



FINANCIAL SERVICES CASE STUDY: DESIGN REVIEWS USING THE BUSINESS CAPABILITY MAP

From the Business Architecture Guild®

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Editor's note: Some images were blurred and a few metrics were modified in this case study for commercial and proprietary reasons.

The Organization

Credit Suisse Group (“Credit Suisse”) is a global private bank and wealth manager with distinctive investment banking capabilities. Founded in 1856, Credit Suisse is headquartered in Zurich, Switzerland, and has a global reach with operations in more than 50 countries and 48,200 employees from more than 150 different nations.

Current Situation

Prior to the financial crisis of 2007-08, most of the financial industry, including Credit Suisse, had robust profit margins. During this era, multiple business lines grew rapidly, and IT infrastructure was typically optimized for each business line by location. Often, time-to-market was the primary driver to support a new product in a new region. Therefore, limited thought was given to a holistic consideration of the best global solution for a particular business need. Over time, these scenarios resulted in highly fragmented infrastructures with high total cost of ownership (TCO).

After the financial crisis, Credit Suisse’s operating environment became more cost-constrained, making it difficult for the company to sustain the same return on equity/return of investment margins compared to prior years. Moreover, increased regulatory pressure created stringent capital requirements on a number of business lines. It became imperative that the technology stack be rationalized for more consistent solutions to deliver lower TCO.

Credit Suisse’s solution was to implement an agile design governance structure that could conduct effective, thorough design reviews of a substantial IT portfolio. The methods the company used to establish this design governance forum and conduct design reviews using business architecture methodologies are the focal points of this case study.

Prior to establishment of a business architecture practice, there was little consistency in design reviews at Credit Suisse. Each department and team performed design reviews in their own way, if at all. The inconsistencies extended to templates, tools, evaluation criteria, and compliance to design principles, etc. Furthermore, it was unknown how the company could combine such inconsistent approaches these views into a holistic target state design. There was no cohesive design model or governance framework that could map to detailed design work. As such, the development team had limited understanding of how an application aligned to the big picture. Therefore, it was unclear at what level key design considerations should be made. Ultimately, the process was ad-hoc and not repeatable or scalable in any manner.

At the executive level, there was limited understanding as to how the overall portfolio aligned to differentiating or competitive capabilities of Credit Suisse. Given this gap, it was impossible to deliver evidence that design was aligned to and enabling the company’s strategic direction. Without this alignment, it was difficult to ensure that IT spend was allocated to the most strategically important areas. While there were key performance indicators (KPIs) at department/program levels, there was little transparency or interdependency of these KPIs and how they would be evaluated at an enterprise level. Moreover, in an increasingly regulated industry like financial services, Credit Suisse also found it difficult to demonstrate progress and exhibit the ability to adhere to good design principles, meet external regulatory commitments, and deliver effective controls.

For these reasons, there was a strong impetus to define a target state and conduct consistent design reviews, demonstrating good design governance to the Credit Suisse’s regulators. This effort created an opportunity to illustrate all major design challenges—as well as costs, pain points, and controls—on one consistent framework: the business capability map (internally called the “business capability model”). This opportunity led the chief information officer (CIO) and chief architect to establish a centralized business architecture function to remediate these concerns. The primary goals were to significantly improve the overall design review and associated governance processes within the Credit Suisse’s investment bank (“IB”) division.

The Approach

The business capability map was created to be the fundamental building block of a logical, functionally organized target state for the IB and to drive good design governance. At the outset, there were several partially complete and inconsistently applied capability maps in various areas of the company. Several key internal and external subject matter experts performed an analysis to compare and harmonize these maps into a single, enterprise-wide business capability map.



Figure 1: The Business Capability Map at Credit Suisse

A design authority forum was organized based upon seven functional areas of the IB. This formed a governance to help drive the standardization process across business, simplify the architecture, and reduce technology complexity and spend.

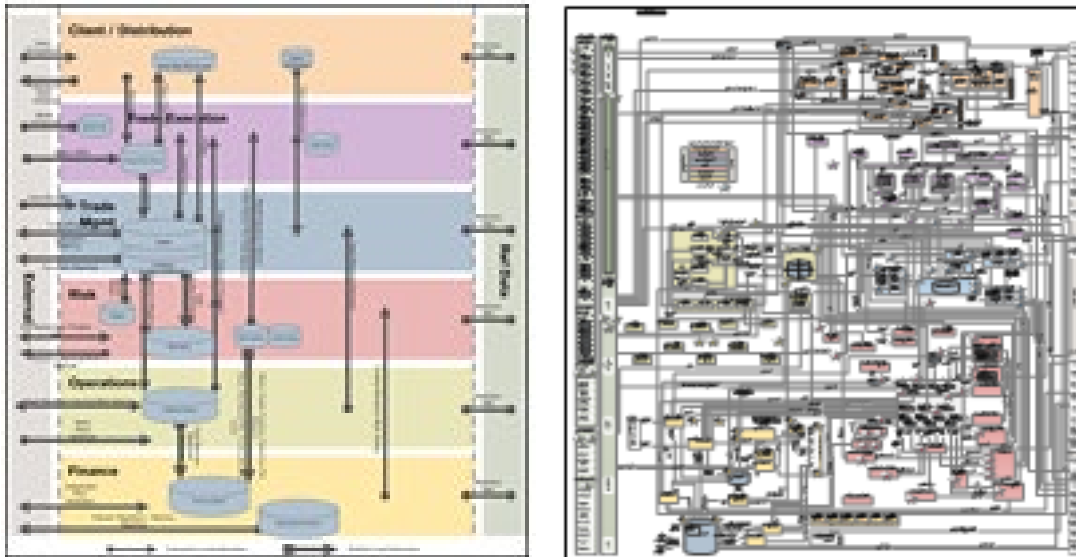


Figure 2: Logical Target State Views

The business capability map established an underlying framework for target state views. The IB's leadership defined and agreed to design principles. Designs were then evaluated and compared against these design principles. Compliance was not mandatory but highly recommended and demonstrating where designs did not align was an essential input during the review process. Each functional area defined a logical view using the common taxonomy provided by the business capability map. In addition, the functional areas were responsible for highlighting key design features. All detailed design work performed by underlying teams now had to map to this target state view.

To establish a combined business and IT architecture, an application view was layered on the logical target state, easily highlighting both adherence and misalignment to the target design. Applications in this view were tagged based on their "disposition" (strategic or tactical). Significant time and effort was invested in creating a logic/rule tree to categorize an application as strategic versus tactical. In doing so, it removed the majority of guesswork, biases, and subjective analysis from the application categorization process.

Applications mapped to the capability map demonstrated an understanding of the scope of the application, making it relatively easy to determine which components were strategic versus tactical. Escalation criteria and materiality thresholds were defined and embedded in the review processes across the entire IB to ensure designs were evaluated by the correct design forums at

the right time. The effort created a common approach that federated detailed design decisions to representative expert panels while maintaining oversight and central decision power where materiality warranted. The capability map again formed the core of how these thresholds were evaluated and mapped.

The IB created standardized templates that showcased alignment of the design or changes to logical and physical views, which drove consistency in the review and governance processes. These physical and logical views provided a more accurate picture of the scope of the proposed work effort, which, in turn, drove better transparency of work across the IB.



Figure 3: Standardized Design Review Templates

The various design authorities and working groups had flexibility to adjust their design review processes based on their needs and requirements, provided they were in compliance with the higher-level framework. Key features, KPIs, design issues, and control models were mapped to the target state views to cohesively identify and understand the impact of proposed changes.

Business Results

The efforts of the business architecture team yielded tangible results. While this case study is focused on the design review and process-related benefits of the business capability map, there were additional benefits that were not strictly design review related, including:

- The business capability map allowed business and IT stakeholders to speak a “common language” by providing consistent definitions and terminologies. It acted as a “Rosetta Stone” to minimize any confusion.
- The business capability map provided transparency by mapping KPIs to the business capabilities.
- The capability map allowed for application rationalization. For example, 68 systems were mapped to the Book Trade capability in the Asia Pacific region, highlighting an opportunity for application rationalization in that region for that capability.
- The business capability map enabled Credit Suisse to understand where the change spend was focused. By mapping initiatives to the capabilities that mattered the most and were truly differentiating, Credit Suisse could prioritize programs more effectively. While this measure was not the only rationale used, efforts that mapped to differentiating capabilities had higher potential to receive funding.
- Credit Suisse had been through several restructuring initiatives, which, at times, were due to changes in regulations, while at other times driven by market forces. There were significant shifts in business strategy every few years, some more significant than others. The business capability map was the first tool to map the impact of changes in business strategy to the overall business and operating model. It became relatively easy to identify channels, services, regions, geographies, employees, and/or applications that were going to be impacted.

In addition to these secondary benefits, the key design-related benefits from the common taxonomy of the business capability map came from having a single consistent model across the enterprise. Creating a common, IB-wide target state view allowed Credit Suisse to have a baseline to which design work was compared. It was mandatory across all design working groups to map proposed work to this framework. Any discrepancies were easily and immediately identified. IT and business staff across departments identified with this common view and understood how their applications and design fit into the overall picture. It became straightforward to identify the upstream and downstream implications, as well as create the front-to-back views “on the fly” using internally developed tools. In the event multiple design review forums were required, minimal to no rework was needed as the same design could be presented to different design review forums.

Another challenge organizations as large as Credit Suisse often face is the lack of clarity on who should review which design when and where. To solve for this problem, there was a need to establish design review criteria and materiality thresholds. The business capability map was again leveraged to establish this criterion for the IB as shown in figure 4.

Driver of design approval & Target State alignment assessment	Materiality Thresholds	Target State Impact			
		High	Medium	Low	None
Does the design have an impact across the IB?	1. Number of Level 1 BCMS impacted	≥3	2	1	1
Does the design spend money on non-strategic applications, or create new applications?	2. Number of new or non-strategic applications in scope	≥3	2	1	0
What is the implementation cost of the design?	3. Program/Project Budget	≥\$XX mil	≥YY mil	-	-
What funding basket is the spend from?	4. Funding Basket	Funding Source 1,2	-	-	-
DAs can serve as escalation point to resolve issues, such as non-alignment to Target State (e.g. breaching multiple design principles)	5. Design Issue Resolution Options	-	Yes	-	-

Figure 4: Escalation Matrix for Design Reviews

The thresholds were based on multiple criteria, including:

- Number of level 1 business capabilities impacted (to understand the scope of the change program)
- Non-strategic applications in scope (to understand the level of regretted spend)
- Total program budget (to understand the total amount of spend)
- Funding basket (every funding basket has a unique set of criteria that needs to be fulfilled)
- Design Issues identified (a temporary road block encountered while developing detailed design work that is in breach of the target state or design principles)

By implementing this escalation matrix, it was relatively easy to direct design reviews to the appropriate authorities. Decisions on designs that have low impact—UI change, non-functional changes, designs that are inherently strategic—can be taken by lower-level bodies like horizontal or business architect or lead business analysts. Decisions on designs that have medium to high impact—front-to-back designs, designs that have significant regretted spend, designs that need resolution of multiple design issues—are escalated to higher-level bodies.

Within the target state, architects and business analysts could identify the impact of their proposed change to the overall KPIs and common reference model. As these changes were mapped to a common model, they could easily locate and isolate impact of their proposed change in the overall technology stack. The content was stored in a central tool, providing an easy place in which to store and view this information.

The business capability map was also used to develop an enterprise-wide information map (internally called the “information model”). As described in the BIZBOK® Guide, the information map is the business information corollary of the business capability map. The information map establishes a structured description of the business information needed in the target state views. Using a distinct set of terms, it consistently describes the information created within and flowing between capabilities, independent of process and technology. This method allowed Credit Suisse to have a head start in complying with several new data lineage regulations by demonstrating traceability of information elements as they were translated to data across the technology stack. These views were made available on a read-only basis to the IB staff, and different views were created for several groups, including regulators. With these views, regulators could examine the status and progress of strategic projects for compliance with regulations under their purview.

Conclusion

The business capability map enabled consistent evolution of a target state and allowed the IB to conduct efficient, optimized design reviews and report on design progress to regulators.

Credit Suisse evolved and leveraged the business capability map to achieve considerable success. While this case study focused primarily on benefits of conducting design reviews using the business capability map, several other related benefits were also highlighted. In Credit Suisse’s experience, these different frameworks, taxonomies, and approaches were used to bridge across divisional silos.

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