GOVERNMENT AGENCY CASE STUDY:
LEVERAGING BUSINESS ARCHITECTURE
TO ENABLE TRANSFORM

From the Business Architecture Guild®
The Organization

The Alberta Gaming and Liquor Commission (AGLC) “is a Crown commercial enterprise and agent of the Government of Alberta, Canada. AGLC has two core businesses: liquor and gaming. AGLC is responsible for regulating Alberta’s charitable gaming activities and for conducting and managing provincial lottery activities. AGLC also controls the manufacture, importation, sale, purchase, possession, storage, transportation, use, and consumption of liquor in Alberta”.

In addition to the two core revenue generating businesses, the AGLC also has a third line of business called “Compliance & Social Responsibility” that is mandated to ensure the integrity of gaming and liquor activities. The Compliance & Social Responsibility division is responsible for issuing licenses and registrations, conducting inspections and investigations, providing training to the gaming facilities’ and liquor establishments’ staff, and providing education and public awareness on responsible gambling and consumption of liquor.

In today’s mobile cloud era, there is a significant increase in demand for digitally enabled AGLC-related business services. Stakeholders expect to be able to access the AGLC’s services anytime, anywhere, via any device, and be able to conduct business with the AGLC digitally.

The gaming industry is also experiencing a significant shift in the marketplace. While there is a decline in traditional gaming activities such as bingo and no substantial change in demand for electronic gaming machines (i.e., slots machines and video lottery terminals), there is an increasing demand for internet and mobile gambling. Research shows that the global demand for mobile gambling is expected to increase over 40% by 2019.

In order to respond effectively to this digital disruption, the AGLC has embarked on a business transformation journey to enhance and modernize its business services. The first phase of this transformation program is the enhancement and modernization of the Compliance & Social Responsibility services, which include registration, licensing, and inspections and investigations.

Current Situation:

In order to enable this digital transformation, the AGLC needs to overcome major business and information technology challenges. Traditionally, the AGLC has approached its stakeholders based on the type of products or services that they were seeking (e.g., based on the type of license that they would like to acquire). The business solutions are also mainly isolated point solutions that deliver one or two business products or services.

This results in a proliferation of solutions and disparate data sources that must be used by business stakeholders to fulfill their daily duties. In addition, these silo data sources hold duplicated stakeholder information, which make it very hard, if not impossible, for the AGLC to
build the “single view of the stakeholder”.

There is also poor stakeholder experience due to the limited online self-services provided by the AGLC and limited mobility for the AGLC’s field workforce, such as inspectors and field technicians. Internally, there are duplicated processes across the AGLC’s lines of business and extensive manual tasks performed to deliver services to the stakeholders.

Figure 1 summarizes the current business challenges at AGLC.

Figure 2 summarizes the current information technology challenges at AGLC.
Based on these business and information technology challenges, perhaps the most important transformation goal is the shift from the product-focused service delivery to the stakeholder-focused value delivery. This shift can enable 360-degree view of the stakeholder across the AGLC. Having a 360-degree view of the stakeholder will enable the AGLC to be more effective at identifying its stakeholders and understanding their needs and expectations, and to build, tailor, and deliver its services accordingly.

Secure access to the AGLC’s services anytime, anywhere, and via any device is the mantra for delivering both internal and external stakeholders’ expectations in the mobility and cloud era. In order to improve the AGLC’s stakeholder experience and enable digital self-services and mobility for the field workforce, the AGLC needs to make its services available on demand and across multiple platforms in a secure manner.

Finally, there is a need to streamline and automate processes to improve efficiencies. Figure 7.3.3 summarizes the transformation goals.
Our Approach:

The business architecture approach applied to this transformation program was based on a shift from the traditional product-focused technology-driven point solutions to a holistic stakeholder-focused value delivery approach.

As part of this approach, the team identified impacted capabilities and value streams, cross-mapped capabilities to value streams, and then heat mapped them. Each value stream was accompanied by a value delivery mechanism using a conventional, business use case approach. The mapping effort also defined stakeholder business interactions, and then devised a transformation framework.

The following sections provide further details on the approach taken.

Stakeholder Interactions

To understand the stakeholders and their nature of business interactions and exchange of values
(tangible or intangible), the team modeled a value network diagram, as shown in figure 4.

**Figure 4: Value Network Diagram**

Value networks show value exchanges across multiple stakeholders, which in this case includes the client, internal stakeholders, and external stakeholders.

**Strategic Drivers and Business Capabilities**

For the strategic view, the team identified a subset of the AGLC’s strategic intents and goals that were the drivers of the transformation. Since the progress toward each of these goals is measured by a set of metrics, as outlined in the AGLC’s business plan, the transformation should ideally contribute to the improvement of these measures. Therefore, the team identified that the success of the transformation could be gauged by the improvement in the strategic measures relevant to each of these goals.

These team mapped strategic drivers to the transformation goals, which, in turn, were mapped to the business objectives (to make the drivers and goals more tangible and measurable, i.e., “smart” objectives), and these objectives, in turn, were mapped to business capability levels 2
and 3. Figure 5 illustrates these mappings.

![Figure 5: Strategic Drivers Mapped to Business Capabilities](image)

**Value Streams**

Another fundamental piece of the business architecture work was the identification and design of the major value streams, as shown in Figure 6.
Once the value streams were designed and in place, the team cross-mapped each value stream to the business capabilities that enabled each stage of the value stream. As a next step, the team performed a preliminary assessment of these value stream stages and capabilities using a heat mapping technique. A detailed descriptive assessment of current state and future vision for each of the value streams and capabilities accompanied this assessment.

**Framework for Case Management**

To package the deliverables, the team applied a “framework for case management”. The purpose was to provide a clear vision of value delivery. Using conventional business use cases, the team cross-mapped enabling capabilities to each value stream stage. This cross-mapping was accompanied by a detailed value delivery mechanism that represented participating stakeholder interactions with the target service delivery approach.

**Transformation Framework**

Once the business architecture artifacts were finalized, the business architects worked with other
domain architects, such as enterprise solution and data architects in order to complete the analysis. The team then assembled a transformation framework for the program, as shown in figure 8. This framework presented a complete picture of the transformation and illustrated the current and future visions of business and information technology domains.

This framework also comprised other artifacts, namely: the stakeholders' interactions diagram, the business information map (mapping the relationships of the major business information concepts), and the solution context diagram (representing an overview of the stakeholders’ interactions with the future solution).

The strength of this framework is in the identification of major horizontal and vertical transformations required across business and information technology domains. The vertical transformation is from the traditional technology-driven point solution delivery to the business-driven holistic solution delivery. The horizontal business transformation is from a product-focused approach to a client-focused value delivery approach and the horizontal technology transformation is from point-solution delivery to the service-oriented solution delivery. These transformation concepts guide the transformation program from solution design and delivery approach to implementation. Figure 8 illustrates these horizontal and vertical transformations.

Currently, the AGLC is going through a comprehensive cloud readiness assessment in order to assess the current state of the organization, people, applications, data sources, and technology components and identify gaps, steps, and the roadmap to move from the current state to the future vision (i.e., enabling horizontal transformations).
Business Results

This transformation program was the first engagement leveraging business architecture at the AGLC. Business architecture contributed to this program by providing a clear and complete view of the business issues, depicting the multi-dimensional causality relationships among business concepts, and identifying a holistic approach to deliver a business-driven transformation.

As this case clearly reveals, business architecture can play a significant role in and have a profound impact on analyzing and delivering transformational endeavors. Organizations can benefit from leveraging business architecture as early as in programs initiation stage to reap the most value out of it.

By leveraging business architecture, the team was able to provide value not only to the transformation program, but also to the AGLC, as a whole. Perhaps the most important value is transforming the way the organization responds to disruption.

More and more, organizations are facing digital disruption and constant changing economic situations, changing market conditions, and rising needs and expectations of the stakeholders. The speed and magnitude of change are reaching to levels that conventional business models
and strategies are simply not capable of efficiently and effectively responding to change. Therefore, in order to sustain revenue levels, survive, and even thrive in this environment, organizations need to become more innovative and transform the way they approach disruption.

To deliver on this value, business architecture is a crucial tool to build the big picture and horizontally and vertically transform the organization. The value and results of leveraging business architecture at the AGLC allowed the organization to:

- **Apply systems thinking philosophy to the organization**
  - Understand multi-dimensional cause-and-effect relationships
  - Understand and simulate the behavior of the organization
  - Predict how the organization responds to change
  - Become more agile, flexible, and effective in building innovative and holistic solutions
  - Communicate an end-to-end transformation vision
  - Provide transparency and traceability
  - Provide a basis for root-cause analysis and granular requirements gathering
  - Identify and successfully mitigate business risks/threats

- **Shift from silo mentality to enterprise-wide perspective**
  - Move away from product-delivery to stakeholder-focused value delivery
  - Provide a cross-divisional view using business capabilities and value streams
  - Provide a new way of looking at the stakeholder value delivery
  - Utilize five value streams as opposed to over 60 processes documented
  - Identify process reengineering opportunities

- **Shift from bottom-up to top-down holistic business-driven approach**
  - Facilitate top-down business-driven solution delivery
  - Architect the business first before asking for solution
  - Involve the business architecture team in almost every project
  - Ensure board-level endorsement for business architecture
  - Align business and IT strategies
  - Facilitate implementation prioritization based on business needs using heat maps
  - Provide higher return on investments

**Next Steps**

AGLC anticipates pursuing next steps as follows.

- Map the processes and value streams using decomposition and aggregation relationships in order to identify potential process reengineering opportunities
- Incorporate dynamic rules-based routing in order to create a more robust framework for
case management for each of the value streams
- Further validate the heat maps with the business stakeholders
- Work with the program team to strategize and plan for the roadmap and implementation approach using the Cloud Readiness Assessment

Lessons Learned

**Value**

- Cause-and-effect (causality) relationship mapping was useful in providing a deep insight on where the root causes of the problems were and the value of tackling root causes.
- The use of value streams, which was a new concept being introduced to the business, was very useful throughout the analysis, as it created a basis for the scope of the program and for further analysis and process reengineering.
- Working closely with other domain architects was valuable to ensure the business architecture is well articulated and not disconnected from the rest of the domains. The enhancement of the transformation framework included other artifacts because of this collaboration.

**Fit**

- It is necessary to balance the use of new concepts and conventional, more well understood methods. For example, although dynamic rules-based routing was a more appropriate and flexible approach to demonstrate how value is delivered across the value streams, the business architecture team decided to use the conventional, business use case scenario approach. This was mainly due to the fact that there were already many new business architecture concepts introduced to the business stakeholders and therefore the use of a conventional approach facilitated communicating how value is delivered in a more familiar and well-understood manner.

**Communication**

- The use of the animated video was a simple yet powerful communication method to illustrate how value streams work and show how value is delivered across those value streams.
- Detailed design and clear documentation cannot guarantee that the architecture is properly and fully understood. Therefore, a business must have a well-understood communication strategy. For example, the transformation framework requires a walkthrough to be understood and appreciated by project stakeholders, including business sponsors and project managers.
About the Business Architecture Guild®

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