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15.571 Generating Business Value from Information Technology Spring 2009

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# 15.571 Generating Business Value From Information Technology

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#### Agenda

- Digitized platforms
- The digitized process platform
  - Definition and example
  - Requirements for different operating models
- Driving value from a platform
  - How a digitized process platform leads to innovation and other benefits
  - Building the platform through the architecture stages
  - Defining metrics for IT and business value
- Conclusions



#### Three types of IT-enabled platforms

|                            | Process Platform   | Product Platform  | Collaboration<br>Platform   |
|----------------------------|--|---|---|
| Role of technology         | Reuse of systems across enterprise to enforce data and process standards | Reuse of product components enabling an integrated set of customer services             | Reuse expertise through set of tools facilitating the sharing of unstructured knowledge |
| Business<br>Value          | Operational excellence; market responsiveness                            | Ease of product innovations and roll-outs   | Opportunities for product and process innovation  |
| Key<br>Governance<br>Issue | Standardization vs. autonomy   | Execution vs. evolution   | Creation vs. recycle  |
| Unique<br>Challenges       | Process ownership;<br>Process discipline;<br>Change management           | Salesperson/ account<br>manager training;<br>Innovation process;<br>Product transitions | Identifying critical connections; Creating a culture of sharing; Design of incentives   |

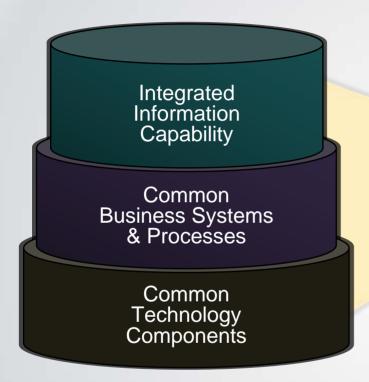


#### Digitized process platform defined

- What is a digitized process platform?
  - A coherent set of standardized, IT-enabled business processes along with supporting infrastructure, applications, and data.
- What business processes are eligible to be included in the platform?
  - Those which are stable.
  - Those which are common.
  - Those which can be shared.



#### Example: Swiss Re's digitized platform



Harmonized Processes & Informed Decisions

- Organizational flexibility
- People empowerment
- Risk management
- M&A integration

A digitized process platform is a coherent set of standardized, IT-supported business processes along with supporting infrastructure, applications and data.

#### Design of Swiss Re's digitized process platform

#### **Business Group Model Integrated Business Model** P&C CM UW CLM TA L&H СМ **TA**(1) CM UW **CLM** TA UW CLM AM **CMA** FS CM UW **CLM** TA AM **CMA** Risk Risk Risk origination administration/ placewarehousing ment





#### Types of digitized process platforms

- Administrative process platform
  - Digitized platform supporting administrative processes
     (e.g., purchasing, finance, IT, facilities) designed and managed
     from a single organizational unit to benefit entities
     throughout the organization
- Operational process platform
  - Digitized platform supporting end-to-end operational process(es)
     (e.g., order-to-cash, concept-to-launch) ensuring accurate transactions
     for operational decision making
- Data-centric process platform
  - Digitized platform supporting access to and sharing of standardized operational data

All of these platforms are built on a standardized technology infrastructure platform



#### Digitized platforms differ by operating model

| ess Integration  | High                             | Coordination  Data-centric process platform  Administrative process platform  Technology infrastructure platform  + Portal and middleware | Unification  Operational process platform  Data-centric process platform  Administrative process platform  Technology infrastructure platform  + Portal and middleware  + Single instance of enterprise systems |  |  |
|------------------|----------------------------------|---|---|--|--|
| Business Process | Low                              | Diversification  Administrative process platform  Technology infrastructure platform  | Replication  Operational process platform  Administrative process platform  Technology infrastructure platform  + Multiple instances of enterprise systems  |  |  |
|                  |                                  | Low   | High  |  |  |
|                  | Business Process Standardization |   |   |  |  |

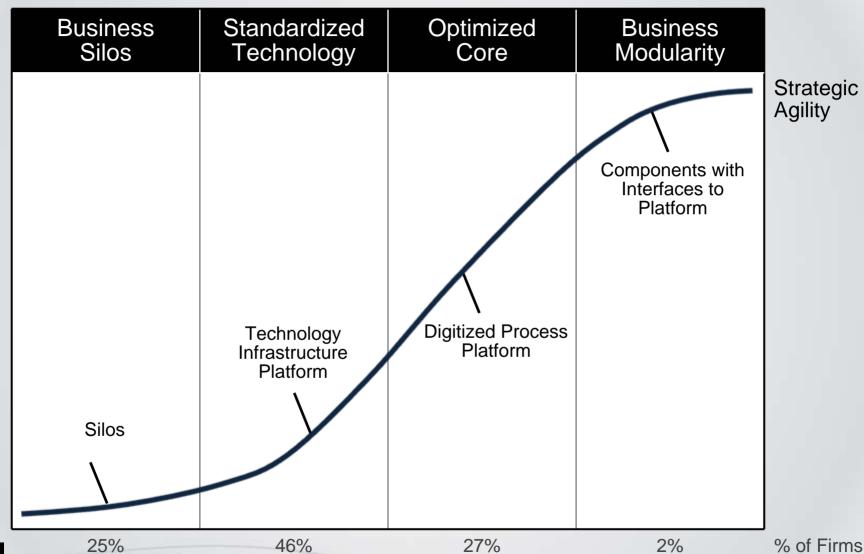


## Building a digitized platform creates opportunities for innovation and other forms of business value

| Business Opportunity            | Role of the Digitized Process Platform   |  |
|---------------------------------|--|--|
| Accelerate innovation           | <ul> <li>Automate repetitive processes to allow more management focus on innovation</li> <li>Facilitate, through standard interfaces, addition of new products and replication across sites</li> </ul>   |  |
| Increase customer focus         | <ul> <li>Provide information to support decisions specific to individual customer segments</li> <li>Introduce information-based customer services</li> </ul>   |  |
| Empower people                  | <ul> <li>Make customer and product/service data available to customer-facing and operational employees</li> <li>Provide analytics for establishing decision criteria</li> <li>Enhance transparency via individualized performance metrics that reflect decisions made</li> </ul> |  |
| Integrate acquisitions          | <ul> <li>Provide a platform to replace systems and processes of acquired firm</li> <li>Provide process components for reuse in an acquired business</li> </ul>   |  |
| Increase operational efficiency | <ul> <li>Provide straight through processing</li> <li>Enable reuse of standard components</li> <li>Provide a predictable customer experience</li> </ul>  |  |



#### Firms build their platforms through the stages





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

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#### Swiss Re began building its digitized platform in 1997

Building the Technology Foundation (Stage 2)

1997 1999

Harmonization of Business and Information Solutions (Stage 3)

2000 2004

Integration and Unification of Global Operating Platform (Stage 4)

2008

2005

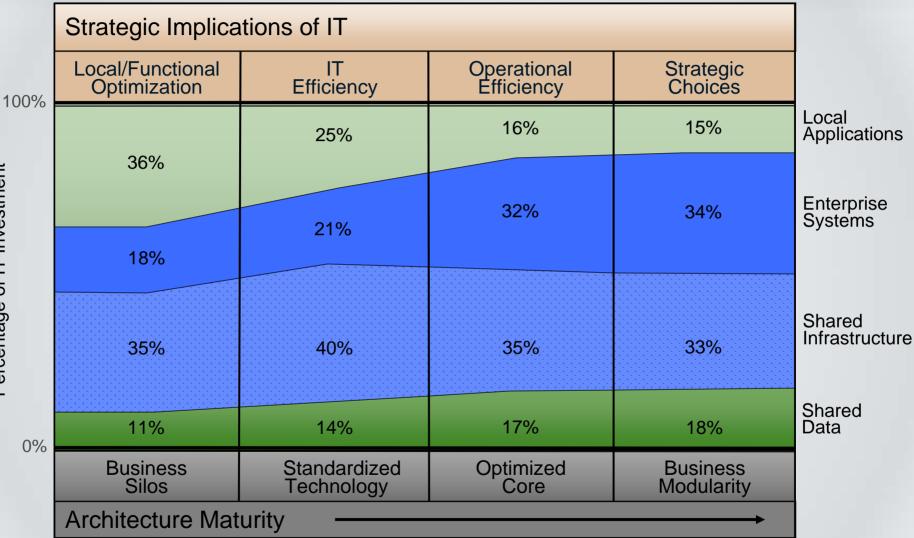
- Global technology standards
- Consolidated data centers
- Group-wide knowledge and email platform
- Business driven IT governance

- Translation of Swiss Re business model into core processes
- Delivery of group-wide solutions and information
- Transition from legacy processes and legacy systems towards one process/one solution

- Availability of integrated operating platform
- Scalable and harmonized core processes
- Flexible application landscape
- Information delivery supporting new business demands



### IT spending and attitudes change through the stages



92%

100% 84% IT Budget

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.

145%

Percentage of IT Investment

#### Metrics for business value from IT

| Business  | Standardized   | Optimized  | Business               |
|---|--|--|------------------------|
| Silos   | Technology   | Core   | Modularity             |
| <ul> <li>Time to deliver new system and benefits</li> <li>Business case/ROI of specific initiative</li> </ul> | <ul> <li>Time to deliver new systems and benefits</li> <li>Reliability metrics</li> <li>Percentage of systems on time and onbudget</li> <li>IT unit costs</li> <li>Cost to run systems and related services</li> </ul> | <ul> <li>Total delivered cost (Campbell)</li> <li>Inventory turns (7-Eleven Japan)</li> <li>Concept to store (JCPenney)</li> <li>Sales from new products and services</li> <li>Customer profitability and retention</li> </ul> | The list keeps growing |



## What we know about how IT supports business innovation and business value

- At its best, the value of IT cannot be separated from the value of the business processes it supports.
- Effective IT units maintain a balanced scorecard of metrics like reliability, on-time and on-budget delivery, customer satisfaction, unit cost management. This is critical to the professionalism of the IT unit and its ability to provide a base platform for doing business.
- Every project should have a business case and every business case should be checked against measurable outcomes. If a project has no expected measurable outcomes, it's a bad idea.
- There may not be a satisfactory answer to the question: "What is the value of IT to our business?"

