View Point

Insurance Modernization – New Demands, New Approaches

- Jeffrey Kupper, Lalit Kashyap, Siva Nandiwada, Srikanth Srinivasan
Most insurance companies in the US are facing multiple challenges such as increasing costs of operation, regulatory pressures, low perceived business-IT alignment, and old, inflexible technology infrastructure. These pressures are compounded by low to moderate premium growth and the increasing burdens of regulatory compliance. Some of the root causes for the challenges faced by insurers across the value chain are shown in the figure:

While several of the root causes lie on the business process and technology dimensions, many insurers focus on addressing technology problems in the form of Legacy Modernization without concurrently addressing the business context.

Old, inefficient, standalone systems and inflexible enterprise architecture are contributing to the increased costs of operation and lack of organization agility.

Though most companies realize the modernization imperative, forced by one or more of the aforementioned drivers, their IT leaderships commonly face the challenge of building a robust case for change. In a majority of the modernization efforts, changes to technology are not mapped to impact on processes, people or service metrics. Even mission-critical IT projects have difficulty eliciting strong business support unless they are tied to tangible improvements in business capability or of business metrics.

It is, therefore, important to appreciate that modernization of IT infrastructure in itself remains an incomplete exercise, until there is a strong alignment between technology modernization and modernization of the operational context – people and process. Indeed, for best results the effort should consider the likely long-term landscape of the industry, industry benchmarks and enterprise strategy.

Capability Driven Approach to Insurance Modernization

To effectively capture both the business and technology context of modernization, Infosys suggests using “business capabilities” as the building blocks. Any entity may be broken down into a set of “core business capabilities” as depicted by a standard capability map below for the average insurer:

Picture 1: Core Capabilities for an Insurer
These “core capabilities” can further be broken down into lower-level capabilities. These lower level capabilities are termed “business capabilities”. Business capability represents a collection of attributes capturing people, process and technology dimensions. Importantly, one can think of business capability as a ‘service’. The insurance business can thus be viewed as a collection of services. As mentioned earlier, a key ingredient missing from most modernization or improvement efforts is business measurement. While considering business capabilities as services, each business capability should have at least one metric or service level agreement to allow the management to assess its efficacy. The picture of a business capability broken down into its layers, along with an SLA is shown in picture 2.

One of the capabilities that the company wanted to acquire was Electronic Document Management. This capability can be broken down to lower-level capabilities like:

- Automated content capture
- Content Management
The benefits of analyzing an insurance company through the lens of “business capabilities” include:

- **Capability** improvement measures are a better way of judging long-term efficiency improvements because they are more constant than traditional process improvement analytics; processes change frequently, impacting most process improvement efforts before they are completed.

- A **capability focus** enables the capture of activities external to the insurance company (i.e., Third Party Claims Adjuster), which allows the company to view its entire operational environment.

- **Capabilities** broken down into respective attributes encompassing the people, process and technology involved, optimizes modernization. A company can easily see where business capabilities are replicated across operations and where gaps exist. Further, the actual technology support of business operations is clearly depicted, as business capabilities are aligned with the model of service oriented architecture.

- **Capabilities** drive the definition of service level metrics allowing for improved performance and management. Capabilities that do not derive value are highlighted and can be extracted. More importantly, service valuation enables prioritization – a key to any improvement effort.

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<table>
<thead>
<tr>
<th><strong>People</strong></th>
<th><strong>Process</strong></th>
<th><strong>Technology</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mail Room Assistant</strong></td>
<td>Receives the application. Sorts the policy pack appropriately and hands it over to the Scanning Assistant for scanning</td>
<td>-</td>
</tr>
<tr>
<td><strong>Scanning Assistant</strong></td>
<td>Scans the documents; Virtual scan to do an auto quality check of images created. Route the images that do not meet pre-defined quality criteria to the re-scan / exception processing queue. Quality check passed images are ready for indexing</td>
<td>Scanner; Update in the system that scanning is complete. Application number should be generated OR OCR/ICR; System should pick up the primary index values (pre-printed policy number from the application and the document type) - Ability to index the documents</td>
</tr>
<tr>
<td><strong>Application Processor</strong></td>
<td>Verifies the application for DOB, address, etc. Automatic routing of the application after verification is completed.</td>
<td>1. After completing verification, should be able to update in the system. 2. System should support automated work routing based on the rules set up. System should be able to show the apps in the UW inbox. Status should be updated as UW – IN Progress.</td>
</tr>
</tbody>
</table>

The following section details the capability view of automated content capture:
This approach involves three distinct phases:

**ASSESS**
- CURRENT BUSINESS CAPABILITIES MAP
- VALUE CHAIN
- PROCESS
- TECHNOLOGY
- ORGANIZATION

**ARCHITECT**
- FUTURE STATE BUSINESS CAPABILITIES MAP
- PROCESS
- TECHNOLOGY
- ORGANIZATION
- Detailed Technology Architecture
  - Application Architecture
  - Data Architecture
  - Physical Architecture

**EXECUTE**
- PROGRAM MANAGEMENT
- PROGRAM
- EXECUTION
- PROCESS
- TECHNOLOGY
- ORGANIZATION
- TECH ACCELERATORS
  - Modernization Estimation
  - Migration Analysis
  - Upgrade Wizard
  - Deployment Framework

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**Business benefits from Capability-driven Insurance Modernization**

Infosys' business capability viewpoint of insurance modernization yields the following business benefits:

- Capturing a comprehensive context for modernization, leading to better solution definition and delivery results
- A clear and strong case for change, increasing likelihood of both funding approval and business support
- Aligned business and technical architectures improve the business value of any modernization initiative as well as the longevity of change
- Efficient execution reduces overall modernization costs
- Reduced operational costs driven by optimized processes and technologies
- Greater integration and interoperability based on modern technologies
Conclusion

Dependence on old, inflexible legacy systems is often a major reason for the inability of many insurance companies to make the changes necessary to enhance their competitiveness. The existence of old systems also contribute to challenges such as increased costs of operation, low perceived business and IT alignment, and low recognized business value from IT investments.

Modernization initiatives in the insurance industry have tended to focus on improving only the IT effectiveness or pure IT head count. This ‘tunnel’ vision does not help in realizing the business value from investments. A broader focus on integration of business and IT architecture, business capability acquisition and better business value are critical to the success of all modernization efforts.

Infosys’ Insurance Modernization Solution leverages almost 25 years of modernization experience. This solution aids in making the case for change, in defining as well as aligning business and technology architectures, and in accelerating execution. Our solution can help insurers to holistically define and accomplish modernization goals, thereby increasing the efficacy of the transition and enhancing the business value derived from modernization.
About the Authors

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