# Embracing Business Excellence: Singapore and ST Engineering's Experience – Challenges, Success Factors and Impact.

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### **Abstract**

Business Excellence(BE) Models are frameworks that, when applied within an organisation, can help to provide a systems approach for a focus thought and action in a systematic and structured way that lead to increased performance. Singapore BE Initiative which include BE certifications and awards programmes provide the framework for defining the management system and integrating whatever quality standards, best practices, and improvement methodologies that are integral to how the business operates for sustainability.

Singapore Technologies Engineering Limited (ST Engineering) adopted the business excellence model. By 2001, all of its units were BE certified, and it adopted a group-wide integrated approach in steering its business excellence journey, and was bestowed the SQA and Innovation Excellence Award in 2002 and 2003 respectively. In 2007, it became the first recipient of the SQA with Special Commendation.

A key contribution of the business excellence journey to ST Engineering is the synergistic integration of its business units into a single, like-minded entity. The business excellence framework has also helped to build the foundation for ST Engineering to enter and compete in the global marketplace. The experience at ST Engineering suggests that the business excellence framework can be applied successfully to huge and complex organisations.

### Introduction

Business Excellence (BE) Models are frameworks that promotes excellence in organizational performance, when applied within an organisation, no matter the size or nature of the organization, helps to focus thought and action in a more systematic and structured way that should lead to improved performance. In general, business excellence models are developed by national bodies as a basis for award programmes. For most of them, the awards itself are secondary in importance to the wide-spread take up of the concepts of business excellence, which ultimately lead to improved national economic performance

The Singapore Quality Award (SQA) was first presented in 1995. As at November 2014 there are 54 SQA winners and 7 SQA with Special Commendation winners. Of these, 33 are from the private sector and 28 from the public sector. On average, there were two to three SQA winners every year.

In 2001, Singapore introduced two niche awards, namely the People Excellence Award, and the Innovation Excellence Award. They are given to organisations that have distinguished themselves in these key dimensions of the Business Excellence framework. To date, 16 organisations have won the People Excellence Award, and 12 have won the Innovation Excellence Award.

To drive excellence among ministries and government agencies, the Public Service adopted the Business Excellence framework in 1999. Today some 400 public sector organisations, including ministries, statutory boards, uniformed services, hospitals and schools have attained Business Excellence certifications. The BE Interpretation Guide for the Public Sector was introduced in 2013 which is now being used by public agencies to drive a more citizen centric approach while adopting a whole-of-government approach in serving the public.

# **Singapore Business Excellence Initiative**

The BE Initiative is today positioned as journey for continuous improvement striving for superior and sustainable improvement. There are nine certifications and awards programmes to recognise organisations which have achieved different levels and types of excellence. The 5 BE Certifications are the Singapore Quality Class (SQC), SQC STAR, People Developer (PD), Innovation Class (I-Class) and Service Class (S-Class)..

Today, more than 1500 organisations have been certified by SPRING Singapore to these Business Excellence standards, about half of these certified organisations are from the private sector and they are from a wide range of industries – from manufacturing and logistics to hospitality and business services. The certification process provide a development path for organisations to continue to innovate, improve and work towards attaining outstanding performance and in the process meeting the requirements of the Business Excellence Awards.

Organisations that consistently demonstrate outstanding performance are encouraged to apply for the BE Awards. These Awards recognise an organisation's efforts for developing outstanding management capabilities and for achieving world-class standards of performance.

The BE Awards are conferred through an annual award cycle managed by the SQA Governing Council, which is supported by a Management Committee. There are 4 BE Awards namely Singapore Quality Award (SQA), Singapore Quality Award with Special Commendation (SQA SC), Innovation Excellence Award (I-Award), People Excellence Award (PE Award)

## **Business Excellence Journey**

Over the years, the BE initiative has gained international recognition and the pinnacle Singapore Quality Award (SQA) has become a symbol of world-class quality in organisational management practices for superior results.

In 2009, SPRING Singapore was designated by the Asian Productivity Organization (APO) as its Centre of Excellence (COE) for BE. In this role, Singapore has helped more than 20 APO countries set up their quality and BE awards infrastructure. Singapore is also a key member of the Global Excellence Model Council representing premier Excellence Models from around the world. The BE framework is used by both public and private sector organisations. To further assist the two-thirds of public agencies in Singapore who are BE-certified. A BE Interpretation Guide for the Public Sector was launched in 2013 to align the language of excellence to the key imperatives underpinning public sector transformation with a stronger focus on citizen-centricity, building trust and whole-of-government efforts. A growing number of small and medium enterprises (SMEs) are with us on the BE journey.

# **Business Excellence Impact Study**

To understand the usefulness of adopting the BE mode, a Business Excellence Impact Study was conducted by the National University of Singapore, (NUS) Business School in 2014 which showed that BE-certified organisations enjoy profit growth twice that of their industry benchmarks and the profit growth of BE certified SMEs is triple that of their SME counterparts.

When assessing the Objectives for Embarking on the BE Initiative Journey. It was revealed that Organisations pursue multiple objectives when going for certification. And these objectives are well-aligned with the BE Framework i.e.

- Most objectives relate to:
- \_ Driving continuous improvements (76% of all organisations) and change (48%), to
- Providing a structured framework for doing so (70%).
- Differences between organisation types were:
- \_ SMEs generally reported more objectives than all other types of organisations.
- \_ SMEs focus more on using the certification to drive continuous improvement (82%) and to use it as a framework to structure management systems (82%).
- \_ *SMEs and LEs* were more interested in Marketing & Branding (54% and 39%, respectively).
- \_ MNCs were more interested in benchmarking (61%) than all other types of organisations

Overall, SMEs benefitted most from the BE initiative. As SMEs operate at lower levels of management practices. That is, their assessment scores were lower than those of Large Enterprises, MNCs and Public Agencies.

- However, the impact of the BE initiative on their management practices was the highest, whereby the BE initiative was used to professionalize the way they run their businesses.
- SMEs used the BE initiative mainly to drive continuous improvement and to provide a framework to structure management practices.
- SMEs were also most interested in using the certification and awards for marketing and branding purposes.
- The BE initiative resulted in improved financial performance compared to their industry peers.
- SMEs had the highest intention for re-certification.

# Key challenges associated with embracing the Business Excellence model

There are two main challenges, the first challenge involves the fact that the criteria in the BE model contain many statements or areas to address for each of the items requiring response from the users on how or what is done for the identified "areas to address" or statements. Since these are generic as such challenging to interpret to how things are done or the processes in place without spending time to understand what you do intimately. As such consultants/subject matter experts are needed to help.

The second challenge is that the business excellence framework criteria is non prescriptive and understanding the criteria and responding with the organisation's processes /approaches/ practices or performance would bring about a better appreciation of what is not done well, or effective for the purpose. It is left up to the user to first ensure they have a clear and well understood organisational profile (OP) and evaluate the gaps to find approaches to make improvements in the areas identified.

# ST Engineering and Business Excellence

ST Engineering Ltd is an integrated engineering group in the aerospace, electronics, military contracting and marine sectors. Headquartered in Singapore, the group reported revenues of \$6.54b in FY2014. Our customer are both commercial and defence in over 100 countries, served by our 23,000 employees through a global network of over 100 subsidiaries and associated companies in 34 cities in 24 countries.

ST Engineering embarked on its business excellence journey in 1997, its business units began to be certified to Singapore Quality Class (SQC), and by 2001, all of its 26 business units in Singapore were SQC certified. In 2001, ST Engineering adopted a group-wide integrated approach in steering its

business excellence journey, and was bestowed the Singapore Quality Award and the Innovation Excellence Award in 2002 and 2003 respectively. In 2007, ST Engineering became the first recipient of the esteemed SQA with Special Commendation and in 2011 was amongst inaugural winners of the Global Performance Excellence Award (World Class)

# **Embarking the BE Journey**

With the formation of ST Engineering in 1997 we entered a period of consolidation with the aim of improving the performance and leveraging the strong core competence we had built. Most of our business units were already ISO 9001 certified, this enabled us to achieve a great deal, but we wanted to go further and we embarked on the BE journey. It was implemented in stages throughout the business and our business units progressively were being recognized as SQC and PD entities and many amongst those in the pioneer organizations recognized.

In 2001 we decided to adopt the BE Model in the context of a Group to promote a Group-wide acceptance and application for the SQA in 2002. We were the first public listed organization and also the largest organization awarded the SQA in 2002. We continued to leverage on the BE model to also build our strengths in niche areas, all our businesses were certified to Singapore Innovation Class in 2002 and 2003 and were as Group the winner of the Innovation Excellence Award in 2003. In 2005 we won the International Asia Pacific Quality Award presented by Asia Pacific Quality Organization. In 2007 we won the inaugural SQA with Special Commendation which recognizes past SQA winners scaling greater heights of business excellence and for demonstrating global leadership in key business areas

### **Benefits & Success Factors**

The model has enabled us to develop a better understanding of our business. Whilst the managers had a very clear understanding of their own functional areas, the model has helped clarify the impacts of individual business units on the overall performance of the business areas and the Group. This has helped us to make improvements in end to end processes which could not be realised by separate improvements to the functions which make up the process.

Since our amalgamation as a group in 1997, our efforts to achieve our vision of becoming a global defense and engineering Group has resulted in the growth of our geographical operations spread and the strengthening of our global customer base. In addition, it has increased our capabilities both organically and through acquisitions. We have also penetrated new markets and constantly developed new products, solutions and services.

Before implementing the model we needed to get buy-in from all areas of the business which was quiet diversified. Decisions had to be made with regard to issues such as which quality system or management and business model is relevant and effective, and how it should be implemented. By involving people at all levels from across the businesses in the decision making process and implementation we were able to identify an approach that was best for us and to gain commitment to that approach from across the Group. Without that degree of commitment we would have achieved much less.

One of the most important benefits of the model has been the impact it has had on improving the performance and satisfaction of our employees. Our employees are our biggest asset and improvements in this area have a direct effect on our performance in all areas of the business. When we measured employee satisfaction in 1999 only about 62% of employees were satisfied. Without the use of the model we would not have identified the issues and challenges and would not therefore have addressed it. Now approx 80% of our employees are satisfied. Our customer satisfaction levels also improved from an average 92% in 2002 to 97% now.

Adopting a "Leading from the front" approach worked well for us, the Chief Executive, Senior Leaders and the Management Team took a "hands-on" role as Sponsors and Leaders of the various

BE categories and also as specialist process owners and steering the BE Secretariat functions in sustaining our BE Efforts in the businesses and the Group.

Since 2001 BE efforts are institutionalized as part of work in ST Engineering, and since 2007 at the Group level ST Engineering Business Excellence Council (BEC) supported by its 6 Component Committees continue to work in permeating a strong customer-centric culture and innovation in the Group, providing a holistic approach to our business excellence initiatives. An annual BE Seminar is the platform to communicate the direction for the New year, report progress of BEC Component Committees, share and learn best practices and reward and celebrate exemplary contributions. At the Business Sector level there are similar structures, initiatives and programs reaching out to all and institutionalize BE as a way of work whilst imbuing a customer centric culture.

### Lessons drawn

Once the philosophy of what BE model does is understood - People – quickly realize it is not a fault finding tool, instead a tool to help determine if you are on track and how to remain or get on track - they get flexible and more willing and accepting to the need for periodic changes as necessary to remain relevant

This framework is a good starting point to ensure that the group has the ability to stay focused and align its efforts and resources in achieving its vision, mission and strategic objectives. The assurance is therefore not so much what we have achieved today, but ensuring that we have the systems, processes and practices, which will ensure our relevance and timely responses to any unforeseen challenges and our future needs of our businesses and as a group

Visible, hands-on leadership is crucial - leading in sponsoring, leading the various BE categories and steering towards a common purpose in the adaptation and application of the framework

Business excellence champions and managers were trained to share openly on issues to reinforce support and prevent misunderstanding. Business excellence reports and supporting publications were also circulated regularly to staff. At the top management level, a Business Excellence Council led by the Leadership Team and Business Excellence Coordinators, was formed to oversee the journey with the President and CEO as Chair. The progress of the business excellence journey is tracked with programmes and initiatives as well as key performance indicators against a timeline.

### Conclusion

A key contribution of the business excellence journey to ST Engineering is the synergistic integration of its business units into a single, like-minded entity. The business excellence framework has also helped to build the foundation for ST Engineering to enter and compete in the global marketplace. The experience at ST Engineering suggests that the business excellence framework can be applied successfully to huge and complex organisations. However, implementing business excellence in a large organisation like ST Engineering has its challenges. Here, strong and committed senior management leadership is vital to ensure success. At ST Engineering, the senior management are strongly dedicated to spearhead and drive the business excellence journey

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