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	Information and Transformation at Swiss Re: Maximizing Economic Value						
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Title: Information and Transformation at Swiss Re: Maximizing Economic Value

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Abstract: In 2007 Swiss Re was striving to maximize economic value, a metric that would allow the company to assess its performance over time despite the volatility of the reinsurance industry. Maximizing economic value required that decision makers throughout the company understood the risk profiles of individual investments and the performance profiles of individual investment instruments. Swiss Re management had recognized several years earlier that the firm had to globalize processes and share data to provide needed information to decision makers. This case describes Swiss Re's journey from a regional to a global firm and highlights the role of information technology in enabling the standardization and sharing of the firm's global processes and data. Swiss Re was still working in 2007 to drive the benefits of its global process environment, but decision makers were learning to take advantage of enhanced information.

Keywords: agility, globalization, enterprise architecture, business transformation

14 Pages



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Information and Transformation at Swiss Re: Maximizing Economic Value

In 2007, Swiss Re was the world's largest and most diversified reinsurance company and one of the world's most profitable firms, in terms of profit per employee. Swiss Re, a pioneer in insurance-linked securitization, had established a reputation as a "best in class" reinsurer:

We are committing ourselves to generating economic profit growth, reducing earnings volatility, enlarging our market scope and advancing our organizational excellence. Each has a vital role in keeping us "best in class" over the long term, building upon the knowledge and commitment of our employees to provide top quality client service and attractive shareholder returns.

> —Jacques Aigrain CEO^{I}

Swiss Re management observed that the financial metrics applied by the various regulatory agencies around the world made it difficult to assess the long-term financial strength of reinsurance firms. In particular, the impact of major catastrophes created volatility in reported performance that failed to capture a company's long-term financial strength. Swiss Re management emphasized what management referred to

as "economic value" as a more reliable gauge of the company's long-term performance and financial strength:

Generating economic profit growth demands a focus on quality of earnings. Our scale, diversification, and expertise in financial markets provide Swiss Re with a unique advantage in enhancing earnings quality and stability.

—Jacques Aigrain²

The economic value target focused management attention on providing value to shareholders. Management assessed economic value by monitoring the differential between the market value of assets and the market value of liabilities. In 2007, management was targeting a 13% return on equity:

In this cyclical industry, we cannot guarantee that each year we'll be at 13%, but we can guarantee that on average it will he 13%. —Michel Liès

Head. Client Markets Function

Top management worked to steer the decisions of knowledge workers throughout the company to maximize the company's economic value. Of course, individual underwriters, claims adminis-

¹ Extracted from Driving Performance—The CEO's View, 2006 Swiss Re Annual Report, p.24.

² Ibid

This case study was prepared by Cynthia M. Beath of the University of Texas at Austin and Jeanne W. Ross of the MIT Sloan Center for Information Systems Research. 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 acknowledge and thank the executives at Swiss Re for their participation in the case study.

trators, salespersons, investment managers, and other knowledge workers in Swiss Re's local offices could not assess the impacts of their individual decisions on Swiss Re's economic value. So, to ensure that local decisions met the firm's global objectives, Swiss Re was centralizing responsibility for defining clear decision criteria and performance targets. Management then empowered local knowledge workers to exercise their judgment in applying those decision criteria to meet targeted performance objectives:

The decision makers are [people like] underwriters or claims administrators on the job; we cannot completely take away the responsibility for them to make smart decisions. So, our organizational design has to leverage the knowledge worker. The boss of the company cannot know and decide everything. He or she has to delegate.

—Markus Schmid CIO, Client Markets & Products Functions

Swiss Re's challenge was two-fold. First, senior managers needed detailed performance and market data to effectively set decision making criteria. Second, every knowledge worker needed specific contextual information to apply those criteria to individual transactions. To ensure that decision makers had the information they needed, Swiss Re was on a multi-year journey to standardize critical information and related decision making processes:

We're a company of tremendous knowledge. If we don't provide consistency in how people can use this knowledge and apply it to the environment in which they operate—including information, including process, including systems—half of it will be wasted. So clearly, we want to be global. We want to use our knowledge in a much more effective form. We want to continuously maximize our knowledge supported by having consistent information.

—Yury Zaytsev Global CIO

Swiss Re Background

Founded in 1863 in Zurich, Switzerland, Swiss Re provided reinsurance for property and casualty, life, and health insurance. (For a brief overview of the reinsurance industry, please see the Appendix.) The company complemented these offerings with insurance-based corporate finance solutions, supplementary services for comprehensive risk management, and a unit dedicated to capital market activities. For 2006, Swiss Re reported profits of 4.6 billion Swiss francs on premiums of CHF 29.5 billion. The company's investment portfolio was valued at CHF 162.7 billion. (Exhibit 1 provides summary financial information from Swiss Re's 2007 investors' meeting.)

Swiss Re employed approximately 10,000 people world-wide. Operating out of 90 offices in over 25 countries, Swiss Re generated over 95% of its 2006 revenues outside Switzerland. The company had grown organically, most notably through growth in catastrophe protection and through major acquisitions, including M&G in 1996, Life Re and Union Re in 1998, Lincoln Re in 2001, and GE Insurance Solutions in 2006.

Swiss Re's management team was taking aggressive action to reduce the company's carbon footprint and address global warming. Among many publications that had recognized Swiss Re for its efforts, *Scientific American* named Swiss Re "Business Leader of the Year" in 2006 for its environmental engagement. *Fast Company* recognized Swiss Re as one of the 2007 "Fast 50," for launching the carbon markets' first insurance product for managing Kyoto Protocol-related risk in carbon credit transactions.

In 2007, Swiss Re and Munich Re were the dominant global reinsurance companies. However, insurance brokers, investment banks, and hedge funds were all moving aggressively, through alliances and acquisitions, to enter the reinsurance market. In addition, the financial position of direct insurers was growing stronger. As a result, direct insurers could retain more of their own risks, making them direct competitors to reinsurers.

Rethinking the Reinsurance Business

The 2001 terrorist attack on New York's World Trade Center was a seminal event for the insurance industry. Insurance industry losses exceeded most experts' assumptions about the maximum loss that might be realized from a single event. For Swiss Re, the 9/11 attacks led to its first loss since 1863:

9/11 was a horrible confluence of events on the liability side. All these risks that we thought were uncorrelated—aviation, property, business interruption, workmen's compensation, life and health—they all got hit. All of our excess capital at that point was invested in equities. Equities went down the tubes, and a lot of our equities were invested in other insurance stocks, which we'd had for decades. And they went down even more than the markets. So just when we needed it, our excess capital disappeared.

—Benjamin Meuli Head, Asset Management

As a result of the events of 9/11, the insurance industry experienced capital erosion of about 25%. Embarrassed by their overly optimistic assessments of all the major reinsurance companies, ratings agencies like S&P and Moody's dropped the ratings of all major reinsurance firms:

I think the rating agencies decided around that point that reinsurance wasn't a triple A industry. There was just too much risk in it, so everyone got downgraded. We actually improved our <u>relative</u> position because other AAA firms got downgraded further than we did. —Benjamin Meuli

The losses from the 9/11 terrorist attack, and later from Hurricane Katrina, compounded by the lowered market valuations, led Swiss Re management to think about how the company could reduce the volatility of its earnings and increase value to stockholders. Management concluded that the firm's organization structure, which at the time was regionally based, created vulnerabilities to dramatic fluctuations caused by extraordinary events.

In 2001, the company had eight geographic divisions (e.g., Northern Europe, Southern Europe, Latin America, North America), and each region took on liabilities and managed their matching asset portfolios locally. Swiss Re's executive board set asset allocations once a year for each major asset class (e.g., equities, bonds) in each region and then set benchmarks for the return on each asset class. The benchmarks tended not to vary much from year to year, and each investment center managed to the benchmark independently. Thus, each region could assess the risk of its individual book of business and manage its capital, but the company did not know its total risk exposure or its overall investment position:

The eight different investment centers never spoke to each other. They could easily have been taking opposing positions in interest rates, currencies, stocks, whatever it might be, and no one would ever have known.

—Benjamin Meuli

The information needed to understand and manage the company's risk position at a global level was not readily available in 2001. Regional leaders had designed processes, systems, and tools to respond to the specific priorities and demands of their individual businesses:

There was indeed a myriad of different local tools, largely uncoordinated and with duplication of effort, but even worse, there was no easy way to bring risk or pricing information together in order to analyze or aggregate them.

—Christoph Menn Head, Product Development & Strategy

The 2001 terrorist attack had highlighted the need for a more global approach to managing the company. To do so, the firm had to do more than reorganize. Swiss Re had to transform its information base.

The Transformation Journey

In fact, Swiss Re's transformation had its beginning well before 2001. In 1996, Yury Zaytsev, then CIO of Swiss Re's North American subsidiary, had moved to Zurich to take on the role of

corporate CIO. Previously, Zaytsev had led a successful effort within North America to standardize their technology platform. As corporate CIO, he set out to repeat that success for the corporate IT infrastructure, an effort he referred to as Optimization. (Exhibit 2 is a graphic developed by the IT unit to describe the phases of Swiss Re's transformation.)

As a first step, he worked to introduce enterprise-wide IT governance. Zaytsev reported to the CEO and sat on the Executive Board. From that position he helped establish an IT Steering Committee, which included the heads of major businesses. The IT Steering Committee made investment decisions for global, shared IT infrastructure, and applications, while the individual businesses retained their own IT development resources and made local business-specific IT investment decisions.

With the steering committee's support, the corporate IT unit was able to implement global technology standards, consolidate data centers, and introduce an enterprise-wide knowledge and email platform:

Optimization was driven by the recognition that Swiss Re was becoming a global company. We knew that we would definitely have to standardize on certain generic functionality. We started with the workplace, our vehicle to deploy functionality to the users. Within the standardization of the workplace, the first decision was on email. We rolled out Lotus Notes globally as the Swiss Re standard email system enabling people to easily connect to each other.

—Guido Kehl Head, Corporate Technology

The Optimization effort lasted about three years. Its most apparent impacts were cost savings and improved reliability, efficiency, and scalability of the IT infrastructure. But the most significant impact was that technology standardization positioned the firm for process standardization, the second step in Swiss Re's transformation.

Harmonizing Processes

Around 2000, IT unit leaders started the dialogue with business leaders toward more standardized core business processes, an organizational change effort that IT referred to as "Harmonization." The goal was to create a standard set of tools and processes to be used across the regions that would provide greater transparency of Swiss Re's transactions, financial positions, and performance. The first task was to clarify the commonalities in decision making processes around the world:

I remember I asked the heads of our underwriting divisions to come together from Northern Europe, Southern Europe, Latin America, Northern America, and so on. And I challenged them that the underwriting process was the same around the world. They completely disagreed. I was talking about process; they were talking about content. "How can you say underwriting is the same if we do it one way in the States, another way in Latin America, and the requirements in Europe are still different?"

—Yury Zaytsev Global CIO

Although business leaders were reluctant to abandon regional differences, Walter Kielholz, Swiss Re's CEO in the early 2000s, was pushing the firm toward common processes, and he was relying on IT to help put global processes in place:

The CEO seemed to somewhat use IT as an instrument to support the globalization of the company. That was sometimes also painful for IT, because the business perceived IT to be sometimes too pushy and even interfering with their own domain like their business processes.

—Guido Kehl

Business leaders noted that there was little enthusiasm for process standardization, which they viewed as neither captivating nor lucrative. Swiss Re's traditional strength had been its ability to manage insurable risks: That is probably the weakness of a company that enjoys elaborating a cat bond³ or any similar insurance linked security. That [i.e., designing the cat bond] is intellectually challenging, besides the fact of being quite nicely compensated. On the other side, developing an administration system... that's much less exciting.

—Michel Liès

Head, Client Markets Function

In 2000, Kielholz reorganized the firm into three end-to-end global business groups (Life and Health, Property and Casualty, and Financial Services). The reorganization prompted increased adoption of global common processes within the business groups. The eight regional asset management centers were consolidated into two—one in New York and one in Zurich, both of them operating globally.

The IT unit analyzed, at a high level, the company's key business processes. They took a minimalist approach, defining approximately 20 high-level core processes, such as risk acquisition, deal proposal and execution, contract administration, claims management, and technical accounting. They found that the applications supporting the company's core processes were piecemeal and redundant. For example, there were 35 client management systems and 25 underwriting systems. The IT unit then modeled those processes on an as-needed basis:

We didn't want to run through the whole enterprise and model every single process we could potentially find and create this big monster bible that no one would ever read again nor maintain. Instead we would only model a core process in those areas where we actually had projects that involved a business model change or an operational model change. So by design our enterprise model had holes, namely all those areas where we wouldn't im-

prove or that we didn't focus on. We call this the minimalist modeling approach.

—Sylvia Steinmann CIO, Financial Services Function

Recognizing that Swiss Re was an information business, IT management engaged in ongoing discussions as to whether standardization efforts should focus on process or data, but process standardization emerged as key to information rationalization:

For us the discussions went: the business model of Swiss Re as a global company asked for global processes supported by global systems with data as an integral part of it. The alternative would have been to focus solely on the data and allow for heterogeneous business processes. But the decision was clearly to have global business processes.

—Guido Kehl

Head, Corporate Technology

Despite the primary focus on processes, IT management recognized that data standardization would be crucial. IT and business leaders defined what came to be known as the "Swiss Re Data Language" (SDL). SDL institutionalized standard data definitions for terms like "premium," which varied across regions. The process of developing standard data definitions drove a shared understanding of the firm's end-to-end business processes, what one IT leader referred to as a "cradle to grave" model of the business:

By defining a data language you define your business model, your ability to measure your business, and ultimately how you can steer your business. —Markus Schmid CIO, Client Markets & Products Functions

Drawing on their analysis of the company's core processes, IT leaders created a high level architecture identifying the critical processes that Swiss Re needed to standardize in order to capture data conforming to SDL. This architecture became known throughout the company as the BAA (Business Application Architecture). The term Business Application Architecture

³ A "cat bond," or catastrophe bond, is a rated security that transfers the risk of a low frequency but high severity event to an investor, in exchange for fee. Cat bonds may securitize property/casualty portfolios against the risk of earthquakes or hurricanes, or life insurance portfolios against pandemics like bird flu.

evoked three critical aspects of every global change project: business process ownership, IT application ownership, and IT architectural standards. Involving stakeholders representing all three points of view would ensure that every project addressed global and local, as well as short and long-term, requirements. Around 2002, business managers began to embrace the benefits of BAA and lead efforts to implement global processes:

When the business took ownership—that was the critical point when this really started to fly.

—Guido Kehl
Head, Corporate Technology

Early BAA projects focused on client management, because standardization of the client management process would lead to standardized client information. Underwriting soon followed:

In parallel there were two pushes. On one side, projects were launched to bring the business administrative systems together, and, in parallel, we worked on bringing all the pricing and underwriting tools together so that we could analyze the business centrally. In addition to the pure system capability, we also needed to define and implement one global pricing benchmark for measuring the profitability of the business. —Christoph Menn Head, Product Development & Strategy

Recognizing the difficulty of organizational change, Swiss Re implemented the BAA through a series of incremental projects. Each project created new challenges, and businesses needed time to adapt:

What we have observed is it takes at least a year until the business community starts embracing the new capabilities provided by the application... What annoys the people most is that they are "lost in translation" because they cannot relate back to their old experiences. It's as simple as, for example, "I know all the product codes by heart, and this crazy new system introduces new product codes." Now of course the product codes

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are not a result of the new system, but because we want to have a new view to the business.

—Markus Schmid CIO, Client Markets & Products Functions

With experience, individuals started to see not only the constraints but the benefits of process standardization. Underwriters provided an example:

[Before, underwriters] had fewer tools and thus enjoyed maybe a larger degree of flexibility in pricing the business, whereas immediately after the rollout of global tools and systems some may have perceived that as now having less of such flexibility. However, the new pricing tools provided them with much better and consistent analytics to assess the business, and over time, that second aspect won out.

—Christoph Menn

Similarly, the asset management organization learned to adapt to a single investment accounting package:

For every single person, the system was less optimal than what they were used to having locally. But for the first time, more or less on a daily basis we could get a consolidated picture of what our investment result was, what it looked like, what the value of our assets was from an accounting and from a market value point of view. We also then were able to use it to feed our risk management engines and various other things, which allowed us effectively to take the second step, to run the portfolio in a consolidated way on a global basis, which I really do think is what's allowed us to create value for our shareholders. —Benjamin Meuli

Head, Asset Management

The harmonization stage forced standard data definitions and a set of globally standardized processes for capturing the data. The effort required that people throughout Swiss Re adapt to new organizational structures, new systems and tools, new business processes, and new

expectations. Although that effort was not complete, by the end of 2004, management was ready to focus on the next stage.

Integration and Unification

In the integration and unification stage, IT and business were in the process of building and leveraging a global enterprise management model that would provide (1) straight through processing of the company's key transactions; (2) enterprise information for decision making; and (3) an extended industry platform (See Exhibit 3).

Straight through processing was a natural extension of efforts to provide standardized tools supporting Swiss Re's key processes. Major functions within Swiss Re linked increasingly automated process components. Asset management, for example, had reduced the incidents of delay and error:

So today in asset management we have this completely straight through processing. From the order management system, we have a straight through process for settlement of the trades. Once they settle, we have straight through processing for dividend payments, for interest payments. There's little human intervention, only in cases where there's a conflict and that's less than five percent.

—Sylvia Steinmann CIO, Financial Services Function

In late 2005, Swiss Re reorganized into a structured form framed by its key competencies, this time around three global business functions: Client Markets. Products. and Financial Services. In addition, three corporate functions (Risk Management, Finance, and Operations) provided globally coordinated support for the three core functions. (See Exhibit 4a for an organizational overview and Exhibit 4b for an IT organizational chart.) The new structure allowed the company to further leverage its common processes and systems to improve customer service and enhance shareholder value. Because Swiss Re had standardized global processes, the reorganization did not require any major changes in the systems:

Once we had a core single business process supported by a single solution, we were no longer connected to any [specific organizational] entities. Now that critical restriction goes away, we can do organizational design with significantly more flexibility in terms of design and time of implementation.

—Yury Zaytsev
Global CIO

The new structure repositioned the company to develop an integrated value chain across the lines of business. (See Exhibit 5 for a graphical representation of the targeted business model.) The 2005 reorganization collapsed the customer management, underwriting, claims administration, and technical accounting functions of the different lines of business. This new structure supported efforts to adopt best in class processes in each business function.

In Swiss Re's integrated value chain, Client Markets and Product people had close working relationships. However, they had distinct accountabilities and metrics. The Products function assessed the risk of each proposed contract and set its technical price (a calculation of the point at which expected returns from the contract equal the company's targeted return). The key performance metric for Products was the accuracy and reliability of the technical prices:

If the Product people define a technical price which is too low, we sell too low and then we don't achieve the return on equity that we want to achieve. If it's too high, we have a handicap because we are trying to sell something too expensive and then we lose market share. So the quality of the reference premium is an extremely important aspect and it's an aspect on which the Product people are judged.

—Michel Liès Head, Client Markets Function

Client Markets, on the other hand, was focused on the profitability of customer relationships. The performance of account managers was assessed relative to the technical price, rather than the actual profitability of a customer account:

Client Markets tries to combine the product offerings so we have, from a global perspective, a positive P&L account for each client... We may have 10 or 20 treaties with the same company, and we have to establish a balance between technical price and competitive advantage.

—Michel Liès Head, Client Markets Function

Financial Services, the smallest of the three businesses, had responsibility for asset management and the firm's growing capital management and advisory business. Management performance in Financial Services was assessed primarily on the basis of return on assets.

Ultimately, the goal of the global processes and the new global structure was to provide historical data, modeling tools, and decision criteria to knowledge workers to support their decisions. By 2007, the BAA and the accumulation of data in accordance with the SDL had combined to provide useful information to decision makers:

It took about two to three years following implementation until all the efforts started to show fruit. But by now we have three to four years of worldwide consistent pricing data in one system that can be analyzed centrally. —Christoph Menn Head, Product Development & Strategy

Realizing the Benefits: Information Support for Decisions

The data from global processes increased transparency, so that individual decision makers, and their managers, could monitor the results of their decisions. Management had accumulated this information into reference portfolios. On the liabilities side of the business, these reference portfolios allowed management to better define the parameters for establishing technical prices:

In our models we have some 200–300 reference portfolios, and we apply these reference portfolios to the several thousands of treaties that we have. We began that some years ago, and we are coming to a point at which we are quite near to

the truth. So we began with data, from this data we established a reference portfolio on which we can judge the economic value of the reinsurance business, taking into account the speed at which the claims are paid. —Michel Liès

Management converted this information into better informed underwriting and a process of continuous improvement:

We have improved the accuracy of our underwriting, but more importantly, we have gained the capability to analyze and calibrate our underwriting and our underwriting tools: "How did I price that business and how does it look after a couple of years of development or reserving? Were my tools right? Do I have somewhere a tendency to be over conservative or over aggressive in my underwriting?" Now we can really benchmark and calibrate our tools.

—Christoph Menn

The reference portfolios also helped asset managers. The transparency provided a better understanding of liquidity requirements:

You know, one of the big challenges for the asset managers is to match their asset management durations to the claims payment patterns. And that is something that is unique in our company. You know, our company is probably paying between US \$50-\$100 million in claims per day. So you need to have this money quite liquid. And that is something for which the development of the reference portfolio is extremely important. —Michel Liès

With global processes informed by increasingly transparent information, senior executives were better able to respond rapidly to new environmental information:

I think the main benefit from the whole BAA and Underwriting Steering Value effort comes in the ability to steer the business. What we have gained is a uniform yardstick that allows us to compare profitability of the business across the globe, on

a real-time basis. It allows us to say, "We should write more of that and less of this." Also, we have gained the ability to consistently measure our performance and to re-calibrate our tools where necessary. So we have gained the ability to steer and influence the business worldwide. That is what we have gained. —Christoph Menn Head, Product Development & Strategy

Realizing the Benefits: Increasing Economic Value

In addition to the impact on decision making, Swiss Re's process and information platforms had yielded dividends in merger integration. In June 2006, Swiss Re acquired GE Insurance Solutions (GEIS), the world's fifth largest reinsurer. A week after the deal closed, Swiss Re had provided all GEIS sites with Swiss Re's network, email, and access to the enterprise portal. Swiss Re also quickly delivered Swiss Re client management and underwriting tools to GEIS offices. For a short while, former GE offices used both tool suites to assure that the new tools would return the same results. By September, all new business was being written using Swiss Re's global tools:

Three months after the merger became effective, we started writing all new business of the combined entity using the same process, i.e., the same underwriting systems, pricing tools, and business steering methodology. —Markus Schmid CIO, Client Markets & Products Functions

Swiss Re would need another 18 months to port GEIS' existing accounts to its systems, but it expected full integration of the GEIS business in 2008 (including the consolidation of all the data centers and the consolidation of the IT infrastructure under one management). The acquisition of GEIS had introduced some new business (e.g., direct insurance) that extended, rather than integrated into, Swiss Re's core processes. But in less than two years, Swiss Re would fully absorb a business that represented more than 10% of its revenues.

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Senior managers believed they had only begun to drive the benefits from the company's harmonization and unification efforts. Eventually, improved understanding of performance outcomes would provide criteria to help senior management determine when an acquisition—or other strategic opportunity—would increase economic value:

This means that at each planning process, when we try to compare opportunities in life reinsurance, non life reinsurance, asset management, corporate development, and merger & acquisition opportunities, we use the same parameters to judge. In our industry, most companies use one parameter for property and casualty reinsurance (combined ratio), in life vou speak about embedded value, and when you buy a company, you speak about the internal rate of return. But when you have to choose: do I buy a company, do I make reinsurance in property and casualty, do I make reinsurance in life? You don't know what to compare to what. And that is a type of harmonization which is also important. —Michel Liès

Head, Client Markets Function

While there was still much to be done, by 2007, management saw evidence that the company's process and data standardization efforts were increasing economic value:

Over the past three years, every year, the mark to market on [Swiss Re's] investment portfolio has exceeded the mark to market on the liabilities by about a billion Swiss francs. If we keep doing that, it will accrue to the shareholder. There is no escaping that.

—Benjamin Meuli Head, Asset Management

Future Challenges

Over the years, Swiss Re's transformation forced the IT unit to learn how to deliver more for less. Christoph Locher, the Head of Global Infrastructure noted that demands on his unit were climbing:

Today we have to have agility in every aspect, from integrating/divesting companies to granting access from multiple devices into our systems, from anywhere in the world, with the same level of quality... So, now the time to react equals zero. That is one side. On the other side, we have had virtually no budget increase in five years and we've reduced staff by 20%.

—Christoph Locher Head, Global Infrastructure

As Locher's infrastructure team worked to cut costs while increasing efficiency and reliability, business unit IT heads were working to deliver new capabilities to business leaders:

They're requesting more information and faster information than we can actually deliver for them. When we give them more they're very happy, but immediately it increases their appetite for more.

—Sylvia Steinmann CIO, Financial Services Function

The growing demand for IT services compounded the challenge of keeping infrastructure operating costs down and service levels up:

We try to reduce complexity every day, but with every new system, we add to the complexity. The systems today are not the systems of 20 years ago. You can't isolate to solve an efficiency or functionality problem. Today it's an integrated landscape, so whenever you grab it, you have the whole carpet, the whole landscape. You have to think of and manage all the interdependencies. I don't manage systems anymore, I manage landscapes and processes.

—Christoph Locher

Business managers recognized their growing dependence on IT. They noted that cost constraints forced tradeoffs in the services IT could provide:

We're all concerned to keep the IT spend to a reasonable amount, and at the moment, if I say, "I need a new front office system in fixed income, Yury. I can't operate without it," and then my colleague in Products says, "We've got to have a single underwriting system for life and health," I mean, it's very hard to trade off those things if you are under a budget constraint.

—Benjamin Meuli

Head, Asset Management

In the late 1990s Swiss Re had instituted an IT governance process engaging the senior executive team in IT tradeoff decisions. Through this process, management had learned how to manage IT as a strategic asset:

Aligning the strategic portfolio, defining what it is, managing the IT budget, all this management discipline has been embedded in this organization for many years. People here wouldn't even understand how you might do it differently.

—Yury Zaytsev Global CIO

As management gained confidence with IT decisions, senior leaders had distributed much of the decision making responsibility. By 2007 the business functions controlled IT project budgets and the CIO controlled infrastructure investments. As the company continued to pursue integration and unification, management was working to ensure that investments in IT and business change would continue to reap increased shareholder value.

Exhibit 1 Summary of Financial Performance

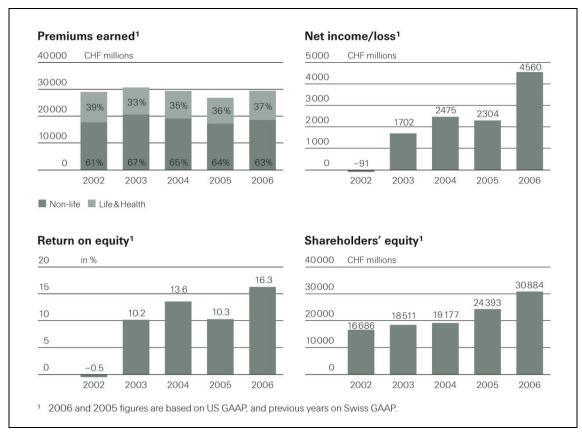


Exhibit 2 Swiss Re's Transformation Journey

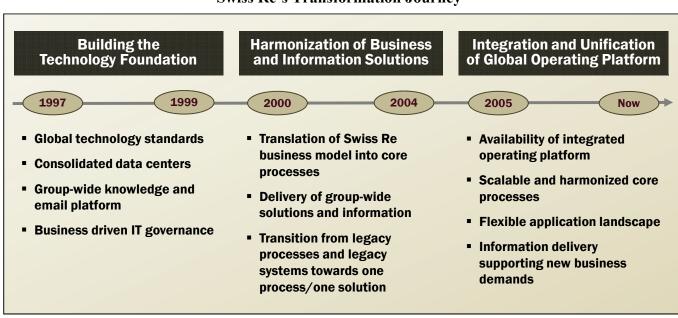


Exhibit 3 Swiss Re's Global Enterprise Management Model

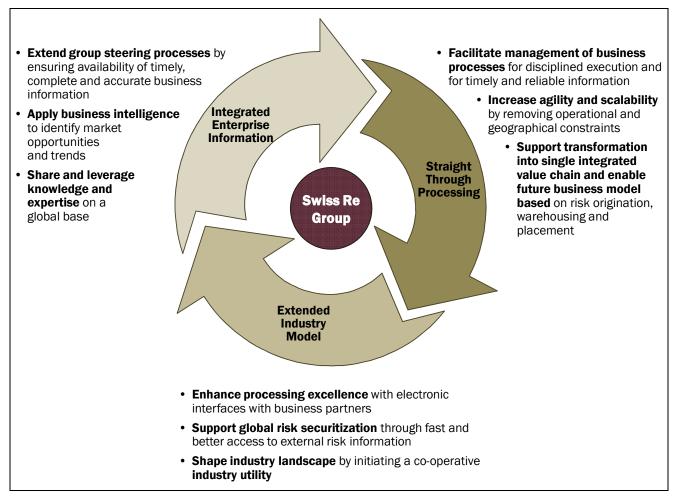


Exhibit 4a Swiss Re's Organizational Overview

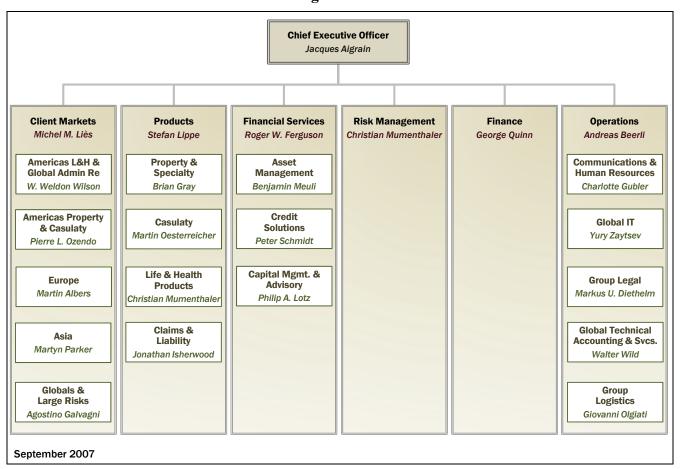


Exhibit 4b Swiss Re's IT Organizational Chart

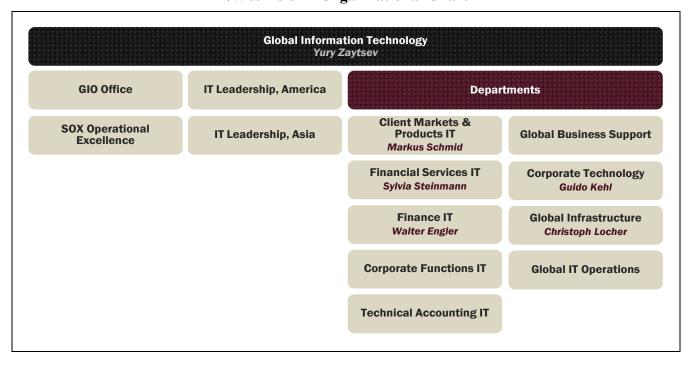
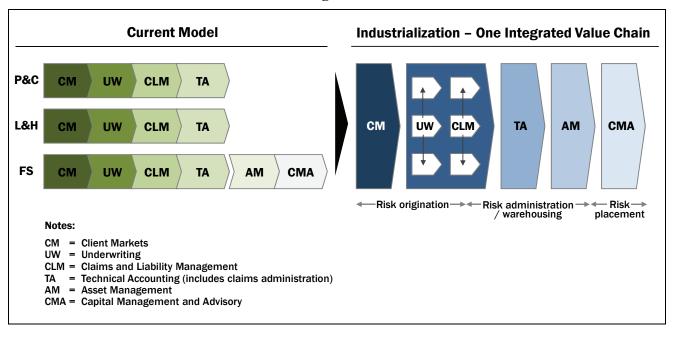


Exhibit 5 Swiss Re's Integrated Value Chain



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- The Future of the IT Organization
- IT Governance in Top Performing Firms
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- 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
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- 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, Nils Fonstad, and Stephanie Woerner 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.

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