~Yammer won't get adopted unless more use it~~

Not just tech - its a culture

Why don't managers use it?

Command + Control → Cultivate

Gamification

Only 20% think they have some say

(Stupid sentence -
what did I
mean?)

②
"Great Store Manager" badge

Mark was in retailer (Tesco)

thought too much tailoring
not good for enforcing common biz practices
Yammer should not get out of control

But catalyst - not defining tools

Have defined common goals

Course correction

How doing on Working Smarter

1. IT Backbone

2. Manage biz rules

3. Redesign of Structures, Roles, Accountability

4. Cultivate talent

Very low biz intell levels

Understand talent of store managers

Clearer on accountability

8

But low data on availability

- Must do more here for 21st century

Could use some outside services

Morningstar analysis

Could they last?

Only have 2-3 days cash

Break

Gamification Group

- Nextjump - sales
- fitness

- IBM Lotus Connections

- Trip Advisor - Post reviews, like reviews

- Farmville - coin to pull you into the game
- pushing you to complete
- send top score

9

Meet Hall - people going to there
- did they initiate

3 questions

1. What is the game
2. What is the goal
3. The benefits

- Lose it app

↳ Pick something different

- Foursquare

- whole thing is a game

Crash Presentations

Vote: Biggest impact on CO

Rypple

Salesforce

social performance management

(will be later)

10

Fan Player

Carpon generated

share socially to ↑ discount

See conversion + share rate on carpon

try to make discounts not as deep as Carpon

Experts Exchange

Points ~~to~~ ~~not~~

cost to ask

paid in points

Others pay to see

Highest rated ^{answers} ~~are~~ gets points

Internal Help Desk OmniCare

Budge for # calls answered
quality of ans

based on their performance targets

11

Khan Academy

Points to watch, answer questions

feel rewarded

badges/achievements

Saw course map

Fitbit

Pedometer or stairs

~~The~~ Compete w/ friends

Buy new model

Beat goals

(I should look this up)

Ryple

Set goals

Invite collaborators

Note taking

Ach great work

12

(But how does this work day to day

I don't think a small web 2.0 site can work)

~~can~~

Continuous performance appraisal

(good - but how to do
w/ overt actions

Engage by IActional

Gamification of Sales force.com

(It's pushing big impact on Co)

~~App~~ ~~Compliance~~

Drive calls

(What does it actually do?)

Compliance

~~the~~ Sales force wants to win

(How does this work long term?)

(13)

US

~~the~~ Khan

Khan Academy won

Was expecting to see more users

1 more thing to change culture

VICTOR PIPER

Group Number 8

15.571 Business Strategy and the Role of IT

Group Assignment

In your group, have each member describe an example of gamification. Focus on the following:

- What is "the game?"
- What is the goal of the game?
- What benefits do you think the company will derive from this gamification initiative?

Then choose the best example (in terms of most impact) and prepare to present your example to the class by answering the above questions.

Please hand in one list of your group members to Eugene with the name of the company example you chose to present:

Group members:

Name of company:

15.571: Business Strategy and the Role of IT

Dr. Jeanne W. Ross
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Today's agenda

- 4:05-5:25 **Supervalu case study discussion**
 - Review key class concepts
 - Consider the influence of social media on firm performance
- 5:40-6:10 **Group work on gamification**
- 6:10-6:45 **Presentations (up to 4 minutes for each group) and vote on highest impact initiative**
- 6:45-6:55 **Wrap up and description of homework**



What operating model was SUPERVALU pursuing prior to Craig Herkert's arrival?

Business Process Integration	High	<p>Coordination</p> <ul style="list-style-type: none"> ▪ Unique business units with a need to know each other's transactions ▪ Examples: Commonwealth Bank of Australia, MetLife, Aetna ▪ Key IT capability: access to shared data, through standard technology interfaces 	<p>Unification</p> <ul style="list-style-type: none"> ▪ Single business with global process standards and global data access ▪ Examples: Southwest Airlines, Dow Chemical, UPS Package Delivery ▪ Key IT capability: enterprise systems reinforcing standard processes and providing global data access
	Low	<p>Diversification</p> <ul style="list-style-type: none"> ▪ Independent business units with different customers and expertise ▪ Examples: Johnson & Johnson, Pacific Life, ING ▪ Key IT capability: provide economies of scale without limiting independence 	<p>Replication</p> <ul style="list-style-type: none"> ▪ Independent but similar business units sharing best practice ▪ Examples: Marriott, 7-Eleven Japan, ING DIRECT ▪ Key IT capability: provide standard infrastructure and application components for global efficiencies
		Low	High
		Business Process Standardization	



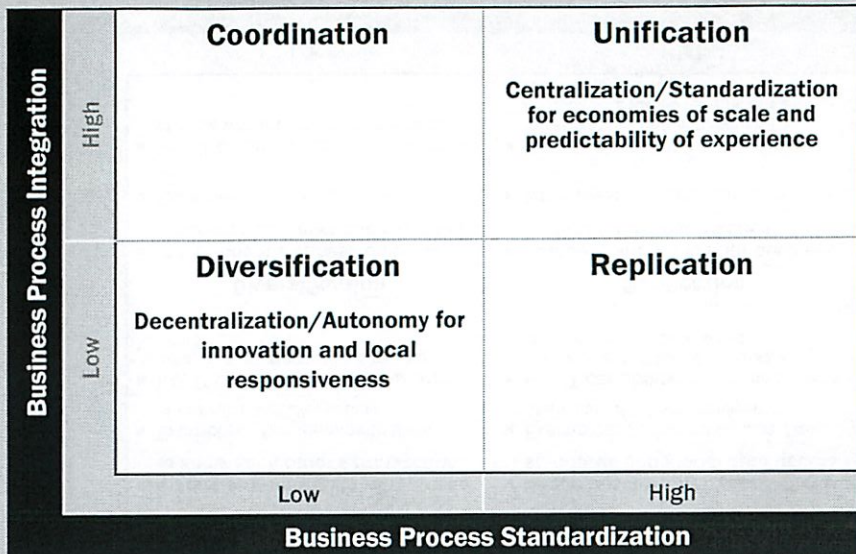
What operating model is SUPERVALU pursuing now?

Business Process Integration	High	<p>Coordination</p> <ul style="list-style-type: none"> ▪ Unique business units with a need to know each other's transactions ▪ Examples: Commonwealth Bank of Australia, MetLife, Aetna ▪ Key IT capability: access to shared data, through standard technology interfaces 	<p>Unification</p> <ul style="list-style-type: none"> ▪ Single business with global process standards and global data access ▪ Examples: Southwest Airlines, Dow Chemical, UPS Package Delivery ▪ Key IT capability: enterprise systems reinforcing standard processes and providing global data access
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		Low	High
		Business Process Standardization	



Handwritten initials: JFR

Every company's operating model address tradeoffs

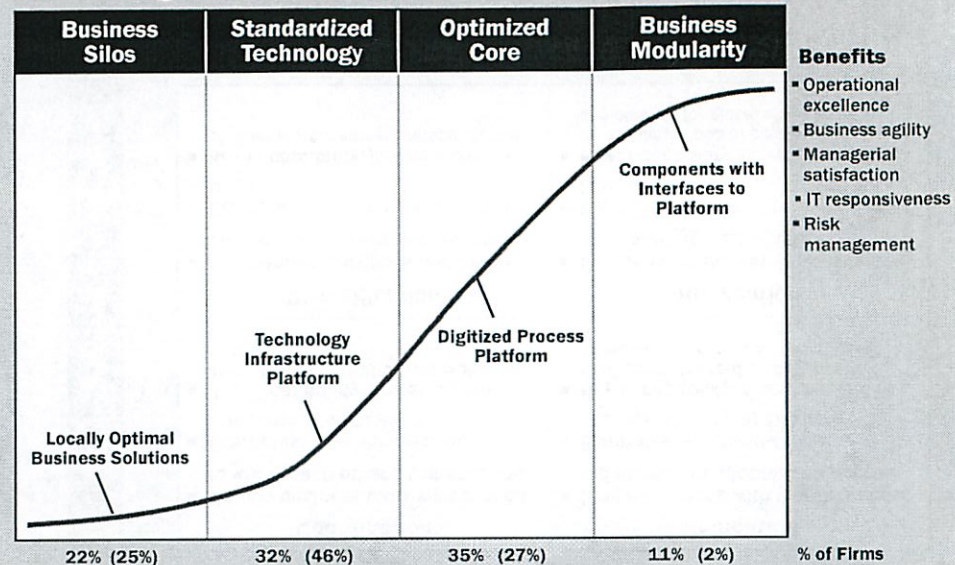


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Source: *Enterprise Architecture as Strategy: Creating a Foundation for Business Execution*, J. Ross, P. Weill, D. Robertson, HBS Press, 2006.

4

What stage is SUPERVALU in?

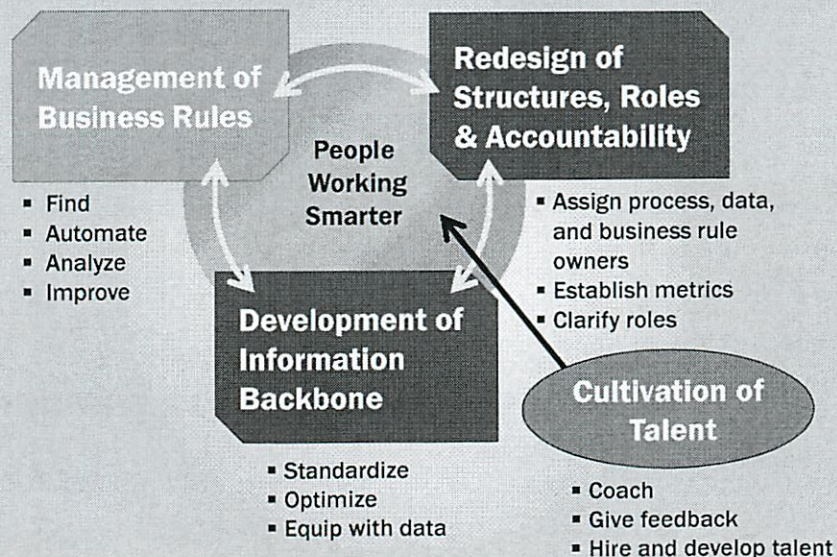


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Percentage of firms in each stage updated based on a 2010 CIO Magazine/MIT CISR survey of 206 IT executives. Numbers in parentheses show percentages in 2007 from a survey of 1508 CIOs, conducted with Gartner.

5

How is SUPERVALU doing on working smarter?

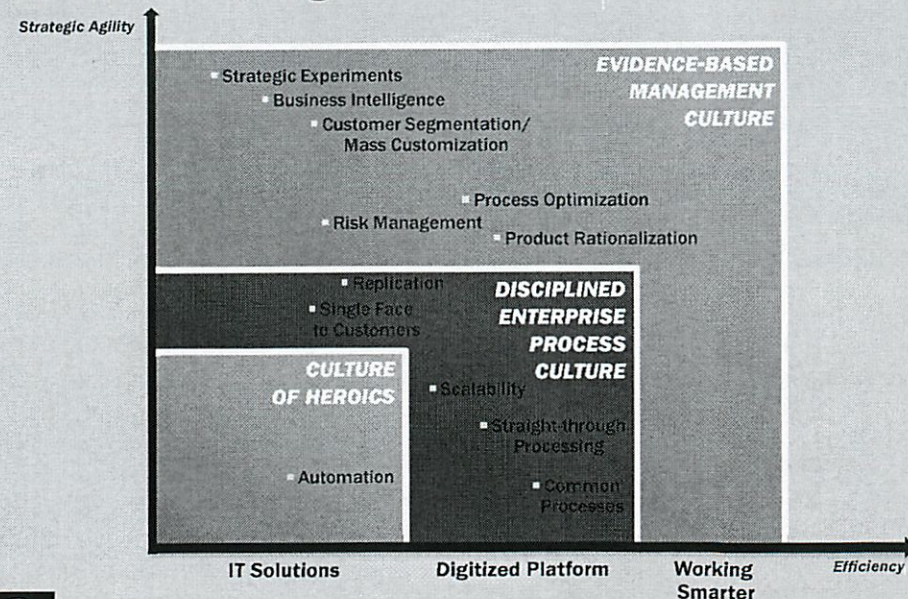


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Model is based on 5 in-depth case studies and multiple interviews at 13 firms.

6

Can Yammer change the culture?



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Relationships depicted in this graphic are indicative of findings in three MIT CISR studies: *Enterprise Architecture as Strategy*, *IT Savvy*, and the *MIT CISR Value Framework*.

7

Will SUPERVALU succeed?



Supervalu continues to lose disproportionate market share and underperform relative to its industry peers. The acquisition of Albertsons doubled Supervalu's supermarket base, which now operates under 12 different banner names. The multiyear integration process to function as a single company is underway. Management also launched a number of initiatives to reverse market share losses, which so far have been unsuccessful in the face of secular industry headwinds. Non-traditional retailers continue to use the food category to drive customer traffic. According to government data, the traditional grocery channel has lost nearly 20% market share to supercenters and wholesale clubs during the last quarter century. Near-term macroeconomic data is positive with improving employment trends and modest food inflation, both of which should help identical store sales. However, the threat of disruptive food inflation could emerge. Inflation above 5% typically begins to depress volume demand and the food PPI is now up to nearly 7% from a year ago. Moreover, rising gas prices could compel consumers to consolidate shopping trips once again, thus accelerating the market shift trend to supercenters and wholesale clubs that also sell fuel. We assign the firm a high fair value uncertainty rating and do not believe the company has developed an economic moat.



Group Work

- Find your group before you go on break and decide where you are meeting.
- In your groups, listen to each example of gamification and decide which is likely to have the most impact
- Decide on a presenter
- Outline key presentation points
 - Description of the game
 - Expected impacts (your expectations and/or those of management)
 - Critical success factors (what must firm do to realize the expected impacts)



Social Media and Gamification—Potential Impacts

- **Won't substitute for important leadership requirements**
 - Clarity and consistency of strategic vision
 - Clarity of roles and accountabilities
 - Development of powerful information backbone
- **Could be a game-changer**
 - Valuable tools for knowledge sharing internally and externally
 - Just beginning to understand how to use these tools to enhance understanding of company goals (internal) and brand (external), customer loyalty, and employee motivation/satisfaction
 - Incredible opportunities for business innovation—but could be easy to lose focus



Week 8 Assignment—Some Instructions and Background on Your Topic

In our next class (April 23), we'll devote at least an hour to group work. Your group has already been formed and a topic assigned (On the back of the handout given in class), so that you can keep in touch over the next two weeks as you identify interesting articles/learning about your topic of responsibility. Your task is to prepare a 8-minute (this is a change from what I distributed in class—I don't think we have time for a 10 minute) presentation to tell your classmates (1) what this phenomenon is; (2) why it's important or at least potentially important to business; (3) how it might affect IT management in companies; and (4) best practices or critical success factors.

In this presentation, you should take a business person's perspective (not a technologist's). Over the next two weeks, you should keep in touch with your teammates about what you're finding in the literature. Then you can use the class to address the requirements listed above and prepare your presentation. You should not need to meet as a team outside class—I know how difficult that is.

Here's a brief introduction to the topics—and one suggested reading so that all team members can share a common language:

BYOD/Consumerization: Consumers increasingly own smart phones, tablets, and related technologies for use in their daily lives. This consumer trend has, in many cases, caught IT leaders off-guard. Consumers are insisting on using the same technologies they use at home in their offices. And wherever possible, they'd like to use just one phone/tablet for both personal and professional reasons. But that's a very different paradigm for technology management in companies, where IT units usually mandate what technology will be used and business managers mandate how it will be used (i.e., the business processes). To get a sense of the issues read "Harnessing the Consumerization of IT," by Anne Quaadgras and Irfan Mohammed, CISR briefing Vol. XI, No. 7, July 2011. It's available from Eugene or the CISR website.

Software as a Service: Traditionally, IT units or vendors developed software that helped companies run businesses. Software companies—thousands of them, although only a few, like SAP and Oracle, are widely known—introduced packages that could be used by many companies with similar needs. More recently, companies like Salesforce.com and Workday have offered to sell software services, meaning that they not only write the software, they run it for you. This allows companies to pay for software as needed and they buy software maintenance (e.g. upgrades) without having to take responsibility for installing the upgrades. I have emailed Eugene a paper that I don't have permission to post to the web, but I'm comfortable sharing with the team. It's an introductory paper on SaaS. Feel free to ask Eugene for a copy.

Cloud Infrastructure: Even though computer processing is becoming increasingly important to companies, owning computer processing power is becoming less important. Now you can do your processing with a company that provides Cloud infrastructure services. Akamai is one example of such a vendor. Amazon is another. In fact, to get a sense of what cloud infrastructure is all about, it's worth reading this article about Amazon: <http://www.wired.com/techbiz/it/magazine/16->

[05/mf_amazon?currentPage=1](#). This is an article from 2008, so you'll want to learn a bit about the latest thinking but it will give you a good sense of what cloud infrastructure is all about. Don't get into Software as a Service, which is a cloud topic as well—a different team will do that—just stick with the infrastructure issues and their implications for companies and IT units.

IT Offshoring: First there was IT outsourcing, in which companies could rely on vendors to do IT development, maintenance and support. Then there was offshoring, which allowed companies to outsource at lower hourly rates. Some companies have gone offshore with company resources (called captives), but feel free to study only offshore outsourcing, and simply acknowledge that there is an alternative. In any case, the initial buzz about offshoring was that it would save companies a bundle of money. There are savings, to be sure, but they come at a cost. Your presentation should highlight both the opportunities and the risks of offshoring—you might also identify the alternatives. I've sent an MISQE article to Eugene that he'll send you if you'd like. It's from 2002 but it provides an introduction to the topic. MISQE has some more recent articles as well.

IT Services: Let me admit that this is the toughest topic I assigned, so I handpicked the teams that are studying it. The important issue here is that many business leaders feel like IT costs are too high but they find it very hard to gauge. IT services management is designed to define what IT does for the business in terms of services that can be priced. It involves a bit of activity based costing, which is foreign to most technologists, but it helps a company understand what IT is providing and how much it costs. This is extremely valuable in deciding what to do internally and what to outsource. It is also valuable in pricing new initiatives and deciding what's worth investing in and what isn't. IT services management has become a bit of a science in that ITIL specifies best practice. DON'T BOTHER LEARNING ITIL, just know what it is and why people find it useful. I'd suggest you read the case study on Texas Instruments, which I've sent to Eugene. This will explain what problem IT Services is trying to address. Then you can look up other materials on IT Services Management to learn how companies are addressing it. If you feel overwhelmed, let me know. I'm hoping you'll find this interesting, not a burden.

I'm very skeptical about this -at DB
But want to read more about it...



Read 4/22

Texas Instruments Incorporated: Service Level Agreements and Cultural Change

Introduction

In December 1996, Jodie Ray, then CIO of Texas Instruments Incorporated (TI) reflected on the firm's upcoming introduction of service level agreements. He noted that SLAs represented another step in his efforts to increase the strategic impact of the firm's core IT services. He hoped that the SLAs would foster two-way communication that would promote mutual understanding of how the IT unit could best add value to the organization and would lead to support for a shared infrastructure:

We started reengineering IT in 1994 but we struggled with how to partner with the businesses. We needed a good communication tool. Service level agreements help business people articulate their needs and they focus IS&S [Information Systems and Services] on returning business value.

meh

The schedule for designing the SLAs and the accompanying reorganization of the IS&S unit had been compressed to meet a January 1, 1997, implementation deadline, so he expected some bumps in the process. Ray wondered about the impacts of the agreements. Would they lead to greater customer intimacy? Would they foster support of a shared infrastructure? Would they identify opportunities for cost reduction? As he prepared for a meeting of his management team, he wanted to determine what actions were necessary in both the month remaining before implementation and the first year of the agreements to ensure the success of the SLAs.

Background

are these needed? or table stakes?

Founded in 1930 as Geophysical Service Inc., Texas Instruments Incorporated (TI) adopted its name in 1951. From its beginnings as the first independent contractor specializing in the reflection seismograph method of exploration, TI became a leading producer of high-technology products world-wide. By 1996 TI operated out of 155 locations in 33 countries, including 42 manufacturing plants in 16 countries. It employed 59,500 employees worldwide, of which 35,000 were in the U.S.

Over the years, TI built a reputation for product innovation and high-quality manufacturing operations. Among its innovations were the commercial silicon transistor, the integrated circuit (IC), the electronic hand-held calculator, and DMD (digital micromirror device) technology for imaging applications. Quality awards received by TI subunits in Taiwan, the United Kingdom, Singapore, Malaysia, Japan, Portugal, Canada, and Germany, as well as a Malcolm Baldrige award in the U.S. (1992), and the European Quality Award in 1995 attested to the firm's emphasis on quality processes.

This case was prepared by Jeanne W. Ross at the MIT Center for Information Systems Research. It may be freely distributed to students in not-for-profit institutions. The author would like to thank Cynthia Beath, Judith Quillard, John F. Rockart, and Mike Vitale for their helpful comments and Dan Murphree, Deneese Gipson, and the many Texas Instruments employees who contributed their time and insights.

In its 1995 annual report, Texas Instruments declared a goal of “world leadership in digital solutions for a networked society.” TI pursued this goal through development of products that enabled key networking capabilities, such as signal processing, mobile computing, wireless communications, and digital imaging. Semiconductors comprised approximately two-thirds of TI’s revenues, but the firm was diversified into related areas that were both profitable and growing. These included defense systems, notebook computers and calculators, materials and controls, and emerging technologies like digital light processing and object-oriented business software.

TI experienced its best financial performance ever in 1995, with total revenues exceeding \$13 billion and profits topping \$1 billion for the first time in TI’s history. (See Exhibit 1 for a summary of TI’s financial performance.) In 1996, however, the semiconductor industry experienced drastic reductions in profit margins due to excess customer inventories. Average DRAM (Dynamic Random Access Memory) prices fell 80% from the third quarter of 1995 to the third quarter of 1996, cutting TI revenues and profits to well below those of a year earlier. TI responded to what industry analysts believed would be a temporary crisis by making productivity improvements. As part of its cost-cutting efforts, management offered an enhanced voluntary retirement program to about 5300 eligible US-based employees effective December 31, 1996. It also accelerated the pace of execution of its company strategy with targeted acquisitions, divestitures, R&D and capital expenditures for wafer fab expansion, and new construction.

Information technology at TI in the early 1990s: Product Innovation

TI’s information technology unit had traditionally been centralized, staffed with as many as 2500 IT professionals who developed state-of-the-art systems in support of TI’s global business operations. In the 1980s and early 1990s, Information Systems and Services (IS&S) was organized around major technologies and technical processes. (See Exhibit 2 for a 1992 organization chart.) At the time, it relied solely on proprietary software, even developing its own e-mail system before commercial systems were widely available. In order to recover the costs of its investment in developing leading-edge software and to leverage its technical competence, TI sold some IS&S products, including its CASE-based methodology, externally.

IS&S enhanced its competence through extensive training in technologies, leadership, quality, and methodologies delivered by a staff of as many as twenty-five full-time educators within IS&S and supplemented by external specialists. A professional development center worked with individual staff on self-assessments and career progression. TI became recognized as having an outstanding IT organization and was regularly included in lists of firms that were most effective in their application of IT¹. Dan Murphree, Director, Business Alignment, later observed that its technical accomplishments created an atmosphere of pride and self-reliance within IS&S:

We have twenty years experience with a common, standards-based global WAN with a single global interface and 65,000 terminals sending and receiving e-mail messages in sub-second response times. We produced our systems in-house because the vendors were too slow. (Dan Murphree, December, 1996)

¹ See, for example, “All for the Best,” *CIO*, August 1995, pp. 26–30, and “Charged with Change,” *InformationWeek*, September 1995, pp. 100–104.

As a centralized unit, IS&S had perceived itself as a vendor whose goal was to “do the right thing” for its internal customers. Senior management established the IT budget, but IS&S management determined IT priorities, made resource allocation decisions, and then billed internal users to recover its costs. This model fit TI’s business environment throughout the 1980s, when its businesses were stable and synergistic. The new decade, however, brought changes in politics (particularly the fall of the Berlin Wall, which contributed to reduced defense spending) and markets (most notably the shift from commodity to differentiated semiconductor products). TI responded with major business initiatives that included joint ventures, acquisitions, divestitures, and process reengineering. These initiatives, in turn, created very different and more varied demands for IT support within the firm:

We had excelled at innovation and product leadership and suddenly the business demanded greater customer intimacy. We needed to abandon our one-size-fits-all approach and provide business-targeted IT. (Jodie Ray, CIO, 1996)

Evolution of the IT-Business Unit Partnership

Operating in a CIO mandate approach with its internal customers limited the need for IT-business interaction. The CIO had met about twice a year with a senior management team that approved its budget, and development teams had regularly discussed requirements with, and provided training for, systems users. For the most part, however, IS&S staff did not communicate extensively with their internal customers, and at least some of those customers felt that the unit did not understand their needs:

What was happening was that in a large organization, the sensitivity to business-specific needs can get lost very easily, so the large central IS&S organization, which had a tendency in my opinion to have been a dictatorship, wasn’t necessarily serving the business needs. (Dennis Hallworth, Systems Manager, Materials and Controls Group)

This sense that IS&S was isolated from the businesses led to concerns by business managers that IS&S investment decisions did not focus on their priorities. Consequently, business unit managers sensed they were paying for things they did not want. Hallworth noted that IS&S delivered “limousine” solutions when a bicycle might be sufficient:

IS doesn’t understand cut lines [spending limits] from what I’ve seen. They don’t understand that even though something might be a good thing to do, we probably can’t do it this year; we just don’t have the money. It might be great to do, but we’re not spending the money, because we want to invest in new product development. We want to invest in new equipment. We want to invest in training. We want to invest in facilities.

prod high overhead

IT management had recognized the need for IT-business unit communication in the mid-1980s when high-level liaisons had been assigned to business units. These business CIOs, as they were called, were responsible for eliciting business priorities and helping business unit management

understand their responsibilities in systems development efforts. In 1993, a business manager was named CIO, and leadership of the software business was separated from IS&S so that the latter could focus on business unit needs. The new CIO worked to strengthen IS&S-business unit ties.

In January, 1995, Jodie Ray was brought in as CIO from TI's software business to focus IS&S on business needs and to reduce total costs. He stepped up his predecessor's efforts to gradually adopt a federal governance structure by distributing IS&S applications staff and some support staff to the business units. The distributed staff reported to the business CIOs who reported solid-line back to Ray and dotted-line to business management. Distributed staff were compensated through corporate IS&S, but their bonuses were tied to divisional performance. By 1996 only about one-third of IS&S employees were located in the central unit, and Ray believed that central staff could be reduced to as little as 25% of the total in the coming years. He was working with senior management to change reporting lines so that distributed IS&S staff would report directly to business management and have just dotted-line relationships to the CIO. (Exhibit 3 shows the IS&S organization chart in 1996.)

federated

trying to align IT + biz - a perpetual problem

In addition to changing IT governance, Ray supported efforts to reengineer IS&S through the RITTI (Reengineering IT at TI) initiative. Announced in mid-1994, RITTI had four key components:

central

- The development of PowerPath, a TCP/IP² network to replace TI's existing WAN.
- A new approach to applications delivery in support of finance, sales, distribution and materials management that mandated reusing before buying and buying before building new applications.
- A new IT work environment, focused on developing technical skills and providing business and leadership training to make IS&S staff more effective in working with customers.
- IT service choice, a program offering TI businesses the flexibility to tailor their selection of IT services and service levels to meet their specific business needs.

Two years into the RITTI initiative IS&S had implemented a global TCP/IP network that had quadrupled file transfer speeds between client-server applications. It had broken with tradition to purchase PeopleSoft, SAP, and other applications packages. It had created centers of excellence designed to help individuals map out career paths and plan professional development. Finally, IS&S was preparing to implement a service choice agreement process that would provide its internal customers with choices regarding the IT services they received and paid for.

Implementing Service Level Agreements

² TCP/IP stands for Transfer Control Protocol/Internet Protocol. It is the dominant architecture for managing distributed systems within and across organizations and can be used to connect systems provided by any vendor.

The concept of Service Choice as outlined in the RITTI initiative meant that IS&S would adopt service level agreements as a means of negotiating, delivering, and charging for central IT services. The service level agreements signaled a change in how IT infrastructure investment decisions would be made. In the past, infrastructure investments were undertaken as necessary to support new applications, and infrastructure development costs were bundled with the cost of application development. Top management broke with tradition to provide the \$100 million needed for the TCP/IP network implementation, because a single global user interface and reliable, high-speed data transfers were considered strategic priorities to support a range of applications and capabilities. Senior management might again consider such “speed bump”³ investments in infrastructure, as the need arose, but most infrastructure investments would result from negotiations with business units in which business unit managers would designate which services and capabilities they wanted. In essence, infrastructure development and support priorities would be established by the business units. *not perfect either*

IS&S had long attempted to provide meaningful information on its costs to the business units. Prior to 1995, IS&S charges were presented in great detail with as many as 2,200 line items on statements sent to each of 6,000 cost centers. The line items were based primarily on mainframe resource utilization, which was marked up to cover all overhead expenses as well as a 3% profit. (See Exhibit 4 for examples of line items.) The detailed data proved helpful to IS&S financial analysts in identifying cost drivers and recognizing potential savings from data center consolidation and other management changes. Customers, on the other hand, found the detail overwhelming: *1*

At the division level we had thousands of billable lines. It became meaningless; you'd end up giving up. We didn't do anything with those charges. (Business Unit Controller)

When Deneese Gipson became IS&S controller in late 1993, she believed, based on her experience as a business unit controller, that IS&S charges were high and hard to understand. She decided to “put our cards on the table” and solicit customer input to fix the chargeback algorithms. She worked with category advisory boards (CABs), comprised of business CIOs and core IS&S staff to identify major cost categories and decide on a basis for charging for them. Initially it was difficult to get commitment from individuals whose input was important:

We have a twenty-five year history of dictatorship, and now all of a sudden we want to work with our customers. We've been beating up everybody on the block and now we want to play and no one wants to play. (Deneese Gipson, IS&S Controller)

The CABs distinguished fixed costs, which they felt should be allocated to divisions, from variable costs that were based on usage. The process of distinguishing fixed from variable costs increased understanding of IT costs. A new chargeback process, implemented in January 1995, reflected the recommendations of the CABs. It eliminated the mark-up for profit and pulled fixed costs out of the usage rates. The new chargeback statements had fewer than fifty line items, *Charge del*

³ “Speed bump” is a term used by TI and other firms to refer to “one-time” funding required to get them over a hump that was limiting their ability to provide new IT capabilities. *Reduce Costs*

do like AWS - charge based on actual costs

which distinguished between mainframe resource usage, data communications costs and development costs (both allocations based on prior year usage of system resources), and general overhead (based on prior year mainframe usage charges). Business unit managers applauded the much simpler and more understandable billing statements generated by the process, but observed that fixed allocations represented the larger proportion of their total charges.

Those business unit managers who participated in the discussions of the charges were comfortable with how the costs were allocated, but they were concerned about high fixed costs. One business unit controller found his data communication costs had increased \$2 million as a result of the reengineering of the chargeback system. He objected to the allocation, but it clarified what he was paying for, and he felt that the high IT expense was providing capabilities beyond his division's needs:

or redup
billing -
like MIT
did

Over time we came to realize that the decision for data communication was made by an IS&S organization in Dallas with their own concept of what growth and capacity was. Once they unbundled it and got it on our radar screen and we started working with it, we understood what we were paying for. So as they started to do that kind of unbundling, there was this reality that set in. (Paul Danesi, Vice President, Controller, Materials and Controls Group)

go either
way

The new chargeback process generated interest both within IS&S and in the business units for greater business unit control over their costs. They believed SLAs were the next step in better targeting IT expenditures at business priorities. The original plan for implementing SLAs was to start with a pilot that would move just data communications (about 30% of core IS&S costs) under SLAs in 1997. As the IS&S leadership team (business CIOs and Jodie Ray's direct reports) discussed the concept, however, they noted that moving to SLAs would require some radical reorganization that precluded a pilot implementation:

When we really got into it, we realized that just looking at data communications was still selling things, not services. If we really wanted to be true to the concept of SLA, we couldn't think in terms of data communications, but rather of supplying communications from the desktop to their destination. (Deneese Gipson, IS&S Controller)

moving away from clarity

↳ more like

Dan Murphree, Director of Business Alignment, headed up the effort to define the SLA process. (See Exhibit 5 for a diagram of the SLA process implementation.) The first step was to discuss with the business units what services should be provided centrally and which should be provided locally by division IS&S staff. Although some business CIOs delegated responsibility for this effort, the chargeback redesign had alerted all the business units to the importance of the business unit's participation. One business CIO who had not been active in the initial chargeback reengineering described his commitment to the SLA process:

IBM

From a business point of view, service level agreements were extremely important to this group. And what was going to be within the core versus what was optional was, without a doubt, one of the biggest single issues from a funding point of

what exactly
was part
of this

view. I spent a year's worth of my time and a lot of flights to Dallas working that issue. (Dennis Hallworth, Systems Manager, Materials and Controls Unit)

Core IS&S staff drew up a list of 108 existing services divided into 7 categories: enterprise-level services, communications services, customer/vendor connectivity solutions, distributed computing services, mainframe services, applications services, and extended services such as consulting. (See exhibit 6 for a full listing.). Division CIOs voted on each service to indicate whether they wanted it to be provided centrally for everyone, centrally for those who wanted it, or locally as the responsibility of the business unit. Only the thirty-two services that everyone agreed should be centrally provided were designated as enterprise-wide services. Eighteen (mostly applications-related) services would be turned over to the individual businesses, and the remaining 58 services would be provided by core IS&S as optional services to the businesses. IS&S mapped the 32 enterprise services and 58 optional services and their related costs into approximately 50 different services to be negotiated under the SLA process. (Exhibit 7 lists these services.)

That's prob good

In June 1996, business CIOs indicated their optional service needs. At the same time IS&S allocated its 1997 budget among the services to be offered by corporate IS&S based on its estimates of service level demands and its knowledge of cost drivers. Sixty percent of the IS&S budget was targeted for enterprise services. The other 40% was for optional services.

As part of the process of preparing budgets, IS&S ran simulations which calculated each business division's approximate total charges based on their initial requests. These simulations were intended to help divisions determine whether they would meet senior management-defined IT spending limits. (See Exhibit 8 for an example of the output from the simulations.) Deneese Gipson noted that the simulations provoked intense discussions about IT charges:

It gets us in so much trouble, but it's such good conversation to have. We're telling them six months in advance what their bill will look like, so they can do something now instead of waiting and being mad about it later. Sometimes we think if we just quit doing this, we wouldn't have so much pain. But, still, it's the right pain to have. (Deneese Gipson, IS&S Controller)

Formal SLA negotiations, which specified performance metrics and cost, commenced in July (See Exhibit 9 for examples of services, metrics, and costing methods). In some cases, service owners were not identified prior to negotiations, so Dan Murphree, Director of Business Alignment, who had overall responsibility for SLAs headed up the negotiation process. For the most part, divisions could decide only whether they wanted a service or not. Various levels of service were not available for the first year of the SLAs, partly because of time constraints in preparing the SLAs and partly because in many cases IS&S did not know enough about either its cost drivers or its customers' needs to be able to package and price alternative service levels. Each service specified metrics comprised of a small number of measures (usually one to three) that indicated service guarantees. Metrics negotiations, because they took place after spending limits had been established, focused on how much IS&S thought could be delivered within the stated budget constraints. As one service owner observed:

For some services there might be gold, silver, and bronze levels of service. Division CIOs, of course, wanted us to promise gold service; we sometimes felt we could only promise bronze for the desired budget level. (Steve Groce, Service Owner, Service Delivery)

like 24 hr, etc stuff

By early December 1996, central IS&S had reorganized around its newly defined services. Approximately 35 service owners had been assigned responsibility for TI's 50 or so services. Each division had designated the services it wanted core IS&S to provide, and both divisional and core IS&S staff had agreed to performance metrics for each service. Quarterly performance and commitment reviews were scheduled so that IS&S could review how the process was working and what specific changes in services and service levels were needed.

Staffing an SLA-based organization

Three sets of key players in the SLA effort were the service owners, the corporate and divisional CIOs based in the business units and the members of the SLA Portfolio Management team. These were the individuals charged with making the SLA concept work.

Service Owners were responsible for meeting the services outlined in the SLAs, managing the costs and revenues associated with providing their services and for improving their relationship with their customers. They were expected to meet with customers to learn their needs, explain services and benchmark against external providers to determine whether to source internally or externally. As an example, Larry Proctor, Service Owner for Network Connectivity, would lead a 35-person team responsible for the firm's wide area network (WAN) and its connection to on-site local area networks (LAN). The team's responsibilities included the following: collect business unit requirements for their WAN connections; engineer the network; negotiate with and monitor vendors who provided network services (e.g., Cisco, Cabletron, AT&T); establish architecture standards for LANs; and oversee and support the network. Proctor's team had established network availability as its primary metric and planned to collect availability statistics from each of the firm's 430 routers and report them on a daily, weekly and monthly basis via a WEB site. This team would be the primary customer of Steve Groce's help desk support team. Groce's team would provide first level support and escalate appropriate problems to Proctor's team as necessary.

The service owners were becoming, in effect, general managers of a small business. Most were enthusiastic about this role:

This is as it should be. I'll have to market my services to my customers. If they don't see value in what I offer, they won't buy it. (Danny Offil, Service Owner, UNIX Enterprise Computing Servers)

du - that seems to make sense

I absolutely must make budget. It is my responsibility and important to the assessment of my performance. And I am motivated to squeeze the most out of my resources because I want to be able to fund some R&D. No R&D is funded in

- but can they really buy from others

*- Security
- interoperability ..*

the SLA agreement. (Steve Dean, Service Owner, Enterprise-Level Mainframe Applications)

The business CIOs were responsible for understanding the business units' strategies and priorities, translating the strategies into IT requirements and communicating the businesses' requirements to the service owners. They worked very closely with the core IS&S service owners to ensure that capacity planning and systems management included unique business requirements. Business CIOs also negotiated the services that a business would purchase and the service performance metrics that were acceptable. For large divisions it also involved purchasing fewer centralized services and taking more responsibility for their computing, but one business unit IT manager anticipated that the biggest impact of SLAs would be reduced IT costs:

The main difference SLAs make is that they place an upper limit on how much we will spend on IT. If core IT can't deliver the services for less, we'll buy them from someone else. We don't care if we buy our services internally or externally, but we want to stop spending so much on IT. (Larry Dix, Systems Manager, Semiconductor Group)

Another business unit manager argued that the impact of SLAs was in how they would change conversations with IS&S:

Now they will face us across the table and say "This is what I'm charging you for a six kajillion bit communication line," and we can say, "If I only had a one kajillion bit communication line what level of service would I get and what would be the cost differential?" They aren't yet able to answer those questions, but they need to do so. (Paul Danesi, Vice President, Controller, Materials and Control Group)

If it actually makes a dif.

Dan Murphree, Director of Business Alignment, identified the need for an SLA Portfolio Management team. The SLA Portfolio Management team was responsible for overseeing the creation of processes and tactics necessary to implement the SLA strategy, manage the IT comparative assessment activities and conduct the quarterly commitment reviews.

This team created SLA processes and templates used by the service owners, including a Web based repository housing all SLAs and metrics. This made access to the SLAs easy for the customers. Examples of processes include: incremental IT services, service termination, metrics reporting and shared funding. These processes enabled consistency in work product for the customer and allowed the service owners to focus on delivering their services.

The quarterly commitment review meetings between the divisional CIOs and the core IS&S leaders provided an opportunity to discuss business priorities, strategies and IT needs as well as to discuss how well core IS&S was meeting SLA commitments and service metrics.

SLAs are not a quick fix to close IT's credibility gap with the business units. I do believe, however, they are an important first step in achieving improved customer satisfaction, customer intimacy and moving toward a customer driven approach in

ways to actually cut costs

internal funny money

delivering IT services. (Bonnie Lawson Wagner, Manager, SLA Portfolio Management)

Anticipated impacts from the transition to SLAs

With the SLA implementation and other IT reductions within the business units, the 1997 budget for TI came in 17% below the 1996 level and 9% below the 1995 level. The reduced costs would be realized from headcount reductions and from identifying cost savings in delivering individual services. Due to the early retirement option offered to long-term employees, a partnering arrangement with Andersen Consulting for SAP implementation, and a number of voluntary resignations, total IS&S headcount in December 1996 was around 1700, down from approximately 2200 at the start of the year.

To meet tight budgets, some service owners had immediately focused on the costs of their operations and identified opportunities to cut costs. In the networking area, for example, Larry Proctor, service owner for network connectivity, had been able to shave \$8 million from 1996 expenditures of \$51 million by redefining and simplifying the network architecture, and negotiating new subnetwork contracts with telecommunications providers.

goal - someone to focus on

During the first year, IS&S management, as well as service owners, hoped to better identify the services and alternative service levels that would benefit their internal customers. They expected to better understand cost drivers of each service as service owners studied the expenses that accrued to their areas and observed variability in usage. Service owners recognized the importance of managing IT costs but they were wary of the negative impacts of a budget-driven SLA process.

Yeah

I'm afraid that I might not really be given the opportunity to run my service as a business due to artificial spending limits. If I have a good service to offer and someone wants to buy it, they should be able to make that decision. The spending cap means they can only make that decision if they spend less on other IT. (Steve Dean, Service Owner, Enterprise-Level Mainframe Applications)

IS&S management anticipated that the first year of the SLA process would be very much a learning experience. Business unit management might want to eliminate services that they had originally requested and IS&S would need to determine whether they could reduce their costs accordingly. In other cases, business units might want to add optional services that they had not originally requested. IS&S management felt that some services would be difficult to restore once dropped.

right - costs don't scale here

We very specifically did not put penalty clauses in there. We did not want this to be seen as a contract. In fact, we call them agreements on purpose. These are guidelines as to how we want to operate with each other and not legal documents. (Dan Murphree)

Top IS&S management felt that the process of designing the SLAs had greatly increased mutual understanding between IS&S and business unit CIOs. They observed that the nature of the

but get people talking

conversation in the weekly meetings of the IS&S leadership team had started to focus on identifying shared infrastructure needs. For example, several divisions were negotiating for joint development of new capabilities for connecting with customers or contractors and two divisions were interested in sharing IS&S costs for developing electronic storefronts. These discussions were helping to define future IS&S services. As TI entered the initial year of SLAs, IS&S management hoped these conversations would continue:

I'm confident. I'm very confident, but it's going to be painful for a while. And it's not going to be one year; it's going to take two or three years. My hope is that the conversations don't stop when we get in a good profit situation again. If they stop then, we haven't been successful. This kind of conversation should take place all the time. (Deneese Gipson, IT Controller)

Postscript

By early 1997, TI had announced a number of additional divestitures including its software and defense businesses. With these divestitures, the semiconductor business represented 80% of TI's revenue, and digital signal processing solutions had become its primary focus. With one business representing the majority of the company, management felt it no longer made sense to have separate central shared services and dedicated business IT organizations. In May 1997, the Corporate IS&S and Semiconductor IT organizations were combined into a single IT Services organization, headed by Pallab Chatterjee, who had formerly held positions as head of research for the semiconductor business and president of the notebook, printer and calculator businesses. This new organization reported into the semiconductor business with responsibility for both the IT needs of that business and the shared services used by the other TI businesses.

Chatterjee noted that he was committed to continuing the efforts to increase the impact of the IT organization on the business bottom line:

Service Level Agreements used internally is a proactive way of making business alignment happen. (Pallab Chatterjee, Senior Vice President, CIO, Semiconductor Group)

In addition to the continuation of the SLA concept, several evolutionary steps were initiated:

- Relationship managers were assigned to represent each of the business segments. These managers were given responsibility for aligning business needs and IT capabilities to deliver business success.
- IT management was working to clarify the roles of customer vs. user of IT services. The customer was the business leader who made the decision to buy or use the service; the user was the end recipient of the system or service.
- Chargeback rate structures would be modified to further bundle services and bill them at the level driving additional costs. TI was focusing on identifying two particular cost drivers: those driven by the addition of a site, and those driven by the addition of people.

→
marginal

- In the future, chargeback rates would be set for basic levels of service with premium services available for an additional charge. This would replicate the approach used by the telephone and cable industries for their utility services.

TI had committed to a multi-year transition following the business' positive reaction to the SLA transition. IT management was looking for opportunities to streamline the process and further engage with the businesses.

September 1997

Basically pros + cons
Make a presentation saying that --

Exhibit 1
Texas Instruments Incorporated
Summary of Selected Financial Data, 1995 Annual Report

Years Ended December 31	1995	1994	1993
<i>Millions of Dollars</i>			
Net revenues.....	\$ 13,128	\$ 10,315	\$ 8,523
Operating costs and expenses	11,534	9,232	7,795
Profit (loss) from operations	1,594	1,083	728
Other income (expense)net	73	4	15
Interest on loans	48	45	47
Income (loss) before provision for income taxes and cumulative effect of accounting changes.....	1,619	1,042	696
Provision for income taxes.....	531	351	220
Income (loss) before cumulative effect of accounting changes.....	1,088	691	476
Cumulative effect of accounting changes	—	—	(4)
Net income (loss)	\$ 1,088	\$ 691	\$ 472
Earnings (loss) per common and common equivalent share:			
Income (loss) before cumulative effect of accounting changes.....	\$ 5.63	\$ 3.63	\$ 2.54
Cumulative effect of accounting changes	—	—	(0.03)
Net income (loss)	\$ 5.63	\$ 3.63	\$ 2.51
Dividends declared per common share	\$.64	\$.47	\$.36
Average common and common equivalent shares outstanding during year, in thousands.....	193,631	190,855	187,211

As of December 31	1995	1994	1993
<i>Millions of Dollars</i>			
Working capital.....	\$ 2,330	\$ 1,818	\$ 1,313
Property, plant and equipment (net).....	3,187	2,568	2,203
Total assets	9,215	6,989	5,993
Long-term debt.....	804	808	694
Stockholders' equity.....	4,095	3,039	2,315
Employees	59,574	56,333	59,048
Stockholders of record.....	30,034	28,740	29,129

Exhibit 2
1992 IS&S Organization Chart

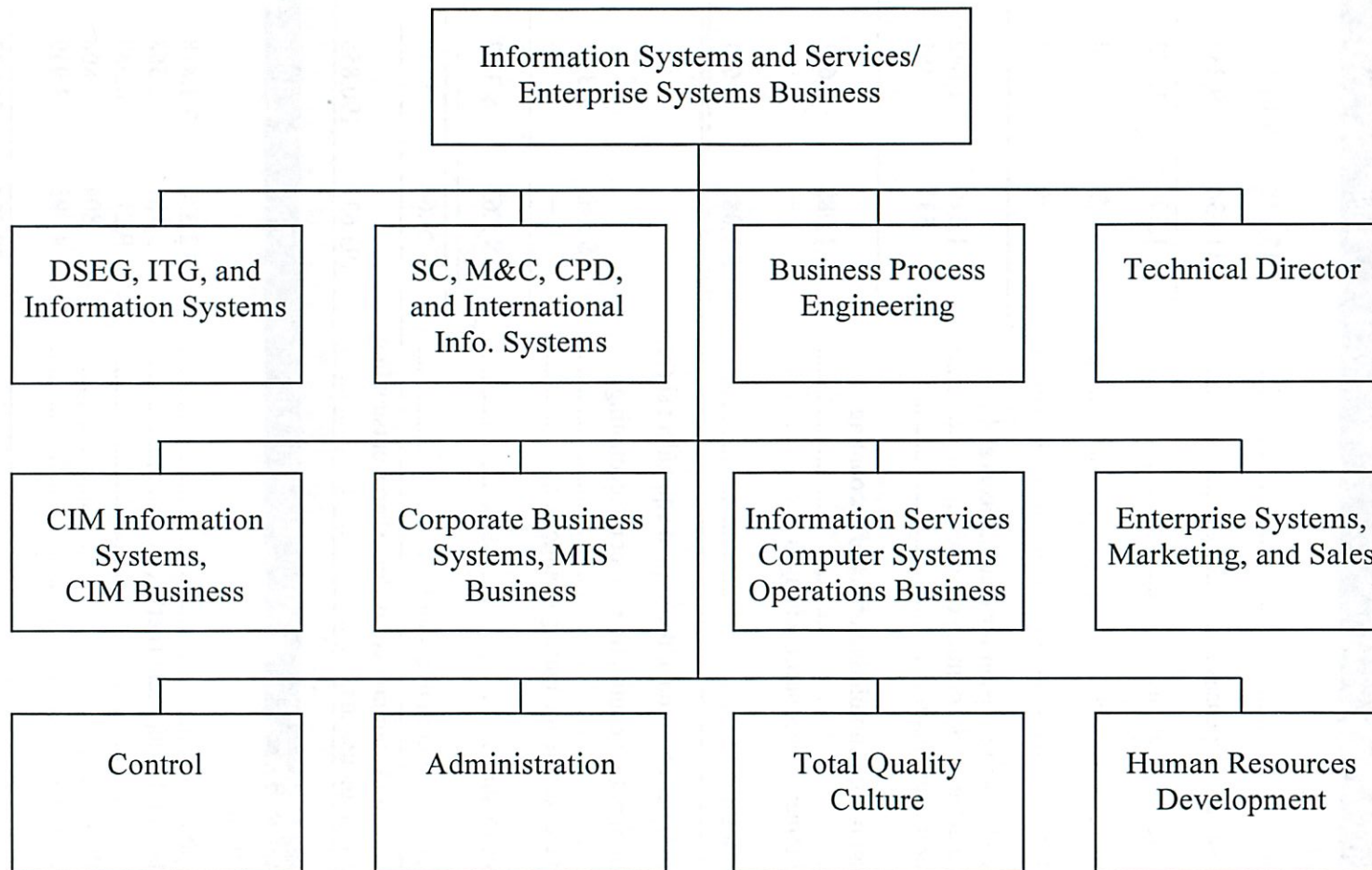


Exhibit 3
Information Systems and Services Organization

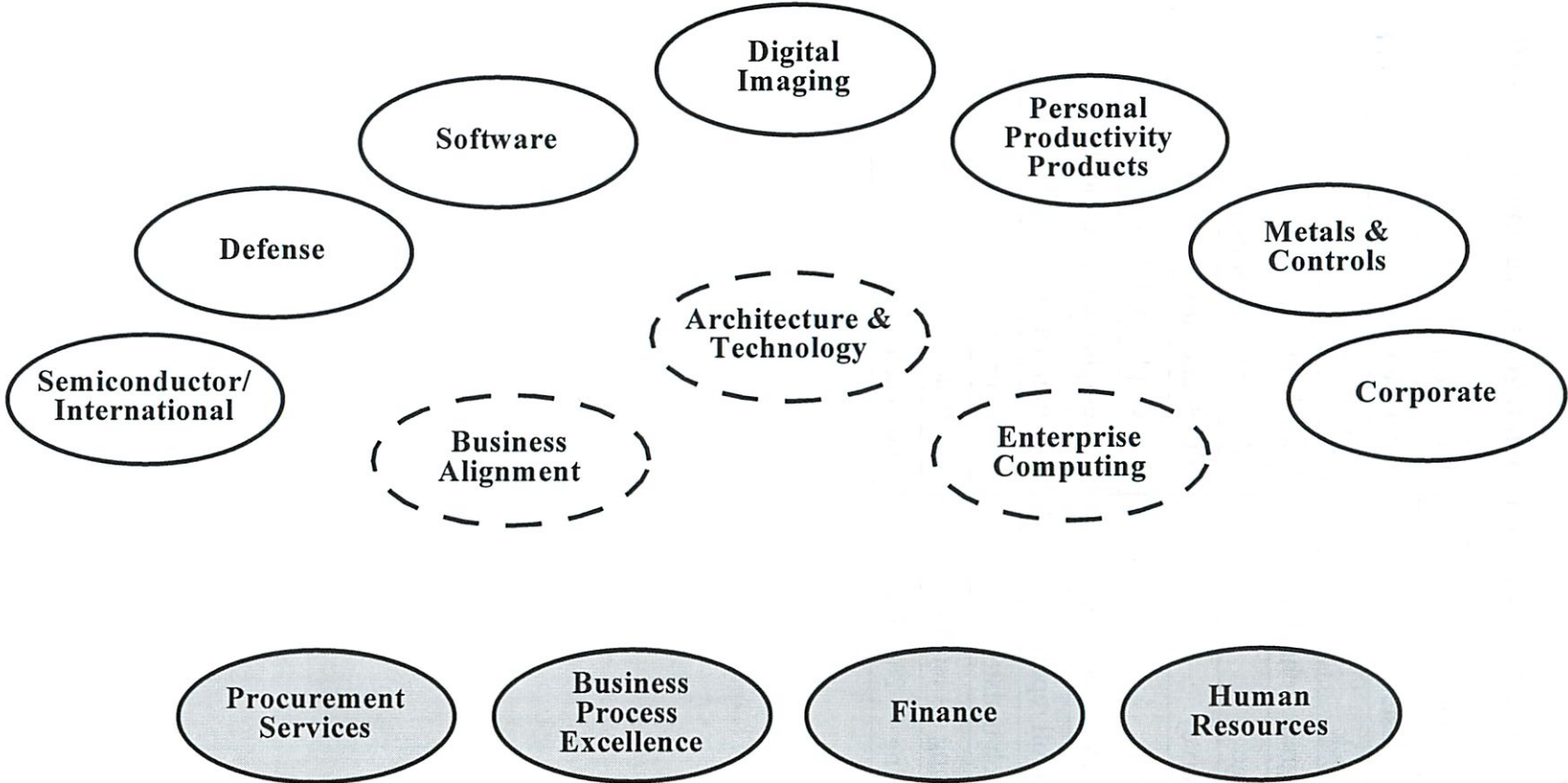


Exhibit 4

Examples of IS&S Line Item Charges to Business Units (Pre-1995)

EFT Transaction	0.010/each
Fourlough Master Rec	0.750/record
Pay u-p/check	0.24/each
Apple Program Consulting	55.00/hour
Data storage	0.04/1000 datapoints
Attitude survey	100.00/site/survey
EEO system	0.03/employee + 100.00/feed
HRDB focus file creation	0.03/employee record/month
HRDB payroll report	0.20/transaction
HRDB batch update	100.00/update
Tax reporting — 1st close	0.012/each
Tax reporting — 2nd close	0.005/each

Ok micro rates

What does that cover?

Exhibit 5
Service Level Agreement Implementation Time Line

- Decide to move to SLAs
- Identify existing IS&S Services
- Reach consensus on enterprise/optional/business categorizations
- Business CIOs select optional services
- Define new services and allocate 1997 budget
- Negotiate services and costs/determine metrics
- Reorganize around services/appoint service owners
- Complete implementation of service-based business model
- Complete first commitment reviews
- Do competitive assessments and benchmarking
- Provide businesses skill training for service owners
- Assess and modify service agreements
- Negotiate 1998 agreements

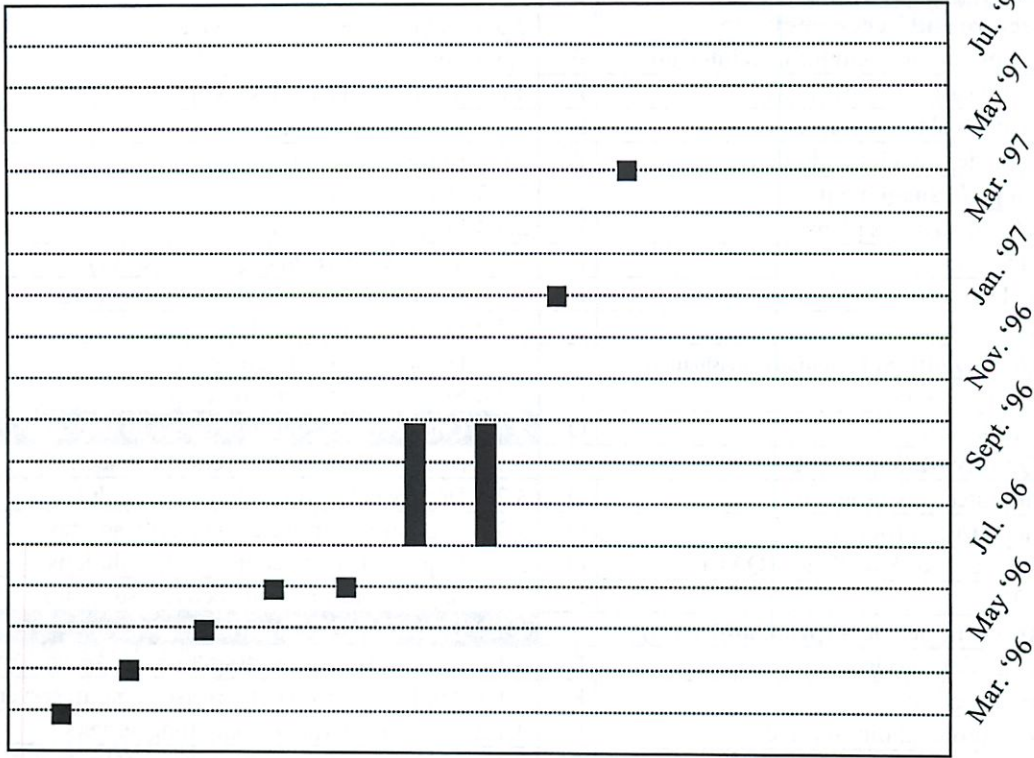


Exhibit 6

Enterprise IT and Business Plan for Optional IT

Information Technology (IT) Services			
1 Enterprise-Level Services		2.5 Voice Services, cont.	
1.1 Architecture and Technology		2.5.4 Delpoy other voice services	O
1.1.1 Define common bus. and info. architecture	E	2.5.5 Support other voice services	O
1.1.2 Define applications architecture	E	2.6 Voice Mail (prod & svc)	
1.1.3 Define technical architecture	E	2.6.1 Architect/oversee voice mail	E
1.1.4 Define and deploy IT standards	E	2.6.2 Engineer voice mail	O
1.2 IT Strategy Management		2.6.3 Deploy voice mail	O
1.2.1 Comprehend business plans	E	2.6.4 Support voice mail	O
1.2.2 Define IT strategy	E	2.7 Video Conferencing (prod & svc)	
1.2.3 Develop IT plans	E	2.7.1 Architect/Oversee video conferencing	E
1.2.4 Allocate resources	E	2.7.2 Engineer video conferencing	O
1.3 IT Process Mgmt (SEI, solution provisioning)		2.7.3 Deploy video conferencing	O
1.3.1 Define IT Processes	E	2.7.4 Support video conferencing	O
1.3.2 Deploy IT processes	O	3 Connectivity Solutions—TI to Outside	
1.4 Total Quality Management		3.1 Architect/Engineer/Oversee connectivity sol	E
1.4.1 Customer interview program	O	3.2 Deploy enterprise connectivity solutions	O
1.4.2 Customer survey program	O	3.3 Support enterprise connectivity solutions	E
1.4.3 Quality Award for Excellence (QAE)	O	3.4 Deploy business connectivity solutions	O
1.4.4 TI-BEST	O	3.5 Support business connectivity solutions	O
1.5 Infrastructure Services (prod. and serv.)		4 Distributed Computing Services	
1.5.1 Provide naming services	E	4.1 Enterprise Computing Servers (UNIX & NT)	
1.5.2 Provide IT security	E	4.1.1 Arc/Eng/Dep/Ovr enterprise comput. servers	E
1.5.3 Provide interoperability services	E	4.1.2 Support enterprise computing servers	O
1.5.4 Provide disaster recovery planning	E	4.2 Business Computing Servers (UNIX & NT)	
1.5.5 Provide help line service (level 1 domestic)	E	4.2.1 Architect/Oversee bus. computing servers	E
2 Communications Services		4.2.2 Engineer bus. computing servers	O
2.1 Wide-Area Network (WAN) prod & svc		4.2.3 Deploy bus. computing servers	O
2.1.1 Provide Wide-Area Network (WAN) svc	E	4.2.4 Support bus. computing servers	O
2.1.2 Equipment ownership	O	4.3 Workgroup Solutions Services (Notes, etc.)	
2.2 Local-Area Networks (LAN) prod & svc		4.3.1 Architect/Oversee workgroup solutions	E
2.2.1 Architect/Engineer/Oversee LAN	E	4.3.2 Engineer workgroup solutions	O
2.2.2 Deploy LAN	O	4.3.3 Deploy workgroup solutions	O
2.2.3 Support LAN	O	4.3.4 Support workgroup solutions	O
2.2.4 Equipment Ownership	O	4.3.5 Equipment ownership	O
2.3 LAN Management Services (service only)		4.4 Product Expert Services (level 2, svc only)	
2.3.1 Engineer LAN management services	E	4.4.1 Provide enterprise product expert services	E
2.3.2 Offer LAN management services	O	4.4.2 Engineer shared product expert services	O
2.4 Dial-Up Connectivity (prod & svc)		4.4.3 Offer shared product expert services	O
2.4.1 Architect/Engineer/Oversee dial-up access	E	4.4.4 Engineer bus.-unique product expert services	B
2.4.2 Deploy dial-up access	O	4.4.5 Offer bus.-unique product expert services	B
2.4.3 Support dial-up access	O	4.5 Desk-Side Services (service only)	
2.5 Voice Services (prod & svc)		4.5.1 Engineer desk-side services	B
2.5.1 Architect/Oversee voice services	E	4.5.2 Offer desk-side services	B
2.5.2 Engineer/Deploy/Sup N. TX voice services	E	4.6 Production Services (svc only)	
2.5.3 Engineer other voice services	O	4.6.1 Engineer production services	O
		4.6.2 Offer production services	O

← even here!

Emall's ← what I look at

Information Technology (IT) Services			
5 Mainframe Services (MVS)		6.3 Business Unique Applications (prod & svc)	
5.1 Mainframe Computing Services - LE		6.3.1 Business-Unique Distributed Applications	
5.1.1 Provide mainframe computing services	E	6.3.1.1 Architect application	B
5.2 Mainframe Computing Svc UM/MIHO/JF		6.3.1.2 Engineer application	
5.2.1 Equipment Ownership	B	6.3.1.3 Deploy application	B
5.3 Mainframe Management Services		6.3.1.4 Oversee application	
5.3.1 Arc/Eng/Dep/Oversee MF mgmt svcs	E	6.3.1.5 Sustain application	B
5.3.2 Support MF management services	O	6.3.1.6 Enhance application	B
6 Applications		6.3.2 Business-Unique Mainframe Applications	
6.1 Enterprise-Level Applications (prod & svc)		6.3.2.1 Architect application	
6.1.1 Provide distributed enterprise-level apps.	E	6.3.2.2 Engineer application	B
6.1.2 Provide mainframe enterprise-level apps.	E	6.3.2.3 Deploy application	B
6.2 Shared Applications (prod & svc)		6.3.2.4 Oversee application	
6.2.1 Shared Distributed Applications		6.3.2.5 Sustain application	
6.2.1.1 Architect applications	O	6.3.2.6 Enhance application	B
6.2.1.2 Engineer application	O	6.4 Application Services (prod & svc)	
6.2.1.3 Deploy application	O	6.4.1 Offer application dev/deploy/mgmt tools	O
6.2.1.4 Oversee application	O	6.4.2 Offer consulting support/customization	O
6.2.1.5 Sustain application	O	6.5 New Solutions Assembly (prod & svc)	
6.2.1.6 Enhance application	O	6.5.1 Enterprise-level applications	O
6.2.2 Shared Mainframe Applications		6.5.2 Shared applications	O
6.2.2.1 Architect application	O	6.5.3 Business-unique applications	B
6.2.2.2 Engineer application	O	7 Extended Services (svc only)	
6.2.2.3 Deploy application	O	7.1 Network Consulting Services	
6.2.2.4 Oversee application	O	7.1.1 Engineer network (not linked to WAN)	O
6.2.2.5 Sustain application	O	7.1.2 Deploy network (not linked to WAN)	O
6.2.2.6 Enhance application	O	7.1.3 Support network (not linked to WAN)	O
		7.2 Business Support Services	
		7.2.1 Offer extended account management	O
		7.2.2 Offer IT consulting services (emerging tech.)	O

LEGEND		
E	Enterprise IT	Provided by IS&S to all bus. units
O	Optional Services	Agreed to in SLA process
B	Business Unit Provided	Former IS&S Services to be assumed by the bus. units

Exhibit 7

IS&S 1997 SLA/PDA Services

1 Enterprise-Level Services

- 1.1 Dev - Architecture & Technology
- 1.2 IT Strategy Management
- 1.3 IT Process Management
- 1.4 Total Quality Management
- 1.5 Infrastructure Services Consulting
- 1.6 Development—strategic reserve
- 1.6 Admin/HR/Finance/Matl Svces
- 1.6 Corporate people allocations

2 Communications Services

- 2.1 Core Network - Infrastructure Eng & Ops
- 2.1 Core Network - MSA Cost to Non-MSA Sites
- 2.1 Core Network - MSA Cost to MSA Sites
- 2.2 Site Network Dedicated Sites
- 2.3 Site Network Shared Sites (IS&S as host)
- 2.3 Central IS&S LAN only
- 2.4 Dial-Up connectivity (prod & svce)
- 2.5 Voice Services (prod & svce)
- 2.6 Video Conferencing (prod & svce)

3 Connectivity Solutions - TI to o/s (prod & svce)

- 3.1 E-mail (prod & svce)
- 3.2 EDI (prod & svce)
- 3.3 InterCorporate Gateways (prod & svce)
- 3.4 Internet (prod & svce)
- 3.5 Lotus Notes Spt (prod & svce)

4 Distributed Computing Services

- 4.1 Enterprise Computing servers (UNIX), (central owned products & services)
- 4.1 Enterprise Computing servers (NT), (central owned products & services)
- 4.2 Business Computing servers (UNIX), (business owned products & services)
- 4.3 Workgroup solutions services (prod & svce), (business computing NT)
- 4.4 Product Expert services, level 2, svce only
- 4.5 Desk-side services (svce only)
- 4.6 Production services (svce only)

5 Mainframe services

- 5.1 Mainframe Computing services - commercial
- 5.2 Mainframe Computing services - manufacturing
- 5.1/2 Mainframe DASD LE
- 5.1/2 Mainframe TMM DASD LE
- 5.1/2 Mainframe Print LE
- 5.1/2 Mainframe Fiche LE
- 5.3 Mainframe Management services (svce only)

6 Applications

- 6.1.2 Enterprise level mainframe applications (prod & svce)
- 6.1.1 Enterprise level distributed applications (prod & svce)
- 6.1.3 Enterprise level backup & restore (prod & svce)
- 6.1.4 Enterprise level electronic doc mgmt (prod & svce)
- 6.2 Shared applications (S.A.P. amortization)
- 6.3 Business unique applications (prod & svce)
- 6.4 Applications services (prod & svce)
- 6.5 New solutions assembly (prod & svce)

7 Extended services (svce only)

- 7.1 Network Consulting services
- 7.2.1 Business Support services - Center of Excellence
- 7.2.2 Business Support services - Infrastructure Provisioning

8 Non IT related services (usage based)

- Training
- Computer Acquisitions Group
- Business & Strategic Services
- Information Center - CBS
- Information Resource Services - NB

Exhibit 8
Simulation of XX Group 1997 IS&S Charges

XX Group Business Unit Summary	Enterprise	Committed*	Optional	Total
1. Enterprise-Level Services	5.814	0.000	0.163	5.977
2. Communications Services	4.816	9.327	0.000	14.143
3. Connectivity Solutions	1.345	0.000	0.357	1.702
4. Distributed Computing Services	1.720	0.000	0.000	1.720
5. Mainframe Services	11.316	0.000	0.020	11.336
6. Applications	2.104	0.000	0.387	2.491
7. Extended Service (service only)	0.000	0.000	0.495	0.495
Total Business Cost	27.115	9.327	1.422	38.864
Non IT Related Services	0.000	0.047	1.753	1.825
Total Business Cost Recovery	27.115	9.374	3.175	40.689

*Committed amounts are targeted to become optional, but are the result of existing TI assets.

Exhibit 9

Examples of SLA Descriptions, Metrics and Charges

Service	Description	Metrics	How Charged
Help Desk	First-level troubleshooting, maintenance of problem resolution system	Pass/fail goal = 3.37 sigma (97%)	Allocation based on % of IS&S services used in prior year
Core network	Architect, engineer, deploy oversee and support enterprise WAN; set standards for LANs; provide some LAN support	Availability measured by router for both LAN & WAN; Goal = 4.3 sigma	Allocation based on exempt headcount (sometimes specific to sites involved)
Dial-up services	Provide dial-in access to TI's network through alternative hw/sw configurations	Server & hub availability; goal is 3.1 sigma (95%)	Allocation based on exempt headcount (purchased services are direct billed)
Voice services	Architect, oversee & support telephone & operator switches	Grade of service; goal is 1 busy signal in 100 attempts	Fixed rate per telephone line charged to cost center

IT service management

From Wikipedia, the free encyclopedia

IT service management (ITSM or IT services) is a discipline for managing information technology (IT) systems, philosophically centered on the *customer's perspective of IT's contribution to the business*. ITSM stands in deliberate contrast to technology-centered approaches to IT management and business interaction. The following represents a characteristic statement from the ITSM literature:

Providers of IT services can no longer afford to focus on technology and their internal organization[;] they now have to consider the quality of the services they provide and *focus on the relationship with customers*.^[1]

No one author, organization, or vendor owns the term "IT service management" and the origins of the phrase are unclear.

ITSM is process-focused and in this sense has ties and common interests with process improvement movement (e.g., TQM, Six Sigma, business process management, CMMI) frameworks and methodologies. The discipline is not concerned with the details of how to use a particular vendor's product, or necessarily with the technical details of the systems under management. Instead, it focuses upon providing a framework to structure IT-related activities and the interactions of IT technical personnel with business customers and users.

ITSM is generally concerned with the "back office" or operational concerns of information technology management (sometimes known as operations architecture), and not with technology development. For example, the process of writing computer software for sale, or designing a microprocessor would not be the focus of the discipline, but the computer systems used by marketing and business development staff in software and hardware companies would be. Many non-technology companies, such as those in the financial, retail, and travel industries, have significant information technology systems which are not exposed to customers.

In this respect, ITSM can be seen as analogous to an enterprise resource planning (ERP) discipline for IT – although its historical roots in IT operations may limit its applicability across other major IT activities, such as IT portfolio management and software engineering.

↑ opposite!

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- 2 Frameworks
- 3 Professional organizations
- 4 Information Technology Infrastructure Library
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- 7 See also
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- 9 Further reading
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Context

IT Service Management is an enabler of information technology governance (or information management) objectives.

The concept of "service" in an IT sense has a distinct operational connotation, but it would be incorrect then to assume that IT Service Management is only about IT operations. However, it does not encompass all of IT practice, and this can be a controversial matter.

It does not typically include project management or program management concerns. In the UK for example, the IT Infrastructure Library (ITIL), a government-developed ITSM framework, is often paired with the Projects IN Controlled Environments (PRINCE2) project methodology and Structured Systems Analysis and Design Method for systems development.

ITSM is related to the field of Management Information Systems (MIS) in scope. However, ITSM has a distinct practitioner point of view, and is more introspective (i.e. IT thinking about the delivery of IT to the business) as opposed to the more academic and outward facing connotation of MIS (IT thinking about the 'information' needs of the business).

↳ many generic acronyms!

IT Service Management in the broader sense overlaps with the disciplines of business service management and IT portfolio management, especially in the area of IT planning and financial control.

↑ ↑

Frameworks

There are a variety of frameworks and authors contributing to the overall ITSM discipline.^[2] There are a variety of proprietary approaches available.^[3]

Professional organizations

There is an international, chapter-based professional association, the IT Service Management Forum (ITSMF), which has a semi-official relationship with ITIL and the ITSM audit standard ISO/IEC 20000. There is also a global professional association, the IT Service Management Professionals Association

(IT-SMPa).

Information Technology Infrastructure Library

Main article: Information Technology Infrastructure Library

IT Service Management is often equated with the Information Technology Infrastructure Library, (ITIL) an official publication of the Office of Government Commerce in the United Kingdom. However, while a version of ITSM is a component of ITIL, ITIL also covers a number of related but distinct disciplines and the two are not synonymous.

The current version of the ITIL framework is the 2011 edition. The 2011 edition, published in July 2011, is a revision of the previous edition known as ITIL version 3 (published in June 2007). It was a major upgrade from version 2 (2001). Whereas version 2 was process orientated (split in 2 groups: service support and service delivery), version 3 is service orientated. Since ITIL V3, the various ITIL processes are grouped into 5 stages of the service lifecycle: service strategy, service design, service transition, service operation and Continual service improvement (or CSI). The use of the term "Service Management" is interpreted by many in the world as ITSM, but again, there are other frameworks, and conversely, the entire ITIL library might be seen as IT Service Management in a larger sense.

Other frameworks and concern with the overhead

Analogous to debates in software engineering between agile and prescriptive methods, there is debate between lightweight versus heavyweight approaches to IT service management. Lighter weight ITSM approaches include:

- ITIL Small-scale Implementation^[4] colloquially called "ITIL Lite" is an official part of the ITIL framework.
- FITS (<http://www.e-ictsupport.org/fits/Sec/fits-introduction/index.html>) was developed for UK schools. It is a simplification of ITIL.
- Core Practice (<http://www.corepractice.org>) (CoPr or "copper") calls for limiting Best Practice to areas where there is a business case for it, and in other areas just doing the minimum necessary.
- OpenSDLC.org (<http://OpenSDLC.org>) A Creative Commons ITSM/SDLC Framework Wiki
- MOF 4 (<http://microsoft.com/mof>) Microsoft Operations Framework covers the IT service management lifecycle with a practical focus

Governance and audit

Several benchmarks and assessment criteria have emerged that seek to measure the capability of an organization and the maturity of its approach to service management. Primarily, these alternatives provide a focus on compliance and measurement and therefore are more aligned with corporate governance than with IT service management per se.

- ISO/IEC 20000 (and its ancestor BS15000). This standard is not identical in taxonomy to ITIL and includes a number of additional requirements not detailed within ITIL and some differences. Adopting ITIL best practices is therefore a good first step for organizations wishing to achieve ISO 20000 certification for their IT Service Management processes.
- COBIT (or the lighter COBIT Quickstart) is comprehensive and widely embraced. It incorporates IT Service Management within its Control Objectives for Support and Delivery.

See also

- Definitive software library
- IT cost transparency

References

- ↑ IT Service Management Forum (2002). van Bon, J., ed. *IT Service Management: An Introduction*. Van Haren Publishing. ISBN 9080671347. Emphasis added.
- ↑ van Bon, J.(Editor) (2002). *The guide to IT service management*. Addison Wesley. ISBN 0201737922.
- ↑ For a (somewhat dated but comprehensive) discussion of frameworks visit hci-til.com (http://hci-til.com/options_frameworks.html)
- ↑ Sharon Taylor and Ivor Macfarlane (2005). *ITIL Small Scale Implementation*. The Stationery Office. ISBN 0113309805.

Further reading

- Eric J. Feldman (30 July 2007). "The Eight Essential Elements of an IT Service Lifecycle" (<http://www.itsmwatch.com/itil/article.php/3691561>) . ITSMWatch.com. <http://www.itsmwatch.com/itil/article.php/3691561>. Retrieved 15 December 2007.
- Peter O'Neill (20 October 2006). "Topic Overview: IT Service Management" (<http://www.forrester.com/go?docid=40558>) . Forrester Research. <http://www.forrester.com/go?docid=40558>. Retrieved 6 June 2007.

External links

- The OGC website (<http://www.itil.co.uk/>)
- IT Service Management Forum – UK (<http://www.itsmf.co.uk/>)
- IT Service Management Forum – USA (<http://www.itsmfusa.org/>)
- Open Source ITSM Software – Community (<http://www.otrs.org/>)

Read 4/22

Strategic Implications of Adopting Software-as-a-Service (SaaS)

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While the Software-as-a-Service (SaaS) model is gaining large traction in the enterprise software market, many companies are still struggling to understand the strategic implications of their adoption. What distinguishes the new SaaS model from the conventional software licensing and service models? What are the implications of these differences? What capabilities are required for firms to generate high returns from their investment in SaaS? We interviewed over 20 CIOs and senior IT managers from various industries whose organizations have evaluated or adopted SaaS for various applications to understand the specific challenges and lessons that they have learned from their experiences.

Understanding the SaaS Model

With the SaaS model, software is owned and managed remotely by the vendor, and delivered as a service to customers over the Internet. The application is based on a single set of common code and data definitions, and distributed in a one-to-many manner to all customers (e.g. Salesforce.com's service model). Customer-specific configuration and functional extensions are logically separated from the common code and are maintained by customers. Integration is made through common web services application programming interfaces (APIs), which are defined and maintained by SaaS vendors. SaaS vendors decide and implement new developments and keep the application on its most current version at all times.

To illustrate the key features of SaaS, Table 1 compares SaaS with the earlier ASP (Application Service Provider) model and the conventional on-premises hosting model, with which a client buys the perpetual licenses of a software and hosts it on its own premises. These key distinctions have important implications for firms' adoption.

SaaS customers do not have their separate instance of the software but share a common code base and set of data definitions that are not modifiable by them (or multi-tenancy). This unique architecture allows SaaS vendors to bring down the cost of operating and maintaining the standard application even further compared with what they could do with the conventional single-instance models. Thus, customers may see a bigger cost benefit from adopting SaaS than other alternative options if the cost savings are passed on by SaaS vendors.

Moreover, since all clients are running on the same platform, a vendor has more at stake if the system does not deliver on its promises. SaaS vendors hence are more motivated to invest in delivering high service levels that are shared among all customers. Finally, small customers may benefit from sharing the same platform with larger and more sophisticated customers which are better leveraged to demand higher quality services from SaaS vendors.

economics of scale from investment

On the other hand, multi-tenancy creates dependency across customers, which potentially constraints customers' options for individualized demand. Customers no longer have access to the core of the application and are unable to perform deep customization at the core level (e.g., changing the source code). Customization at the functional and input/output level is also constraint unless it is allowed by the SaaS vendor.

but easier to update

Moreover, SaaS vendors are only responsible for maintaining the common code base; while customers are responsible for maintaining their own configuration and functional extensions. In contrast, many conventional outsourcing service vendors offer coverage for customization and its maintenance. As more and more customization is required, the proportion of the application that is maintained by SaaS vendors becomes smaller, and the cost benefits of employing SaaS diminish quickly.

Finally, individual clients may not be able to audit SaaS vendors' IT practice as they share the infrastructure and application with other clients at various levels, and one client's auditing could violate other clients' confidentiality. Thus, clients may have to rely on the report from their SaaS vendors and/or independent 3rd-party auditors to monitor the SaaS vendors' IT practice.

Our interviewees also applauded SaaS for that it rolls up the infrastructure, software and service costs into a predictable monthly subscription fee and oftentimes gives clients the option to change their usage capacity on-the-go. This option is very valuable to clients with limited IT capital spending or clients whose usage pattern fluctuates significantly overtime. More importantly, by offering clients the flexibility to scale (up or down), SaaS creates an opportunity to vastly improve the temporal alignment of IT projects' benefit and cost compared to the old IT model in which clients invest large upfront costs in the hope that benefits would arise. SaaS allows firms to try out new applications very quickly and cheaply; scale up to full capacity if the pilot succeeds; and easy to stop if it fails without ongoing costs. The ability to experiment with new applications with very low upfront investment will fundamentally change the way firms think about IT innovation.

In addition, SaaS is often priced on a per user basis. While this cost structure may be financially sensible for firms with small numbers of users, customers with a relatively stable large number of users may be able to achieve the same efficiencies in operating the software application internally through employment of specialized technical infrastructure and IT professionals. The upfront cost of setting up the application (e.g. hardware and software deployment cost) and the overhead of system maintenance are justified since these costs can be spread over a large number of users.

regulate

Another major benefit of SaaS adoption that came up from our interviews is gaining access to up-to-date functional and process improvements and the ability to do so in a seamless manner with minimum service interruption. Nonetheless, our study suggests that getting automatic system updates and upgrades can be as much of a blessing as a curse. On the one hand, it allows a client to stay at the forefront of technical innovation at a low cost. On the other hand, SaaS upgrades happen on the vendor's timetable not on the customers'. Clients with complex customization and integration may find themselves struggling to keep up with the constant changes made by SaaS vendors.

I think better

advantage or disadvantage?

SaaS is delivered via the publically available Internet. SaaS users can access the applications from anywhere in the world where Internet connection is available. It is not surprising that the growth of SaaS offerings has paralleled the globalization of the economy. Nevertheless, Internet adds an additional component to the service delivery, and its performance can be far from ideal at times. The ever heavier Internet traffic may hinder those applications that involve heavy analytics and transfer of large datasets from moving to the SaaS platform. Communication through a publicly available network also creates serious security and privacy concerns, and web browsers, users' point of access to SaaS applications, are becoming a preferred point through which hackers enter systems.

Very goal

The privacy consequences of adopting SaaS also warrant a careful look. Data stored in a SaaS vendor's server may have weaker privacy protections than data remained only in the possession of the client. The secondary use of a client's data by a SaaS vendor may violate privacy laws applicable to the client. The privacy protections of the data may be subject to the laws of the country where the SaaS vendor's server is located. Finally, the application of the current privacy laws to the SaaS context can be unpredictable.

On the strategic level, SaaS delivers some similar benefits as the conventional outsourcing services such as allowing companies to focus their IT resources on the core IT capabilities, improve system performance and business satisfaction with IT. Now that IT organizations do not have to worry about keeping the lights on, they can focus on understanding business needs and explore opportunities for IT-enabled business innovation. The agility provided by SaaS lowers the risk of experimenting with IT-enabled business initiatives, and more effectively support product/service innovations or business process improvements.

Table 2 summarizes the major benefits and concerns of SaaS adoption that were suggested by our interviewees.

Table 1. Comparing SaaS with ASP and On-premises Hosting

	SaaS	ASP	On-premises hosting
Vendor owns the software	✓	✓	✗
Sharing of code across customers	✓	✗	✗
Vendor maintains the customization	✗	✓	✗
System upgrade (e.g., schedule and the specific changes) controlled by the vendor	✓	✗	✗
Communication channel	Internet	Internet or dedicated connection	Intranet
Hardware infrastructure owned by the vendor	✓	✓	✗
Shared infrastructure (software and hardware)	✓	It depends.	✗
Payment option	No or small upfront payment, subscription-based service fee	No or small upfront payment, subscription-based service fee	High upfront payment (e.g., for software licenses, infrastructure and implementation), small on-going payment

Table 2 List of Benefits and Concerns for SaaS adoption

Benefits	Concerns
<p>Economic Benefits</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lower cost in IT infrastructure <input type="checkbox"/> Lower cost in IT operation <input type="checkbox"/> Lower cost in system maintenance <input type="checkbox"/> Transfer of fixed costs into variable costs <input type="checkbox"/> A more transparent cost model <p>Enhanced Technical Expertise</p> <ul style="list-style-type: none"> <input type="checkbox"/> Access to up-to-date functional or process improvement <input type="checkbox"/> Improved system reliability and performance <input type="checkbox"/> Seamless updates and upgrades with minimum service interruption <input type="checkbox"/> Ability to access the application globally <p>Improved Agility</p> <ul style="list-style-type: none"> <input type="checkbox"/> Improved scalability: the ability to change the capacity of the system on the fly <input type="checkbox"/> Rapid implementation <input type="checkbox"/> Rapid response to emerging business needs <p>Strategic benefits</p> <ul style="list-style-type: none"> <input type="checkbox"/> Ability to focus IT resources on core IT capabilities <input type="checkbox"/> Shorter IT development cycle <input type="checkbox"/> Enabling product/service innovation <input type="checkbox"/> Enabling business process innovation <input type="checkbox"/> Increased business satisfaction with IT 	<ul style="list-style-type: none"> <input type="checkbox"/> Concerns about application performance, such as lack of availability or slow response time <input type="checkbox"/> Concerns about data and application security <input type="checkbox"/> Concerns about integration with our other systems <input type="checkbox"/> Concerns about meeting government or industry-specific compliance requirements <input type="checkbox"/> Inability to customize the application to meet our needs <input type="checkbox"/> Lack of specific applications/functions needed <input type="checkbox"/> Loss of control over changes made to the system or interface <input type="checkbox"/> Risk of being locked in a vendor's platform <input type="checkbox"/> Switching costs from our existing investments in software applications, computing resources and/or organizational expertise <input type="checkbox"/> Unexpected future charges by the SaaS vendor

Generating Premium Returns from Adopting SaaS

Although SaaS promises to create value on the economic, technical and strategic front, our study shows that firms reported different performance gains from their adoption. To understand how customers can generate premium returns from their SaaS investment, we asked our interviewees to discuss how they were able to achieve various benefits from adopting SaaS. Our findings show that firms that can orchestrate a set of complementary capabilities are able to generate higher returns from their adoption of SaaS-based applications and hence are more open to adopting SaaS (see Figure 1).

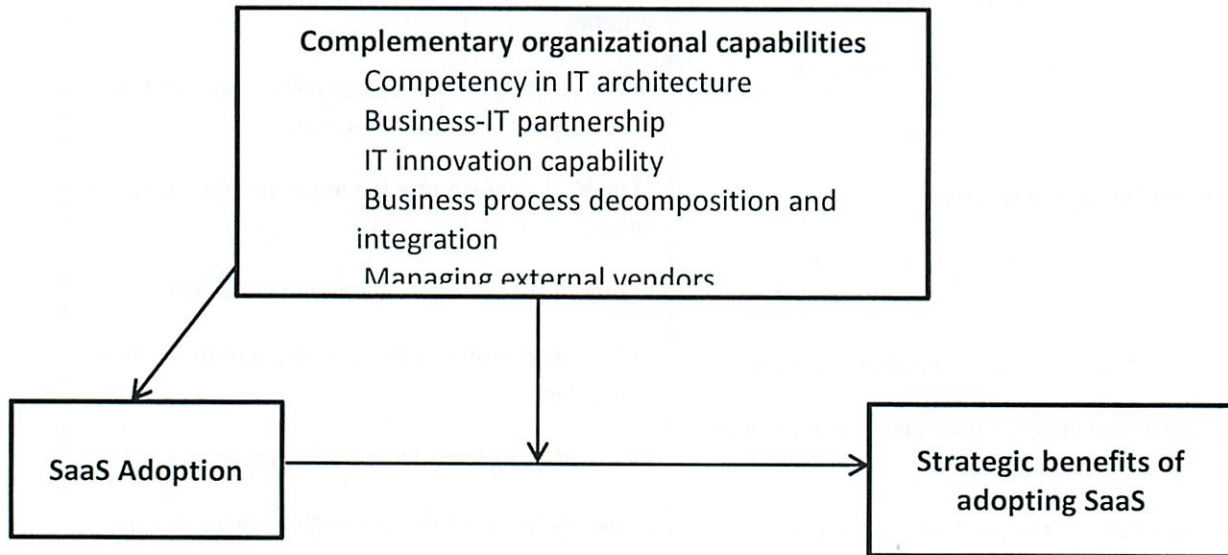


Figure 1. Research framework

Competency in IT architecture

IT architecture refers to "the organizing logic for applications, data and infrastructure technologies, as captured in a set of policies and technical choices, intended to enable the firm's business strategy" (Ross 2003). A competency in IT architecture refers to a firm's ability to draw on its IT architecture to create a mutually reinforcing pattern of evolving, tightly aligned business and IT capabilities (Ross 2003; Feeny and Willcocks 1998). Firms with higher levels of competency in IT architecture are characterized by their increasing use of standardized infrastructure, data management, and business processes (Ross et al. 2003, 2006). This makes it easier to isolate individual processes from other activities and employ external service vendors' best practices for these processes. A consolidated and standard technical platform provides a good foundation for fast deployment of emerging IT capabilities and reusable modular business services that are typically offered through SaaS-based solutions. Moreover, firms with higher competency in IT architecture are more likely to have developed standard interfaces so that they can readily integrate with SaaS vendors' industry-standard components at a competitive cost level.

Business-IT partnership:

Business-IT partnership refers to a firm's ability to foster effective partnerships between the IT group and their business clients (Bharadwaj et al. 1998). It includes aspects related to the blending of business and IT expertise through multi-disciplinary teams and encouraging risk and responsibility sharing between IT and business. Relationship building facilitates rich communication, develops mutual trust and respect between IT and business users, and ensures better business-IT alignment.

In traditional IT models, implementation of a commercial software package requires IT organizations' heavy involvement. With SaaS, on the other hand, the business units can start using an application as soon as they open an account with the SaaS vendor. Indeed, some business units have adopted SaaS as a way to speed up their business process automation by bypassing their overcommitted IT counterparts. Nevertheless, business users often do not fully understand the complexity related to regulatory compliance, security and privacy considerations, integration, and service levels. The lack of IT involvement in this case could result in serious consequences. In firms characterized by strong business-IT partnership, IT professionals are in frequent and close contact with their business clients, and hence are able to identify problems and address users' requests as business needs evolve overtime.

Moreover, shared knowledge and objectives allow business and IT to be highly aware of the emerging business and technological opportunities. Through SaaS, firms are able to quickly and effectively identify, try out and deploy external technical solutions to enable business initiatives without compromising on the operational efficiency of the application. Thus, firms with strong business-IT partnership are well positioned to create premium returns from IT-enabled business innovations through their SaaS adoption.

IT innovation capability

IT innovation capability refers to firms' ability to create innovative IT solutions to enable business strategic objectives. It includes aspects related to employees' technical and business expertise and their innovative mindset, policies and culture encouraging experimentation and prototyping with IT, as well as provisioning of personnel and technical resources for testing and making transitions.

Firms with strong IT innovation capability constantly seek IT-enabled product innovation and process improvements, the results of which are highly uncertain in nature. These organizations value the flexibility to increase or decrease their commitment to these innovative IT solutions before more information becomes known and the ability to do so quickly.

With the traditional IT model, large upfront costs are required for building and deploying new IT applications. This increases firms' loss in case of project failure, necessitates detailed evaluation process, and consequently raises the barrier to IT innovation. In contrast, with SaaS, firms are able to experiment with new software applications at a pilot scale cheaply and quickly, rapidly scale to full capacity if the pilot succeeds, and easily exit without ongoing cost if it does not succeed. In firms characterized by strong IT innovation capability, the business and IT employees are better incentivized to challenge the existing business processes and create new business initiatives. The flexibility and agility provided by the SaaS model significantly lower the risk of organizational innovation through IT and enable these firms to seize emerging opportunities with speed.

Business process decomposition and integration

This capability refers to IT organization's ability to understand the interdependency among different business processes, and to carve out individual processes with well defined interfaces with the other processes. It also includes aspects related to firms' ability to build and maintaining system integration among discrete software applications.

Firms' ability in business process decomposition allows them to identify appropriate functional units, define robust interfaces with other business processes, and employ SaaS vendors' best practices for these services. Moreover, firms that adopt SaaS applications operate on a distributed application platform in which different elements of the application or infrastructure are owned and managed by different organizations. To effectively manage such a diverse IT environment, firms need to take into account the distribution of management information and execution of management processes across organizational boundaries. Although firms can employ external vendors for the one-time system integration effort, maintaining an integrated and coherent IT environment is an ongoing effort and requires a holistic view of IT that reflects the organization's evolving business objectives. This ability is especially crucial in the SaaS environment where changes to SaaS-based applications and their interfaces happen automatically and are not controlled by clients.

Managing external vendors

This refers to firms' ability to effectively manage external service vendors. It includes firms' ability to analyze external IT services market, select optimal sourcing strategies, evaluate and negotiate services contracts, and manage on-going contractual relationship with service vendors.

There are a few new challenges in managing a contractual relationship with SaaS vendors.

- SaaS users utilize distributed application platforms which are owned and operated by different organizations. Challenges arise in managing contractual relationships in a multilateral environment.
- The multi-tenant architecture employed by SaaS constrains firms' ability to audit SaaS vendors' IT practices.
- SaaS vendors own the software and the infrastructure on which the software is running, and hence have full discretion over future changes made to the system.

Firms with strong capability in managing external vendors are well informed of the performance metrics that are important to the organization and highly aware of the contractual pitfalls stemming from their lack of control over the application. They, therefore, are able to adequately evaluate SaaS vendors' service offerings, ensure relative transparency in the reporting of system performance, and establish formal or informal structures or procedures to oversee and coordinate contractual relationships in a multilateral environment.

Conclusion

The unique features of SaaS promise many benefits beyond the traditional IT sourcing models. To achieve these benefits, firms need to orchestrate a set of organizational capabilities that are complementary to their SaaS adoption. To understand how firms can generate supreme returns from their SaaS investment, we interviewed over 20 CIOs and senior IT managers who have been involved in evaluating or adopting various SaaS solutions for their organizations. This article discussed the strategic implications of SaaS's unique features as well as a set of 5 organizational capabilities that we have identified from our interviews. Appendix 1 describes a set of question that firms can use to evaluate their capability levels. Our study suggests that firms with high levels of these capabilities are able to generate higher returns from their investment in SaaS and tend to be more open to SaaS adoption for various software applications.

Appendix 1. Assessing complementary capabilities to optimize your SaaS investment

- IT architecture competency
 - Do we have standardized IT platforms supporting shared infrastructure services?
 - Do we have standardized IT platform, data and applications support the enterprise-wide core processes?
 - Are we growing a library of reusable application and process modules that builds on our standardized IT environment (i.e. IT platform and data)?
- Business-IT partnership
 - Do we leverage dedicated effort (e.g. business analysts working as liaisons between business units and the IT department) or multi-disciplinary teams to blend business and technology expertise in your IT practice?
 - Do we have mechanisms instituted to promote communication between business and IT units?
 - Does feedback from business units play a role in evaluation of IT performance?
 - How do we educate business users on the value of IT?
- IT innovation capability
 - How do we encourage joint efforts between business units and the IT department in pursuing innovative activities?
 - How do we encourage collaboration across the functional areas within the IT department in pursuing innovative activities?
 - How do we ensure the availability of organizational and technical resources needed for innovation with IT?
 - Do our HR policies strongly encourage experimentation and rewards successful innovation with IT?
 - Do the skill levels of our current IT employees facilitate our innovation with IT?
- Business process decomposition and integration capability
 - How well does IT understand the business processes of the organization?
 - Do we have the expertise internally to model business processes and translate the requirements into technical solutions?
 - Do we have the expertise to understand the implications of different integration solutions?
 - Do we understand the data structure and APIs of the SaaS applications and their business implications?
- Managing external SaaS vendors
 - How transparent are the SaaS vendors about their IT practices in the area of data and system security, legal compliance, changes made to the system, etc.?
 - How do we monitor the service levels?
 - How are maintenance responsibilities allocated between the client and the SaaS vendors? If things do not work, how do we coordinate with the vendors to trouble shoot?
 - Are the functions and APIs provided by the SaaS vendor mature enough?
 - Does the SaaS vendor have a viable business model? What's the vendor's future business plan? Is it credible?
 - Which other companies have adopted services from the SaaS vendor?

IT Services Call

4/22

Victor made this ppt

↳ ~~idea~~ seems to be ~~diff~~ diff than I thought → the focus
Be good at contracts + negotiations
- ~~mean~~ he thought outsourced service

I think its more the cost recovery basis

like at DB

(except ~~cost~~ it never works in practice)

Can agree

Victor its all the same thing

Central ~~provide~~ top-down biz vs providing services

A way of changing/starting conversation

Where to spend \$

What the costs are

Victor agrees now

②

Victor: ^{Should} Bring something interesting back to class

Me: Lots of downsides

Carla: Vendor risks

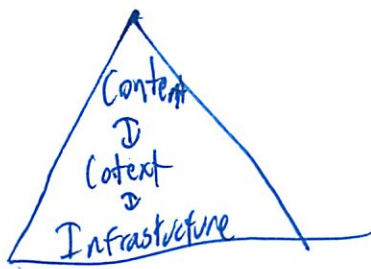
Provide an example

sidekick ITIL

15.565 L8
Digital Biz Models

4/23

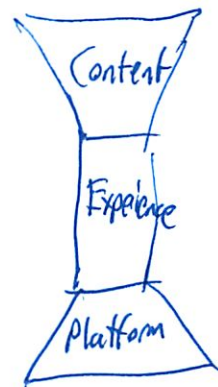
- Newer research - no conclusions
 - Framework
 - lots of questions
 - Presentation - prepared one ~~pre~~ graded
 - I will be ~~asked~~ presented
 - Other will say what you missed
 - No graded assignments this week
-



Place

tangible
physical

Customer
Proposition



Space

intangible
info based

①

How do you get paid in a digital economy?

Before: physical product

Now: Customer experience - people should enjoy it
- value add

Converting to new environment is very tricky

Digital business model

- 2000 - cos didn't think about making \$

- How to capture the value? Can create it

- Some underlying need for platform

Student: Did ~~the~~ newspaper ads ever work?

Or just vague hope that it did

Advertisers are unsure of the value

Also no more classifieds.

③

Diff examples

Content - Ford

1st Exp - Amazon

Platform - NY Times

Need to make a strategic decision about what their model is

Google at all 3 levels

Content - Ad clickthrough

Experience - Sticky brands

Platform - Cloud model

Ubiquitous

Does Facebook do ads well?

Someone thought you will soon have to pay for search

Other student thinks they are just a very good

2 trick pony (search + ads)

(9)

Mash i (future emp) thinks can link together all their parts

Or FB is stealing time on internet to them

Is search result content?

Google viewing ~~the~~ platform as greatest assets

Amazon

Content - E books

Experience - brand, kindle, recommendations

Platform - S3, etc sell to niche processes

Amazon betting Apple on books

key: cost experience

Apple

9% market share in ~~all~~ smartphones

but 75% operating ~~the~~ profit

5

Content - Apps by anyone

Exp - User friendly, interconnected

Platform - Sales + service processes

Control the platform - who holds keys to content

~~BMW~~

(discussion can it survive)

It is a lux good - is the market saturated?

USAA

Content insurance

Experience - online, Deposit @ home

Platform - single cut into file

(The model fits this much better...)

6

LexisNexis

Content being available for free

So moving towards premium - expert opinions + commentaries

Currently subscription revenue

Content - law info

Experience - single sign on, easy search, analytics

Platform - db, APIs, taxonomies

Lawyers are bad at using computer

Issue at SEC

- find wrong doing w/ algorithms

Look at Net Promoter Score

- real-time surveys

- call people who give low ratings

- She thinks its very important

(I whole heartily agree)

- Can't just make quarter-to-quarter

⑦

LexisNexis trying to target individuals

Ethnographic, anthropological studies

- watch what customers do

- phone apps

Changes everything they are

TripAdvisor

(see slide)

AA - UK auto association

Hotels pay to be part

30 inspectors each w/ 150 inspections/year

Very tough

(Did in 15.56.5)

21 postings/minute

⑧
But hard to understand how rankings made

If top position ↑ 20-30% increase in sales

Trip Advisor could add a verified ~~position~~ check

- ping back from Expedia

- but I don't think its a big deal

AA ~~AA~~ should get out of biz?

Put authoritative content from AA to Trip Advisor

(Break)

IT services ~~are~~ wrap work time

Cara: Agrees w/ me

Diff way to do challenges

Cara: Portfolio manager

Provided internally or externally

15.571: Business Strategy and the Role of IT

Dr. Jeanne W. Ross

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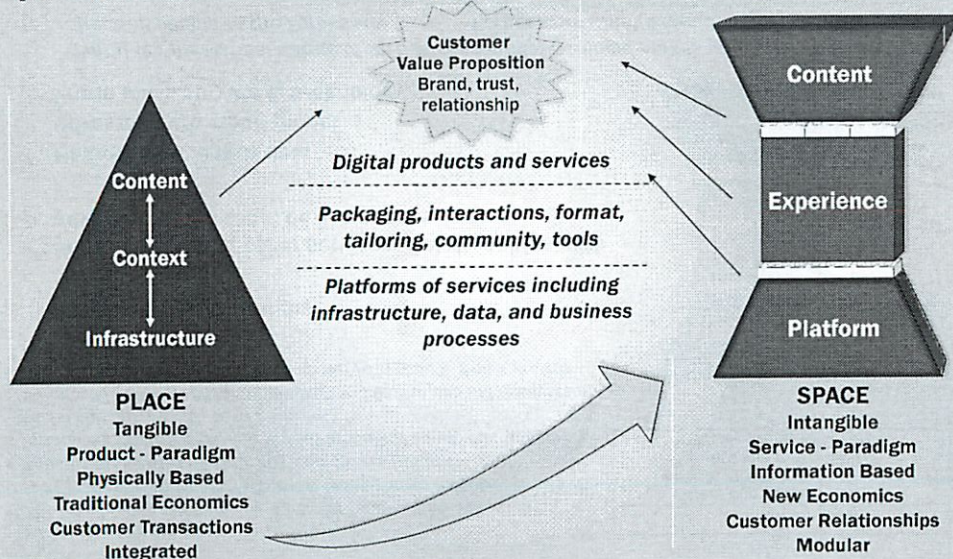


Today's Agenda

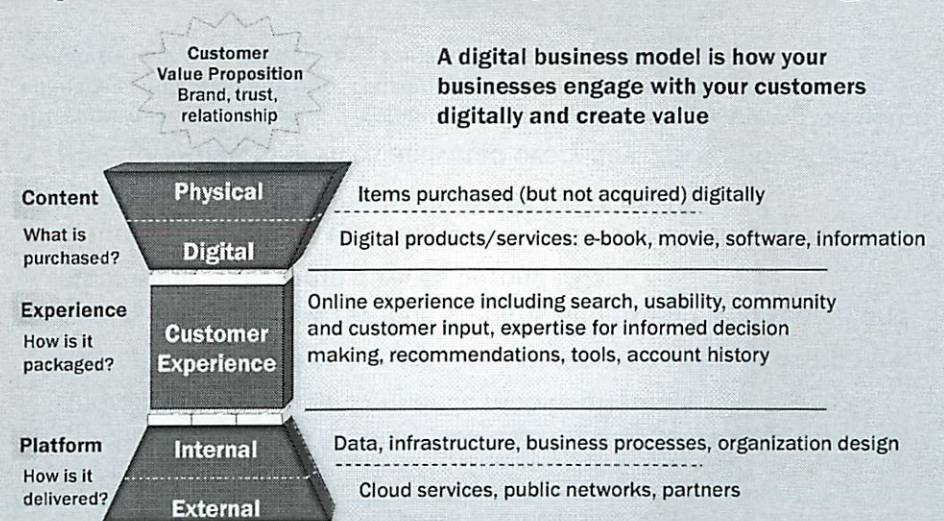
- A look at digital business models:
 - Definition and key concepts
 - Examples: Google, Amazon, Apple, LexisNexis, USAA
- Success factors for digital business models
 - Survey results
 - Discussion of Trip Advisor
- Break (around 5:30)
- Group work on topical presentations



Today's digital business models incorporate digital products, services and interactions



3 potential sources of competitive advantage



4/23

Google - search

- 82.8% of searches globally¹
- 75% of search ad dollars and 43.5% of total on-line ads in US²
- Images, Gmail, shopping, finance, scholar, photos, groups
- Android phone 48% of 1stQ 2012 purchases (iPhone 43%)³
- Introduces "Search plus your World" in Jan 2012 includes Google+, social network etc... to search results⁴
- Purchased Motorola Mobility Holdings in 2012 to expand ecosystem
- 850,000 Android devices activated every day, 250% Y-on-Y growth rate⁷

Advertiser clickthroughs

"Sticky" brand

Search interface, other services; Relationships with advertisers; Personal device access

PageRank ©, meta data

Infrastructure cloud model

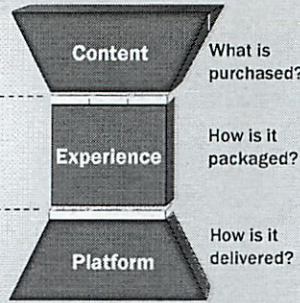
World class service & technology

"[with] the parasitical nature of its business model... Google makes about \$60M a year directing people to the Forbes site."⁵

—Forbes.com Chief Executive Jim Spanfeller⁵

Source: Adapted from Place to Space: Migrating to eBusiness Models, P. Weill & M. Vitale, Harvard Business School Press, April 2001 and "Managing in the Marketplace," J. Rayport & J. Sviokla, Harvard Business Review, Nov-Dec 1994.
¹ <http://marketshare.hitslink.com/search-engine-market-share.aspx?qsrdr=4>
² <http://www.businessinsider.com/the-google-livestor-march-3-2011-3>
³ http://blog.nielsen.com/nielsenlive/online_mobile_smartphones-account-for-half-of-all-mobile-phones-dominates-iphone-purchases-in-the-us
⁴ <http://googleblog.blogspot.com/2012/01/search-plus-your-world.html>
⁵ "Google: We're good for journalism" by Stephen Shankland, <http://www.cnet.com/8301-1023-3-10234622-93.htm>
⁶ www.boovers.com ⁷ <http://googlemobile.blogspot.com/2012/02/android-mobile-world-congress-its-all.html>

2011 Revenue*	US \$37.91B
Net Profit Margin* Industry average*	25.69% 6.80%
Employees*	32,467
3-year compound annual growth rate (net income)* Industry average*	32.07% 16.94%



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Source:
¹ <http://online.wsj.com/article/SB100014240529702036940577213430517844194.html>
² <http://investor.google.com/releases/2011/0815.html>
³ <http://www.marketintelligencecenter.com/apelabreport/1334057>
⁴ <http://www.techcrunch.com/technology/google/8504600/google-to-make-figtbit-and-dishwashers.html>
⁵ <http://googlemobile.blogspot.com/2012/02/android-mobile-world-congress-its-all.html>
⁶ <http://googleblog.blogspot.com/2011/06/supercharging-android-google-to-acquire.html>

5

Amazon

- At least 60% market share for all e-readers¹ 6% Market share for all tablets²
- Kindle—Estimated 4M sold in Q42011³
- Now apps for iPhone, Android, BlackBerry, etc.
- 36 of the top 100 bestselling ebooks in the Kindle Store are published either by indie, direct-to-Kindle authors or by Amazon publishing subsidiary programs⁴
- May 2011 Amazon sold more Kindle than print books in the last three months⁵
- Kindle Fire \$199 including Amazon Silk cloud browser – video, shopping, fast, subsidized for content
- Introduced digital e-book lending library, available only to Kindle device owners⁶

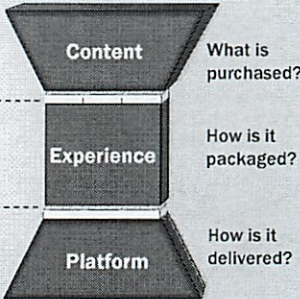
Physical and electronic: Amazon launches a 70% of revenue to publisher option; Electronic books outselling physical books

Amazon brand and customers
Reviews and recommendations
Kindle tablet; app for other tablets

Proprietary device and (ATT) network; now more open
Designed by Amazon

Even if Apple could offer a full library of books, it can't offer the decade's worth of reviews, comments and community connections that Amazon's bookstore has... "If you're an iPad buyer, chances are about 90% that you're also a book buyer on Amazon. Amazon has your credit card on file, they know what you like... That relationship is the key to selling books."⁷

2011 Revenue	US \$48.08B
Net Profit Margin Industry average	1.31% 1.60%
Employees	56,200
3-year compound annual growth rate Industry average	(0.73%) 10.17%



Source: Framework adapted from Place to Space: Migrating to eBusiness Models, P. Weill & M. Vitale, Harvard Business School Press, April 2001 and "Managing in the Marketplace," J. Rayport & J. Sviokla, Harvard Business Review, Nov-Dec 1994.
¹ <http://www.nytimes.com/2012/01/29/business/business-tablet-sharing-on-amazon-in-the-light-of-the-kindle-fire.html>
² <http://www.forbes.com/sites/graceoswald/2012/02/02/amazon-kindle-fire-market-share-beating-apple-iphones-but-still-lags-2012/>
³ <http://www.nytimes.com/2012/02/20/technology/amazon-kindle-fire-market-share-beating-apple-iphones-but-still-lags-2012/>
⁴ <http://www.nytimes.com/2012/02/20/technology/amazon-kindle-fire-market-share-beating-apple-iphones-but-still-lags-2012/>
⁵ <http://www.nytimes.com/2012/02/20/technology/amazon-kindle-fire-market-share-beating-apple-iphones-but-still-lags-2012/>
⁶ <http://www.nytimes.com/2012/02/20/technology/amazon-kindle-fire-market-share-beating-apple-iphones-but-still-lags-2012/>
⁷ <http://www.nytimes.com/2012/02/20/technology/amazon-kindle-fire-market-share-beating-apple-iphones-but-still-lags-2012/>



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6

Apple

- In 1Q2012, 15.4M iPods, 15.4M iPads, 37M iPhone, 5.2M Macs sold¹
- 9% of all mobiles sold but 75% of mobile industry total profit²
- 500K+ apps³—\$13B revenue⁴ so far from 25B app downloads⁵
 - Projected to reach \$5B annually by 2014⁶
 - 79 apps per iOS device with developer revenue over \$4b¹²
 - More time daily on apps 94 mins than search (72)⁷
- 316M iOS units (78M iPod Touch, 183M iPhones, 55M iPad) units so far⁸
- iPhone 4S released in October 2011, 37M sold over holidays, double sales of previous holiday season⁹

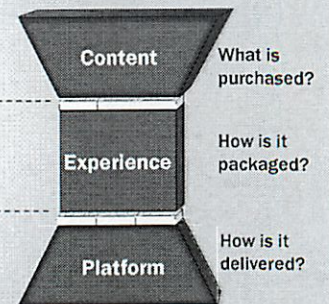
Apps by anyone but must be to standards

User friendly Apple interface; connections to other Apple devices

Apple sales and service processes
Manufactured by partners (e.g., iTunes)

"I've always wanted to own and control the primary technology in everything we do."—Steve Jobs¹⁰
 "It is not the one who owns the content who wins in the future, but who holds the keys to the content."¹¹

2011 Revenue	US \$108.3
Net Profit Margin Industry average	25.8% 4.26%
Employees	63,300
3 year compound annual growth rate (net income) Industry average	75.0% 18.1%



Source: Adapted from Place to Space: Migrating to eBusiness Models, P. Weill & M. Vitale, Harvard Business School Press, April 2001 and "Managing in the Marketplace," J. Rayport & J. Sviokla, Harvard Business Review, Nov-Dec 1994.
¹ <http://www.apple.com/ios/124apple-reveals-first-quarter-results.html>
² <http://www.apple.com/ios/124apple-reveals-first-quarter-results.html>
³ <http://www.apple.com/ios/124apple-reveals-first-quarter-results.html>
⁴ <http://www.apple.com/ios/124apple-reveals-first-quarter-results.html>
⁵ <http://www.apple.com/ios/124apple-reveals-first-quarter-results.html>
⁶ <http://www.apple.com/ios/124apple-reveals-first-quarter-results.html>
⁷ <http://www.apple.com/ios/124apple-reveals-first-quarter-results.html>
⁸ <http://www.apple.com/ios/124apple-reveals-first-quarter-results.html>
⁹ <http://www.apple.com/ios/124apple-reveals-first-quarter-results.html>
¹⁰ <http://www.apple.com/ios/124apple-reveals-first-quarter-results.html>
¹¹ <http://www.apple.com/ios/124apple-reveals-first-quarter-results.html>
¹² <http://www.apple.com/ios/124apple-reveals-first-quarter-results.html>

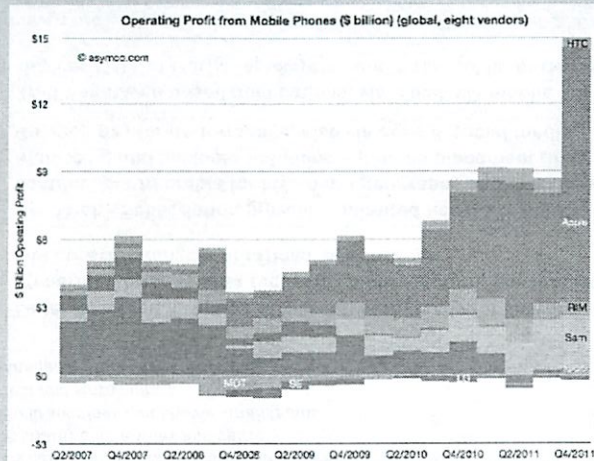


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7

Apple

- Estimated to have 75% of industry operating profit but only 9% of global marketshare¹

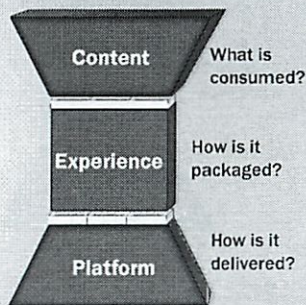


Source: Adapted from *Place to Space: Migrating to eBusiness Models*, P. Weill & M. Vitale, Harvard Business School Press, April 2001 and "Managing in the Marketplace," J. Rayport & J. Sviokla, Harvard Business Review, Nov-Dec 1994. Financial data: www.bpspress.com

Sources: <http://www.asymco.com/2012/03/01/why-lexical-net-profits-are-not-conserved/>
<http://www.asymco.com/2012/02/03/first-apples-rank-in-mobile-phone-profitability-and-revenues/>

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2011 Revenue	US \$108.3
Net Profit Margin Industry average	25.8% 4.26%
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3 year compound annual growth rate (net income) Industry average	75.0% 18.1%



USAA

- 8M members, 8% increase in 2010, 98% member retention
- Member-owned, 50% members active military, now 4th generation
- Customer interactions initially by phone & mail, now mobile & internet, 80% of business is online now¹
- Often #1 in customer service, 97% member satisfaction
- 15,000 logins to USAA Mobile every hour, 175% increase, has highly ranked deposit apps for all major mobile platforms
- First bank to develop mobile phone check deposit by photo

Property and casualty insurance, banking and investment products, financial advice and info

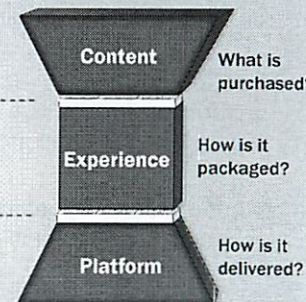
Deposit@Mobile, other mobile device apps
 Integrated services like Auto Circle, Home Circle
 Online Support

Single customer info file, includes customer asset info. 50% Run/50% Build, continuing to drive down Run costs. Reusable infrastructure, data, and application services. Digital product platforms for each of the 3 major business units. Member Experience Organization

"... a visionary CEO who saw what was happening in his own household. He said, 'This is happening with or without us. In these channels we have to be proactive, we can't wait.'"² — Rhonda Crawford, VP, Digital Media and Innovation

"There is nobody on this earth who understands their customer better than USAA."³
 — Karen Pauli, Research Director, TowerGroup

2011 Revenue	US \$19.9B
Net Profit Margin Industry average	11.2% 2.2%
Employees	23,000
5 year compound annual growth rate	6.7%

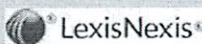


Sources: Framework adapted from *Place to Space: Migrating to eBusiness Models*, P. Weill & M. Vitale, Harvard Business School Press, April 2001 and "Managing in the Marketplace," J. Rayport & J. Sviokla, Harvard Business Review, Nov-Dec 1994; Jeanne W. Ross and Cynthia M. Booth, "USAA: Organizing for Innovation and Superior Customer Service," CISR WP No. 382, December 2010; USAA 2008 and 2010 Reports to Members; Industry average: www.bpspress.com
 1. <http://www.bpspress.com/2011/02/full-review-usaa-ipad-app/>
 2. http://www.banktech.com/blog/archives/2010/05/citl_usaa_sces.html
 3. http://businessweek.com/magazine/content/10_09/b4168040782858.htm

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How does LexisNexis create value?

- LexisNexis products:
 - Help lawyers organize, analyze and communicate information about cases, track spending, manage customer relationships, research the law and the associated expert opinions, and access business and public records
 - Allow consumers to identify and evaluate lawyers
 - Deliver work-flow solutions, including analytics, to lawyers and professional service firms
 - Provide access to a variety of business and financial content
- Content is becoming commoditized (e.g., case law, statutes, and regulations—content not created by LN). LN made some of this content free and accessible from search engines.
- Exclusive content—expert opinions and commentaries, and community sites (30, organized by practice area)—are increasingly valuable.
- Currently, most revenues come from annual subscriptions.
- Monetize behavior, not content? Metrics for engagement? Stickiness ratio is one measure (# of visitors per day/# of visitors per month).



LexisNexis – Large law firms

- Provides info and analysis to legal and other markets
- Customers in 100+ countries; almost 100% market penetration in large law segment
- Billions of searchable documents—75% of revenue from digital format
- In-depth customer discovery process drives innovation
- Customer co-creation is common—expert briefs
- Growth internationally and small law (lawyer.com)

Info about other lawyers, legal research, case law, expert commentary, community sites, integrated public records, news and business information

Single sign on, subscription-based, graphically displayed. Collaboration with peers and customer content. 81,000 apps downloaded (332% increase in adoption from 2010 to 2011). Sophisticated use of NPS.

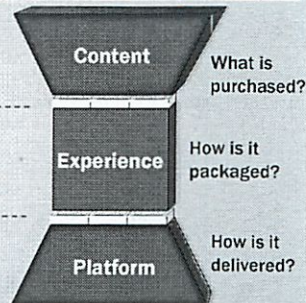
Global Platform – LN Advanced – customized locally. Mobile is huge. Enterprise business architecture with Global Content Repository, exposed APIs, expanded taxonomies, modular design, global and local innovation.

"The 21st century lawyer is supposed to be someone who can whip out his iPhone or iPad to show the judge the case his opponent just quoted."
 —The Wake Forest University Professional Center Library Blog²

"... Legal compared to the corporate world has been a late adopter of mobile applications. My sense is that Lexis, they're early on in terms of legal mobile apps...What we do see is a lot of point releases and very specific functionality. That's the right way to go."
 —Dan Safran, EVP, Project Leadership Associates³



2011 Revenue	US \$2.3B
Operating Margin Industry Average ¹	14% 4%
Employees	10,300
5-year CAGR to '10	11%



1. Industry = information retrieval services
 2. August 2, 2011 <http://wfuipcd.wordpress.com/2011/08/02/lexisnexis-mobile-apps/>
 3. *Law Technology News*, September 02, 2011 <http://www.law.com/jsp/lawtechnologynews/PubArticleLTN.jsp?id=1202513278380>

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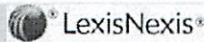


Center for Information Systems Research (CISR) Sources: www.lexisnexis.com and company interviews
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Net Promoter Score (NPS) is an important tool for gauging customer satisfaction



- Real-time survey; 25,000 to 35,000 customers per year across product and customer segments. Live in 17 countries. Surveys sent out once a week, no individual customer gets surveyed more than 2X per year. NPS calculated as a 12-month rolling average.
- Three questions:
 - How likely are you to recommend LexisNexis to a colleague? 0–10 scale. Detractors (0–6) are unhappy customers, Passives (7–8) are satisfied but open to competitors' offerings, and Promoters (9–10) are enthusiastic customers. NPS = % of Promoters – % of Detractors.
 - What is the reason for your rating? Comments about usage are categorized as negative and positive.
 - What one thing could we do that would make your score a 10? Asked of 7s and 8s.
- A Detractor gets a red flag. Someone affiliated with the account makes contact within 24–48 hours. Instrumental program to retain customers.
- A Promoter gets a green flag. Promoters are asked if they would give testimonials to the press or give references to potential customers.
- Started calculating a competitive NPS. Each BU will track its own NPS. Every product, every community has an NPS.



Center for Information Systems Research (CISR) Sources: Company interview and www.netpromoter.com
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Net Promoter Scores vary greatly by industry

Industry	Leading Company	Top Firm NPS ¹	Industry Av
Banking	USAA	87%	18%
Grocery and Supermarkets	Trader Joe's	82%	49%
Homeowners Insurance	USAA	78%	27%
Retail	Costco	77%	46%
Auto Ins.	USAA	73%	35%
Computer Hardware	Apple	72%	32%
Online Shopping	Amazon.com	70%	47%
Airlines	Jet Blue	60%	15%
Brokers & Investment	Vanguard	56%	35%
Online Search and Info	Google	53%	43%
Consumer Software	Symantec	44%	31%
Cell Phone Service	Metro PCS	41%	19%
Cable TV	Verizon	28%	-3%
Health Insurance	Kaiser Permanente	28%	-5%
Life Insurance	State Farm	19%	0%
Internet Service	Verizon	13%	-4%

Source: Satmetrix 2011 Net Promoter Benchmark Study of U.S. Consumers

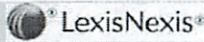
¹ NPS = % of Promoters - % of Detractors. Promoters are loyal enthusiasts who will keep buying and refer others to your site and Detractors are unhappy customers who can damage your brand and impede growth. (<http://www.netpromoter.com/np/calculate.jsp>). NPS scores in the table are those of industry leaders.



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13

LexisNexis – small law firms

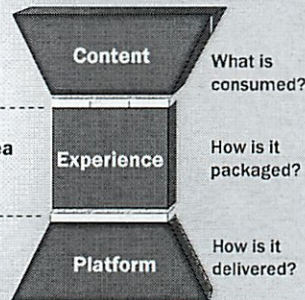


Small law = 1-50 attorney firms. Approximately 1/2 of all US lawyers
LN has 25% share in U.S. small law market
Primarily online sales and delivery
Build solutions quickly, via small teams
Test and learn culture
Annual or multi-year subscriptions

Legal Research, Practice of law software, leads for lawyers (generated by consumer requests on lawyer.com), law firm web site construction, client ratings, peer ratings

Research - Subscription provides unlimited access to select content, configurable for attorney's geography and practices area
Marketing and business solutions – paid ad placement (like Google), pay-for-performance, also via apps & social media

Traditional web-based applications, via cloud, via mobile devices (10% of traffic for lawyers.com is via mobile devices)



"Attorneys are working from home and using notebooks on the road. . . . Case management programs are moving to the cloud. It has to happen. It's the only way to answer those demands."² Bruce Berls, Legal IT Consultant

"It does seem to be a niche that has a lot of customers, and is a full of potential for LexisNexis in expanding its customer base beyond the high-cost market of larger firms."³ Greg Lambert, Legal Librarian

Source: Company interviews, www.law.lexisnexis.com

¹ Calculated as a weighted average.

² <http://www.bruceberls.com/2011/02/lexisnexis-joins-the-move-to-the-cloud/>

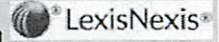
³ <http://www.geeklawblog.com/2010/10/lexis-advance-for-solos-what-it-is-what.html>



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14

Watching customers work leads to innovation



- Field research with clients—anthropological, ethnographic studies of customers—is a competitive advantage. Method excavates unmet needs. Market research, especially surveys, is not getting the job done anymore.
 - Sit with customers and watch what they do, ask them to describe the most frustrating parts of their day, about their most frequent tasks and ideas on doing tasks better, and what prevents success.
- Customers are now part of the innovation team. At any time, at least 200 customers are committed to work monthly with LexisNexis (they are engaged for 12–18 months), with an additional 650 available on an ad hoc basis.
- Mobile strategy is an example of innovation. Research changed product roadmap for mobile Lexis Advanced. Didn't need to build all the bells and whistles. Biggest insight was that customers want to do high impact tasks—one per app—on their smart mobile devices, rather emulate the entire system including:
 - Quick, time-sensitive tasks—track time, look up legal term descriptions, read legal news, and review legal codes and cases.
 - Access documents remotely
 - Sync seamlessly with their laptops
 - LexisNexis scheduled to deliver 15–20 apps by the end of 2011; apps based on the results of field research. Demand could change as tablets evolve.



Center for Information Systems Research (CISR) Source: Company interviews.
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15

LexisNexis Advance

- Complete refresh of technology to provide a better user experience, new reporting conventions, and ability to partner with LN and colleagues. Overhauled and integrated registration, authentication, certification, billing, pricing, and customer service.
- Integrated, seamless movement from one product to another, from front office applications to back office applications.
- Out for solo lawyers, continue to roll-out by product segment (through 2014).
- Per-person subscription.
- Architected for mobility. Able to do short, time-sensitive tasks quickly. Data from apps is synced seamlessly to full-featured version of LexisNexis Advanced when mobile devices are connected to laptop.
- Key word search rather than Boolean.
- Searches firm content as well as LexisNexis content and the web. Taps into a vetted list of respected legal sites for free research. Provides results targeted to user (e.g., lawyer in NY wants Second Circuit cases, not Ninth Circuit cases).
- Designed to be a global platform.



Effectiveness of content, experience, & platform by industry

Effectiveness of:	Content ¹	Experience ¹	Platform ¹
Banking, Financial Services & Insurance	6.4	5.4	5.8
Transportation & Utilities	6.8	5.8	6.2
Healthcare	6.0	5.4	5.6
High Tech, Aerospace & Electronics	6.2	5.2	6.4
IT Software & Services	8.0	7.0	7.4
Other Services ²	8.4	6.2	7.0
Energy & Mining	5.8	4.4	5.4
Manufacturing & Chemicals	6.9	4.4	6.4
Telecom & Media	7.0	6.0	6.8
Total	6.8	5.6	6.4

Source: MIT CISR 2011 Digital Business Models Survey, N=118
 1. Effectiveness measures are averages of questions assessing effectiveness of different aspects of each construct (Content=9 questions, Experience=9 questions, Platform=8 questions). Effectiveness is measured on a 10-point scale with 1=Not effective to 10=Very effective. Content and Experience are correlated at 0.6, Content and Platform are correlated at 0.7, and Experience and Platform are correlated at 0.6.
 2. Other Services includes: Legal + Professional Services + Consumer Services + Restaurants + Hospitality + Distribution and Logistics



Effectiveness of Content, Experience and Platform all predict different measures of performance

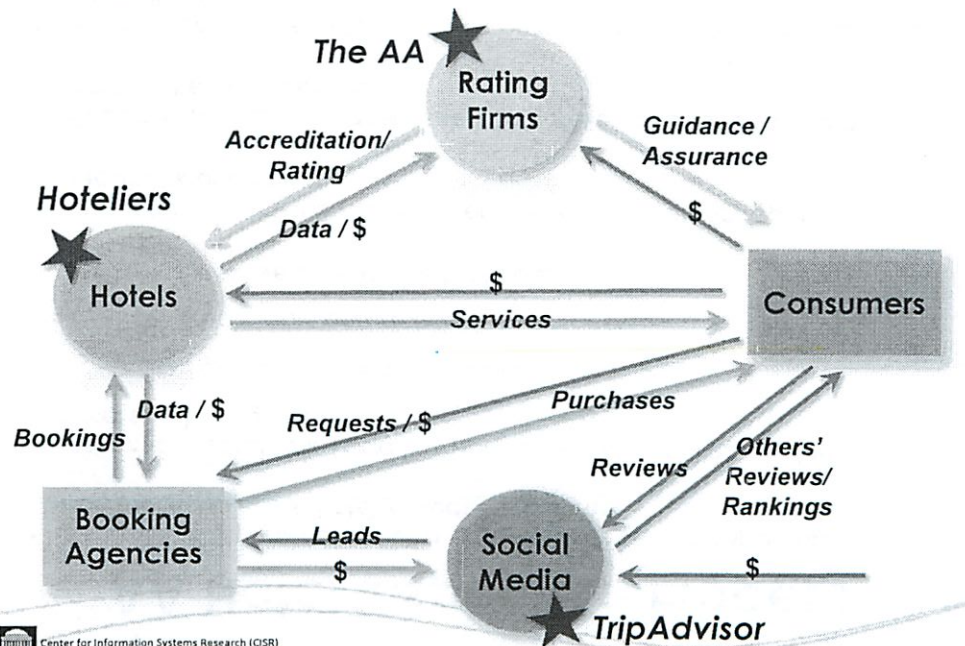
		% of Revenues from digital products and services	% of Revenues from online channels	% Revenue Growth ²	% Net Margin ³
EFFECTIVENESS	Content ¹	++		+	
	Experience ¹	++	+		
	Platform ¹	+			+

- Strong content drives online profits and revenue growth
- Strong customer experience drives online revenue
- Strong platform drives margin

Source: MIT CISR 2011 Digital Business Models Survey, N=78. Plus signs are statistically significant at the p < .1 level, double pluses are strongest correlations
 1. Effectiveness is assessed by averaging a series of questions on different aspects of each construct (Content=10 questions, Experience=9 questions, Platform=8 questions) on a 10-point scale with 1=Not effective to 10=Very effective.
 2. Revenue growth is sample industry adjusted. Results are same for both adjusted and unadjusted figures
 3. Unadjusted for industry differences



Players/Flows in the Hotel Business



Automobile Association (AA)

- Founded in 1905 to help motorists avoid speeding fines following 1904 Motor Car Act
- Now a widely recognized and respected brand in the UK, providing a range of services to 15 million members, hotels, and the public:
 - Breakdown & roadside assistance, travel advice, route maps, driver training, insurance & financial services, hotel accreditation, and travel guides
- Went private in 1999, and was then acquired by a private equity fund in 2004 for £1.75B
- Hotels pay to be part of hotel accreditation scheme and are inspected every 12–18 months
- Most recent AA Travel Guides rated/reviewed over 7,500 hotels, B&Bs, and inns in the UK

AA Hotel Inspection Process

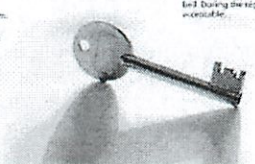
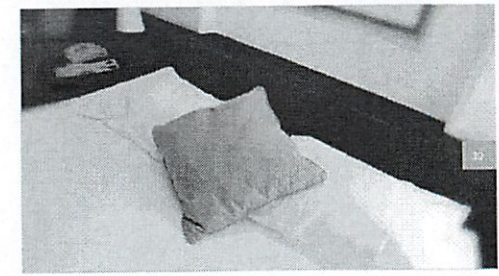
- AA employs 30 well-trained and experienced full-time inspectors, each conducting over 150 hotel inspections per year
- Inspections conducted as a “mystery guest” who replicates overnight hotel stay by a guest
 - Highly professional evaluation
 - Predictable and accountable process
 - Extensive checks and balances
- Inspectors identify themselves after checkout, meet manager to offer feedback and rating
- Report with recommendations sent to hotelier, and used to prepare entry in the Hotel Guides
- Hoteliers can request elaboration, complain and contest a rating, or get consulting help



2.0 DETAILED QUALITY GUIDANCE	
2.1 OVERALL STANDARDS	
Three Star	Four Star
<p>2.1.6 Hospitality</p> <ul style="list-style-type: none"> Guests will be greeted and acknowledged in a friendly, efficient and courteous manner throughout their stay. As One Star 	<p>Service provided without effort, provided by the proprietor and a small team of staff. Management and staff well-informed about their hotel and other local information. Service and efficiency of a quite good standard, with evidence of some personal skills. </p>
<p>2.1.7 Services</p> <ul style="list-style-type: none"> An instantly straight-forward range of services offered – when provided by the proprietor and staff. All enquiries, requests and reservations, co-operation and assistance from visitors dealt with promptly and politely. Service and efficiency skills of a competent standard. Every effort made to take account of individual guests' needs. 	<p>Good guest service, with more staff to provide a prompt and efficient service without detriment to other service areas at the same time. For example, it is necessary that service of drinks should not be provided by a member of staff acting as sole bar person and responsible for the same later, depending on likely guest demand. <p>Good service and efficiency of a very good standard, with evidence of other service areas at any time. <p>Good service and efficiency of a very good standard, with evidence of other service areas at any time. <p>All staff demonstrates a positive attitude and a willingness to help. <p>Service, efficiency and technical skills of a good standard. </p></p></p></p></p>
<p>2.1.8 Opening</p> <ul style="list-style-type: none"> Hotel opens seven days a week during its operating season, providing, on every day open, a consistent level of service and facilities appropriate to its star rating. As One Star 	<p>Open seven days a week of good quality, providing a consistent level of service and facilities. </p>
<p>2.1.9 Guest access</p> <ul style="list-style-type: none"> Once registered, registered guests have access to the hotel at all times. Proprietor and staff to be on site and available to visitors 24 hours a day. It is acceptable for a front door key or security code to be issued. As One Star 	<p>24-hour access, facilitated by on-duty staff. <p>Both prior to and after registration, guests should have access without having to ring a bell. During the night a bell is available. </p></p>

2.0 DETAILED QUALITY GUIDANCE	
2.6 BEDROOMS	
Three Star	Four Star
<p>2.6.6 Bed size, quality</p> <ul style="list-style-type: none"> Minimum bed sizes, including total beds and bunks as follows: Single: 190cm x 90cm (75in x 35in) Double: 190cm x 130cm (75in x 51in) 220cm x 100cm (87in x 39in) Bed to be designated as single. 190cm (75in) beds are unacceptable, except in family rooms where they are clearly designated for children only. Soft beds are not acceptable at permanent bed bases. Bunk beds (permanent bed bases) are acceptable for child use only. When bunk beds are used, guests will often find them uncomfortable. All beds, including supplementary beds, with a 2-inch, soft beds etc., to be of acceptable quality and in good condition. They should have a sound base and spring mechanism, or a similar quality, sturdy, comfortable mattress. Service headboard or equivalent on all permanent beds. 2.6.8 Bed size should have a minimum 10cm (4in) clearance between the mattress of the bed and the underside of the bed and (Bunk Bed Regulation 1997). 	<p>Beds and headboards of better quality and condition. </p>
<p>2.6.7 Bed access</p> <ul style="list-style-type: none"> There should be access to both sides of beds for double occupancy. Easy access to both sides of beds for double occupancy. 	<p>Good access to both sides of beds for double occupancy. As Three Star Generous access to both sides of beds for double occupancy. </p>
<p>2.6.8 Bedding requirements</p> <ul style="list-style-type: none"> Top sheets, turn-downs and a designated OR non-top sheet and coverlet with cover top bed. Top rating appropriate for the time of year and location. Additional bedding available on request when events are provided. Where feather duvets or pillows are used, a non-irritant alternative available on request. 	<p>Two pillows on individual beds, per person. Soft pillow and blanket available on request. Any additional bedding kept in bedrooms to be clean, fresh and changed. A mattress protector is provided for each bed. Pillow or duvet or mattress protector are not acceptable except for children's beds. </p>

2.0 DETAILED QUALITY GUIDANCE	
2.6 BEDROOMS	
Three Star	Four Star
<p>All children's beds to be full sized beds. Single: 190cm x 90cm (75in x 35in)</p> <p>Soft beds meeting the bed size requirements for permanent beds.</p> <p>Beds and headboards of good quality and condition.</p>	<p>A choice of larger sized beds. Very good quality beds, e.g. pocket spring mattress and base, in very good condition with a service headboard or screen.</p> <p>Beds for double occupancy to exceed 190cm (75in) in width.</p> <p>Each for double occupancy to be at least 130cm (51in) in width.</p> <p>Several beds to exceed this size. Bunk beds are not acceptable.</p> <p>Beds and headboards of excellent quality and condition.</p>



Hoteliers and the AA

- Hoteliers integrate the AA reports into their strategies and programs of improvement
 - AA star grading has come to define what it means to be a quality hotel
- Hotel evaluations/recommendations seen to
 - Offer verifiable and actionable feedback
 - Reflect considerable industry expertise
 - Be disconnected from customers' experiences



TripAdvisor

- Largest online travel site, operating in 30 countries and 21 languages
 - 50 million user reviews and opinions on approx. 1 million venues (hotels and restaurants)
 - Over 45 million unique visitors/month
 - \$486M revenues and ~1000 employees
- Increasingly influential in decision making
 - 80% of UK consumers conduct online research and half had "refrained from booking a hotel as a direct result of a negative review on TripAdvisor."
- Founded in 2000 by 4 software entrepreneurs, initially as a search engine for travel sector
- Struggling to get traction, they experiment in 2001 with sending users to travel booking sites
 - Business now based largely on "click-through revenue" and advertising
- Subsequently, added feature to allow users to post their own reviews
 - User reviews and opinions now constitute primary content on the website



TripAdvisor Hotel Evaluation

- Reviews produced by 20 million members using pseudonymous profiles
 - An average of 21 postings/minute
- Hotel evaluation involves travellers' personal interpretations and experiences
 - Free-text reviews and photos
 - Ratings on 6 criteria: *value, rooms, location, cleanliness, service, sleep quality*





GolfGril
Leawood, Kansas
★ 34 reviews
11 helpful votes

"I wouldn't stay here again"

○○○○○ Reviewed August 24, 2010

There were dirty towels on the bed, dirty bed sheets. There was toothpaste in the sink. Smoking room was right next door. The loud music below us. The roaches on the floor. The food was well done. They forgot to give me shampoo. The hotel was run down. Lip marks were on the glasses. The bathroom was worn and dirty. The pool was dirty. lockers rooms were dirty too. The shower dispensers were empty. Toilets were out of toilet paper. No room amenities, robes in the room, no minibar, no coffee or tea in the lobby area. The staff doesn't keep up records on computer. They have to look up to see who is there for the night. The staff was rude.

Stayed August 2009, traveled as a couple

○○○○○ Value ○○○○○ Rooms
○○○○○ Location ○○○○○ Cleanliness
○○○○○ Sleep Quality ○○○○○ Service

less ▲

Was this review helpful? Yes

Ask GolfGril about Hyatt Regency Cambridge, Overlooking Boston

This review is the subjective opinion of a TripAdvisor member and not of TripAdvisor LLC. Report problem with review

TripAdvisor Hotel Evaluation

- Hotel evaluation also involves a ranking mechanism: "popularity index"
 - Algorithm based on traveller ratings that ranks hotels within a region
 - Highly influential in practice
 - Forms the basis for listings of "best," "worst," "dirtiest" hotels in regions/the world
- Reviews are not verified and only lightly scrutinized for problematic content
 - Human mediators and automated tools
- Questions are being raised about the quality, validity and authenticity of reviews
 - Hoteliers, the media, and regulators

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The screenshot shows the TripAdvisor page for Le Meridien Cambridge-MIT. The page includes a search bar, navigation tabs, and a sidebar with various filters. The main content area displays the hotel name, address, and a "Check Rates and Availability" section. A "TripAdvisor Popularity Index" is highlighted with a red circle, showing a rating of 7 out of 17 hotels in Cambridge. Below this, there is a "TripAdvisor Traveler Rating" section with a 67% rating and a "Reviews you can trust" section with various filters.

The screenshot shows the TripAdvisor page titled "2011 DIRTIEST HOTELS". The page features a large banner with the title and a list of hotels ranked as the dirtiest. The first hotel listed is "1 Grand Resort Hotel & Convention Center" in Pigeon Forge, Tennessee, with a note that 87% of reviews do not recommend the hotel. Other hotels listed include "2 Jack London Inn" in Oakland, California, and "3 Desert Inn Resort" in Daytona Beach, Florida. The page also includes a section for "The very best hotels, as chosen by millions of real travelers."

The Telegraph

Tripadvisor reviews: can we trust them?

"Get the truth, then go" is the mantra of TripAdvisor, the world's largest travel-review website, which only makes the following all the more alarming.

Log on to its website and type the words "racist" or "racism" into the search engine and you might be surprised by what you find: together they crop up more than 2,300 times in reviews. "Pervert/perverted" features in 353 reviews, "homophobic/homophobia" in 295, "rapist" in 33, and "paedophile" in 10. Often these defamatory terms are used to describe hotel or restaurant staff, b & b owners, waiters and receptionists.

"There is a real risk of getting raped here," wrote one reviewer of a hotel in Munich; "the proprietor ... is one of the worst paedophile priests", said another of a guesthouse in Scotland; "the woman that runs this bar is a racist – fact!"

Aug 10th 2008, 5:43 am

CherryV
Champion of the Naaru

Trip Advisor Poster Needed

I need 30 good reviews written on Trip advisor for one of my clients hotels.

15 for each one of the two listings

They will each need to be written from separate accounts and only max one per day.

You will need to make the accounts and reviews. Nothing fancy but positive.

PRWeb: PR Distribution
Gain search engine top placement, promote your brand and more!
www.prweb.com

As by Google

Let me know who is interested.

Hoteliers and TripAdvisor

- Hoteliers see increased impact on business from visibility of social media platform
 - "Since we've achieved the top position in this region, probably 20–30% more people come than would have."
 - "TripAdvisor has increased our revenue 9-fold in 3 years."
- Hoteliers see increased vulnerability and risk from unregulated content
 - "Those opinions... are on that website for life. Forever, they're going to be on there for anybody to see them."
 - "It is very difficult to get them to take a review off, even if it's incorrect."
- Hoteliers feel obliged to monitor TripAdvisor and integrate its content into daily practices
 - Read reviews regularly (daily/weekly)
 - Respond professionally to negative reviews
 - Discuss reviews at staff meetings
 - Make reviews the focus of staff appraisals
 - "Manage the review" during the guest stay

fiverr Halloween Gigs - Where to find them?

webseo: I will write a good review for your hotel, villa, or restaurant on TripAdvisor or any other travel websites for \$5

Order Now

Contact Seller

100% Rating

4 DAYS

2 Reviews

Are you trying to increase the number of customers for your business? I will write a good review for your hotel, villa, or restaurant and will post it on travel websites. I will send you the link where my review has been posted. The positive feedback you'll get is a good indication that your service is satisfying customer needs or wants!

Get Reviews!

tripadvisor CABITZ

Latest buyers' feedback

- swaddy created 3 weeks ago: Aha! Great!! Excellent service as always. Many thanks.
- swaddy created 3 weeks ago: Excellent as always, thank!
- wmassis created 3 weeks ago: Wow! Super fast, good communication and great execution yet again! Highly recommend! More gigs to come!
- swaddy created 1 month ago: Many thanks. Well done as always.

the guardian TripAdvisor could face legal action

One guesthouse owner says she has been branded a racist after turning a potential guest away and is so upset she has gone to the police. Another says he is giving up the B&B business he has run for 30 years following an online review claiming his rooms were dirtier than a sewage works. A third claims he is in despair because he seems to be spending more time dealing with unfair reports than actually running his successful seaside hotel.

ComputerWeekly.com

You are here: IT Management » eBusiness

Online reputation firm launches 'defamation action' against TripAdvisor

Nail Gerard
Friday, 19 September 2010 15:45

Up to 1,000 hotel and restaurant businesses could present their grievances about what they see as unfair treatment on the reviews website TripAdvisor by the end of this week, as part of an initiative led by an online reputation management firm.

KwikChex.com co-founder Chris Emmins told Caterer that his company would launch what he termed a 'group defamation action' against TripAdvisor, after its members in the hotel and restaurant sector highlighted that they were fed up with what they alleged were 'unfair' or 'false' reviews on the site.

Hoteliers and TripAdvisor

- Hoteliers feel obliged to monitor TripAdvisor and integrate its content into daily practices
 - Read reviews regularly (daily/weekly)
 - Respond professionally to negative reviews
 - Discuss reviews at staff meetings
 - Make reviews the focus of staff appraisals
 - "Manage the review" during the guest stay



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IT Services 15.571 – Team 6

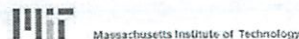
April 30th, 2012 Vy Nguyen, Victor Piper, Michael Plasmeyer, Cara Presseau



Template by Sascha Boehme

Agenda

- Definition of IT Services Management (ITSM)
- ITSM Benefits and Limitations
- IT Transformation to Service Model (Example)
- Transformation Challenges and Limitations
- Transformation Critical Success Factors



3

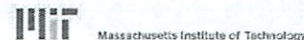
IT Services Management - Reconceiving the IT Mission



Template by Sascha Boehme

IT Services A two-way discussion between IT and Business

- What “services” should IT provide for purchase?
- Should these services be sourced internally or not?
- What capabilities are needed from IT (service level, etc.)?
 - Business Strategy: focus on meeting business objectives
 - IT Strategy: focus on supporting operations and enabling business strategy
- How will IT provide cost transparency?
- How will IT support business planning cycles and needs?



4

4/29
Done

IT Services

Pros (Benefits)	Cons (Costs and Limitations)
Greater transparency on costs and capabilities means better alignment with business units.	Cost accounting overhead, it takes time and effort to understand and distribute costs equitably.
Charges (chargebacks) are close to actual costs, Business and IT can make decisions that directly impact their budgets.	Doesn't apply to all services; some services have security or strategic implications.
Discussion about needs between IT and Business provides better organizational support for decisions.	Hidden or delayed costs from vendors or suppliers after the initial agreement. IT and Business Units must be prepared for hard discussions.
Clarification of service level needs (how much speed, redundancy, availability, etc.) provides better insight and understanding.	Excessive focus on costs makes it difficult to make strategic investments in scale, flexibility or innovation.
Understanding of service failure impact is part of the mutual agreement between Business and IT.	

IT Services Management

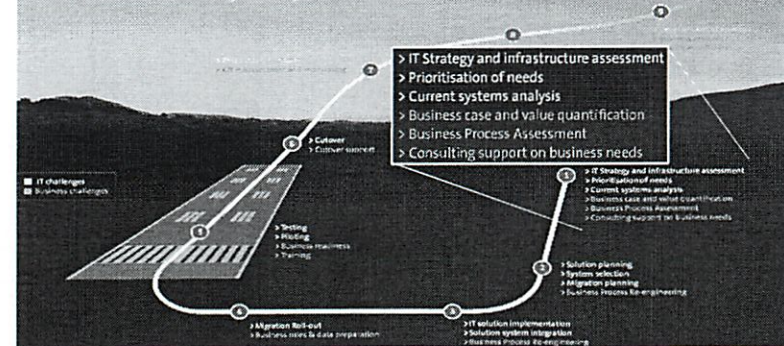
- Processes and practices to implement IT Service Model
- Example Framework :
Information Technology Infrastructure Library
ITIL Service Strategy
ITIL Service Design
ITIL Service Transition
ITIL Service Operation
ITIL Continual Service Improvement

Benefits of a Well Managed IT Service Model

- IT Cost Efficiency**
 - Economies of scale, eliminating redundancies, delivering only required services
- Spend Control**
 - From cost center to business supplier/consumer relationship
 - Catalog of tiered services
 - Service level agreements, subscriptions, or usage-based fees
- Service Quality**
 - Customer-defined service level, performance measured and monitored
- IT Responsiveness**
 - Flexible and controllable services and components
 - IT aligned with processes, people, and technologies
- Business and IT Alignment**
 - Clear service definitions and governance model
- Risk Identification**
 - Risks actively managed within IT service portfolio

Transforming the IT Unit

The IT transformation journey



IT Services Transformation Example: Objectives and Motivation US Department of the Interior

IT Services – A new model for managing and delivering IT

“The costs, benefits, and timelines of IT services must be clear to customers and clearly aligned with the bureau’s missions.”

“The first key change in the IT market is the evolution of IT from an asset to a service.”

 http://www.doi.gov/ocio/strategic/IT_Transformation_Strategic_Plan_FINAL.pdf
Massachusetts Institute of Technology

US Department of the Interior IT Transformation Vision

- **Service-Focused**
 - Deliver uniform, modern, agile, and cost-effective services
- **Enterprise Solutions**
 - “Support the Department’s diverse missions”
- **Enabling Internal Performance**
 - “Empower our employees to conduct their businesses using IT as a mission enabler, rather than inhibitor”
- **Aligned with Mission**
 - “Help responsibly steward the natural, cultural, and historic resources with which we have been entrusted by delivering and managing IT services that positively affect how we serve the American people.”


 http://www.doi.gov/ocio/strategic/IT_Transformation_Strategic_Plan_FINAL.pdf
Massachusetts Institute of Technology

US Department of the Interior IT Transformation Expected Outcomes

- **Change How IT Adds Value to the Mission:**
 - Customer Relationship Management
 - Service Delivery
 - Service Portfolio Management
- **Change How IT is Delivered:**
 - Formal Service-Level Agreements (SLA’s)
 - Modern Infrastructure
 - Governance and Accountability
- **Change How IT is Budgeted and Purchased:**
 - Service Catalog
 - Up-Front Pricing
 - Cost Transparency



Figure 1: IT Customer Service Lifecycle

 http://www.doi.gov/ocio/strategic/IT_Transformation_Strategic_Plan_FINAL.pdf
Massachusetts Institute of Technology

Challenges in Transforming to IT Services Model

- **ITSM Process Requires Change Management**
 - key is adopting a process that fits the organization
- **Complexity of Process Model**
 - How mature is mature enough? Careful of “Excessive Technical Fastidiousness”.
- **Firm needs to build new competencies to make service model work**
 - Change Management (Culture)
 - Communication
 - Procurement: Contracts/Negotiations/Pricing

 Massachusetts Institute of Technology

12

Critical Success Factors

- **Bilateral Communication**
 - Expose needs and challenges
 - Collaborate on strategy
- **Transparency**
 - Costs
 - Process
- **Service Definition Process**
 - Includes all critical components (cost, functionality, etc.)
 - Don't forget about risk (security, service failure)!
- **Accountability**
 - Roles and responsibilities are clear
- **Delivery Competence**
 - Commitments must be kept
- **Devotion to Business Value**
 - Periodic adjustment of the "Plan" is as important as execution



15.571 Business Strategy and the Role of IT

Individual Summary of Group Work

Class 9

Your group presentation on a current IT development in today's class constitutes your participation grade for both last week and this week—a total of 10 points. Half of your grade will be assigned based on the quality of the content you hand in. The other half of that grade will come from this peer assessment. Please list your teammates (last name only is fine—see team lists on the back of this page). You may not award your teammates more than one 4 and one 5. You should rate your teammates on the quantity and quality of their contributions to the delivered product.

Team Topic:

Rate (1=poor, 5=excellent) your group members for this exercise.

YOUR NAME: _____

RATING (1=poor, 5=excellent): _____

NAME: _____

RATING (1=poor, 5=excellent): _____

NAME: _____

RATING (1=poor, 5=excellent): _____

NAME: _____

RATING (1=poor, 5=excellent): _____

NAME: _____

RATING (1=poor, 5=excellent): _____

When complete, please hand this in to Eugene.

Team 1: BYOD/Consumerization

Bin-Nun, Edan
Boehme, Sascha
Braganca, Julia
Brox, Elin

Team 2: IT Offshoring

Caro, Rodrigo Andres
Doddala, Harish
Eid, Osama
Fang, Miaoqing

Team 3: Software as Service

Finicane, Moira
Gao, LingYun
Glaiel, Firas
Grodas, Bjorn Ole
Kiddie, Taimur (Listener)

Team 4: Cloud Infrastructure

Holguin-Veras, Jose E.
Hussain, Mohibi
Jiang, Dennis Ming
Wohl, Michael
Takase, Hideaki (Listener)

Team 5: BYOD/Consumerization

Kafka, Vanessa S.
Kristiansen, Thomas
Lee, Heechang
Martin, Sara Jayne

Team 6: IT Services

Nguyen, Vy T
Piper, Victor Lawrence
Plasmeier, Michael E.
Presseau, Cara
Oliveira, Leandro (Listener)

Team 7: Cloud Infrastructure

Ranganath, Naveen C.
Sadeghpour, Omid
Sahay, Manjul
Wong, Ming Fai
Rios, Mauricio (Listener)

Team 8: Software as Service

Schlossberg, Elizabeth Z.
Seelhof, Michael
Shafrir, Michael
Shum, Areta Y.
Yamaguchi, Masanobu (Listener)

Team 9: IT Offshoring

Sinha, Prasanta
Stuenes, Hallgeir
Teo, Kai Siang
Traversi, Mark

Team 10: IT Services

Tullis, John Richard
Villalobos, Aguilera, Michael
Waltham, Mark
Weill, Alexis
Westermann, Donald (Listener)

*If your name does not appear on this list, please see Eugene.

15571

4/30

Guests: Darg Rosso, CTO, CBS

Jim Walsh, CTO, AECOM

PPTs - be sure to cite

and put your name on it

CBS

combined IT unit and tech leadership
- innovation

lots of related units

- Showtime - outdoor
- Films
- CW
- Smithsonian
- Simon + Shuster

local broadcaster

12-12.5 billion

mostly domestic

②

Been there for a year

Felt not enough value

Project failures

Monitize all content better

Originally line of business oriented

- repeated
- expensive
- agile

They do a mix

- biz management
- security
- infrastructure
- sol development
- project management
- architecture

Not an acquire co or direct

3

Needed to do things differently

AMP - advanced media platform

3 people
(440 total staff)

versatility

No biz as usual

Strong position

but things going online

fragmentation

- time shifting
- place shifting
- mobile
- Online
- social
- game

④
need to experiment

~~avg~~

avg age = 56

What tech to invest in
turn viewing distraction into incremental rev same
hyper local

ages 33, 27, 28

new authoring, production, distribution

Ask the what ifs

- ~~AM~~TVs come w/ tablets
- hypertargeting
- micropayments

Requires breaking some eggs

Collaborates w/ rest of CBS

Get people who live in the future

⑤

Must be trend setter

"Apple model"

Sees platforms as an opportunity

VC approach like

Hit driven teams

Guidelines

huge market

Scalable

IP creation

BIG rewards

High Potential → High Risk

Fail Fast

↓ initial capital req

Cut losses fast

Want 200x

6

IT wants 10%

Don't interrupt vs

Encourages rebels

Innovation is opportunity

- Strategic returns

2nd screen
mobile
connected TV

- fin returns

dial poll

Advertiser dial in

audio fingerprint

Monetize interaction

[Another 10 years to watch anything on any device]

More targeted ads - CPM

New inventory

7

New way to add new inventory

Are you cannibalizing

OTT → new way to deliver content

Tech aims dealer - play both sides

Get into the library

3-year goal

9 sec attention span

have to deliver

(he is a favor of 10 sec slides)

Won't expand till get results

- 4 patents

- has to work lot

8

Q: How long do you show results

2 weeks - joke

6 months to figure out what is broken

plus was told to stop/slow down

he can't trace revenue to OTT apps

Since people collecting \$ won't tell him

Q: Alignment

Some will be

Others will break eggs

Media co are old

- Some shared vision

AECOM Was hired as CTO

Does not ~~believe~~ believe in tech strategy

Now CTO

9

8 bill engineering + consulting firm

Civil engineering

Plus ~45 joint ventures

transportation

water

planning + design

environmental remediation

mining

oil + gas

Complex

Split IT ~~roles~~ roles

CIO - internal

CTO - external to biz

- tools; GIS, analytical to biz

- partner services; manage client's money

- try to be more solutions driven
tech pushing services

(10)

Not just sell labor hours

But wrap in services to ↑ margins

~~Un~~ Profitable Pnl one side

Recoverable Pnl other side

Subsidizes Shunkworks

450 people

25% on con + improve

aiming for 65%

~~IT~~ Thinkas should be biz strategy IT enables

By going to 1 Oracle + SAP less flexible
raises costs w/ shadow systems

Sell diff to diff markets

(Green gr - people laughed)

↳ Said we try to do everything more sustainable

(11)

50% internal

50% acq

- buy + con

~~now~~

buy, integrate, con

for compliance

Chair for innovation council

Chair of sales

- to show do innovation

Chair of academic ~~and~~ partnerships

Challenge: now paid by hr so new
labor-saving tech is threat

Design - Build is how projects are going

And goes going broke - finance on own

(12)

He seems he wants to preserve barriers

BYOD

Bring own device

Can you bring your own device
(actually only 30% of class knew what this was/is)

↑ Satisfaction

- valuable emp

harness extra productivity

but balance security + control

1. Can't just do nothing

reactive or proactive

2. Change of thought required

3. New ^{think mobile} policies + processes,

(13)

Aruba, etc some sw fools

Response

Governance

Also social networking

Who buys the device? Who fixes it?

Save cost or ↑ cost?

How to make it work?

Device pool

Education

Discussion

Thought points straight on

Trying it → \$80/month

Dissatisfied - connectivity issue
- over data plan

Understand emp mix - what do they need?

(14)

Is the co trying to milk \$ out of them?

Gartner have created the whole industry

This is what will blow up in a few years

What productivity is ~~there~~ it?

How mobile is existing portfolio?

Can you actually run transactions

So many holes in this

CBS: huge VOI fan

Likes Win OS - but not encrypted

Thinks ↑ IT costs

But cultural role of always on

This is US

- less in Europe
- culture not in China
- internet not everywhere

(15)

US i here badge at ZAM
(BS; Its not to save \$

IT Offshoring

(Random ^{Vendor} buzzword chart)

	Ownership	
location	Standard	Outsource
	Capture	Offshore
	Offshoring	Outsourcing

- by industry
1. Fin services
 2. Manu
 3. Telecom
 4. Energy
 5. Travel

Not just labor arbitrage

(16)

Slide on what is Pice arbitrage

(nice, but hard to write)

he had 40% net savings

benefits

low cost

fast ramp up/down

risk

Good cost

lack of foot

turnover

IP

4 stages (from paper)

(17)

When not outsource

lots of vendors - had to manage
don't outsource what your competitive adv is
Strategic functions

Now more strategic

- not just a single project
↳ handing over requirement docs

Accused of stretching new reve

IT pros BPO vs IT offshoring

Hard to ramp up offshore talent

↳ hard to hire anywhere

Maturity of processes harder to shift
esp if require a lot of integration

You are still accountable to your boss

18

They have off shore - but must do their values

India high ^{low} cost + high quality

Others low cost + low quality

How repeatable are your processes
CMMI Level 5

But you often get crappy talent

Do the entire process
↳ not just a part

Talked to ~~the~~ Day over break
- said Disney part at end

SAAS

(They didn't explain what it is)
(and said cost save - but then back peddled)

(This generic look at stuff is getting annoying...)

Pros

- faster
- better scalability,
- pay per use, not upfront

Con

- harder to customize
- be ok w/ updates
- ~~more~~ security

Best practices

- matrix of access rules
- availability
- involve security + audit at beginning
- through central procurement so get scale
- put features you need in contract
- so cos can't take it out

20

response
Separated

Application - Google Apps
Platform - Azure, force.com, FB
Infrastructure - Amazon EC2

What are the top concerns?

- Security
- Performance
- Availability

Much easier for small co

Easier / cheaper to sell

IT Pros

Lots of people play in the gray areas b/w bars

Significant tax benefits for capital investments

(21)

What biz trying to sell to?

Value curves differ

For them: Time to market

AECOM

Do it w/o IT

Salesforce.com

Easy to change/flexible

Also sell to clients

CBS: Financial model Capex vs Opex is huge

Shifts costs - not transparent

Salesforce.com is expensive

But very agile

22

Cloud Infrastructure

100 years ago plants had their own power plants
IT manages vendors - not building
stuff themselves

debate is more internal vs external cloud

Other

econ of scale
metered access
but security

trust issue

disaster recovery
their suppliers

actually more expensive often

(23)

IT pros

architectures needed to adopt cloud?

- turnkey or customizable?

Same qv as cloud vendors and outsourcing

AECOM: split internal + provide to client

IT Services

(Victor did pretty well - but and slow

- checking phone
ran out of time)

ITIL - trying to get value out of it

20 years ago - UK gov

Corps now have same issue as gov

Standardization + integration

Cost control

Examples

Email

accounting

Network

etc

29

Biz needs not IT wants

CBS: Inherited dysfunctional IT orgs

- One of the 1st things he looked at
- getting transparency
- what control did they have over costs

What is it that I need

What do they need from IT

What do you do to contribute to that value chain

Email is not a service

doesn't ↑ revenue

but must be up

Service: is ~~App~~ communication

AMCom: Must be trustworthy on the basics

More stewards of best practices

↳ like TR

25

You need to provide triggers

IT now more complex than ever

↳ biz folks should not care

just use it

don't care about how it works

If Tech becomes the business - it changes

- IT services
- Media kinda

15.571 Business Strategy and the Role of IT

Instructions for Final Presentation

We have printed at the bottom of this page the presentation schedule for our final class. Each team can have up to 15 minutes to present their project to their classmates. We will then have 3 minutes for Q&A and changing of teams. We will strictly adhere to time limits, so be sure to rehearse—it's always a shame when a team (and it seems there is always one) doesn't get to show the great material on its last slide.

Please send all presentations to me by noon on Monday, May 14. I'll have them in order ready for class.

Note that half of your project grade is for the material you hand in to your sponsor (and Eugene and me) at the conclusion of the project. The other half is for this presentation. Here are the criteria on which this presentation grade will be based:

1. Clarity—this is hard in a short presentation. Make sure we understand (1) the problem/opportunity you were addressing, (2) what you did to explore that problem/opportunity (i.e., your methodology), (3) some of your findings (don't try to tell us everything you learned—just teach the class something interesting that you learned; that might be one case study or the results of a survey or a framework you learned from the background research), and (4) one or more key recommendations to the client—again this need not be an exhaustive list. You are trying to educate your classmates, not tell them everything you learned.
2. Professionalism—you need not divide presentation time among the team, but it's nice if everyone can speak (and we are very tolerant of any challenges you might have with English if it's not your first language). But the slides and the delivery should be professional.
3. Quality of work—we are looking for quality insights and research reflected in the research you present and the recommendation(s) you make.

4:05PM	Fidelity Team (Gamification)
4:23PM	Akamai Team
4:41PM	EMC Team (Analytics)
4:59PM	NASA Team
5:17PM	Fidelity Team (Financial Education)
5:35PM	EMC Team (IT Innovation)
5:53PM	IFC Team
6:11PM	Exxon Team

IT Services
Call

4/29

Cara, Victor, + Me

Cara: IT service management -> not IT services

Contract:

↳ people also know

Promotional pricing

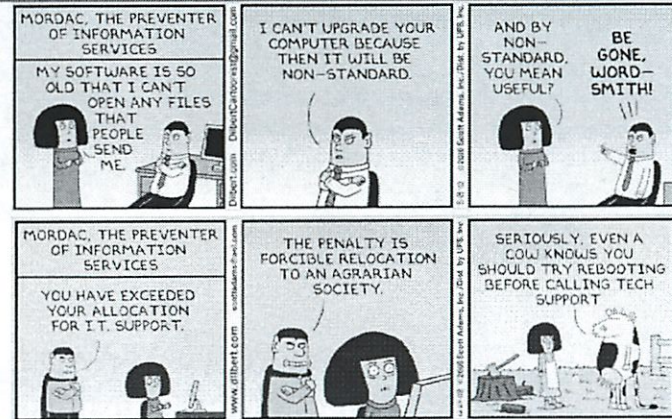
IT Services 15.571 – Team 6

April 30th, 2012 Vy Nguyen, Victor Piper, Michael Plasmeyer, Cara Presseau

Agenda

- Definition of IT Services Management (ITSM)
- ITSM Benefits and Limitations
- IT Transformation to Service Model (Example)
- Transformation Challenges and Limitations
- Transformation Critical Success Factors

IT Services Management - Reconceiving the IT Mission



IT Services A two-way discussion between IT and Business

- What “services” should IT provide for purchase?
- Should these services be sourced internally or not?
- What capabilities are needed from IT (service level, etc.)?
 - Business Strategy: focus on meeting business objectives
 - IT Strategy: focus on supporting operations and enabling business strategy
- How will IT provide cost transparency?
- How will IT support business planning cycles and needs?

5/30

IT Services

Pros (Benefits)	Cons (Costs and Limitations)
Greater transparency on costs and capabilities means better alignment with business units.	Cost accounting overhead , it takes time and effort to understand and distribute costs equitably.
Charges (chargebacks) are close to actual costs, Business and IT can make decisions that directly impact their budgets .	Doesn't apply to all services ; some services have security or strategic implications.
Discussion about needs between IT and Business provides better organizational support for decisions.	Hidden or delayed costs from vendors or suppliers after the initial agreement. IT and Business Units must be prepared for hard discussions .
Clarification of service level needs (how much speed, redundancy, availability, etc.) provides better insight and understanding.	Excessive focus on costs makes it difficult to make strategic investments in scale, flexibility or innovation.
Understanding of service failure impact is part of the mutual agreement between Business and IT.	

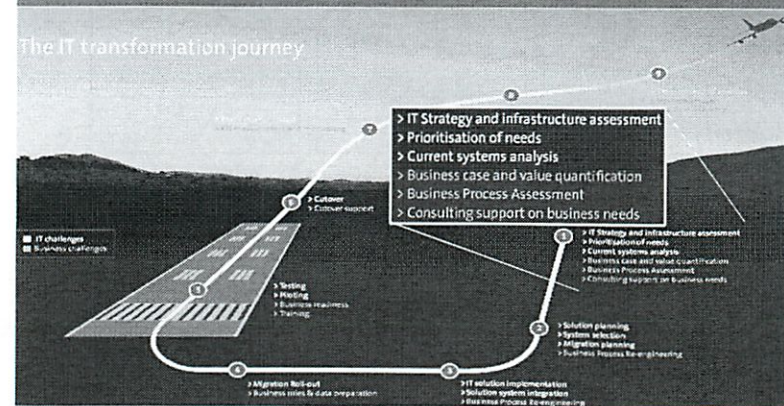
IT Services Management

- Processes and practices to implement IT Service Model
- Example Framework :
 Information Technology Infrastructure Library
 ITIL Service Strategy
 ITIL Service Design
 ITIL Service Transition
 ITIL Service Operation
 ITIL Continual Service Improvement

Benefits of a Well Managed IT Service Model

- IT Cost Efficiency**
 - Economies of scale, eliminating redundancies, delivering only required services
- Spend Control**
 - From cost center to business supplier/consumer relationship
 - Catalog of tiered services
 - Service level agreements, subscriptions, or usage-based fees
- Service Quality**
 - Customer-defined service level, performance measured and monitored
- IT Responsiveness**
 - Flexible and controllable services and components
 - IT aligned with processes, people, and technologies
- Business and IT Alignment**
 - Clear service definitions and governance model
- Risk Identification**
 - Risks actively managed within IT service portfolio

Transforming the IT Unit



IT Services Transformation Example: Objectives and Motivation US Department of the Interior

IT Services – A new model for managing and delivering IT

“The costs, benefits, and timelines of IT services must be clear to customers and clearly aligned with the bureau’s missions.”

“The first key change in the IT market is the evolution of IT from an asset to a service.”



http://www.doi.gov/ocio/strategic/IT_Transformation_Strategic_Plan_FINAL.pdf
Massachusetts Institute of Technology

US Department of the Interior IT Transformation Vision

- **Service-Focused**
 - Deliver uniform, modern, agile, and cost-effective services
- **Enterprise Solutions**
 - “Support the Department’s diverse missions”
- **Enabling Internal Performance**
 - “Empower our employees to conduct their businesses using IT as a mission enabler, rather than inhibitor”
- **Aligned with Mission**
 - “Help responsibly steward the natural, cultural, and historic resources with which we have been entrusted by delivering and managing IT services that positively affect how we serve the American people.”



http://www.doi.gov/ocio/strategic/IT_Transformation_Strategic_Plan_FINAL.pdf
Massachusetts Institute of Technology

US Department of the Interior IT Transformation Expected Outcomes

- **Change How IT Adds Value to the Mission:**
 - Customer Relationship Management
 - Service Delivery
 - Service Portfolio Management
- **Change How IT is Delivered:**
 - Formal Service-Level Agreements (SLA’s)
 - Modern Infrastructure
 - Governance and Accountability
- **Change How IT is Budgeted and Purchased:**
 - Service Catalog
 - Up-Front Pricing
 - Cost Transparency



Figure 1: IT Customer Service Lifecycle



http://www.doi.gov/ocio/strategic/IT_Transformation_Strategic_Plan_FINAL.pdf
Massachusetts Institute of Technology

Challenges in Transforming to IT Services Model

- **ITSM Process Requires Change Management**
 - key is adopting a process that fits the organization
- **Complexity of Process Model**
 - How mature is mature enough? Careful of “Excessive Technical Fastidiousness”.
- **Firm needs to build new competencies to make service model work**
 - Change Management (Culture)
 - Communication
 - Procurement: Contracts/Negotiations/Pricing



Massachusetts Institute of Technology

12

Critical Success Factors

- **Bilateral Communication**
 - Expose needs and challenges
 - Collaborate on strategy
- **Transparency**
 - Costs
 - Process
- **Service Definition Process**
 - Includes all critical components (cost, functionality, etc.)
 - Don't forget about risk (security, service failure)!
- **Accountability**
 - Roles and responsibilities are clear
- **Delivery Competence**
 - Commitments must be kept
- **Devotion to Business Value**
 - Periodic adjustment of the "Plan" is as important as execution

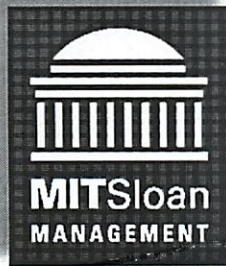


15.571 Generating Business Value from IT

Class 10 Assignment

For class on Monday, May 7, you will be reading the Grupo Plenia Locatel case study, which we have posted on Stellar. As you are reading, please prepare a high-level assessment of the decisions and execution of the GPL business strategy, business model, and IT strategy up to 2012. Our visitors are very interested in your assessments, so we ask that you jot down some notes to facilitate the group discussions that will take place in class. Each group will be expected to offer some advice to GPL and our guests will respond to that advice. In addition to your high-level assessment, they are also interested in your thoughts on four specific aspects of their strategy, as described in the appendix to the case on pages 18-20. Each group will address only one of these more specific questions, in addition to providing your overall assessment:

1. To maximize benefits and limit cost, what principles should guide GPL's CRM decisions?
2. GPL must make important decisions about which business processes should be locally unique and which should be globally standardized. What recommendations do you have as to how GPL should make and communicate those decisions?
3. What choices should GPL consider regarding how franchisees pay for IT operations and systems implementations? Please specify the implications of those choices.
4. What recommendation do you have for the design and roles of the IT unit at GPL? Where would you locate IT people?



**CENTER FOR
INFORMATION
SYSTEMS
RESEARCH**

**Sloan School
of Management**

Massachusetts
Institute of
Technology

Cambridge
Massachusetts

Plenia Locatel Group: Globalizing from Venezuela

Cyrus Gibson and Ari Levy

May 2009 (revised May 2012)

CISR WP No. 376

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- Research Article:** a completed research article drawing on one or more CISR research projects that presents management frameworks, findings and recommendations.
- Research Summary:** a summary of a research project with preliminary findings.
- Research Briefings:** a collection of short executive summaries of key findings from research projects.
- Case Study:** an in-depth description of a firm's approach to an IT management issue (intended for MBA and executive education).
- Technical Research Report:** a traditional academically rigorous research paper with detailed methodology, analysis, findings and references.

Title: Plenia Locatel Group: Globalizing from Venezuela

Author: Cyrus Gibson and Ari Levy

Date: May 2009 (revised May 2012)

Abstract: In 2009 the founders and top executives of Plenia Locatel Group, a retail business in Venezuela specializing in health care products and services, were planning a global expansion of the business. Founded by two close friends in 1994, the business grew through franchising and customer focus to 46 stores in Venezuela and 12 more in Colombia, Mexico, Miami, and Russia. As a basis for their globalization, the founders and executives sought to formalize and introduce structure in operations and management and had recently implemented an ERP for operational transactions. A basic issue was how to replicate business success and brand image, built over years of personal involvement and franchisee relationships, without losing the customer service focus in each store.

Keywords: globalizing from emerging economy, ERP implementation, retail franchising

20 Pages



Massachusetts Institute of Technology
Sloan School of Management

Center for Information Systems Research

Plenia Locatel Group: Globalizing from Venezuela



It was hard for anyone around the table of top executives of Plenia Locatel Group to get the attention of his colleagues. No sooner would one offer a point than another would change the subject, or a cell phone would be answered. Luis Ruah, one of the two founders, interrupted a chain of interruptions and brought the subject back to the reason for the meeting:

We must devote this time to the future of Plenia Locatel. We cannot continue to focus only on today's issues or today's problems all the time. I am more guilty of this than anyone. That's why John (John Levy, co-founder) and I are valuable to each other. I just want to get on with it. He reminds me of the big picture and risks of growing fast without good foundations. But now I am convinced we must pause and reflect.

Plenia Locatel Group, started in Venezuela as Locatel, a privately held company. Established by Luis Ruah and John Levy in 1994, it offers healthcare products and services to consumers through franchised stores. In 2009, in addition to 46 stores in Venezuela, there were 12 in Colombia, Mexico, the United States, and Russia under the two brands "Locatel" and

"Plenia". The team of Luis, John, and six key executive directors had decided to halt growth outside Venezuela to plan for globalization.

The team believed that Plenia Locatel success came from adhering to basic values and principles, of customer attention and customer service, plus commitment and long hours of hard work. Through a combination of the partners' personalities and skills, such as intuitive decision making and a passion for customer contact by Luis, and a thoughtful, analytic approach by John, the pair had built a hugely successful business. Franchising enabled leveraging of the partners' capital. Franchisees—most of whom had been personal friends of the founders—became trusted business associates and practitioners of the values in their own stores. The exemplary customer-oriented store behavior by employees, known as "Plenia Locatel Way," was seen as the key reason for the Plenia Locatel powerful brand recognition, industry admiration, customer loyalty, and financial success.

The eight executives were keenly aware of the need to continue the Plenia Locatel Way in stores while enabling growth with more formal strategy, structure, franchisee selection, and

This case study was prepared by Cyrus Gibson of the MIT Sloan Center for Information Systems Research and Ari Levy of the MBA Class of 2010 at the MIT Sloan School of Management as part of his class requirements. This case was written for the purposes of class discussion, rather than to illustrate either effective or ineffective handling of a managerial situation. The authors would like to thank the founders and executives of Plenia Locatel for their time and participation in this case study.

systems. Only a few of them had actually created or worked in such business conditions. For their part, both founders realized their operational involvement and expertise must give way to the next generation of leaders. The six other senior executives included three sons and a daughter of the founders.

Plenia Locatel Group had recently installed an information systems platform, consisting of SAP transactional systems and a point-of-sale system. Once fully stabilized, this platform was intended to enable the rapid expansion of stores, support proven business practices, and be a source of timely operational reports.

The questions facing the executives in 2009 were:

- Exactly what new forms of business, in terms of strategy, reporting structure, business and operational models (especially franchising), and systems, should be adopted to ensure continued success with globalization?
- How could formalization and systemization be introduced while extending customer-oriented, values-based practices, the Plenia Locatel Way, down to the store level in widely dispersed countries with different laws and cultures?
- What new roles, assignments, and skills would be needed for existing executives, and would any new outside talent be needed?
- How and when should further changes be introduced, and in what order?

History: Lessons and Legacies

A Partnership Is Formed

In 1971 Luis Ruah invited his childhood friend and brother-in-law, John Levy, to come to Venezuela and form a business partnership. Levy, with two advanced degrees, the latest an MBA from Columbia Business School in 1969, was working in the United States at Merck, Sharp, and Dohme. Luis and John had always wanted to be in business together. John remembers saying to his wife, “Why don’t we try it for two years? We can always go back to France or the US. Let’s see how it goes.”

The partners began by importing novelty clothing and accessories, selling door-to-door. Luis pored over catalogues, looking for the next item that would catch the fancy of hotel travelers or others. John kept the books (see Exhibit 1). In 1979 they formed Galaxia Medica to import a variety of products including medical equipment to sell to wholesalers and doctors. There was no working capital. They occupied a tiny office, sat on wooden boxes, and used a cotton bale for a table. But from the beginning they were committed to customer service. When necessary, they delivered items in a taxi to doctors’ offices, even if it meant losing money on the sale. As they both agreed in retrospect, “We knew we had to give impeccable service, to be better than the competition, and that’s what we did.”

A turning point in the business was “Viernes Negro” (Black Friday) in 1983, one of several events that made the partners keenly aware of the volatile political and economic environment of Venezuela. Facing runaway inflation and weakening currency, the government devaluated the Bolivar by 40% and imposed severe restrictions on imports. (For recent annual Venezuelan inflation rate and exchange rate for the Bolivar, see Exhibit 2.) The partners considered emigrating, but family advice changed their minds:

I told my Uncle Leo, “With the new regulations it is very difficult to import. We want to leave the country.” He said, “Everyone is thinking that way. Why don’t you forget your fear and take advantage of the situation? Do what no one else is doing.” So we took his advice and focused on importing only for the health market, which had been spared from the import restrictions. —Luis Ruah

Health Equipment and the Health Supermarket

In addition to health product importing, the partners began renting medical equipment. They reasoned that few wanted to buy wheelchairs, crutches, or walkers for a short recovery period, and there was no competition for this in Venezuela. They called the new business “Locatel,” French for *Location par Téléphone* (rent by telephone, also an innovation in the

country). The reputation of the partners among doctors helped. The business grew quickly.

In 1993 the partners bought a building for offices and inventory in an industrial area of Caracas. There was an empty floor which, as John remembered, "We didn't know what to do with." Mike Ruah, Luis's oldest son, had written his undergraduate thesis, at Universidad Metropolitana in 1992, on the family business, and included recommending the opening of a pharmacy. The pharmacy was intended to be a secondary business, to attract rental and equipment customers. Pharmaceuticals were priced at a 20% discount to customers who joined a membership program. In 1994 the one empty floor became the first "Locatel Automercado de Salud" (Health Supermarket).

The results astounded John and Luis. From the opening day there were lines into the streets waiting to get in. Contrary to expectations the store attracted customers from far outside the neighborhood, including many from upscale parts of Caracas.

After experimenting with the pharmacy, and seeing the crowds coming in, we understood that healthcare should be the core of the business. Then we said, "Why don't we add related services?" So we set up optometrist services and sold prescription glasses and then blood testing.
—John Levy

The new type of store was marketed aggressively and creatively. A particularly successful decision was to buy TV advertising in the middle of the night and early morning, when they were available cheaply and when a large percentage of viewers might be doctors, nurses, and sick patients; exactly the target market. Soon two more stores were opened, in different parts of Caracas, with rapid success.

Franchising and Growing

To grow and leverage their capital, John and Luis decided in 1999 to go to a franchise model. Until then the only franchises in Venezuela, such as McDonalds, were headquartered elsewhere. There were no local laws or regulations restricting what might be done. To convey their

personal values and principles, John and Luis were rigorous about the terms of the contracts and in selecting franchisees.

From 1999 to 2004 the number of stores grew from 6 to 37 (Exhibit 1). At one point, stores were being opened at the rate of one per month. Stores were almost universally successful. Most achieved breakeven in the first day of operation, compared to similar businesses in the United States which required over four years. Store sales grew from \$10 million to \$221 million. During this period, Locatel, through its stores and supply and wholesale business, became the number one player in the medical equipment market, and the number two player among the pharmacy retail chains, accounting for 5% of total sales of medicines in Venezuela. At the same time, Locatel was able to maintain a uniformly high quality of store appearance and service. Ratings by large suppliers and third-parties showed Locatel's brand image and consumer reputation were the best in its industry in the country.

The founders and executive directors maintained ownership and management of the first store, just below their corporate offices and were fully active in day-to-day operations and local expansion. Luis continued to look for new items and ideas, attending trade shows in the United States and Europe and regularly visiting the stores and talking with customers. In 2002 nutritional advisory services, vaccines, oxygen therapy, and oncology products were added to the Locatel store offering. Whenever a patient received a direct treatment in a store it was as a result of a physician's advice or from a consultation. Not all innovations were successful. Supplying dentists directly, for example, did not work out and was stopped after two years.

Luis, John, and Locatel executives were aware of the visibility of their brand and felt a responsibility to the larger community. In 1999 Venezuela suffered one of the worst natural disasters in its history. Torrential rains associated with a hurricane caused massive landslides on the coastline, killing an estimated 100,000 people and disrupting transportation and relief efforts. Locatel stores were one of the few

places where people could buy products, and facilities were provided for donations. In 2003 Locatel created “Fundailusion,” a foundation to provide terminally ill children the fulfillment of their dream travel experience. Locatel initiated the annual “Mes de la Salud” (Month of Health) in 2004, with in-store promotions and events in which the public engaged in sports activities. Participation reached 50,000 in the closure ceremony of the 2008 Mes de la Salud. In 2004 +*Salud* was introduced (39,000 copies), a high-quality magazine of over 100 pages, featuring custom-written articles on health for the consumer. Published every two months, +*Salud* was available in doctors’ office waiting rooms and for sale in Locatel stores. It was edited by Vanessa Levy, John’s only daughter. In 2005 the Company issued its own credit card, which the holder could use to pay for any health-related expense. Locatel executives were proud of these initiatives and felt that company visibility and public image were enhanced by them.

In 2004 the executive team felt confident about the continued growth in Venezuela, where the concept of Locatel had proven itself, but their ambitions and some pragmatism inclined them toward globalization. The first store outside Venezuela was opened in 2004 in Miami, Florida, United States by a consortium of investors and existing franchisees. The same year in Colombia, a store was opened by a franchisee whom the founders knew well and who had been COO of a major retailer in Colombia. By 2009 there were six stores in Colombia. Then in 2007, stores were opened in Mexico and in Russia, both by franchisees known personally by the executive team. In Mexico the name “Locatel” was replaced by “Plenia” to avoid conflict with a Mexican institution, and because “Locatel” was usually associated with a telecom business. The official corporate name became “Plenia Locatel Group”. In June of 2009, the brand image was renewed by changing the logo and store appearance, and consensus was reached that “Plenia” would be the brand used for future stores in new countries.

Approach to Management

The Plenia Locatel corporate organization in Venezuela, at the founder and executive team levels, was a mixture of individual responsibilities and informal teamwork. (See Exhibit 3 for the overall company organizational structure and Exhibit 4 for the country corporate level structure. These charts were adjusted in 2009 for the purpose of this case study.) Informality was enabled by the executive floor office layout. On one side was a long office in which John sat behind a desk at one end and Luis behind a desk at the other end, facing each other. Other offices were arranged around two other walls. It was unusual for a door to be closed. There was a consensus that more formality was needed, particularly as a basis for going global at scale and with rapid pace. In particular, Luis and John made efforts to delegate more of the day-to-day running of the business to the executive directors.

Franchising in Practice: Enabling Growth and Leverage

The Formal Side of Franchising

The idea of franchising originated with Luis and John. To instill values and principles into all stores, the formal rules and contracts were rigorous and explicit. Franchisees were carefully selected, with the intention of building trust.

Important features of the formal franchise arrangement were the following:

- Franchisees put up 100% of the capital for construction, stocking, and completion of the store. (An opening in Venezuela averaged \$4 million on top of construction cost.)
- Each store paid a royalty of 3% of revenue to Locatel Corporate, on a monthly basis.
- Each store was expected to contribute to marketing expenses of the corporate entity, amounting to 1% of sales.
- “Never stock out!” Stores were expected to carry inventory in excess of what might appear necessary, to sustain the reputation of Locatel for always having what a customer needed. This was particularly true for pharmaceuticals and prescription drugs. Inventory

represented about \$2 million for a new store. (The policy, in stark contrast to many competitive stores and other businesses in Venezuela, was believed by Plenía Locatel executives to be the key to the popular success of Locatel.)

- Each store ordered all but a few items through Locatel Corporate or Galaxia Medica, enabling bundling of orders and negotiation of better prices with suppliers (see Exhibit 5). Shipping and payment were generally between the suppliers and the stores, a feature Locatel Corporate felt insured transparency and trust on the part of the franchised businesses.
- Franchisees were required to be managers of their stores. While a single franchisee might own an interest in several stores, the manager in each store had to have an ownership interest in that store. Store owners were expected to be physically present during most store hours.
- In the Caracas area, each franchisee was assigned to a “zone,” and his/her business could open other stores within the zone. This mechanism was seen as a prototype of what might be done internationally in multi-country regions and within a country.

A franchise was typically a family business itself. It was expected that all franchisees would meet with the corporate executives regularly. Other rules and expectations, particularly reflecting the values of customer service, were set out in the “Ten Commandments” which franchisees agreed to (Exhibit 6).

Franchising: The Informal Aspects

The first franchisee was a long-time friend of the family. The number of individual investors in franchises grew to 471 by 2009, including 366 in Venezuela (203 in Caracas), and the rest in Colombia, Florida, Russia, and Mexico. There were more than 50 franchised companies. By 2009, the minimum investment for an individual was \$250,000, which went for real estate and construction, store setup and working capital, and other capital to carry the store to profitability. Only one franchise was terminated, for

reasons of poor store management and potential damage to the Locatel brand. The franchisee had not been a personal friend of the founders, and the experience was seen in retrospect by the executive team as an indication of the need for in-depth due diligence in franchisee selection.

Franchisee meetings, with the corporate executive team, were held at corporate headquarters in Caracas every three weeks, with members of the corporate board of directors and the executive team present. Attendance invariably included the most senior member of each franchise business, or his/her immediate second. The meetings were used to announce policies and report and exchange progress reports, but also to discuss planning and direction for marketing promotions and to share ideas on store management.

We consider this group of franchisees to be trusted business associates and in most cases personal friends. Their commitment to adhering to our values and policies, and hiring, training and motivating employees is of course the essential reason for our continued success while growing. As we look to future growth outside Venezuela, one of our major concerns is to find the right partners to fulfill our concept.

—John Levy and Luis Ruah

Using and Testing the Franchising Model

The business value of the franchise group and its trust and faith in the founders and executives of Locatel were illustrated by the decision to experiment with a store in the United States. Luis and John brought existing franchise owners and close friends together to present the business case and offer the opportunity to invest in the Florida venture. As Luis described it:

John, I, and others showed them the numbers for the Florida store, showed them the consultants' findings and recommendations, which Walter (Cohen) had obtained, and then I told them how important it was for the future of Locatel, if we were to achieve our dream of becoming a truly respected and valued world brand and business, to

learn how to compete and to be successful in the US. Then I said, "My friends, I cannot promise you this will succeed. I tell you in all honesty I think there is a 20% chance for full success, 50% chance of utter failure and withdrawal, and 30% we will have to do something radical to save the life of the patient, with no assurance of success at that point. Of course John and I are in." When it came to pledges, every one of them signed up. So we now have 25 individuals or businesses who invested in our US venture, a total of \$12 million.

—Luis Ruah

The store was opened in Hallandale, between Miami and Fort Lauderdale, under the leadership of the Locatel USA CEO, who had ample management consulting experience, and Walter Cohen representing the Plenia Locatel Group executive team. Walter had an MBA from the MIT Sloan School of Management and experience working at McKinsey. Shortly thereafter, two other stores were opened, also in the Miami area. One of these had to be closed, due to poor market conditions and the aftermath of hurricane Wilma. As of March 2009, the first store had not reached break even, but was on target compared to competitive stores and was expected to break even within a few months. Walter reflected on the learning:

We chose the first location aware that it was a very competitive setting. Nearby was a Walmart, CVS, Walgreens, Winn Dixie supermarket with a pharmacy, and two long standing independent pharmacies. We deliberately avoided the Latin American areas of South Florida. While this decision made sense for proving our concept in the US market, it also made business more difficult than it might have been. We also decided too quickly to open an additional store, which stretched us too thin, and the location was not the best. We learned enormously from the mistakes made...

—Walter Cohen

As they looked to a potential future of many new stores in new countries, there was consensus

among the executive team not to expand outside Venezuela during 2009. The approach and overview for planning were expressed by John Levy:

What we have done in each country so far is either know a franchisee and trust that he will do well, or conduct a conscious experiment, like Miami, to test the concept and learn how to globalize it. Once we consolidate in Venezuela we can expand here to the point of doubling the stores at a rapid rate, but we will do it carefully. We have proven the concept and should have the structure and systems to support the growth. We must be very, very careful not to expand as rapidly as we might be able to in all countries. When you grow, you have to build up behind it with structure to support the expansion. We regularly get inquiries for potential franchisees elsewhere. We are talking about Central America. Europe will be difficult due to national restrictions, although Spain may be opening up, and so on... So we have a dream. Financial growth is just one part of it. We want to build something unique, and we want to serve the communities.

Information Systems: Investing in a Platform for Growth

A Big Step Toward New Technology

In 2004 Plenia Locatel Group signed contracts with SAP for an Enterprise Resource Planning (ERP) system, with IBM Services for assistance in integration and implementation of the system, and with IBM Venezuela for the purchase of a new Point of Sale (POS) system. Stanley Ruah (Luis Ruah's youngest son), Walter Cohen, Ruben Bretto, and Ari Levy (John Levy's youngest son) had studied the problem and the options and made the recommendation to John, Luis, and the board of directors.

In their study, the team quickly confirmed the urgency for a new integrated administrative system which had to cover transactions in the Plenia Locatel product cycle from end-to-end.

They wanted a system that digitized and optimized purchasing, inventory management, financials, store and corporate reporting, and more. The existing system was home-grown, and its maintenance was dependent on its creator, who worked full-time for Locatel Venezuela. Luis recalled the founders' position at the time:

John and I don't understand computers. We wanted a fix to all the problems we were having just doing the business, to the complaints and annoyance of our store managers. I told the team, "Go find somebody like IBM or some big vendor that understands this stuff and that I can call to complain to and expect it to get fixed!"

The team knew by the end of 2004 that system replacement was an opportunity to introduce a technology platform that could enable and support scaling and operations on a global basis. In discussions with SAP and IBM, the team remembered the vendor representatives being surprised when they suggested they wanted a contract commitment for as long as ten years. A primary consideration, which turned into a significant problem for implementation, was that the system had to replicate and support specific and somewhat unique practices that had evolved in the business and in relationships between Corporate and the franchisees and stores. Both SAP and IBM assured the team that the system was adaptable and recommended that Locatel change certain business practices in the stores to minimize customization of the ERP package.

The total contractual commitment of \$12 million was the largest single capital commitment in Plenia Locatel Group history. Franchisees would be expected to contribute license and implementation costs and a monthly fee for hosting and license maintenance. When the proposal was presented to John and Luis, they were stunned. But the team answered all their questions and obtained their consent.

Once the contracts were signed, the study team went to work on implementation. Also, Alejandro Planas was hired to lead the POS project and

provide a focus on IT. He had been a franchisee/owner of the second franchise, in 1999. He described how he became committed to Locatel:

I was working as an engineer for a high tech company in San Diego, California and studying for my Masters. My mother was ill in Caracas, and on a visit home in 1999 I went across town at her request, not really knowing why she wanted me to go so far, just to buy her medicines. When I walked into this store, up a flight of stairs in a dingy neighborhood, I realized this was a different phenomenon. I went back a few times. I was intrigued. Then a friend of mine who knew the Ruahs and Levys contacted me in the US and asked if I would partner with him to buy a franchise. I dropped everything and changed my career and my life. I have never regretted a moment of it.

In 2004 I was offered the opportunity to join the corporate group, to become head of IT. They have a bunch of bright people at corporate, of course, and a lot of family members who are familiar with the style of the business, but I would be the only one with a specialty in IT and actual hands-on, day-to-day store management experience.

Implementation of the systems took two full years. Some discussions between the IBM consultants and process owners resulted in positive changes in the system while others took longer than expected and achieved no evident result. The system was cutover in phases, beginning in June 2006 with Galaxia Medica, the Locatel Venezuela corporate entity for purchasing and distribution and the most standard and controlled operation. This was followed by the first owned store in October and progressed until all Venezuela stores had a new POS hardware and system, and a new back-office system, in March 2007. The good news was that not a single day of store shut down was necessary during the implementation, despite the usual startup glitches, delays, and occasional need to run the stores with manual systems.

The Bad News: It Isn't Over

During the project, the cutover and installation required Ari Levy and a team to work around the clock. But it didn't stop there. After implementation Stanley, Alejandro, and Ari spent hours with IBM and SAP trying to get to the bottom of persistent stoppages, slow response time, and errors. They found that the operational servers had been undersized, and therefore had to be upgraded earlier than expected. This resulted in an unexpected increase in hosting fees. Implementation of the POS system was intended to be in parallel with the ERP transactions systems from SAP, but by 2007 it only supported the basic operations in SAP. Nevertheless, with the basic systems apparently stabilized, the team declared victory with a celebratory party in September, 2007. IBM produced a press release entitled, "Locatel builds global retail franchise with SAP and IBM," in which it quoted Ari and Stanley making positive comments about the project and stated:

With a complete suite of SAP applications in place, Locatel has been able to define and control its business processes. The fully integrated SAP applications allow managers to view the business from end to end—from sales order to goods delivery, with matching financial reporting.

But problems with the system, annoying but never fatal, persisted. Some processes seemed inflexible and less efficient than before. Response time was slow for key transactions like purchasing, apparently due to some system customizations. After several months, the Plenia Locatel team came to the conclusion that fundamental processing problems existed in the software. Regular complaints to IBM led to little progress. SAP was largely immune, as they had not been contracted to provide consulting assistance. There was a growing sense that the expertise available from the vendors was not up to the task. Stanley, Alejandro, Walter, and Ari paid a visit to the head of SAP for Latin America in his office in Miami and laid out the issues. These were:

- Are the current interfaces (mainly with POS) adequate?
- Why is Locatel Venezuela not using a standard purchasing process?
- Could the SAP replenishment process be used for in-store inventory?
- What kind of retail promotions could SAP address?
- (Most important) How could the time for creating a new store be reduced from the current four weeks? Could the store opening process be automated?

Within a month, one of SAP's world experts in retail implementations, with a team, visited Caracas and went to work with Alejandro and his IT people. After a week of meetings and discussions, potential solutions were presented by the SAP visitors. Most recommendations would require a project. In April 2009, in order to continue the transition to a fully integrated platform, Locatel Venezuela implemented cost accounting and fixed assets SAP modules. Nevertheless, most of the issues that had been presented to SAP were still unresolved.

Reflecting on the experience, Plenia Locatel executives did some rough calculations of IT capital investments to date and going forward. The \$12 million, ten-year program initiated in 2005 had been expected to represent all the capital investment necessary to achieve the new IT platform for ERP transactions and POS. The executives estimated that the actual investment to date was \$7.4 million, including an overrun of \$1.6 million compared to intended investments, or a 13% overrun. Looking forward, and including new functionality and investment as well as overrun, they estimated that total investment by 2015 would reach \$17.5 million, 46% over the originally planned \$12 million.

Despite these large numbers the Plenia Locatel Group executives had no regrets about the decision to adopt the SAP and POS systems. Luis and John were beginning to trust and rely on the daily reports of sales and other key information from the stores. There was general acknowledgement by the executives that the platform could serve to support stores and growth for

globalization. A list of specific opportunities for process changes possible with the platform is in Exhibit 7.

The Store Experience

Locatel Corporate had an active and involved strategy not only for instilling the Plenia Locatel Way, but also for assisting franchisees and their stores to achieve sustained profitability.

Assessing and Assisting Stores

From the early days, it was recognized that different neighborhoods had different capacities to drive sales in a Locatel Venezuela store. Recognizing this, and in order to make comparisons and identify problems with a store, the stores were categorized into one of three types based on sales percentile:

- A type I store was in the top 25th percentile of store sales.
- A type II store was in the range from the top 25th to bottom 25th percentile of store sales.
- A type III store was in the bottom 25th percentile of store sales.

Exhibits 8 and 9 show the income statement and balance sheet for an average store (type II) for 2007 and 2008. Other current (2008) indicators of store performance are shown in Exhibit 10.

Based on comparisons with peer stores, managers and Locatel Venezuela corporate executives would meet on an *ad hoc* basis to determine reasons for weak and strong performance of a store and set a plan for remedial actions. (See the organization chart for a typical store, Exhibit 11.) Involved in these reviews were typically Stanley Ruah for operational matters, Eurice Troya for financial matters, and Alejandro Planas for IT matters. Depending on particular problems, middle managers from Corporate in such areas as training, store layout, or scheduling of employee shifts would visit the store and make recommendations to the store owner/manager.

Business process standards and practices were continually updated in the Franchise Manuals. At the time of the SAP implementation, the manuals were completely rewritten. Plenia Locatel

Group executives and consultants had analyzed every single Locatel Venezuela business process, compared it to the SAP “best practices” and created the final optimized processes. This effort required many iterations and resulted, at the end of 2008, in a set of Franchise Manuals totally consistent with Plenia Locatel’s adaptation of the SAP transactional systems.

Corporate executives were generally pleased with the process for remedial action and achieving adherence to the best practices. At the same time, they knew the informal and face-to-face fixes and the busy IT help desk would be impossible to sustain as stores opened farther away and as the SAP platform was extended to regions beyond Venezuela and Mexico. Illustrative of potential problems was an exchange that took place in one of the stores in January 2009. In the meeting room in back of the store, Walter, Stanley, Alejandro, and Ari mentioned that the new manual for store operations was nearly final and would be out to the stores soon. One of the store owners responded with some passion:

Store Manager: We don’t need a manual from headquarters to tell us how to run our store. What you should do is come and ask our employees what they do and how they do it. If you get that from all the stores, you will put together best practices of what is actually working...

Corp. Executive: That’s exactly what we did do! We sent the consultant around to the stores to talk to employees. Then, of course, we had to marry the best practice with what the new SAP system could support...

Store Manager: Well, it hasn’t been communicated to us in that way...

Corp. Executive: We will get back to you and make sure there is no misunderstanding and work with you and provide the training so good employees can use the system and still be innovative.

In discussions the next day, the corporate executives speculated that if it was difficult to introduce the system and new processes in Caracas, with store managers and employees they knew

personally and could visit in a matter of minutes, how hard was it going to be between Caracas and Moscow or Madrid or Singapore, eventually?

Have we created a monster? Can an "empowered," trained, motivated workforce, thoroughly able to please the customer and sell, be created by more formalization and SAP systems? How much formalization do we need to open 20 stores a day around the world? How much trust with franchisees and how much "high touch" training for employees do we need to go with that formalization? (Consensus questions by corporate executives)

On a related matter, as they looked to grow outside Venezuela, the executives wondered what differences they could expect in the nature of markets, customer socio-economic levels, and national cultural traits and practices. How might these differences alter the successful models of store types, employee behavior, management of employees, supply chain, and comparisons among stores for corrective consultative action? The executives were beginning to absorb some lessons from the experience of new stores in Miami, but that experiment was still new and incomplete.

Visiting the Stores

In January 2009, visits to four Venezuelan stores, representing all three types, over a span of three days, led to conversations with store owners/managers, other employees, and several customers, and allowed for the observation of business interactions on current topics of concern between corporate executives and the store managers. Invariably, the stores were brightly lit, clean, and orderly, and there was an employee at the door, greeting every customer, offering to help, and answering questions. The prescription counters consistently had customers standing in line but always has as many cashiers as necessary to keep them served. A visitor's random conversations with customers and employees were always met with smiles and effusive, positive comments.

A Venezuelan woman on her way from Caracas to Miami was asked if she had heard of Locatel. She responded as follows:

Yes. I have two houses in Caracas and a condominium in Miami, and I wait to do all my prescription and health purchases until I return to Caracas, just to do it at Locatel. Prices are comparable to the US.

Locatel does a wonderful job of training. You can get help with something which you used to need a doctor for, like advice on different non-prescription drugs for something simple like a cold. Locatel in Venezuela is better than most stores in the US. Many of their employees themselves are from lower classes. Locatel has brought them up and made them proud and well equipped in their lives.

They are doing good for the country. I wish the country was doing as good for the country as Locatel is doing for the country.

Looking Ahead

As they reflected on the business and its success, the executives of Plenia Locatel Group could point to current performance indicators and financial results as indications of the health of the business. (See Exhibit 10 for 2008 performance indicators and Exhibits 12 and 13 for Locatel Venezuela's corporate income statement and balance sheet for 2007 and 2008.)

It was a sunny Friday afternoon in early 2009. Plenia Locatel executives, their spouses, and a few guests had driven 1,000 meters up through the "El Avila" National Park. The view was Caracas far below to the south and the Caribbean Sea to the north. Luis Ruah, with John Levy at his side, stood and offered a toast:

My dear friends and beloved family, John and I wanted you all here to join us in celebrating part of our 38th year of partnership and of course the many more years of our relationship.

As you know, we are discussing where to go from here with Plenia Locatel. We

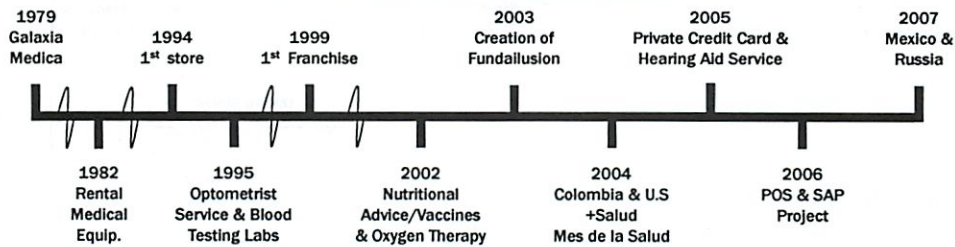
agree we want the business to grow and prosper. The financial rewards are important, but there is much more. We have the potential for Locatel to be known beyond Venezuela, and for it to do good for people as well as good for us. You have heard me say I had an ambition for creating a business that would become a Procter & Gamble. I may not see it in my lifetime, but I

believe it can be done with what we have started.

Now, before we open another bottle of wine, I want to go around the circle and ask each of you to say what you think is our biggest challenge from here forward, to go global, and what you think should be done to address that challenge.

Salud!

Exhibit 1 Events and Decisions Timeline



	1994	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
# Stores	1	6	14	17	21	27	37	43	44	44	46
Sales Growth(%) - All Stores	100%	643%	165%	257%	3%	98%	10%	23%	32%	31%	47%
# Employees - Locatel *	80	480	1120	1360	1680	2160	2960	3440	3520	3520	3680
Sales Growth (%) - Galaxia **	100%	431%	9%	22%	9%	88%	70%	49%	48%	38%	25%

* Corporate Employees represent from 3-5%
** Sales to Locatel account for 75-80%

Exhibit 2 Inflation Rate and Bolivar Exchange Rate

Year	Exchange Rate (Bs. per \$)	Inflation
2000	685.5	13.40%
2001	731.5	12.30%
2002	1280.75	31.20%
2003 *	1600	27.08%
2004	1920	19.19%
2005	2150	14.36%
2006	2150	16.98%
2007	2150	22.46%
2008 **	2.15	31.90%

* In 2003 Currency Control Exchange was established
** Currency Conversion (Bs./1000)

Exhibit 3 Overall Organizational Structure

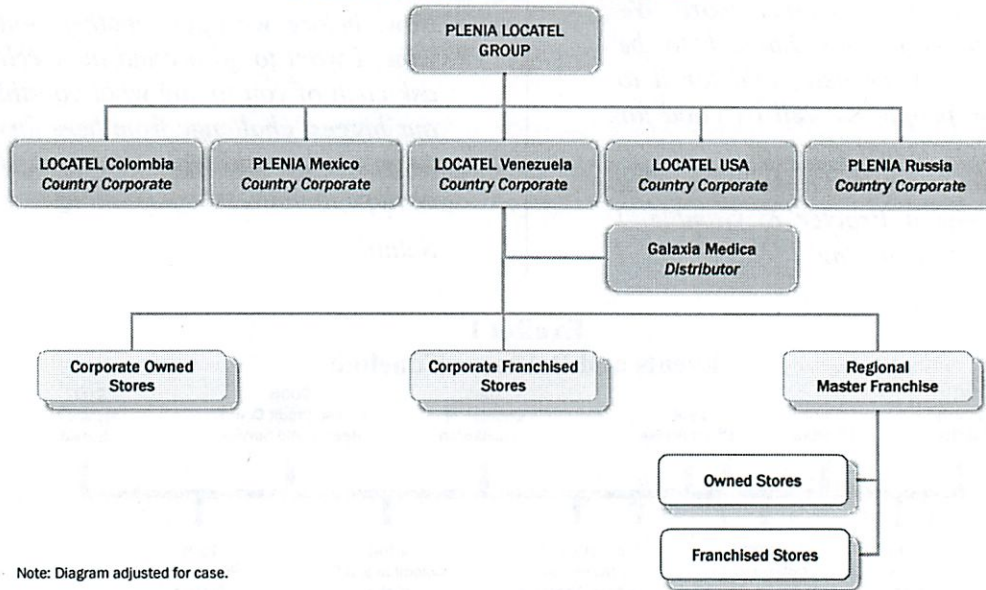
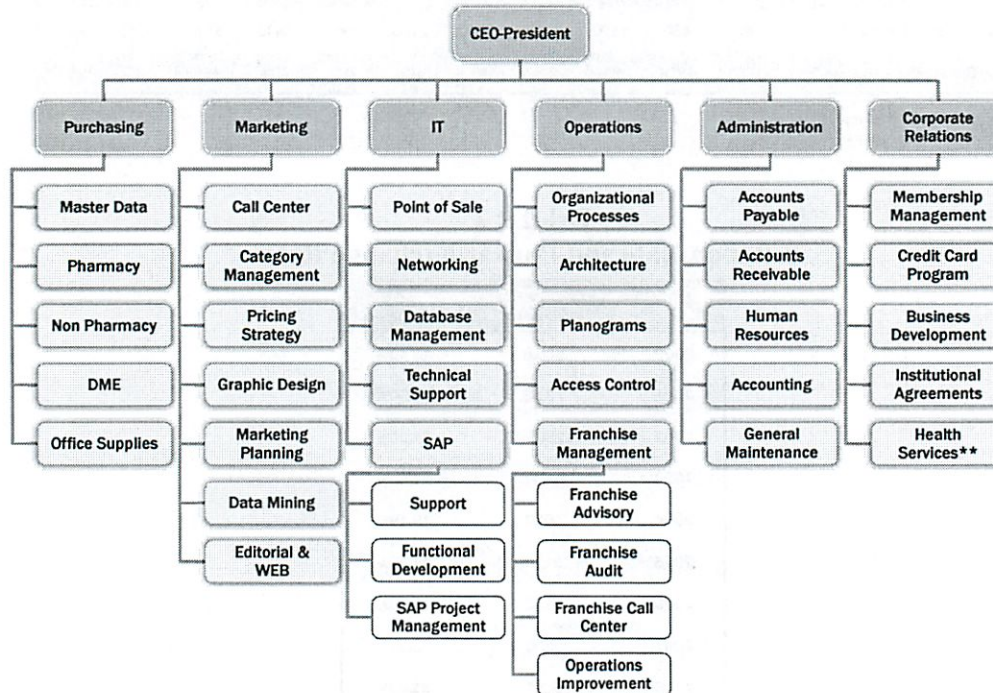


Exhibit 4 Country Corporate Organizational Structure*



* Chart for Venezuela Corporate, intended as a pattern for other countries as they grew.
 **Include: Hearing, Optic, Blood Testing, Nutritional Advice, and Respiratory Therapy - Services.

Exhibit 5 Locatel Venezuela Supply Chain

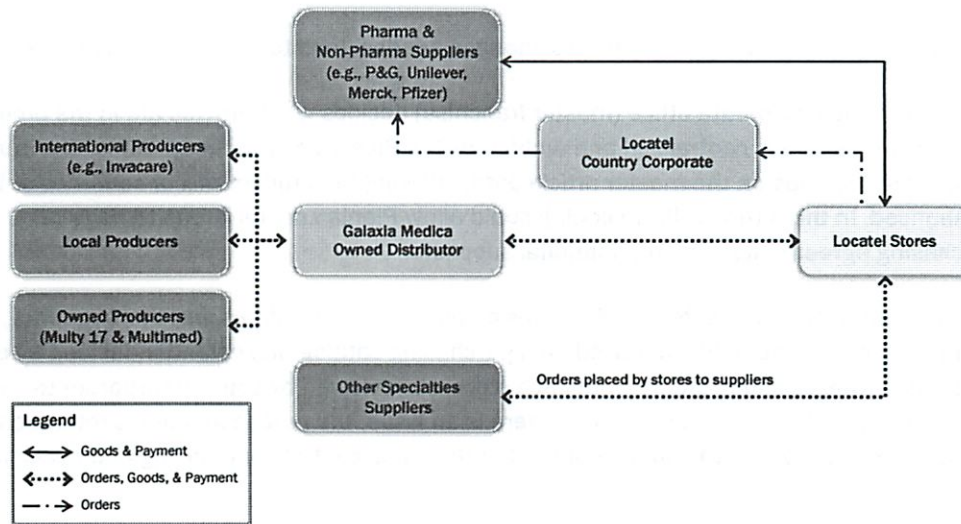


Exhibit 6 Plenia Locatel “10 Commandments”

We are committed to the Health and Wellness of our customers

- **Customer First:** We'll always receive, greet and service ALL customers.
- **Never Say No:** We'll always answer in a positive way and find a solution.
- **Suppliers Are Our Customers Too:** We will promptly receive and treat our suppliers as if they were our customers, striving to satisfy them.
- **Our Employees Share Our Values:** We create a family with our employees and achieve their satisfaction. We all share the health and wellness philosophy and service excellence.
- **No Inventory Stockouts:** Follow processes of inventory management, ABSOLUTELY avoid 'stockouts' and keep FIFO to manage expirations.
- **Store Organized:** We'll always have our shelves fully stocked, clean, organized, full of light and attractive to our customers, at all times.
- **Cross Selling of Products and Services:** We'll always promote the Pharmacy and cross promote ALL other sections' products, like durable medical equipment, vitamins & supplements, health & beauty, and services like Optic, Hearing Aids, Nutrition, blood pressure and glucose monitoring, among others.
- **Exclusive Line Products:** We'll always promote our exclusive line's products before anything else (Corpore Sano, Natural Vital, and others).
- **Follow Up Special Orders:** We'll document and follow up on our customer's special orders until completed and the customer is satisfied.
- **Best Service in Every Area:** We will provide the best possible service and knowledge in every sector of our stores. Learn continuously and never leave any area unattended or a customer until her/his request has been solved.

Exhibit 7 Process Changes Possible with the SAP Platform

The SAP system technology and process changes are designed to enable the following:

Product Coding: Each country corporate office (master franchise) decides what articles are in the product mix. However, the master data record is centralized and audited by the Plenia Locatel Group office. The purpose of this is to avoid duplicated records on the master article data, allowing the product mix of countries to be compared and enhanced. In the future uniform coding could allow Plenia Locatel Group to negotiate international purchasing agreements with multinational suppliers.

Purchasing Process: Each store makes its own decisions on purchasing quantities, but the frequency, price, product options and payment conditions are based on a purchasing catalog and calendar decided by each country corporate office. The purchase orders from each store are reviewed by country corporate to guarantee minimum quantities and appropriate product mix. If there is an issue, the purchase order is returned to the store for explanation or correction. Each country corporate office thus controls purchasing and deals directly with suppliers.

Inventory Visibility: Each store can view, modify and manage its own inventory. However, all the stores and country corporate offices can view the inventory of all stores, enabling a store out of stock on an item to refer customers to another store.

Business Intelligence Reports: Each store can only view their own performance indicator reports. Country corporate can view and compare reports of all their stores. Based on these comparisons country corporate can identify under-performing and over-performing stores.

Aggregate Sales Information: All sales are recorded on the IBM point of sale (POS) system at the store level, with detailed information. Every night the information is aggregated (products, quantities and type of payment) and sent to the group centralized SAP system in a batch transfer. Thus the aggregated information from every store is available to country corporate. Each store can see its numerical order ranking among all the country stores, but it cannot see the identification of other stores in the rankings. In future, once SAP CRM is implemented, detailed information on sales will be available on each store at the centralized system.

Durable Medical Equipment Rental: The provider of this service at every store is the Distributor organization in each country, (e.g., Galaxia Medica in Venezuela). The country central office of the Distributor can have real-time control of these equipment inventories to allocate items across stores, plan for replenishment, and manage the rental contracts created in each store with customers.

Price Optimization: The country corporate office sets the price of every product sold at a Plenia Locatel store. To achieve this, the system enables a view of products by category, such as prescription pharmaceuticals, and presents information on inventory turnover and price comparisons with competition. In the future additional SAP functionality will allow making more sophisticated analysis, based on demand curves, for pricing decisions.

Exhibit 8
2007–2008 Income Statement—Average Store
(Indexed as Percentage of 2007 Sales)

	2007	2008
Sales	100.00%	145.93%
Cost of Goods Sold	76.84%	108.79%
Gross Profit	23.16%	37.14%
Selling, general and administrative	7.11%	8.92%
Royalties	3.00%	4.38%
Marketing Fund	1.00%	1.46%
Consulting Services	0.77%	1.31%
Depreciation and Amortization	1.78%	1.90%
IT Expense	0.32%	0.36%
Building Maintenance	0.54%	1.16%
Insurance	0.19%	0.35%
Rent and Utilities	1.80%	3.44%
Other Operating Expense	0.42%	0.96%
Total Operating Expense	16.95%	24.22%
Operating Income	6.21%	12.92%
Events and Promotion Income	0.68%	0.15%
Discount on Accounts Payable	2.29%	3.20%
Total Other Income	2.97%	3.34%
Income Before Tax	9.18%	16.26%
Taxes	3.12%	5.53%
Net Income	6.06%	10.73%

Exhibit 9
2007–2008 Balance Sheet—Average Store
(Indexed as Percentage of 2007 Sales)

	2007	2008
Cash	4.67%	11.12%
Accounts Receivable	6.46%	9.08%
Inventories	18.44%	25.61%
Total Current Assets	29.57%	45.80%
Property, plant and equipment	13.49%	15.75%
Depreciation	-13.49%	-15.03%
Licences	1.48%	1.91%
Amortization	-1.07%	-1.25%
Total Long-Term Assets	0.41%	1.39%
Total Assets	29.98%	47.18%
Accounts Payable	13.82%	10.93%
Total Current Liabilities	13.82%	10.93%
Other LT Liabilities	2.33%	3.91%
Total Long-Term Liabilities	2.33%	3.91%
Total Liabilities	16.15%	14.84%
Common Stock	4.61%	6.70%
Acumulated Unpaid Dividends	0.00%	9.18%
Current Unpaid Dividends	9.18%	16.26%
Reserves	0.04%	0.20%
Total Equity	13.83%	32.34%
Total Liabilities and equity	29.98%	47.18%

Exhibit 10
Current Performance Indicators

Current Indicators	
Average Ticket Price - Store Type I	\$42.61
Average Ticket Price - Store Type II	\$30.45
Average Ticket Price - Store Type III	\$42.35
Average SKU's per Ticket - Store Type I	4.83
Average SKU's per Ticket - Store Type II	4.40
Average SKU's per Ticket - Store Type III	4.84

Exhibit 11
Franchised Store Organizational Structure

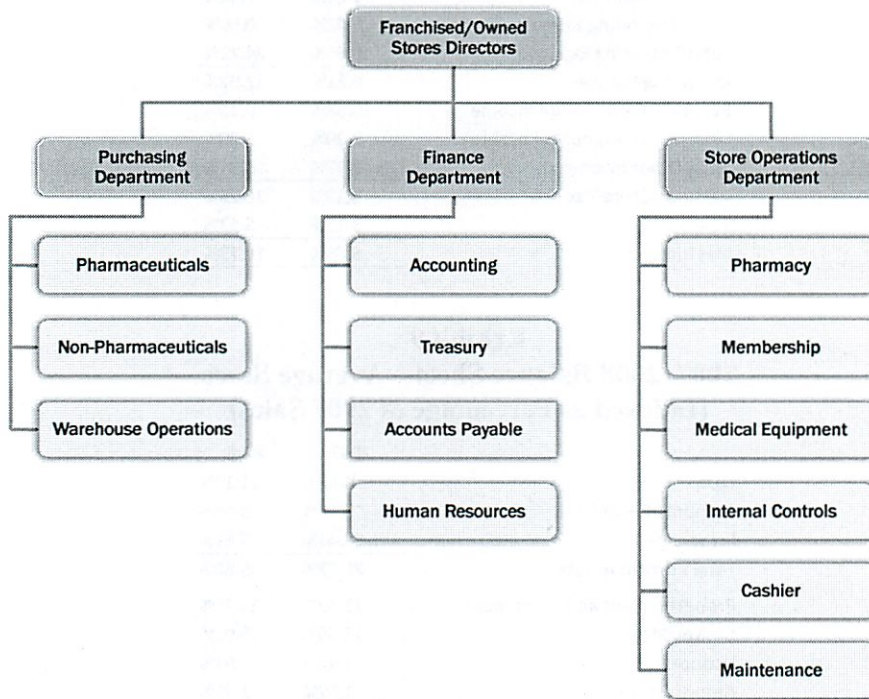


Exhibit 12
2007–2008 Income Statement—Locatel Venezuela Country Corporate
(Indexed as Percentage of 2007 Total Income)

	2007	2008
Royalties from Franchisees	98.25%	144.77%
Entrance Fee from Franchisees	1.75%	1.75%
Total Income	100.00%	146.52%
Selling, general and administrative	22.68%	30.50%
Royalties to Locatel Plenia Int'l	32.75%	48.26%
Entrance Fee to Locatel Plenia Int'l	0.35%	0.35%
Consulting Services	10.07%	13.90%
Marketing and Branding	1.75%	4.63%
IT Expense	7.11%	9.52%
Rent and Utilities	7.02%	8.63%
Total Operating Expense	74.72%	107.16%
Operating Income	25.28%	39.36%
Marketing Fund	32.75%	48.26%
Total Other Income	32.75%	48.26%
Use of Marketing Fund	32.75%	48.26%
Total Other Expense	32.75%	48.26%
Income Before Tax	25.28%	39.36%
Tax	8.60%	13.38%
Net Income	16.69%	25.98%

Exhibit 13
2007–2008 Balance Sheet—Locatel Venezuela Country Corporate
(Indexed as Percentage of 2007 Total Income)

	2007	2008
Cash	14.26%	27.43%
Accounts Receivable	7.78%	13.69%
Prepaid Assets	2.01%	11.64%
Total Current Assets	24.05%	52.75%
Hardware	0.71%	1.75%
Depreciation	-0.71%	-1.23%
Licenses	2.10%	2.10%
Licence Amortization	-0.42%	-0.84%
Total Long-Term Assets	1.68%	1.78%
Prepaid SAP ERP Instal	11.76%	11.76%
SAP ERP Amortization	-3.92%	-7.84%
Total Other Assets	7.84%	3.92%
Total Assets	33.57%	58.45%
Accounts Payable	6.86%	8.34%
Total Current Liabilities	6.86%	8.34%
Other Liabilities	5.20%	6.96%
Total Liabilities	12.06%	15.30%
Common Stock	3.25%	3.25%
Acumulated Unpaid Dividends	0.00%	9.17%
Current Unpaid Dividends	18.26%	30.73%
Total Equity	21.51%	43.15%
Total Liabilities and Equity	33.57%	58.45%

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Addendum

In November 2011, the executives of Grupo Plenia Locatel (GPL) reviewed the status of globalization since 2009. The agenda included a review of progress in using IT systems to support and enable globalization, and the current challenges to that use.

In the two-year period preceding November 2011, the company had grown the number of stores from 64 to 80, with most of the growth being within Venezuela and Colombia. That November, a new store had been opened in the U.S.—in Miami—and two new franchises, one in Costa Rica and the other in Peru, were set to open their first stores.

Several important business decisions had been made since 2009. The headquarters for GPL was expanded in Miami. Executives formerly operating out of Venezuela were more often working from Miami and traveling to countries in Latin America to conduct training, to support ongoing operations, and to negotiate new franchises in new countries. It was found that identifying and vetting a new master franchisee was much more time-consuming and difficult than it had been within Venezuela. The time and expense for opening new stores in new countries was significantly greater than anticipated. This limited the availability of expertise and financial resources for more rapid growth.

A recurrent issue, with new stores in new locations and also with existing locations, was the need to adjust and adapt the principles and concept behind GPL, not only in the fiscal and legal dimensions—as defined in agreements—but also in operational dimensions such as marketing, logistics, and reporting. For example, the value of promotions offered to customers at the point of sale varied from one country to another, so the type of promotion needed could be significantly different in different countries. Making suppliers deliver directly to stores without using a wholesaler as an intermediary had proven to be a hard sell in some countries. The amount and type of information intended to be shared among franchisees varied depending on the country.

In the ambitious approach to growth anticipated in 2009, executives of GPL had set an explicit strategy for IT. In particular, the single-client SAP instance with centrally based transaction processing systems was to be rolled out with minimal adaptations and substitutions. This would be the critical systems part to enable GPL to employ a “Replication” model for operations.¹ By March 2011, all stores in Venezuela, Mexico, and the U.S. were running on SAP.

However, in the case of the U.S., there had been an important change: It was decided that a separate client on the SAP instance would be created for the U.S. stores. This was done to allow more local independence in customizing the applications, and also to create an architecture that would minimize overall IT risk and cost. The decision was made based on a growing recognition, as implementation of the SAP systems in different countries evolved, that local differences required local systems adaptations, and that those adaptations had to be insulated from, yet connected to, the core central system. Local adaptations had been requested and argued over by franchisees for a long time. A unified centralized system would raise too many problems of interference and disruption given the need for local changes.

The Colombia rollout was still pending. More work needed to be done on the current global systems in order to accommodate the already existing capabilities in Locatel Colombia’s own systems.

Other significant actions taken in the two years before November 2011 were:

- The vendor contract for hosting central back office IT operations was changed from IBM in Venezuela to Terremark in Miami in an outsourced consulting services contract with the firm Protera. This was seen as offering the advantages of Linux servers, making the infrastructure more flexible, scalable, and cost-efficient. The move saved some 39% in

¹ J. Ross, P. Weill, and D. Robertson, *Enterprise Architecture as Strategy: Creating a Foundation for Business Execution*, Harvard Business School Press, 2006.

hosting costs. Additionally, the new relationship with Protera provided disaster recovery, previously unavailable. Moreover, it allowed GPL managers and resources to focus on business aspects and not on the technical aspects of the SAP systems. The new partner relationship was seen as clearly providing beneficial results to date.

- A new integrated Point of Sale/Data Management (POS/DM) module was completed and piloted in Venezuela. This project was done directly with SAP, and resulted in a new application on the central system. The completion was seen as an important step toward Customer Relationship Management (CRM), a strategic business goal, because it generated a database with all the specifics of a sale (i.e., products, quantities, and time) and about the customer's demographics. Achieving a CRM had long been a high priority for top management of Plenia Locatel, but its realization had to wait for the completion and stabilization of the infrastructure and core transaction processing systems. SAP was heavily involved in the POS/DM project, and did a case study for their purposes on the effort. SAP believed it was the first of its kind in all of Latin America to be executed under what they called the "SAP Global Delivery Team and its pre-packetized solution." GPL executives knew it remained to be seen if it would prove to be cost effective. The implementation of the POS/DM module involved changes in the POS, particularly so that it could send detailed sales information to SAP every fifteen minutes. This allowed stores to see "live" inventories, thereby having better information about availability of products, minimizing stockouts, and reducing the costs of purchases.

A Promotions module was developed by the POS supplier, Linea Data Scan, in combination with GPL's IT department, essentially an in-house development project. Promotions applications were in demand by franchisees. This module allowed existing promotions offers available within SAP to be interpreted and used by the POS. The development effort proved to be very

difficult. The joint team did not have sufficient in-house knowledge of the SAP systems. Nevertheless, the decision had been made considering that an "off-the-shelf" package, necessarily from a third-party software vendor, would have required an additional server and changes to the infrastructure in order to be integrated. Moreover, in-house development meant that implementation costs were less, in that the developers knew the functionality and were available to train users and make it work in the stores.

Looking ahead from November 2011, there were several existing efforts plus issues to be addressed for Grupo Plenia Locatel's top management to proceed successfully with the IT strategy. These included:

- How to build and implement CRM and, most importantly, how to make it a part of achieving a huge enhancement in GPL's customer membership card and loyalty system. With the central POS/DM system complete, a range of options existed for successful achievement of this goal:
 - Should the entire CRM technical system, including integration with the loyalty system, be integral with SAP, essentially becoming part of the core centralized SAP systems?
 - Should the CRM be an off-the-shelf "CRM and loyalty" software system, quite possibly running on its own server, which would then connect to SAP?
 - Should the CRM be built internally, at least for its basic elements, then tested to see how business operations were affected (the "walk first" option)?
- What would be the best approach for implementing the IT infrastructure (SAP and POS) systems in countries and stores, in terms of who should do what? Implementation in the Miami store had included a POS software developer, a Locatel "country" team, and a GPL team. In Costa Rica, by contrast, the teams involved included a SAP consultant group. It was felt that, going forward, it was important not only to ensure the most efficient implementation—which

would argue for a stronger central GPL role—but also to recognize the legitimate needs of local franchisees for adaptation of the systems and associated business processes in stores. Such recognition was key to achieving the necessary level of support required in each country.

- A related issue was the question of how many “SAP clients” were necessary. Instead of a single-client instance, as had been considered at the outset of the SAP project some years before, it was now a fact that there would be separate clients in each country, at the master franchise location. GPL executives had come to recognize that a “pure replication” of the business globally was neither realistic nor advisable. Thus, a strategic question going forward was just what systems and processes to make local, and, in general, how to build and implement them with the associated adapted processes.
- In new country franchises, and in ongoing operations, who should pay for the systems adaptations and implementations? What should the policies be? It was felt necessary

to have clear policies up front in new franchisee negotiations.

As they reflected on the experience of implementing the IT strategy, GPL executives felt they had learned a lot about implementing a pure Replication model. There were tensions between wanting more “unification” of systems to support uniform processes in stores and countries, versus wanting more “diversification” to reflect differences not only in geography and culture, but also in the quality and nature of the contract and relationship with franchisees. Balancing these tensions was an ongoing business problem. For IT at GPL, the need for some clarity of where on the spectrum of balance the company should be was strong and important for purposes of building the infrastructure and implementing the applications. GPL executives recognized there had to be a continuing effort to set standards and approaches while still building flexibility into IT—albeit at additional cost—to support changes in strategy and policy.

15.571

5/7

(can only do 1st half of class)

Presentations due Mon

Ari - 15.571 student 4 years ago

Ran SAMP at GPO and wrote this

Now SVP - one of 2 people running

Chuck Gibson - worked at CISR before

Ari brought his family

Picking a good location w/ enough space

Medical equipment

Services

Line at end of store

Lots of stock

Similar to CVS - but just medical eq

Standard layout

Run marathon w/ supplies for their charity

(2)

Like Make-a wish

5000 people marathon

(Why did he show the video? - tangentially related)

- Q Gov in Venezuela now setting prices
- from 3 weeks ago
 - problem for production cos / wholesalers
 - big shortage of main brands
 - Co trying to switch mix
 - lower tier brands

"from every crisis -> an opportunity"

More foreign brands

Now very US brands

Q Picking right vendor

2 phases

1. Stop consulting - ~~did not~~ substituted inside co

3

And more boutique consultants

They saw lack of knowledge 'on SAP Retail

2. Hoisting

Shopped around > 1 year

Went to all the fairs

Wanted partner w/ flexibility

IBM acted too slow

More proactive

Q: How handle foreign teams

↳ more sophisticated, but harder to correct

SAP expensive + rigid

but assurance things were done the right way

helped them more formal

better framework to present co

↳ describe who they are

Q: Small

Venisek - 2nd biggest chain of pharmacy

500 licenses of SAP

Not as big as other cos

each store franchised

Only a few modules implemented

Open store every 2 months

They didn't know anything about SAP

Just took brand name of co

Eaiser to sell to franchisee

Q Internal team

50 people corp

1-2 in a store

- technician

- super users

120 people total

5

Q Centralization or Decentralize
Not easy to centralize w/ diff owners
But can put in contract
They in IT

~~Hard~~ Hard to sell the new system to franchisee
Sell CRM to those

Comes back to trust
Consistent to what you do

1/month franchisee meetings
Let them know interests aligned

Q What central/decent
Same backoffice
each store buys same POS
But ya can buy Lenovo or Dell

(6)

Group work

- have standalone CRM - but 'integrate w/ SAP
- virtualization / Cloud ?
- is no SAP CRM / loyalty
 - L says Mohobi

Principals

Customize to region

freedom to experiment / flexibility

have a vision beforehand

- no surprise costs

~~analyze short term + long term costs~~

have a biz plan

all Line risk analysis

Universal cost expi

L same loyalty card

⑦ Debrief

There was other group I thought CAM
meant franchisee customers

counterpart partner loyalty

get established vendor

maintainability / prod roadmap

portability

Other cases we saw - had data

well integrated

but how do you trade off integration
w/ vendors that specialize

\$A\$: SAP expensive
stand alone cheaper

Not as easy to make that decision

Balancing act

⑦

2. How make decision + how communicate

Ari: Local IT communicates their immediate need
But avoids global vision
No formal talk b/w IT teams

~~Does incremental~~

Top-down but then negotiate local autonomy

Transparency

Customize only when benefits outweigh the cost
Use regular meetings to share best practices
And argue for standardization

Prof: They openly debate

family/friends

Goal to build trust

but not scalable to negotiate individually

9

Note local - in-country 1 x month

int - 3/yr

(could go to lower level - IT, CS)

Middle ground: offer processes as services

esp less - core ~~pro~~ values

Final

Class Presentation

15.571 – Establish an Innovation Program for IT at IFC

May 14th, 2012
Bjorn Ole Grodas, Mohibi Hussain, Michael E Plasmeier, Cara Presseau, Hallgeir Stuenes



Template by Sascha Boehme

Bjorn – 1 minute

IFC Project Objective – Company Overview

International Finance Corporation (IFC) is a part of the World Bank Group

- 183 member countries
- 3400 staff, 51% in field offices, 49% in HQ Washington DC
- Private sector cooperation
- Infrastructure Development Programs
- Invested 12,2 billion \$ in 518 projects FY 2011
- Agriculture, Finance and Financial Services, Energy, Telecom, Health, Education, Investment Funds
- Regional Offices in:
 - East Asia & Pacific
 - Europe, Middle East & North Africa
 - Latin America & Caribbean
 - South Asia
 - Sub Saharan Africa
 - Western Europe



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2

Bjorn – 2 minutes (3 minutes)

IFC Project Objective

MBA Sloan Class Project Objectives:

The International Finance Corporation CIO plans to establish a Research and Development (R&D) function within Corporate Business Technologies (CBT) at IFC. The objective of the Sloan Class project is to establish the structure for the R&D function, to identify the critical success factors and measurement framework to operate and monitor the R&D program, and to define the terms of reference for the board that will provide oversight.

2009 *Wenchuan Earthquake Recovery*

After the devastating earthquake that hit Sichuan Province in 2008, killing more than 70,000 people, this project assisted with the reconstruction of infrastructure such as roads, bridges, water supply, wastewater and solid waste, and health facilities in some of the affected areas. China and the World Bank have collaborated effectively in disaster and risk management over the years.



Massachusetts Institute of Technology

3

Bjorn - 1 minutes (4 minutes)

Corporate Business Technologies within IT at IFC

- 110 employees
- 700 contractors and vendor resources

Opportunity at IFC

“A key job of IT is to bring about ideas that move IFC forward.”

- Clare Evans, Manager, Finance, Planning & Strategy - Corporate Business Technologies

- Manage a large portfolio of complex projects, would like to seize “unplanned” opportunities as well
- Change the culture - raise their tolerance for risk
- Decrease the bottlenecks of certain processes that currently flow through Washington, DC (HQ bottleneck)
- Support mobile capabilities and applications for their distributed work force, use a variety of tools to work wherever and whenever (BYODs, low bandwidth)



Massachusetts Institute of Technology

4

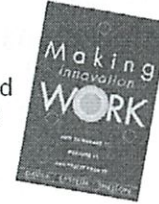
Cara – 1 minute (5 minutes)

Statement of their challenges

Methodology – Background Research



- **Theory and Company-Specific Research**
 - Sources where companies had publicly shared information about their innovation programs (Asian Development Bank, BP, EMC, IBM, MetLife, Norwegian Securities Central Depository, Trinity Health)
 - ~ 25 articles/blogs/white papers + some books



Tool Vendor Research

- Compiled suitable vendor list (8 Vendors)



- **“Local Expert” Research**

- George Westerman cheerfully met with us and also provided us with 6 relevant white papers



Massachusetts Institute of Technology

5

Cara - 1/2 minute (7.5 minutes)

Combination of books, white papers, analyst reports (Boston Consulting Group, etc.) and information on vendor sites, as well as interview with Prof. Westerman and CISR case studies.

Methodology – Drafts and Feedback Loop

- **Meetings with IFC**
 - Background Meetings
 - Scope Negotiations
 - Draft Presentation and Feedback
 - Individual Feedback Calls
 - Final Presentation
- **Artifacts**
 - Used “divide and conquer” strategy – assigned documents to read and post notes
 - Assigned owners to five functional deliverables
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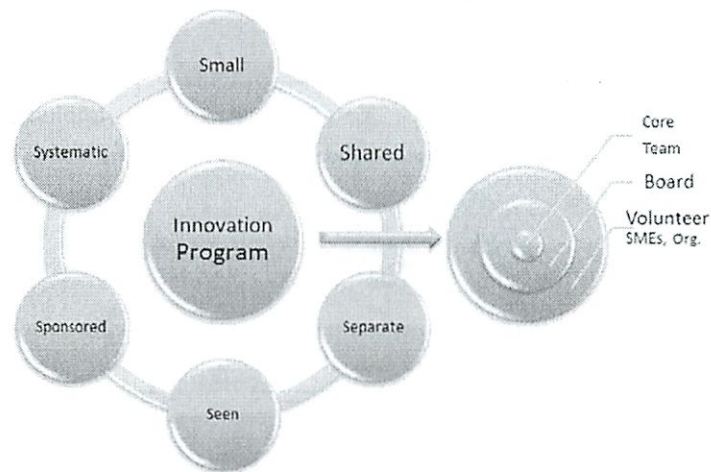
6

Cara – 1/2 minute (8 minutes)

Meetings with IFC were much more productive once we submitted a draft proposal for them.

Arriving at a definition of innovation was critical

The 6 Commandments



Mohibi – 2 minutes (12 minutes)

Recommendations were...

Six Ss

Small – small core group, 2 or 3 people

Shared – the core team and the program must remain relevant to and engaged with the larger organization they serve

Separate – program includes a distinct organizational unit (innovation is their day job) – core team

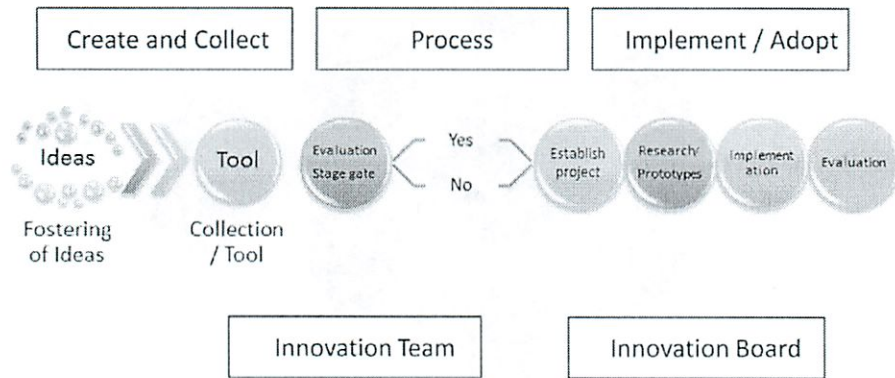
Seen – the core team and innovation board should be shameless promoters of the program

Sponsored – executives (not just the ones on the innovation board) should fund, promote and protect the program and core team

Systematic – research shows that successful innovation programs follow a process (just enough, not bureaucratic)

The bulk of the work is done by the volunteer SME's, the 800 members of the IT staff. They submit ideas, vote on ideas, comment on ideas and work together to build business cases for ideas deemed worth implementing.

Recommendations – Process Map Overview



MASSACHUSETTS INSTITUTE OF TECHNOLOGY

8

Michael

Three main phases, constantly measuring and improving the process iteratively.

Summary of Recommendations to IFC

The Innovation Program should:

- be a long term commitment
- be designed to optimize incremental innovations
- obtain commitment from top-level management throughout the organization (not just IT)
- provide a transparent means for everyone to participate, avenue of excellence
- be driven by a dedicated core team, advised by a board
- include a measurement component (idea processing “engine” should be constantly improving)



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9

Last slide – no talking

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Final
Clare's Presentation
Public

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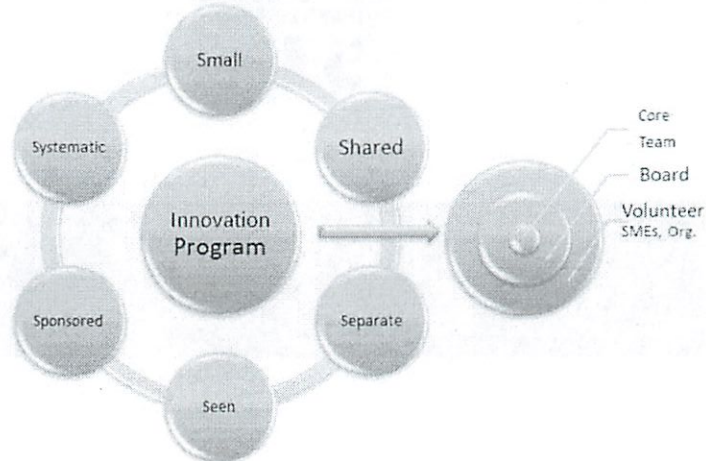
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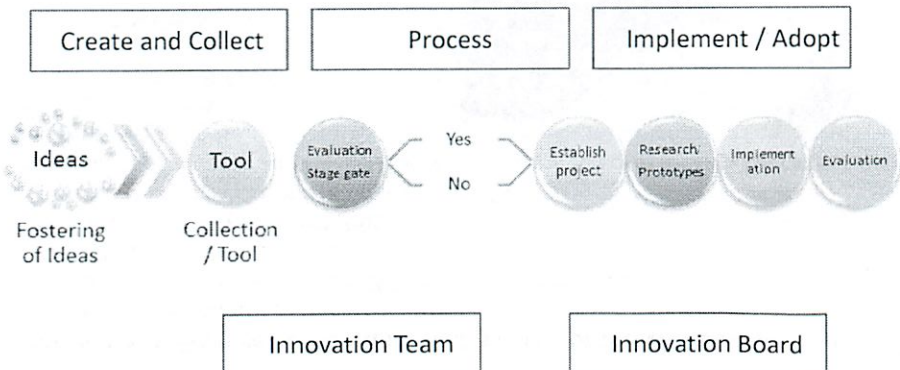
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- include a measurement component (idea processing “engine” should be constantly improving)

15.571

5/14

Final Presentations

Fidelity Gamification

How get Guidance + Planning resonate age 20-35

Spent a lot of the finding scope

Interviewed them

(too much info
hard to find relevant info
isn't well organized

looked at competitors

Set goals

Share dreams

Collect badges

Feedback + Reinforcement → know where you are

2

1. Onboarding
 - 1st minute
 - defer registration
 - nav bar
 - ?hide complex features
2. Focus on short term goals - then leverage for lifetime cost
3. Motivate users to complete profile
 - progress bar
 - Liked In
4. More rewards
 - stats, access, power, stuff (I like this :))
 - levels - club - moderator - freebies
5. Define an engagement score
 - Duration, Ratings, Virality, Recency, Frequency

Develop an engagement score per user

Q More long term than game cos

Q Fix website + User experience 1st?

Akamai

2 people presenting

(12) (3)

More broad biz transformation

29 of 38 of the top Media cos

36% of internet traffic

2,500 emp

Want to get Sbill rev

How can they scale lead to cash?
(Presenting well) ~~(MBA)~~ better

· Couldn't find any comparable slides
"Lean framework" - remove waste

Did interviews w/ lots of dept inc legal
(MBA better presenters)

They grew organically

But lots of manual hands offs

4

(Nike charts)

Very manual approval process

SalesForce and Momentum

Version Control issue on catalog + price

Legal takes 2 days

Institutionalized local Mero process

Transition phase

1. Standardize Data Def

2. Integrate data across processes

3. Unify tech

4. Empower emp

5. Prioritize ext scope projects

Q Culture mostly - How to start

5

Coming from start up challenge

Each dept builds its own tools

Have top down buy in

(EO knows needs to do this)

Take away local hero freedom

Have 500 products

Q: Very hard to get away from local heroes

(missed 3 ~~presentations~~ presentations - 45 min)

Breck

So apparently NASA spent 3 min or 6 sec

⑥

EMC Innovation

(Same exact process)

IT only

have a broad process - Co wide

No formal process

Had idea lab

No motivation

↳ 50 ideas/year

No sponsorship

Ideation > POC > Visibility

More of an Innovation Value Chain model

Questions from people

Very similar to our (S. 39 project)

① Gamification to encourage ideas

↳ Parking Spot

Categorize ideas into specific biz terms

↳ Ses

↳ didn't elab on

Intel i-Innovation Delivery Team

Best
practices

Crowdsourcing

Committees

Rewards

Bright Ideas Innovation Site

More concrete POC goal

↳ we didn't go that in depth

Be goal oriented

Project Review Board

Then get biz sponsor online

Want to allocate \$250k Funding to biz who
can find these IT innovations

Marketing materials

Day job?

Us

2 qu on idea collection
1 on can they do it (profit)

Went pretty well

(Think I presented very well) - had like 9 min

Exon

Big Data

looked at vendors

Data Warehouse evolution

Lots of oil cos using big data

9

Quick adjustments / act real time

Not 1st movers

Tom Davenport - leading expert^s

PRA - Predictive Rev Analytics

1. Info Management

2. Analytics Skills + Tools

3. Data oriented culture

↳ like Capital One

Maturity Model "DELTA"

New job: Data Scientist

Want to be fast followers

↳ how fast?

Can move regional → global quickly

Very much pilot project org

Ross
Grades

Said it hurts

Limits on A, Bs

Big bunch on A, B line

Project lower than others

Longer to direct them

She wants to spend more time

We directed early on

We didn't have project sponsor

Unlucky

Undergrads care more GPA

+ - doesn't matter

But would give high rec

Can be proud of projects

Better than could have

Michael E Plasmeier

From: Eugene Min <emaileugenemin@gmail.com>
Sent: Tuesday, May 29, 2012 11:15 AM
To: Michael E Plasmeier
Cc: Jeanne W Ross; Eugene Min
Subject: Re: 15.571 Grade

Michael,

You did perform very well in the class individually and overall. The grades for the class were very bunched together though in the middle, and it came down to the final group projects/presentations. Your group score was 42.33/50.00, and some other students got some scores that were just a few points higher. The Professor can give you some more color about the group project feedback, but I hope this is at least helpful.

Best,

Eugene

On Tue, May 29, 2012 at 10:32 AM, Michael E Plasmeier <theplaz@mit.edu> wrote:

Hi,

I wanted to enquire about the B+ I received in 15.571.

I'm always looking to improve, so I was wondering where I had lost points and what I can keep in mind for future semesters.

Thanks - Michael