

Organizational Excellence and Agility: A Correlation Model

Karam Al-Assaf

Masters of Science in Engineering Management

Dubai, UAE

Karam.al-assaf@outlook.com

Dr. Slim Saïdi

Associate Professor of Industrial Engineering

Dubai, UAE

Slim.saidi@rit.edu

Abstract

The strive to sustain excellence within organizations has increased with the constant change in customer demands and toughening of competition. With these rapid changes occurring, the need for organizations to be agile has become a significant element in their operation schemes to sustain the excellence and be future-ready. This need raises the question of the relationship between organizational excellence and agility. Various models and frameworks have been developed to achieve excellence and agility in organizations. However, limited studies have correlated the two. This research investigates the relationship between excellence and agility within organizations and develops an assessment correlation index matrix between the two domains. That will help organizations understand their states in agility and excellence. The out-take for an organization is to know its categorization in the correlation model (beginner, master, conservative or fashionist) and determine the under-achieving pillars in each domain. The results of the study have shown that there is a high positive correlation between the two domains in both the public and private organizations. Although while one would expect that private organizations would have higher correlation between the two domains, it has been observed in this study that public organizations within the UAE have shown higher correlation data. This could be attributed to the fact that the Government of the UAE has introduced various initiatives since the 90's that encouraged public organizations to implement excellence models such as DQA and SKEA. Moreover, the study has shown that regardless of the size of the company, the correlation between agility and excellence is highly positive.

Keywords

Agility, Excellence, Correlation, Model, and EFQM.

1. Introduction

With constant changes in customers' demands and increase in competition, organizations have become more aware of the importance of being agile in their operation schemes. Agility is defined as the organizations ability in merging their response-ability and knowledge management to respond swiftly, effectively, and properly to any unanticipated change (Wendler 2014). To reach the ability of flexibility in their response, organizations must attain the best ability they can in six main domains within the organization, namely: futuristic vision, innovation, flexibility, co-operation, and speed (Al-Hammouri 2020). There are various tools that can help organizations in achieving these domains. Such as their technologies, team structure, management of the organization and process structure (Avazpour, Ebrahimi and Fathi 2014). To achieve agility within the organization, it is key that the performance and quality of service the organization remains high. This is due to the important of achieving the best they could which makes adapting to new changes more efficient and less time consuming, since they know how the organization operates and performs the way it does.

Excellence is an important concept that determines the level of quality the organization maintains throughout the entire process of its operation. To achieve the best performance and results, the organization should focus on three main elements within the process that would guarantee their success and marks them as excellent. Firstly, organizations should set a clear direction by utilizing well defined goals and clear visions to be attained. Executing the organization's vision should be initiated by utilizing a well-defined and clear strategy that involves all stakeholders in its implementation. Secondly, for the organization to determine how well they are proceeding, continuous performance analysis should be done. Based on the vision that the organization has established, the

performance of the organization should be assessed by monitoring the strategic and operational performance that is achieved. Monitoring how well the execution of the strategy is a very important element at identifying the excellence capabilities that the organization holds (EFQM 2021).

Due to the importance of the two domains, various studies have been done to analyze each domain of excellence and agility individually. However, limited research has been conducted to study the correlation between agility and excellence. From the previous studies, it has been identified that in various environments within organization one of the two domains was a driver for the rather than having a direct correlation between agility and excellence. However, in various cases, a positive correlation was concluded (Carvalho, et al. 2019). In different studies and researchers, it has been concluded that excellence is a driver of agility, and in others it has been identified as agility being the driver of excellence. It has also been noted by previous researchers that the amount of research that concluded with clear correlations between the two domains is minimal (Carvalho, et al. 2019).

Consequently, the aim of the current study is to assess the correlation between excellence and agility among public and private sectors in the United Arab Emirates. Utilizing a quantitative research approach, the data for the analyses is collected by utilizing a detailed survey that gauges the position of the organizations within the two domains.

2. Literature Review

2.1 Agility

2.1.1 What is Agility?

Agility is defined as the ability of an organization to adapt and succeed in uncertain and changing environments. It requires organizations to be flexible and adaptable to overcome uncertain conditions and to maintain and increase their competitive advantage. Hence, this emphasizes the need for organizations to be efficient in their business process, resource selection, the strategies they develop and the organizational structure they create. However, with the constant changes and development, agility now requires a deeper meaning for organizations to access the success of their organization in becoming agile. The comprehensive characterization of agility is redefined by effectively integrating the organization's response-ability and knowledge management to rapidly, efficiently, and accurately adapt to any unexpected change (Wendler 2014). Moreover, the response must be proactive and reactive to meet customer needs and gain opportunities without compromising the quality of the product or process (Wendler 2014). Since agility requires high responsiveness and flexibility, achieving enterprise-wide agility is essential. It is vital to consider and implement agility in the early supply chain stages to ensure the achievement of enterprise-wide agility (Nejatian, et al. 2019). The enterprise-wide agility will positively impact the performance of the supply chain and enable better flexibility in meeting new demands from customers. Moreover, this would guide the introduction of agility in the whole firm (Denning, Beyond Agile Operations: How To Achieve The Holy Grail Of Strategic Agility 2017).

Agility in an organization is a journey with many stages during which the organization develops various agility capabilities. At each stage of development, the agility that the enterprise aims to achieve focuses on different areas and scopes. The initial stage is achieving operational agility, which focuses on the company's ability to maintain flexible operations and processes within their organization. It aims at improving current products or processes to meet the demands of the existing and potential future customers. It includes staying up to date with the new technological advancements, assessing and monitoring current processes for improvements and the organization's performance in meeting customer's demands (Denning, Beyond Agile Operations: How To Achieve The Holy Grail Of Strategic Agility 2017). The capabilities gained in operational agility allow for high-efficiency gains and quality improvements since it focuses on the agility of teams, units and the various departments and firms within the enterprise. Although reaching operational agility capabilities is highly important, transitioning into the next agility stage is critical. In an environment of constant robust competition, where competitors meet the shifting needs of the customer at a fast pace, monetization of the improvements has become a challenge for organizations. Hence, organizations are now required to shift their focus to meet changing demands from customers and create new customers for themselves.

Strategic agility (SA) is highly based on market-creating innovations (Denning, What Is Strategic Agility? 2018). Unlike operational agility, the focus shifts from the current and direct market to a broader and bigger picture, which should be met before reaching the strategic agility capabilities. The market-creating innovations are crucial to achieving SA since they utilize current technologies and deploy them into new business models. It aims to create new markets with new products to reach new customers while improving their capabilities (Gregorio 2020). In return, this enables organizations to be ahead of any challenge they face. With any unexpected change that may occur, organizations that master strategic agility (i.e., market-creating innovations) would be ready to create a new model to overcome these challenges since they have developed this agile capability along the way (Denning,

Beyond Agile Operations: How To Achieve The Holy Grail Of Strategic Agility 2017).

2.1.2 Pillars of Agility

Agility requires organizations to focus on elements that would guide them in achieving the necessary capabilities to reach strategic agility and goals. In literature, many pillars for agility have been reported. However, five main pillars were set and assessed, which can guide organizations into developing high agile capabilities that would help them overcome unexpected changes and challenges. These pillars are (Al-Hammouri 2020):

Futuristic Vision: the ability to set future directions and paths for the organizations and assess the outcomes and goals.

Innovation: the ability to utilize new technologies and methodologies in generating new ideas, products, and services to meet new demands in new markets.

Flexibility and adaptability: the capability to adjust and respond to changing needs. Moreover, the ability to deal with uncertainty and ambiguity effectively.

Co-operation: the ability to leverage internal and external knowledge and resources to build partnerships and strong teams

Speed: the potential to respond and gain knowledge in new conditions and events by effectively managing change.

The pillars of agility are essential to keep in mind since they will guide the assessment of agility within an organization. Moreover, the pillars are utilized to measure the level of agility the organization has achieved.

2.1.3 Enablers of agility

To achieve agility, the organization should diligently develop the enablers of agility. These enablers guide the detailed operations of the organization by allowing them to focus on areas that will support them in gaining valuable agile capabilities. The enablers of agility can be found within different elements in the organization, from the required resources, used technology, acquired talents and much more. Agility can be attained by focusing on various areas in the organization that may open many doors to becoming agile. In the study conducted by Avazpour et al. (Avazpour, Ebrahimi and Fathi 2014), the enablers of agility have been identified and ranked based on the evidence found in the current literature. From the analyses undertaken, the eight enablers of agility are concluded to be:

1. **Team building:** agile organizations demand empowering people working in internal teams, cross-functional teams, and teams outside of company borders to decentralize decision-making.
2. **Hardware, tools, and equipment:** agile manufacturing necessitates a quick transition from one product's assembly to another. As a result, fast hardware and equipment changes are required.
3. **Supply chain management:** the supply chain management system focuses on customers' main business process difficulties. Hence, supplier connections and interactions should be flexible in agile supply chain systems.
4. **Concurrent engineering:** managing change in a manufacturing setting necessitates a more systematic approach to planning both the product and the downstream processes for production and support at the same time.
5. **Information technologies:** the internet, CAD/CAM, MRP, ERP, EDI, and EC are examples of information technologies that may effectively integrate organizations.
6. **Knowledge management:** knowledge management is a critical issue in an agile company; hence a framework for successful management of knowledge workers (such as programmers, engineers and so on) should be devised.
7. **Electronic Commerce:** Electronic data interchange (EDI) refers to the electronic or online exchange of standard business documents such as purchase orders and invoices between organizations. EDI can provide strategic benefits by retaining customers, lowering transaction processing costs, lowering inventory expenses, and so on.
8. **System integration and database management:** an agile corporate information system must be able to reconfigure in a relatively short amount of time and integrate components from other organizations' information systems, in addition to achieving the conventional requirements. The Systems Integration Architecture (SIA) is built on a revolutionary integration transformation paradigm and provides sets of high-level services that enable information system components to be altered quickly.

2.2 Excellence

2.2.1 What is Excellence?

In the thrive of being the best out of all competitors, organizations have shown higher interest in implementing excellence. In simple terms, excellence is being the best at what the organization is doing by constantly improving its process, resources, systems, and technologies (Lasrado and Uzbek 2016). Excellence is adopted in all sectors such as governmental, healthcare, educational institutes, and private sector organizations. Achieving operational

excellence has driven many models of excellence to be created and implemented in different sectors. When implementing an excellence model within an organization, it needs to focus on the excellence model in the long term and not only on the implementation phase. Integrating an excellence model is essential; however, the pursuit of excellence should be part of the organization's strategy to maintain excellence over time, even with sudden changes and unexpected challenges. Operational excellence is highly dependent on leadership, teamwork, and problem-solving to guide and sustain improvement within the organization. A few key points should be considered and kept for organizations to maintain excellence when implementing an excellence model.

1. The strategy of the organization should be clearly defined and communicated throughout the whole organization
2. Process improvement activities should be implemented with constant self-assessment tools and methodologies.
3. Data analysis available within the organization should be a frequent habit and an activity that the organization should utilize.

Throughout the evolution of the various industries, many processes were re-designed to ensure the highest quality in service and products. With time, quality has evolved into total quality assurance, where quality was set as a priority in the entire process in the organization. This evolution led to the introduction of the Total Quality Management (TQM) model. With the focus on quality, TQM was used in various excellence models since TQM focuses on improving the whole organization's efficiency, effectiveness, and responsiveness. Hence, organizational excellence and the achievement of its goals is at the heart of the TQM model. The EFQM (European Foundation Quality Model) is a commonly used model in most organizations since it is the most robust model that targets quality and excellence compared to the other models (Dubas and P. Nijhawan 2005). Within the scope of the study, the EFQM model used in the United Arab Emirates is seen to be the most relevant model to be utilized in this study. This model helps organizations develop an innovative and improved culture that thrives for the best performance. The implementation of the model will aid organizations in understating organizational maturity, driving transformation programs, building organizational capability for improvement, managing risks, building resilience, and benchmarking performance (EFQM 2021).

Within the EFQM model, three main guiding principles help organizations achieve excellence (EFQM 2021). These three principles are:

1. **Direction:** the element of direction enables the firm to be seen as a leader in its ecosystem and well-positioned to achieve its future goals. It aims in defining an inspiring purpose, create an aspirational vision, sustainable value (driven by a strategy), and build a winning culture.
2. **Execution:** aims in guiding the organization to implement the strategy and vision. It targets identifying and engaging key stakeholders in the organization's ecosystem, creates sustainable value for the organization, and drives the level of performance required for success in the current environment and in its transformation for success in the future.
3. **Results:** based on the direction and execution, the third element targets the organization's performance in terms of stakeholder perception, sustainable values created and the drive towards performance and transformation.

2.2.3. Pillars of Excellence

From the elements in the EFQM model, three pillars have been derived to gauge the level of excellence within the organization. These pillars target the level of excellence the organization has achieved in terms of the vision set, the strategy utilized, the organizational culture, stakeholder engagement, performance and results, values created, and the transformation ability developed. These pillars are (Al-Hammouri 2020):

1. **Vision realization:** highlights the importance of developing flexible strategies and tasks, and implementing them to achieve the long-term vision, raise readiness for the future and enhance competitiveness.
2. **Value-adding:** providing proactive, innovative, seamless, and interconnected services that are personalized and consider the needs of all categories of customers. Enabling smart employment for digital transformation, benefiting from partnerships, optimal investment of talents, and human capital's creative capabilities in designing and delivering exceptional services that delight customers and achieve competitive performance.
3. **Enablers:** focuses on the importance of integration, cooperation, and partnership in all areas within the integrated work system to enhance the utilization of all capabilities available in the scheme of excellence, provide distinctive sustainable value, and achieve the desired positive impact.

2.2.4 Enablers of Excellence

The enablers of excellence are known to be the key elements that will support the organization in implementing the excellence model and are the drivers of the pillars that gauge the excellence level of an organization. These enablers guarantee that the results needed are achieved within the organization. The EFQM model has nine enablers that are categorized into five main groups (Chambers 2016).

1. Leadership: leadership within the EFQM model focuses on utilizing the essential competencies, managerial recourse, organizational capital resources, positional capabilities, and cultural capabilities within the organization. The focus is on how, via a quality culture, top-level management supports and facilitates the achievement of the enterprise's purpose by building and maintaining the values and behavioral patterns necessary for corporate success (Ruiz Carrillo 2005).
2. Policy and strategy: to carry out the strategy the organization need to design and implement policies, plans, objectives, and processes. The proper utilization of the policies and plans set by the organization enable organizations to achieve excellence.
3. People: excellent firms value their people and develop a culture that allows them to achieve mutually beneficial corporate and personal goals. They build the capacity of their people while simultaneously advocating justice and equality. They look after, communicate with, reward, and acknowledge employees in a way that motivates them, encourages dedication, and allows them to put their skills and knowledge to work for the company's benefit.
4. Partnerships and resources: to support the effectiveness of their strategy, policies, and processes, excellent firms plan and manage external partnerships, suppliers, and internal resources. They ensure that their environmental and social consequences are properly controlled.
5. Process, products, and services: excellent businesses establish, manage, and improve processes, commodities, and services to add value to their customers and other stakeholders.

2.3 Correlation between Excellence and Agility

Few studies have analyzed the relationship between agility and excellence due to the importance of the two concepts. It has been concluded that organizational agility is an enabler of operational excellence, especially in the highly competitive environments (Horney 2018). In his study, Carvalho et al. (Carvalho, et al. 2019) has reported a positive correlation between agility and operational excellence. For an organization to maintain the excellence it develops, it should uphold high and effective agile capabilities, to maintain efficient and effective excellence model. Furthermore, the study has shown that agility is the indicator of the level of excellence of an organization in an unstable and dynamic environment. Moreover, they have analyzed culture as a third factor in their study. It has been specified that agility is a true indication of organizational excellence in today's globalized society due to the existence of highly variable and changing conditions.

3 Methodology and Assessment

3.1 Methodology Approach

Based on the literature review conducted and to the authors best knowledge, no previous research has developed a clear and defined assessment tool correlating excellence and agility that can aid organizations in understanding where they stand in both domains. With the importance of the relationship between the two domains, the research aimed to see the performance of the organization in the domains by proposing a set of specific questions that target various areas within the organization. The data required was collected using a detailed questionnaire based on the multiple pillars analyzed and listed (Al-Hammouri 2020). The study was applied on organizations from various sectors and organization sizes. The responses collected targeted organizations operating in the United Arab Emirates, from both the private and public sectors. Some basic data of the organization was collected to be utilized in the analysis of the results, due to the hypothesis that these areas may affect the categorization of the organization in the two domains. These include the size of the company, the designation of the respondent, the level of respondent knowledge in the topics and the type of organization (private or public).

3.2 Survey and data collection

The survey consisted of two main sections that gauged the data required using detailed questions. The first sections focused on the five pillars of agility (futuristic vision, innovation, flexibility and adaptability, cooperation, and speed). The questions created in the agility section gauged the performance of the organization in the technology deployed, the framework and policies, the team and work culture maintained, innovation and contribution and the data utilization. The questions aimed on gauging the level of the agile capabilities that the organization utilizes based on the infrastructure of the organization and the ability to shift its resources and capabilities to meet new demands in each of the five targeted pillars and domains. The second section focused on the three pillars of excellence (vision realization, value adding, and enablers). The questions in this section aimed to gauge the capabilities of the organization in achieving the highest ability in maintaining a healthy work environment,

resources and data utilization, partnerships, and success achievement. The three pillars all aimed at gauging how well the organization operates internally and externally with all stakeholders.

Each question, an ordinal scale was used to capture the responses from the respondent regarding how well they agree that their organization is doing in each area. The respondent had five options (strongly agree, agree, neutral, disagree and strongly disagree). To target public organizations, the survey was translated into Arabic to gauge their responses correctly. The survey was published utilizing Google Forms, since it made capturing all responses easier to be analyzed.

3.3 Scoring rubric and analysis methodology

To create an index with the two domains, the ordinal scale (the Likert scale which was utilized) was translated into a scoring rubric from 1 to 5. The scale 1 represents strongly disagree to the question and the 5 represents strongly agree to the question. While 3 represents a neutral standing. Since the excellence domain has 20 questions, the maximum possible score is 100 (20 questions x 5), while the lowest score is 20 (20 questions x 1), which makes the excellence score range 20 to 100. Similarly, the range for the agility domain is from 25 to 125, since the domain has 25 questions. Based on the score of each organization, it is to be classified into one of the following classes (indicated in Figure 1):

1. **Beginner:** organizations in this category have low capabilities in all pillars of both domains: agility and excellence.
2. **Master:** indicates achieving high scores in the excellence pillars and at the same time is an agile organization.
3. **Conservative:** organizations that have solid excellence operations, but they are cautious and careful, or even slow, when adapting agility change.
4. **Fashionist:** an organization that lacks solid excellence operations however, they are fast in adapting agile modules.

4 Results

4.1 Excellence and Agility Correlation: Overview

The total

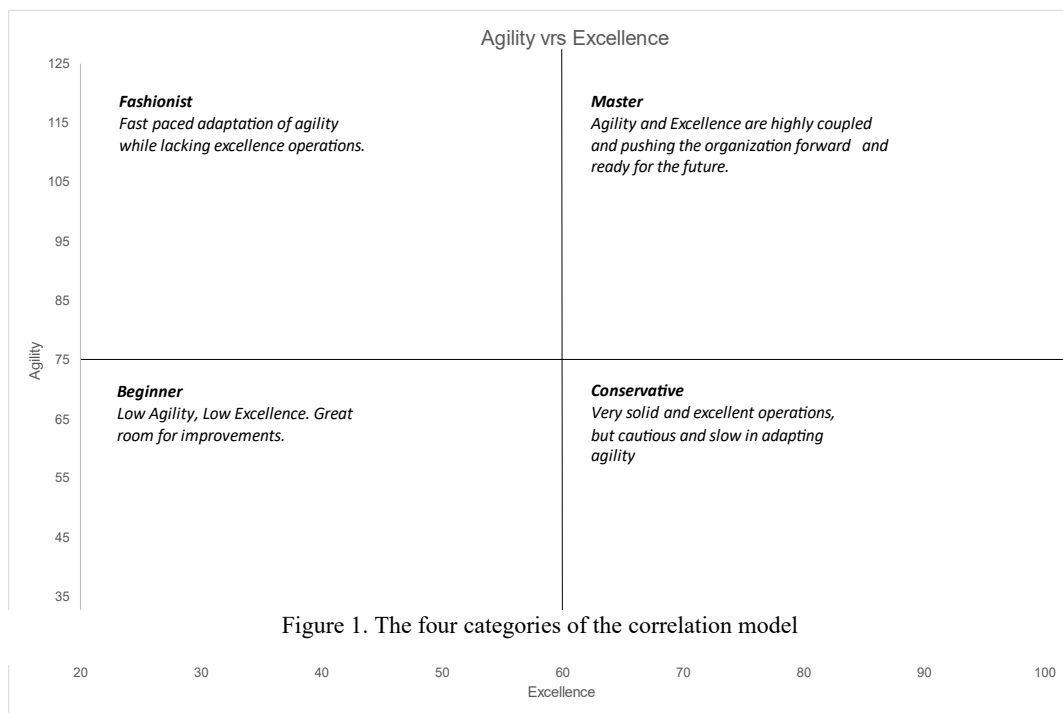


Figure 1. The four categories of the correlation model

number of responses received were from 53 well-known organizations within the UAE. From the sample, 75% of the organizations were public entities while 25% were private entities. The company sizes varied, where 74% of the organizations had more than 500 employees, 16% of the organizations had employees in the range of 50 to 500, and 10% of the organizations had less than 50 employees. From the data collected, 89% of the respondents were aware of either of the two topics of agility or excellence. Analyzing the data for consistency, an outlier was identified where all the responses scored the lowest score possible. This is identified to be a possible misunderstanding of the questions or the purpose of the study. The data for the organizations in each domain was aggregated and processed to find the total scores of the organization in each domain.

Figure 2 shows the positions of all surveyed organizations against the agility and excellence axes. A linear correlation is evident such that the higher the organization scores in agility, the higher its score in excellence domain. To be able to have a concert conclusion, the Pearson's Correlation test was utilized to identify any correlations between agility and excellence. The Persons correlation test is a commonly used statistics test that helps in measuring any statistical relationships between two variables (Solution n.d.). From the analysis used on the two factors, it has been found that there is a strong positive correlation of 94% between the two domains of agility and excellence. This confirms the results and conclusions found by Carvalho and et al (Carvalho, et al. 2019). This can be explained by the close relationship between the pillars of each domain. For example, for an organization to be excellent, they should enhance their ability to anticipate future global trends and utilizes new technology to attain new developments in the market. With the high anticipation ability, this will increase the ability of the organization in creating, analyzing, and assessing futuristic models. Moreover, the correlation demonstrates that agility requires organizations to make realistic decisions to meet needs and expectations of its customers. Excellence supports achieving this by setting strategies that support decisions taken that will help in meeting demands of the market.

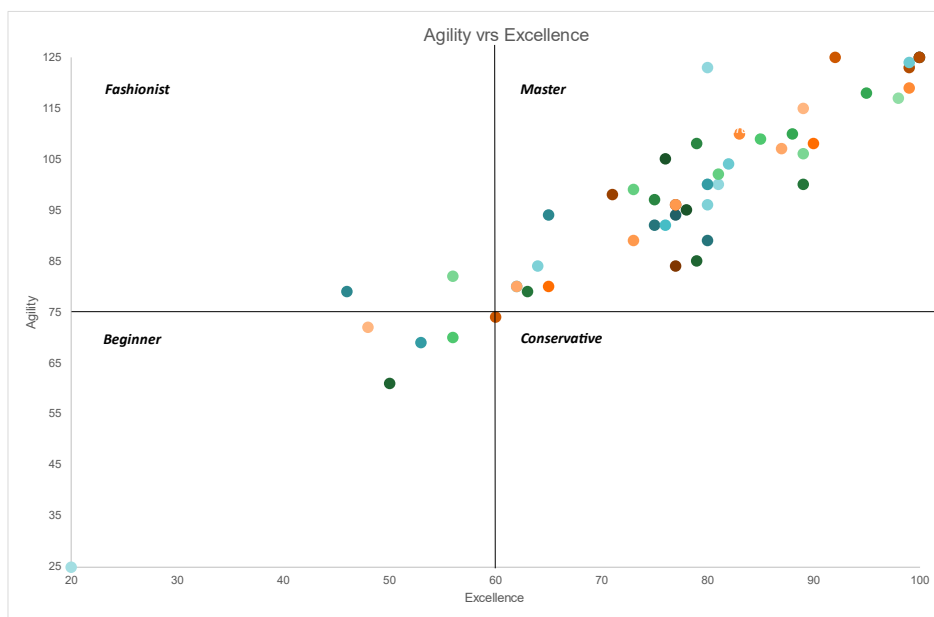


Figure 2. Correlation of Agility and Excellence

4.2 Excellence and Agility correlation: Public versus Private Organizations

The data collected accounted for both public and private organizations within the UAE. The correlation of agility and excellence within the public organization is high with a 93.9% correlation coefficient. While the correlation between the two factors within the private organization was found to be 91.6%. This proves that the correlation of the two factors is not affected by the type of organization, since the difference between the correlation factors is only 2.3%. The calculation for the correlation index can be found in Appendix B. Both the correlations of agility and excellence in public and private organization are positive as indicated by the trendline in Figure 3. It is thought that private organizations tend to have higher capabilities in achieving agility and excellence, since they generate more cashflow that enables them to invest into achieving these capabilities and have more competition to deal with. However, the public sector organizations also scored high in the two domains. With citizens being a main customer for public entities, it is important that the public entity adapts to the new changes to serve their citizens more efficiently. One method in achieving better performance in public organizations is introducing better technological transformations, which will increase the agility of the organization. The UAE governments introduced the ICT 2021 Strategy and UAE National Innovation Strategy that aim in prioritizing technology investments and advancements within the country (Turqieh, Aoun and Nasr 2018). Since the UAE has focused on introducing agile capabilities and increased the awareness of having excellent capabilities, the sound results of these initiatives are demonstrated in this study.

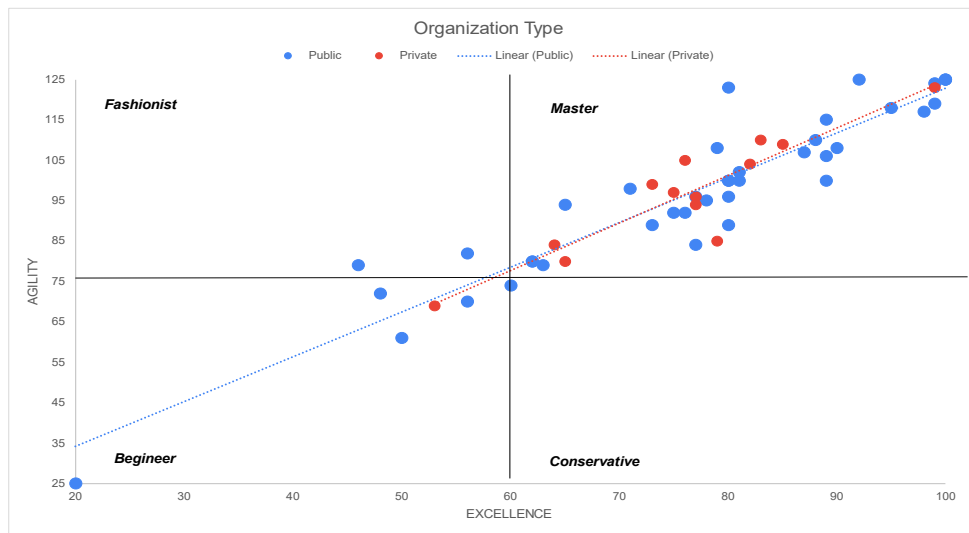


Figure 3. Correlation between agility and excellence based on organization type

4.3 Excellence and Agility correlation: Size of the Organization

The size of the organization tends to be a major factor in many areas in various analysis. In the survey, the analysis of the size of the organization is classified into two main categories: those who have more than 500 employees and those who have less than 500 employees. The correlation between agility and excellence within organizations that consist of more than 500 employees was 94.5%. When it comes to organizations with employees in the range from 50 to 500, the correlation between agility and excellence is 92.4%. Both organization sizes have a positive correlation between agility and excellence based on the linear trend line, as shown in Figure 4. With the sample size at hand, the results have shown that the organization size does not necessarily affect the correlation of the two domains.

In Figure 4, one could deduce that in average small organizations are clustered in one area in the correlation model, showing a smaller variance in this group. As a result of smaller teams within these organizations, change can be implemented quickly as less resources are needed. Compared to larger organizations, big organizations may need more time since they have larger teams that could slow down implementation of change and would require larger resources to implement. However, larger organizations are better when it comes to achieving higher scores in excellence and agility, but after reviewing the data, it was clear that these organizations have huge resources at hand and have been operating by utilizing the excellence model for a considerable time frame, such as Dubai Police, Dubai Customs, Roads, and Transport Authority (RTA), and Dubai Financial department.

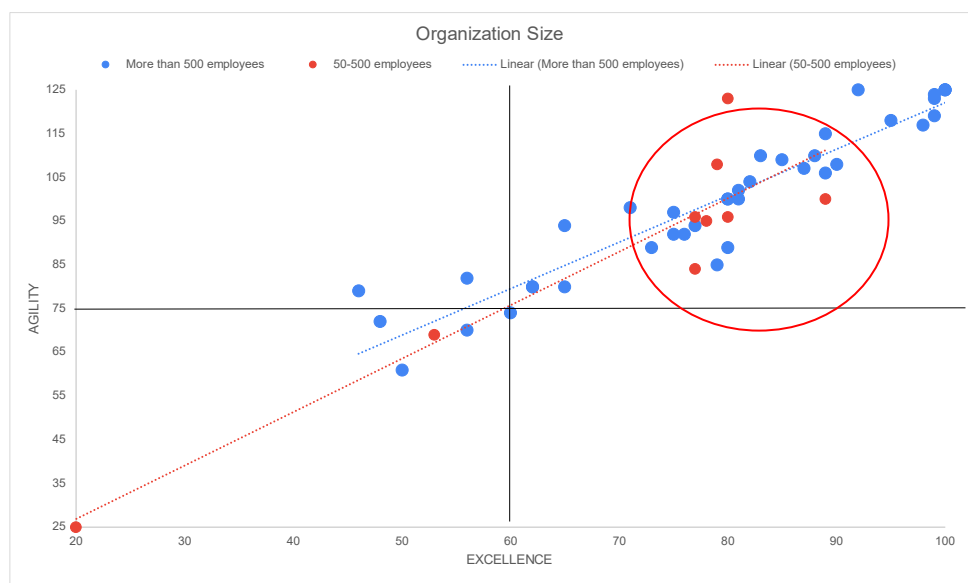


Figure 4. Correlation between agility and excellence based on organization size

4.4 Excellence and Agility correlation: Respondents exposure to the two domains

The knowledge of the respondents within the two domains was analyzed as part of the study. The overview of the analyses still indicates the positive correlation between the two domains, as show in Figure 5. The respondents with some awareness regarding the two domains had resulted in a positive correlation of 93.4%. Moreover, the respondents with no knowledge of the two domains have resulted in a positive correlation of 97.3%. This may indicate that the respondents that have noted yes to their exposure to the two domains may not understand the true difference between the two domains. Since the domains are very correlated, it requires proper knowledge of the two domains for the respondents to distinguish the true difference between the different questions under each pillar. Although this conclusion seems valid with the current data, however, the sample size is small to be able make solid conclusions regarding the respondent's exposure to the two domains, and the true affect it may have on the correlation study of agility and excellence.

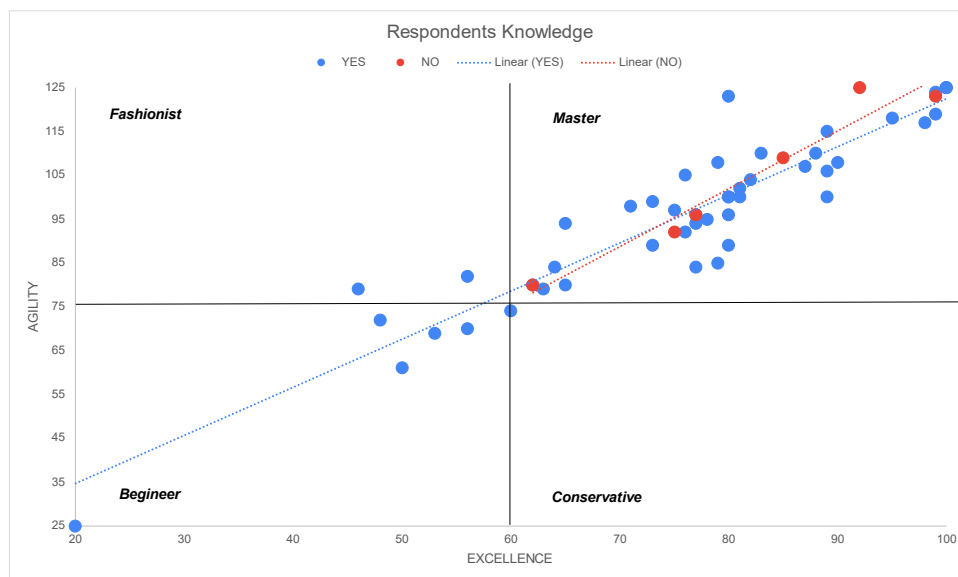


Figure 5. Correlation between agility and excellence based on respondents' knowledge of agility and excellence

5 Discussions

The overall correlation between agility and excellence has been proven to be a strong positive correlation, as all correlation coefficients calculated were higher than 90%. The analysis has shown that public organizations within the UAE have a higher correlation between their agile and excellence capability. Although one would predict that private organization would have the higher correlation, the UAE government's focus on requiring the public entity to achieve excellence may have led to the outcome concluded in this study where the correlation was higher. The government entity has introduced various initiatives within the UAE that aims at increasing the excellence of the government organizations, which entitles public organizations and entities to reach a certain level of excellence to be part of such initiatives. Some initiatives that have been introduced within the late 90's and early 20's are the DQA (Dubai Quality Award) and SKEA (Sheikh Khalifa Excellence Award). These awards require the public entities to implement excellence models within their organizations to gain these national awards. Hence, this has been reflected on the level of excellence and the correlation between the two domains within this study. With the focus on excellence by the UAE governments, the results found have shown that high excellence capabilities required high agile achievement in organizations.

The organization size is known to be a factor that affects the capabilities in being agile and excellent. It is usually thought that organizations with a small number of employees would have stronger capabilities and potential in being agile. Since change requires quick responses, including employees training and adapting infrastructure, small organizations would be expected to be faster at overcoming unexpected changes. This is because they would have a lower number of employees and less complex infrastructure. However, the analysis conducted has shown that the size of the organization does not necessarily affect the level of agility and excellence within the organization. Moreover, the results have shown that larger organizations, which have more than 500 employees, have presented a high score in both domains, compared to organizations with 50 to 500 employees. This can show that when an organization invests in its capabilities, the organization size may become less influential on the two

domains.

In average, the correlation model has shown that small organizations are concentrated in one region, indicating that there is less variation in this group. Because these organizations have smaller teams, change may be executed more rapidly because less resources are required.

It was seen that organizations that have high excellence capabilities also had high agile capabilities. From the data, it has been concluded that a few of the organizations had relatively higher agile capabilities with low excellence ranking, as only two organizations were found in the fashionist category. Even the correlation between agility and excellence for these two companies are high, indicating their understating that focusing on agility is important to achieve excellence. However, they need to achieve the pillars of the two domains better to move into the master classification. This confirms the conclusion made from previous researchers that agility is a driver and enabler of excellence (Al-Hammouri 2020). Since the organization is quick in overcoming unexpected changes without affecting its performance, it has become excellent at what it does. One would expect those who focus on agility without being excellent either they modified their business to stay competitive or have gone out of business. With the fashionist category having only two organizations, it shows that organizations have seen the true importance of excellence within the organization, especially with the latest challenge the whole world faced (COVID 19) and had to change the entire operation processes to be able to survive in the new way of work.

A minor number of organizations have been reported in the beginner category, which indicates that some organizations are yet to work on their capabilities in both domains. Such organizations may need to focus on their value adding pillar. The average of the organizations in the category have achieved a low score in their service and product delivery utilizing innovative and proactive methodologies. Moreover, they should focus on investing in the human talents and creative capabilities within their organization to be able to improve their excellence.

Within the categories, most of the organizations fall under the master category. This shows that as organizations grow and operate, they have gained a great learning curve from their journeys. This is due to the constant changes and challenges that is faced by the organizations. The more challenges they face, the better the organizations become at budling their agile capabilities.

The results have shown only one organization falls under the conservative classification, very close to the intersection of all classes. Like the conclusions made on the Fashionist class, organizations understand the importance of the correlation of the two domains. However, this company needs to focus on improving their capabilities in being agile, as well as excellence. Not having companies in the extreme of the conservative class shows many companies already have realized the importance of agility and implemented it in their operation to a good degree.

The analyses conducted in this research could be expanded for further conclusions to be made and confirmed. The study can be conducted using a larger sample which would lead to a wider participation range. The sample size in this study was of a moderate size that allowed for basic conclusions. With a wider sample size, the categorization of the organizations can be detailed to describe the key capabilities of the organizations in each category. Using the detailed characteristics, further research can be done to guide organizations in moving from the category they are currently in to become in the master category.

6. Conclusion

In this study, the correlation between organizational agility and excellence has been analyzed. Utilizing a detailed questionnaire, the performance of organizations in the UAE was gauged in both domains. The aim was to build a model that would categories organizations based on their capabilities in agility and excellence. With a sample size of 53 organizations, it was found that there is high positive correlation between agility and excellence. This finding confirms the conclusion found in the previous studies about the link between the two domains. Moreover, it was found that the organization size is not a factor that influences the correlation between the two domains. It is possible that this conclusion may differ with a wider sample size. Furthermore, it was identified that the public organizations within the UAE had shown a relatively higher correlation between agility and excellence. This could be due to the initiatives taken by the UAE government in increasing excellent capabilities within public organizations. The model used in this study is to be further developed by taking a larger sample size to gain better categorization of organizations. Moreover, mapping the domains of excellence to those of agility in details so that recommendations for organizations to move from the lower categories into the master category of agility and excellence is to be developed.

References

- Al-Hammouri, Saleh. Affect of organizational agility on organizational excellence. Mohammad Bin Rashid School of government, 2020.
- Avazpour, Reza, Elham Ebrahimi, and Mohammad Reza Fathi. "Prioritizing Agility Enablers Based on Agility Attributes Using Fuzzy Prioritization Method and Similarity-Based Approach." *International Journal of Economy, Management and Social Sciences* 3 , 143-153.2014.
- Barman, Frank, Gui Riederer, and Olli Salo. *Agile talent: How to revamp your people model to enable value through agility*. McKinsey & Company, 2021.
- Carvalho, Andre M., Paulo Sampaio, Eric Rebentisch, João Álvaro Carvalho, and Pedro Saraiva. "Operational excellence, organisational culture and agility: the missing link?" *Total Quality Management*,: 1495–1514. 2019
- Chambers, Abu Dhabi. *The Excellence Model*. Abu Dhabi: Abu Dhabi Chambers , 2016.
- Denning, Steve. *Beyond Agile Operations: How To Achieve The Holy Grail Of Strategic Agility*. 2017. <https://www.forbes.com/sites/stevedenning/2017/02/10/beyond-agile-operations-how-to-achieve-the-holy-grail-of-strategic-agility/?sh=7c8af942b6aa> (accessed Oct 3, 2021).
- Denning, Steve. *What Is Strategic Agility?* 2018. <https://www.forbes.com/sites/stevedenning/2018/01/28/what-is-strategic-agility/?sh=4e156540a0b1> (accessed Sept 27, 2021).
- Denning, Steve. *The Four Keys You Need To Achieve Strategic Agility*. 2017. <https://www.forbes.com/sites/stevedenning/2017/05/22/the-four-keys-you-need-to-achieve-strategic-agility/?sh=99708d17da8a> (accessed Oct 04, 2021).
- Dubas, Khalid M., and Inder P. Nijhawan. "A TEST OF THE EFQM EXCELLENCE MODEL OF TQM." *Allied Academics International Conference*. Las Vegas, 2005.
- EFQM. *The EFQM Model*. European Foundation of Quality, 2021.
- Gregorio, Biase De. *THE DIFFERENCE BETWEEN OPERATIONAL AND STRATEGIC AGILITY – THE PROMISE OF AGILE*. IQbusiness, 2020.
- Harraf, Abe, Issac Wanasika, Kaylynn Tate, and Kaitlyn Talbott. "Organizational Agility." *The Journal of Applied Business Research* 31, no. 2, 675-686. 2015.
- Horney, Nick. *Operational Excellence Agility (OEA)*. <https://www.linkedin.com/pulse/operational-excellence-agility-oea-nick-horney-ph-d-agility-doc-/?published=t>. 2018.
- Lasrado, Flevy, and Christopher Uzbeck. "The excellence quest: a study of business excellence award-winning organizations in UAE." *Benchmarking* 24, no. 3, pp. 716-734, 2016.
- Nejatian, Majid, Mohammad Zarei Zarei, Ali Rajabzadeh, Adel Azar, and Ameneh Khadivar. "Paving the path toward strategic agility." *Journal of Enterprise Information Management* 32, no. 4, 538-562, 2019.
- Ruiz Carrillo, Jose Ignacio Castresan. "Theoretical Foundation of the EFQM Model: The Resource-based View." *Total Quality Management* 16, no. , 31-55. 2015.
- Solution, Statistics. *Pearson's Correlation Coefficient*. n.d. <https://www.statisticssolutions.com/free-resources/directory-of-statistical-analyses/pearsons-correlation-coefficient/> (accessed December 7, 2021).
- Tools, Business Excellence. *Business Excellence. Business Excellence Tools*. n.d. <https://www.businessexcellencetools.com/business-excellence/#efqm> (accessed October 11, 2021).
- Turqieh, Ghassan, Hanna Aoun, and Elie Nasr. *Agile in the public sector*. Middle East: Delottie, 2018.
- Wendler, Roy. "Development of the Organizational Agility Maturity Model." *Federated Conference*. Dresden: fedCSIS, 1197–1206. 2014.

Biographies

Karam Al-Assaf is a graduate of Rochester Institute of Technology of Dubai with a master's degree in Engineering Management and bachelor's degree in Industrial Engineering. She is pursuing her PhD in Engineering System Management at the American University of Sharjah in the United Arab Emirates. Prior to that, she had worked as a Public Service Consultant at HNW Management and Consulting. Her career in consulting started at Detecon Consulting GmbH as a Business Analyst. She acquired various experiences in well-known international organizations such as Siemens and Nestlé. Her masters research focused on supporting organizations in the areas of excellence and agility, while her research in her BS degree was in applying Order Acceptance and Scheduling (OAS) on DUCAB (Dubai Cable Company).

Dr. Slim Saidi carries a wealth of academia, operational and consulting experience in innovation, international strategy, and telecommunications, having advised executives across the world on strategy, quality, and business improvements. Prior to joining RIT, Dr. Saidi headed the Master of Science of Quality and Business Excellence in Abu Dhabi School of Management and University of Wollongong in Dubai. He also held several Senior Executive positions in the telecommunications sector across the Middle East and Africa and was a Partner with the global management and strategy consultants, KPMG, and Arthur D. Little. He was also involved in the development and rollout of value-added services for a Major North American Railroad. Dr. Saidi has previously

been associated with Universities in Canada (Bishop's University, Ecole Polytechnique), Tunisia (SUPCOM, ESPRIT) and UAE (UOWD, ADSM, AUS and AGU). His areas of expertise include Industrial Engineering, strategy articulation and implementation; innovation, customer experience; operational efficiency; cost optimization; supply chain strategy and operation; General board and executive advice; excellence programs and quality management. Dr. Saidi, holds a Ph.D. in Engineering Mathematics from École Polytechnique of Montréal (Canada), a Principal Engineering Degree in Industrial Engineering from ENIT (Tunisia), and a Graduate Business Degree (DSA) from HEC Business School of Montreal (Canada).