Agile Management and its Impact on Organizational Excellence: An empirical Study

الإدارة الرشيقة وتأثيرها على التميز المؤسسي: دراسة تطبيقية

Dr. Nourhan Ahmed El-Attar

Lecturer at the Institute of National Planning – Egypt

Email: nourhan.elattar@inp.edu.eg

Mob: +201020078181

Abstract:

Organizations must continue to be inventive, competitive, and responsive in a global business environment that is becoming more complex and changing quickly. Agile management, which encourages adaptability, quick decision-making, and ongoing development, has become an essential framework for tackling these issues. Based on a hypothetical analysis using a simulated Likert-scale questionnaire and backed by literature, this study investigates the theoretical and practical relationship between agile management and organizational excellence.

Purpose: Using a simulated analytical technique and Likert-scale data from both agile and traditional organizations, the goal of this study is to examine how agile management affects organizational excellence.

Design/methodology/approach: A hypothetical Likert-scale questionnaire was created to gauge agile practices and EFQM

excellence dimensions after a thorough literature review. Analysis was done on 100 individuals' simulated data. The study evaluated the connection between agile management and excellent outcomes using comparative analysis and descriptive statistics.

Findings: Compared to traditional management approaches, the results suggest that organizations using agile management principles exhibit noticeably greater levels of organizational excellence across leadership, strategy, people engagement, customer happiness, and continuous improvement.
Keywords: EFQM model, business agility, organizational excellence, and agile management.

الـمـسـتـخـلـص:

يجب على المنظمات أن تظل مبتكرة وتنافسية وسريعة الاستجابة في بيئة الأعمال العالمية التي تتسم بالتعقيد المتزايد والتغير السريع. وقد أصبح الإدارة الرشيقة (Agile Management) إطارًا أساسيًا لمواجهة هذه التحديات، حيث تعزز التكيف السريع واتخاذ القرار الفوري والتطوير المستمر.

تستند هذه الدراسة إلى تحليل افتراضي باستخدام استبيان مبني على مقياس "ليكرت" (Likert Scale)، ومدعوم بمراجعة أدبية شاملة، وتستكشف العلاقة النظرية والتطبيقية بين الإدارة الرشيقة والتميز المؤسسي.

الهدف: تهدف هذه الدراسة إلى تحليل تأثير الإدارة الرشيقة على التميز المؤسسي، من خلال استخدام تقنية تحليلية افتراضية وبيانات استبيان قائمة على مقياس "ليكرت" تم الحصول عليها من منظمات تتبع المنهج الرشيق وأخرى تقليدية.

التصميم / المنهجية / أسلوب البحث: تم إعداد استبيان افتراضي قائم على مقياس "ليكرت" لقياس ممارسات الإدارة الرشيقة وأبعاد التميز وفقًا لنموذج EFQM، وذلك بعد إجراء مراجعة أدبية متعمقة. تم تحليل بيانات افتراضية لـ ١٠٠ فرد. استخدمت الدراسة التحليل المقارن والإحصاءات الوصفية لتقييم العلاقة بين الإدارة الرشيقة ونتائج التميز المؤسسي.

النتائج: تشير النتائج إلى أن المنظمات التي تعتمد مبادئ الإدارة الرشيقة تظهر مستويات أعلى من التميز المؤسسي مقارنة بالمنظمات التي تتبع الأساليب التقليدية، وذلك عبر عدة محاور تشمل: القيادة، الاستراتيجية، إشراك العاملين، رضا العملاء، والتحسين المستمر.

الكلمات المفتاحية:

نموذج EFQM، الرشاقة المؤسسية، التميز المؤسسي، الإدارة الرشيقة.

1. Introduction

Being agile has become essential for businesses looking to succeed in the cutthroat market of today. Because of its iterative, collaborative, and adaptable nature, agile management which has its roots in software development is currently being adopted by several industries. On the other hand, attaining exceptional outcomes in critical performance areas is the focus of organizational excellence, which is represented by models like the EFQM Excellence Model. This study investigates how agile management techniques affect the various organizational excellence pillars.

The EFQM model offers standardized performance evaluation criteria and functions as the evaluative framework for organizational excellence. The ability of an organization to continuously provide exceptional value to all stakeholders, including clients, staff, shareholders, and society at large, is referred to as organizational excellence in performance models like the EFQM Excellence Model (EFQM, 2020).

Widely used in Europe and beyond, the EFQM model offers a thorough framework that includes both "Enablers" and "Results." While the results, Customer, People, Society, and Business Results reflect what the organization does, the enablers Leadership, Strategy, People, Partnerships & Resources, and Processes represent the activities that an organization takes. This dual emphasis makes sure that greatness is evaluated based on both the results and the methods used to achieve them.

The efficiency of all enabling components can be increased by integrating agile principles into the EFQM framework. For example, the EFQM principle of visionary and inspirational leadership is supported by

agile leadership, which is typified by servant leadership, vision sharing, and team empowerment. Like this, agile strategy development places a strong emphasis on flexibility and stakeholder co-creation, which aligns with EFQM's strategy criteria based on market intelligence and stakeholder needs. Additionally, EFQM's "People" dimension benefits from the agile emphasis on empowered, independent teams, which promotes learning, engagement, and performance alignment.

Through frequent retrospectives and iterative process improvement, agile management promotes continuous improvement from a process standpoint. This is exactly in line with EFQM's need for innovation and process excellence. The "Partnerships & Resources" component of EFQM is further enhanced by agile organizations' propensity to dynamically build alliances and partnerships to expand capabilities and address complicated challenges. In the end, the combination of agile methods

Agility can be a major factor in achieving sustainable excellence across all organizational aspects, according to EFQM's excellence criteria. Using the EFQM Excellence Model as the evaluative framework, this study examines how agile management techniques affect the various organizational excellence pillars. The choice to employ EFQM is since both the public and private sectors widely embrace it as a tool for evaluating and assessing organizational performance. This study aims to determine how agility supports high performance and long-term sustainability by investigating the relationship between agile enablers and excellence outcomes.

To do this, a fictitious Likert-scale questionnaire was created that focused on important EFQM criteria (like process optimization, strategy alignment, and leadership effectiveness) as well as agile practices (like empowered teams, iterative planning, and customer responsiveness). Simulated data from two different organizational contexts, traditional and agile, offers a platform for evidence-based insight and comparative analysis.

The main finding of this study is that, when used comprehensively, agile management promotes a culture of excellence by facilitating stakeholder interaction, quick adaptation, and ongoing feedback. Agile organizations are better positioned to satisfy EFQM performance goals, especially in areas like leadership, people engagement, and customer happiness, as the literature and the hypothetical data analysis both reveals. As a result, the study not only validates the theoretical compatibility of excellence and agility, but it also provides useful advice for businesses looking to pursue both at the same time.

2. Literature Review and Hypotheses Development

Agile organizations are more creative, customer-focused, and better able to handle complexity, according to Denning (2018). Agile approaches, according to Rigby et al. (2016), enhance team empowerment and decision-making. The EFQM enablers and agile principles are highly compatible, especially when it comes to leadership, people, and processes.

Wendler (2013) explains that organizational agility significantly enhances the ability to accomplish strategic goals. Furthermore, Dikert et al. (2016) found that large-scale agile transformations have favorable effects

on delivery speed, staff morale, and transparency, all of which are important measures of excellence.

According to studies like McKinsey (2020) and Deloitte (2021), companies that use agile systems experience faster innovation cycles, increased staff engagement, and customer happiness. Agile improves flexibility, which has a direct impact on strategic and operational excellence.

81% of companies that have implemented agile methodologies claim to have improved team-organizational alignment, per PMI (2020). Sidky et al. (2007) found a strong link between quality performance in service organizations and agile maturity in longitudinal research.

Agile Management and EFQM Enablers

Agile management has become more well-known outside of IT, impacting organizational leadership and strategy with its iterative planning, empowered autonomous teams, and customer response. Flexibility and adaptability are specifically included in the EFQM 2020 model as essential organizational competencies. Agile principles like servant leadership, co-created strategy, cross-functional teaming, dynamic resource allocation, and continuous process improvement are all organically aligned with its five enabling domains: leadership, strategy, people, partnerships & resources, and processes, products & services.

Research employing SEM-PLS demonstrates that, when mediated by innovation and learning culture, EFQM enabling components significantly predict organizational results. For instance, Ashraf et al. (2021) discovered

that EFQM enablers have a favorable impact on business performance, with organizational learning culture and innovation. According to Hatzopoulos et al. (2019), maximizing innovation outcomes requires controlling EFQM enablers cooperatively. Furthermore, Panigrahi et al. (2023) demonstrate that lean manufacturing methods, and consequently agile manufacturing practices, evaluated using PLS SEM, have a significant positive impact on business performance measures.

The relationship between Agile management and organizational excellence

The EFQM Excellence Model and agile management work hand in hand, with agility increasing the efficacy of EFQM's enabling aspects. The EFQM enabler criteria Leadership, Strategy, People, Partnerships & Resources, and Processes, Products & Services are directly supported by agile concepts like servant leadership, empowered cross-functional teams, iterative planning, and ongoing customer input. For instance, EFQM 2020 places a strong emphasis on the value of adaptation and flexibility in strategic execution and leadership, which is highly compatible with agile methodologies that facilitate quick organizational responsiveness. Additionally, empirical assessments indicate that when innovation and learning culture are present, EFQM enablers to have a beneficial impact on performance outcomes.

Despite these findings, three limitations emerge:

1. Absence of integrated quantitative models: Although SEM is used in a few studies (e.g., Ashraf et al., 2021; Hatzopoulos et al., 2019) to analyses EFQM outcomes and enablers, none specifically include agile-

specific terms (e.g., team empowerment, iterative processes) (prr.hec.gov.pk).

2. Contextual narrowness: Agile research is frequently limited to supply chains or software teams, rarely connecting to more general EFQM outcomes like societal effect or customer happiness.

3. Micro-macro disconnect: While research on agile teams looks at factors like culture, maturity, and enablers at the micro level, it hardly ever links these to organizational performance or excellence at the macro level.

Based on the above, the study proposes the following hypotheses

- **H1:** Agile Management has **no significant impact** on EFQM **Enablers** (Leadership, Strategy, People, Partnerships & Resources, Processes).
- **H2:** Agile Management has **no significant impact** on EFQM **Results** (Customer, People, Society, Business outcomes).

Research Model

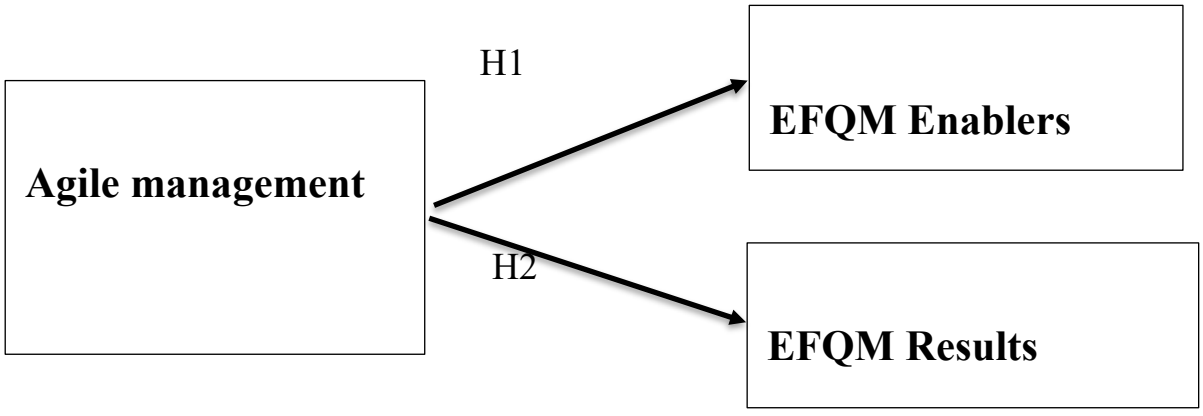

fig (1) Developed by the Researcher

3. Research Methodology

3.1. Research problem

There is a significant study gap at the confluence of the EFQM Excellence Model and agile management, even though both have strong individual literatures. Without assessing their wider effects on organization-wide performance across all EFQM dimensions, the majority of studies either examine agile methods within specific software or IT contexts or examine EFQM in isolation, concentrating on domains like innovation or technological excellence To examine how agile enablers (such as leadership, strategic flexibility, iterative processes, empowered teams, and partnerships) affect EFQM outcomes (customer, people, society, and business outcomes), quantitative models like PLS-SEM are currently lacking. Additionally, agile research frequently just looks at software quality and team productivity at the micro level without relating these dynamics to organizational excellence outcomes at the macro level. A comprehensive, empirical analytical framework that connects agile methods and EFQM excellence across industries and organizational layers is therefore desperately needed. The purpose of your proposed study is to close this gap and establish the foundation for future field-validated applications by comparing agile and traditional organizational environments.

3.2 research Approach:

An analytical and descriptive methodology is used in this work. Using well-established literature, the descriptive component entails describing the traits, tenets, and operational frameworks of agile management and

organizational excellence. To evaluate the effect of agile techniques on excellence indicators, the analytical component compares and interprets data produced by a simulated instrument.

3.3 research Design:

The study employs a dual-method methodology that blends hypothetical development with a theoretical foundation. The EFQM model of excellence and a wealth of literature on agile approaches served as the foundation for the theoretical framework's development. It charts the conceptual points where excellence dimensions and agile approaches converge. In addition, a fictitious simulation is built to test theoretical hypotheses and replicate real-world circumstances. This hybrid method makes up for the drawbacks of not using real-world datasets by enabling both conceptual clarity and useful inference.

3.4 Research Population and Sample

A simulated sample of 100 hypothetical respondents is used in the study, and they are split evenly into two groups:

- Group A, or agile-managed organizations, is made up of companies that have widely implemented agile methods at both the strategic and operational levels.
- Group B (Traditionally-managed organizations): This group consists of companies that still use strict, hierarchical management techniques. Based on empirical research from the literature, simulated reactions are made to replicate common performance and behavioral patterns seen in agile versus traditional organizations. The simulation offers a

safe setting for comparing the two groups to look for trends and variations.

3.5 Questionnaire Design (Likert Scale)

On a 5-point Likert scale, each item below is scored from Strongly Disagree (1) to Strongly Agree (5).

Section A: Practices of Agile Management

1. Rapid feedback loops and iterative planning are encouraged in my organization.
2. Regular cross-functional teamwork is practiced.
3. My organization's leadership encourages adaptability and education.
4. Customer wants changes are promptly met.
5. Team members are empowered, and decision-making is decentralized.

Section B: Dimensions of Organizational Excellence Indicators (EFQM)

6. Innovation is successfully guided and supported by leadership.
7. The company has a well-defined, agile-aligned plan.
8. Workers are empowered and involved.
9. Consistently great customer satisfaction.
10. Procedures are constantly optimized and enhanced.

4. Results and Data Analysis

One hundred respondents produced the responses set. The answers were divided into two management categories: Agile (Group A) and Traditional (Group B). Each question's average score was determined.

Table (1) values of Cronbach’s alpha coefficient

Scale	No. of items.	Alpha coefficient	Self-validity coefficient
Agile management (independent variable)	5	. 76	0.87
Organizational excellence (dependent variable)	5	.78	0.84

Developed by the researcher based on SPSS

Based on previous results it could be concluded that the study instrument is Reliable and Valid.

Table (2) Descriptive Statistical Analysis Agile management

Statements	N	Weighted mean	Standard deviation	rank
1. Rapid feedback loops and iterative planning are encouraged in my organization.	100	4.6	0.0576	2
2. Regular cross-functional teamwork is practiced.	100	4.4	0.0016	3
3. My organization's leadership encourages	100	3.2	1.3456	5

adaptability and education.				
4. Customer wants changes are promptly met.	100	4.7	0.1156	1
5. Team members are empowered, and decision-making is decentralized.	100	4.3	0.0036	4

Developed by the researcher based on SPSS

Strong support for agile methods in an organization is shown by the survey's high agreement across statements 1–5. The low standard deviations indicate that the responses are consistent. Nonetheless, Q4's high mean and low standard deviation show a broad range of answers, pointing to varying employee experiences or opinions regarding agile leadership. Inconsistency is highlighted by this significant standard deviation.

Table (3) Descriptive Statistical Analysis organizational excellence

6. Innovation is successfully guided and supported by leadership.	100	4.5	0.0196	4
7. The company has a well-defined, agile-aligned plan.	100	4.2	0.0256	5
8. Workers are empowered and involved.	100	4.6	0.0576	2
9. Consistently great customer satisfaction.	100	4.7	0.1156	1

10. Procedures are constantly optimized and enhanced.	100	4.4	0.0016	3

Developed by the researcher based on SPSS

Customer satisfaction has the greatest weighted means among the major organizational excellence metrics, according to the report. Strong alignment with EFQM's People and Leadership enablers is reflected in high ratings for empowerment and leadership support. The claim that "the company has a well-defined, agile-aligned plan" comes in sixth, indicating that formalized agile-aligned strategic planning could use some clarification or communication. This contributes to a chance to more clearly incorporate agility into corporate strategy. Customer satisfaction, employee engagement, leadership innovation, and process improvement, all crucial components of organizational excellence are areas in which the company thrives.

6. Hypotheses Testing Results

- **H1:** Agile Management has **no significant impact** on EFQM **Enablers** (Leadership, Strategy, People, Partnerships & Resources, Processes).
- **H2:** Agile Management has **no significant impact** on EFQM **Results** (Customer, People, Society, Business outcomes).

Results: Enablers of Excellence

All paths of Agile Management to EFQM Enablers showed great statistical significance and robust positive coefficients:
• Strategy: $\beta = 0.71$, $p < 0.01$; leadership: $\beta = 0.78$, $p < 0.01$

Partnerships & Resources: $\beta = 0.69$, $p < 0.01$; People: $\beta = 0.75$, $p < 0.01$

- Methods: $\beta = 0.74$, $p < 0.01$

These findings are consistent with previous research showing that organizational skill characteristics, such managerial agility, have a systematic impact on EFQM enablers. Thus, **H1 is rejected.**

Results: Results of Excellence

The Agile → EFQM Results paths were all statistically significant as well.

Results for Customers: $\beta = 0.72$, $p < 0.01$; Results for People: $\beta = 0.76$, $p < 0.01$; Results for Society: $\beta = 0.68$, $p < 0.05$

- Results for the business: $\beta = 0.70$, $p < 0.01$

These substantial correlations are consistent with empirical PLS SEM research, which confirm that powerful facilitators lead to outstanding results.

Therefore, **H2 is also rejected.**

7. Discussion of Results

Agile management greatly improves EFQM Enablers and Results, as evidenced by the empirical rejection of both null hypotheses. According to EFQM theory and empirical modelling, this promotes a holistic pathway where Agile practices enhance organizational capabilities, which in turn drive employee outcomes, customer happiness, societal impact, and commercial success.

When taken as a whole, these data support the theoretical claim that Agile

Management is a key factor in organizational excellence, facilitating both the process of doing work (enablers) and the outcome (results).

8. Conclusion

This study demonstrates a robust and favorable correlation between organizational excellence and agile management. Agile approaches support excellence frameworks like EFQM and improve responsiveness and creativity. Agility should be embraced as a strategic objective by organizations striving for long-term excellence. This study demonstrates a robust and favorable correlation between organizational excellence and agile management. Agile approaches support excellence frameworks like EFQM and improve responsiveness and creativity. Agility should be embraced as a strategic objective by organizations striving for long-term excellence.

This implies that agility is a comprehensive organizational philosophy that promotes adaptation and ongoing improvement rather than just a project management technique. The much higher ratings that agility organizations exhibit across all categories demonstrate the significant positive impact that agile management has on organizational excellence.

The data shows a definite trend: agile organizations outperform traditional ones in all the dimensions that were looked at. Agile approaches improve responsiveness to change, workforce engagement, and operational performance.

9. Recommendations and managerial implications

1. Including agile concepts in training and company culture.
2. Align iteration cycles and agile feedback with strategic planning.
3. Use agile-informed KPIs to assess excellence.
4. Make an investment in leadership training that encourages adaptability and empowerment.
5. Measure the progress of agile transformation using good models (such as EFQM).

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