The Pursuit of Service Excellence: how business intelligence can drive service improvement

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In this presentation, I will briefly share with you my thoughts on the topic of service excellence, focusing more on the role of BI-enabled digital transformation in establishing contemporary Service Excellence Frameworks. This is a topic that is highly relevant to this group, as some of you have embarked on your journeys, some may have already completed theirs, and perhaps many are contemplating undertaking this journey.

How can we achieve service excellence?

The great Greek philosopher Aristotle once said:

> *"Excellence is never an accident. It is always the result of high intention, sincere effort, and intelligent execution; it represents the wise choice of many alternatives - choice, not chance, determines your destiny."*

More than a millennium later, one of the most successful coaches in American basketball, Pat Riley, distilled Aristotle's thoughts for a contemporary sporting context:

> "*Excellence is the gradual result of always striving to do better.*"

Aristotle and Riley's words share a common theme: that excellence is a continuous endeavour for improvement *and never a <u>one-off</u> activity or initiative.* This idea is of excellence as a *habit,* rather than an *achievement*, and this mindset reflects individuals' personal efforts or determination to excel in their fields, with increasing success as the natural outcome.

The importance of continual improvement in the pursuit of service excellence is the fact that excellence is a transient thing. What may be regarded today as excellent service may be merely standard service tomorrow. Our operating environment is constantly changing, with increasing customer demands and expectations. This makes it unproductive (if not impossible) for an organisation to highlight one-off achievements as exemplars of service excellence, as these achievements will soon be superseded. Rather, to achieve service excellence is to build a framework that best attains *continuous improvement.* The challenge lies in how to build these frameworks.

In the pursuit of service excellence, many organisations have adopted service excellence models to build their service excellence frameworks (Asif, 2014). Many of these models have been developed, refined and integrated over many decades. It is important to note that the foundation of all these models is the idea of *continuous improvement* with a customer-centric focus. Service excellence simply has no real purpose without continuous improvement (Asif, 2014). For the purposes of this presentation, no distinction is made between "service excellence models", "process excellence models" and "business excellence models" (BEMs).

While these models provide solid building blocks for a Service Excellence Framework, they do have limitations. One of the main limitations is the speed of making decisions. These models rely entirely on humans making the final analyses and decisions for service or process improvements. However, humans

are renowned for taking a long time to make decisions - and history shows that on many occasions, these decisions have been flawed, counterproductive or wrong.

Market and technology research demonstrates the impact of flawed decision-making:

- One-third of products are delivered late or incomplete due to slow decision making (Forrester Consulting, in Winquist 2014).
- Speed of decision-making is the primary challenge with regard to internal communication (Gartner, in Winquist 2014).
- For every hour the product team works, they wait 48 minutes on decisions to be made (Forrester, in Winquist 2014).

Service Excellence Frameworks require *agility*: the ability to quickly and repeatedly assess and evaluate many potential improvement alternatives, and to make the best decisions, *fast*. Agility in this context is not making decision-makers more agile by implementation agile methodologies (which still might be helpful); rather, it is agility where humans have reduced involvement in the decision-making process. So how can we achieve this kind of agility?

This is the point at which *digital transformation* comes to the fore. BI-enabled digital transformation provides a tremendous opportunity to drive continuous service improvement. Innovations in technologies such as big data, mobile, predictive analytics, data mining, data visualisation, artificial intelligence, and machine learning have revolutionised business intelligence. Organisations are now using their significant data assets more effectively to improve their decision-making capabilities beyond traditional operational reporting (Turnali, 2017).

Most, if not all of us in this room, are responsible for managing BI in our organisations and we understand the many definitions of BI. The definition most relevant in the context of service excellence is this: “BI is a framework that combines technology, processes and people for enabling faster, better-informed business decisions” (Turnali, 2017). This provides a clear perspective, with greater focus on decision-making and less emphasis on technology (Turnali, 2017). **Decision-making is the very essence of excellence** as, in Aristotle's words, it “represents the wise choice of many alternatives”.

In recent times what has re-energised business intelligence to drive continuous service improvement is the rapid advancements in three key BI-enabled digital transformation technologies: Embedded Analytics, Artificial Intelligence, and Machine Learning. The integration of these three technologies has realised a number of continuous improvement outcomes.

Embedded Analytics infuses data analysis and business intelligence with all kinds of applications, allowing automated and real-time decision making (Stanek, 2018). Built into applications, Embedded Analytics improves organisations’ capabilities to modify services towards continuous improvement for better organisational outcomes. The most significant value of Embedded Analytics with regard to Service Excellence Frameworks is its ability to understand complex data, which consequently allows for better decision making in real-time. The integration of this with its ability to identify problems and anomalies in processes enables a powerful platform with which to drive incremental service improvement.

Artificial Intelligence (AI) is:

> the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages (Oxford, 2019).

The evolution of AI over many decades has seen superior capability in computer systems, meaning increasingly more decisions are now automated with impressive accuracy and speed. Decisions that take humans days or weeks to make are now being accomplished in a matter of seconds.

Machine Learning (ML) is a narrower discipline within the broader field of AI which focuses on how machines can learn by themselves to perform tasks (Rebala, et al., 2019). This is achieved by machines analysing massive amount of data using complex algorithms and statistical models to automate solutions to problems, and has been enabled by the increasing power of modern machines, the wide-spread and easy access to telecommunication networks, and the low cost value of cloud computing. Machine Learning will continue to be increasingly powerful (Moore's law), and continuous improvement in services will be further driven by the next wave of BI-enabled digital transformation.

If BI is the engine that drives the next generation of service excellence frameworks, the high-performance fuel is a mix of Embedded Analytics, AI and Machine Learning. This powerful combination empowers continuous service improvement for *high-velocity decision-making.* This approach to decision-making has been made possible through an advancements in the three technologies above. The speed at which we analyse relevant data points for actionable insights determines our decision-making velocity:

> high speed decision making describes only how fast decisions are made, while high-velocity decision-making means decisions are made quickly and in a goal-oriented direction. High-velocity decision making means a decision maker is conscious of and considers the goals that are being pursued (Power, 2017).

This high-velocity decision-making approach has been adopted by highly agile and successful organisations like Amazon. Amazon is at the forefront of companies that harness the power of digital transformation to continually innovate with embedded analytics, artificial intelligence and machine learning to drive decision-making velocity. In his email to shareholders in 2017, Amazon's CEO, Jeff Bezos wrote:

> Most decisions should probably be made with somewhere around 70% of information you wish you had. If you wait for 90%, in most cases, you're probably being slow. Plus, either way you need to be good at quickly recognising and correcting bad decisions. If you are good at course correcting, being wrong may be less costly than you think (Bezos, 2017).

Bezos is driven by a focus on decision-making velocity to drive innovation. His email reveals the mindset that created Amazon's business model, empowered by his leadership capability and enabled by applicable digital tools and technologies. It prioritises the importance of making decisions **fast** over acquiring all relevant pieces of information to make a decision – a risk tolerance approach. The key feature of this model is about building digital capability in a systemic way, which enables agility to drive a culture that constantly seeks rapid continuous improvement.

Service Excellence is about Continuous Improvement, the key element of which is the ability to make decisions fast. Informed organisations are those which harness the power of digital transformation through business intelligence. Consequently, the role of Planning, Performance and Strategy (PPS) Directors has been transformed from not only delivering insights but also assisting organisations in realising the benefits of

continuous improvement through digital transformation. Traditionally, PPS Directors have been facilitators of the provision of information and insights for informed decision-making processes, however the acceleration of digital transformation has created new challenges for the PPS Director. The responsibility to help and support organisations in functions such as planning, service improvement, and quality and review, now requires a new type of leadership capability - a shift to a Digital Age leadership mindset. This transformation of role provides enormous benefits to an organisation: it moves continuous improvement initiatives from a distributed model to an integrated model, which helps organisations make better use of their limited resources, and provides a concerted and highly productive effort at an institutional level. This subsequently provides the required support services to an organisation's executive level leadership, to enable them to successfully drive strategies across the organisation.

In summary, BI-enabled digital transformation improves organisations' capability to infuse agility into their service excellence frameworks and dramatically improve their processes, to address business problems which ultimately sustain continuous improvement and achieve service excellence objectives. BI-driven process improvement initiatives can help organisations leverage the power of their BI investment and data assets for service improvement outcomes. Embedded Analytics mixed with AI and Machine Learning can propel effective processes, which in turn empowers informed decision making. Organisations seeking to achieve service excellence must strive to establish service excellence frameworks that sustain continuous improvement.

The key points of this presentation are:

- The Service excellence framework is becoming increasingly critical for organisational success;
- The pursuit of service excellence is a continuous endeavour for improvement, never a one-off activity or initiative;
- BI-enabled digital transformation provides tremendous opportunity to drive continuous service improvement;
- A mix of Embedded Analytics, AI and Machine Learning creates the high-performance fuel that powers the next generation of smart service excellence frameworks
- High-quality and high-velocity decision-making is a powerful combination to achieve agility in service excellence frameworks.

Thank you

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