

Incomplete Summary of the Readings

CASE 1: Architect your Business

Intro

- Architecture is about the “art or practice of designing and building structures,” especially buildings.
- business architects rarely design their company’s business architecture has become a bad word in some companies, mostly because architects in are seen as more of an obstacle than a problem solver.
- with business change accelerating many companies find their processes, structures, and systems not agility they need **companies are not “architected” for the digital economy.**

The State of the Art of Business Architecture

- 2011 < 50% of firms had a business architecture function VS 72% in 2014
 - 58% of 72% in IT
- most common task for business architects = development and analysis of capability maps.
- capability maps can be used with maps of existing applications to identify gaps and overlaps in the applications landscape. This help:
 - application portfolio rationalization
 - establishing priorities for IT investment
- such efforts are valued mostly within the IT unit.
- most of the business architects are struggling to gain traction.

The Growing Need to Architect the Business

- new more complex, integrated strategies due to the digital economy:
 - packaging, integrated solutions that address customer needs instead of selling separate items
 - omnichannel access to the company’s products and services
 - single face to customers : easier to sell across various business lines
 - rapid innovation (often digital): new products into new markets, new customers.
- pre-digital companies are not designed to use these strategies
 - the dominant design approach for large companies is “divide and conquer”
 - individual leaders have responsibility for success of set of closely related business activities
 - These designs facilitate functional and business unit excellence but do not serve integration requirements
- most companies does not now how to integrate increasingly interdependent activities throughout the business.

- architecture is not a systems challenge, it is an organizational design challenge
 - locating a business architecture function within IT may limit impact

What It Means to Architect a Business

- architecture = *the purposeful (re)design of processes, ..., IT systems to create coherence between business purpose and business capabilities.*
- Business leaders now that processes, ... all interact with one another
- business purpose = foundation of any company's design.
 - company's purpose must be well-articulated, offer a clear view of the value proposition for customers
 - purpose provides direction for design elements.
 - Ex ...
- Philips: three global processes to be standardized: idea to market, market to order, and order to cash.
- many companies struggle to keep elements aligned (one another and business purpose)
 - out of sync (late to market, to market before customer service, ...)
 - Solutions, deciding:
 - What set of capabilities constitutes a stable base for ongoing operations
 - designing technology platforms to support core operations,
 - these capabilities ensure quality, reliability of what's not changing while allowing management to focus on what is changing.
 - What capabilities are most essential to rapid, targeted innovation
 - need capabilities that support targeted business changes.
 - changes touch all elements not just IT, it's about business architecture.
 - business agility as a goal not lead to effective design.
 - Identifying specific activities will add value by introducing rapid innovation is essential to achieving a company's purpose.

What Is the Role of the Business Architect?

- business architects will work with other business leaders to shake up, prioritize, orchestrate, and design the business—processes, structures, roles, incentives, and systems.
- they will focus on critical gaps, map a plan for addressing those gaps, and negotiate requirements with leaders who may struggle with all the interdependencies

Case 2: Demand shaping

- Digital era, too much idea : IT focus more on identifying most important strategic initiatives
- leadership feel not confident that portfolio optimize the opportunity to digitize for both near-term and sustainable

- Demand shaping: ... develop a prioritized list of IT-enabled business capabilities

The Myth of the IT Steering Committee

- positive effects of a steering committee on IT portfolio quality is overwhelmed by:
 - senior executive understanding of IT
 - maturity of demand shaping practices
- IT portfolio quality related to executive perceptions of financial performance
- IT understanding, demand shaping practices, and IT governance processes create a virtuous learning cycle
 - leads to consistent improvements in the IT portfolio
 - then to improved financial performance

Changing the Conversation about IT

- Demand shaping practices force constant dialogue between IT and business leaders
- Each practice impacts the conversation in its own unique way ...

Changing the Conversation at Fidelity Investments Asset Management

- 2008 Crises, fidelity want to do economies but business leaders ask:
 - Why does it take so long to introduce new capabilities?
 - Why are 'baseline costs' (maintenance) overtaking new project costs?
- IT leaders start applying demand practices to shape conversation
 - creation of blueprint for shared capabilities with roadmap (introduction of shared infrastructure capabilities and the elimination of redundant)
 - appointed strategic program managers
 - value tracking
 - appointed business advisor leads
 - agile methodologies
 - governance bodies

Persistent Conversations are Essential

- IT portfolio decision/discussion is perpetual not annual

Case 3: Directing digital innovation

- often companies want to be innovative: lots of prototypes/ideas but not much results
- top-performing innovating firms direct their innovation efforts to the areas of greatest impact and business priority instead of "letting a thousand flowers bloom".

PepsiCo—A Digitally Innovative Company

- PepsiCo is digitally innovative because it applies digitization to every part of the business, including:
 - Products and Services (wraps digital services around its products, example, PepsiCo's Touch Tower)
 - Processes (One digital process innovation is an iPad app *Facts on Demand*, that shows store sales performance at any time).
 - Customer Experience (interactive social vending machine)
 - Strategy (For example, the company was an official launch partner for iTunes Radio)

Directing IT Innovation at PepsiCo

- Digital Innovation Center
 - identify points with the highest possible impact on growth
- innovation team identify two to three *sticky business challenges*
- Pepsico has portfolio of initiatives spanning three "Horizons."
 - Horizon 1 company understand problem and solution
 - Horizon 2 company understand problem solution not known
 - Horizon 3 company does not understand problem

Flipping the Switch on Innovation

- instead of innovating in any possible manner, first identify problems where innovation could help

Maximize Your Impact from Digital Innovation

- what highest-priority problems to which innovative solutions could deliver the greatest impact?
- Where should you initially focus innovation efforts across the business— strategy, processes, products and services, or customer experience?
- What is your process to lift and scale your successes across the firm?

Case 4: Top performing CIO in Digital era

- CIO of all firms recognize the threats of digital disruption
- Top CIO differs from bad CIO in:
 - Spend more time with external customers
 - Obsessively focus on innovation
 - Are deeply engaged with their executive committees
 - Open up their systems for internal and external use

Recognize the Threat; Take the Lead on Digital

- 49% of the value of top CIO is menaced by digital disruption again 19% for bad CIO
- Recognizing the threat is key to survival
- who is primarily responsible for managing digitally enabled threats to the business model?
 - 48%: CIO (the article also says it should be CIO, or appoint a Chief Digital Officer)
 - 52%: CEO

Spending More Time with External Customers

- 2008: 10% of CIO time for external officer vs 20% in 2015 (top CIO 22%, bottom 17%)

Focusing Obsessively on Innovation

- Innovation = big source of revenue for well performing firms
- top CIO innovation = 53% of their time on VS 19% for bottom CIO

Working with Their Executive Committees

- executive committees of top-performing firms : 51% of their time on on digitally enabled threats and opportunities against 18 for bottom
- CIOs reported three techniques that are very effective in helping their executive committees:
 - digital dashboard identifying problems and value creation from IT and digital
 - Reporting regularly on cybersecurity
 - very clear and simple IT governance

Opening Up Systems While controlling more

- digital era needs connectivity
- top performing CIOs have : 51% of capabilities available internally and 44% externally VS 27% and 23% for bottom CIOs

Becoming a Top-Performing CIO in the Digital Era

- three actions proposed:
 - devote time to these four areas, therefore CIO has to delegate existing responsibilities like running systems and working with vendors to their teams.
 - CIOs must step up to design and implement governance of all digital assets whether or not they are in the IT budget in order to ensure the connectivity needed.
 - lead the company in the direction where CIO can have impact such as monetizing data, API creation and reuse, Test and Learn, Agile, or amplifying the customer voice internally

Case 5: Succeeding at digital requires more infrastructure

- more investment in digital infrastructure is correlated with several desirable outcomes, including more revenues from innovation and higher margins.

Digital Portfolios: Infrastructure vs. Applications

- infra-structure provides the foundation of shared IT and digital services used by multiple applications (e.g., servers, networks, laptops, customer data- bases) and excludes applications.
- Applications are all other digital investment that uses the infrastructure.
- from 1993 to 2012, infrastructure investment decreased (54% to 37% of IT investment) then from 2012 to 2015 increased again (37% to 48%)
 - companies have recognized a need to become more connected
- top performing companies spent 55% of their budget for infrastructure against 37 for the others.

The Key Infrastructure Capabilities

- for service companies, deploying APIs is a strategy critical to improving the customer experience
- adding IP addresses and capabilities to physical assets and products that allow a company to create new services and customer experiences.

What Works Best for Managing and Governing Infrastructure?

- Executive Committee education and focus
- Simple but effective digital governance with consequences (ex dashboard)
- Customer orientation
- Evidence-based decision making

Case 6: The CIO as venture capitalist

- innovation is becoming an increasingly important role of CIOs

Approaches of the CIO Venture Capitalist

- three approaches that the CIO Venture Capitalist takes to increase innovation are *Learn*, *Acquire*, and *Partner*
- Learn: Invest to Develop Capabilities You Don't Have but Need

- Acquire: Bring in Revenue Streams or Talent—or Both. two types of acquisition:
 - secure new technology or products for the enterprise
 - recruiting strategy to bring in new talent.
- Partner: Build a Portfolio of New Business Experiments

CIO Venturing at Orange

- realized it needed to tap into the global market for innovation, particularly by targeting small companies.
- **Orange Fab** startup accelerator program
- **Orange Digital Ventures** primarily focused on acquiring, is an investment fund that finds, strategically funds, and works with early-stage tech businesses.
- **Orange Partner** the single publicly accessible source of Orange capabilities and online services for other companies to build on.

Next Steps

- Scanning the environment for new technology opportunities and then proactively helping the enterprise learn, acquire, and partner to produce benefits
- Investing and experimenting with a portfolio of high-potential technologies
- Working on teams with line-of-business executives to identify opportunities for value creation from new technologies
- Brokering, negotiating, funding, investing, joint venturing, and then integrating new technologies into the enterprise