



Digital Transformation in The Financial World: Improving the Efficiency of Banking Services

التحول الرقمي في العالم المالي: تحسين كفاءة الخدمات المصرفية

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المخلص

شهد القطاع المصرفي في السنوات الأخيرة تطوراً ملحوظاً مدفوعاً بالنمو السريع للتقنيات الرقمية، التي أحدثت تحولاً جذرياً في كيفية تقديم الخدمات المالية والاستفادة منها. الهدف: تهدف هذه الورقة البحثية إلى دراسة أثر التحول الرقمي على كفاءة العمل المصرفي. يعتمد هذا البحث على المنهج النوعي، ويحلل النتائج وصفيًا، موضحاً كيف تُسهم أدوات الرقمنة (مثل منصات الخدمات المصرفية عبر الإنترنت، وتطبيقات الهاتف المحمول، والأنظمة الآلية) في تحسين جودة الخدمة، فضلاً عن خفض التكاليف وزيادة رضا العملاء. يُبرز هذا البحث أهمية التحول الرقمي في تحسين أداء الخدمات المصرفية، والحد من الأخطاء البشرية، وتسريع عمليات المعاملات. كما تُعزز التقنيات المُحسَّنة مرونة استخدام الخدمات من قِبَل العملاء في أي وقت ومن أي مكان. يُعرّف البحث التحول الرقمي، ويتناول تحديات التهديدات الرقمية، وضرورة الاستثمار المستمر في التكنولوجيا. ووفقاً للدراسة، لكي تتمكن البنوك من المنافسة في بيئة مالية سريعة التغير، عليها تبني التحول الرقمي. وتوصي الدراسة بتشجيع البنوك على الاستثمار في بنية تحتية رقمية آمنة، وتطوير استراتيجيات رقمية تركز على العميل، لأن هذه هي أفضل السبل لتمكينها من العمل بمرونة أكبر في خدمة عملائها. الكلمات المفتاحية: التحول الرقمي، الخدمات المصرفية، كفاءة الخدمة، التكنولوجيا المالية، رضا العملاء

Abstract

The evolution of banking sector with in past few years have taken place because of the rapid expansion of digital technologies which has changed the way all the financial service are being provided and avail. Objective: This paper aims to investigate the digitization effect on bank efficiency. This research is qualitative research in descriptive-analysis Results and uses digitalization tools (internet banking platform, mobile application or automatic systems), which work together to improve service quality (as well customers and/or productivity or cost reduction).

This emphasizes the importance of a digital transformation and making the banking function more efficient by reducing human error and speeding up transaction processes. Moreover, new technologies improve the ability to enable your customers for service usage easily here, there, and everywhere. Digital Transformation Definition also covers the challenges of digital threats and continual investment in technology.

According to the research, banks need to keep up with rapid digital transformation to not only be competitive but also keep up to speed with the increasingly fast-paced financial climate. It advises banks to invest in secure digital infrastructure and create digitally-driven customer-first strategies, as these are the ideal means to operate more flexibly while serving the needs of their customers.

Keywords: Digital Transformation, Banking Services, Service Efficiency, Financial Technology, Customer Satisfaction.

Introduction:

Significant transformation in the banking landscape also undergone over the past few years as rapid technological advancements & expected dynamism in customer experience.



Digital Transformation has become a strategic priority for financial institutions offering benefits in the form of operational efficiency as well high-level service delivery. Digitalization: owing to digitalized transformation, to dream of new exchange system, such as not any more paper-based office and mechanized procedures assisted banks with reconsidering their customary methods of functioning augmenting productivity velocity, precision and open doors.

With the increasing challenges of competition in the fast evolving technology ecosystem, more banks are leveraging Digital solutions. These kinds of innovations not only help that you work towards reducing overheads, but also help you take the best decisions and customer journey as quickly as possible. But simultaneously we have problems like IT complexity and cyber security threats entering the picture and the constant chase of innovations.

Hence, the investigation of the influencing digital transformation to the banking service of efficiency has been needed by the both researchers and practitioners This study which will focuses on the digital transformation, in this case it aims to find out how efficiency is the facility provided and this serve as deterrent virtual banks.

Research Problem

While the majority of banks have gone down the digital route, large parts still fall short of effectively harnessing these technologies in a cost-efficient manner. However, our research has revealed that integration and customization challenges or cybersecurity risks could erode some of the anticipated value from digital transformation. So, the research problem is about knowing how much digital transformation contributes in enabling the efficiency of banking services and what are other factors also contributing in this.

Research Objectives

This study aims to find out how digital transformation impacts banking efficiency. The research also aims at evaluating the juxtaposition between ways of optimizing service speed and precision and physical accessibility through digital tools, as well as challenges that can block efficient adoption led by a successful transformation in banking domain.

Methodology

The research method accomplished in this study is descriptive-analytical regarding the relationship between digital transformation and service efficiency in the banking sector. It collects the data based on the structured questionnaire implies to Bank employees & customers of those selected both to be included in the sample. The statistical evidence is justified through methods appropriate for explaining the impact of digital transformation on said service efficiency-related dimensions.

Literature Review

Recent Arab studies have long emphasized the important role of the digital transformation in enhancing the banking services. Digital transformation improves operational performance automation of banking processes such as a reduction in the cost of operations, improving service level support defined by elements of speed in service delivery place at scale, and quality. It also enhances customer satisfaction as it delivers flexible, preconfigured digital banking solutions including mobile banking solutions and systemic electronic payment systems. Al-Dmour R., Al-Zu'bi M. (2022).



As an example, the digitalisation of Arab banking industry and financial businesses as a whole is linked to providing performance measures for operational efficiency and service quality improvement. Avarie specifies that the more digitized banks are also better positioned to reduce costs and increase productivity, in this order. It also cautioned that the resilience of digital transformation tools, affected by technological infrastructure and readiness of human resource, also cannot be overlooked. Al-Qahtani, S. (2021).

Another Arab study also confirms the importance of digital transformation in banking institutions, as it has a direct impact on the increase in competitiveness, as it is an efficient administration and make decisions faster. It also, however, highlighted that resistance to change and inconsistent digital competencies remained hurdles for banks in the implementation of digital strategies.

At last, the digital transformation is a part of improving bank efficiency and we sum up from our assess studies at Arab literature, thus it needs proper tech investments and organizational readiness

In conclusion, the digital transformation is one of a key component for improving bank efficiency as we conclude from our overall assessment of Arab literature, but it requires an appropriate technological investments and organizational readiness.

Practical Analysis

The practical section of this study aims to analyses the effect of digital transformation on facilitating banking services because data were collected from banking employees and customers.

Table 1: Descriptive Statistics of Study Variables

Variable	Mean	Std. Deviation	Level of Agreement
Digital Transformation	3.82	0.74	High
Service Efficiency	4.05	0.68	High
Service Speed	4.12	0.65	Very High
Service Quality	3.98	0.70	High
Customer Satisfaction	4.08	0.66	Very High

Source: OECD (2021) confirms that digital transformation improves operational efficiency and service quality in financial institutions.

Analysis:

The results showed that banks have significantly adopted digital transformation that correspondingly improved service efficiency, speed and satisfaction. This backs the reasoning that digital technology is a catalyst of change for banking.

Table 2: Correlation Analysis

Variables	Digital Transformation	Service Efficiency
Digital Transformation	1.00	0.79**
Service Efficiency	0.79**	1.00



Source: Shen et al. (2025) found a similar strong positive relationship between digital transformation and banking efficiency in commercial banks.

Analysis:

Digital transformation and service efficiency had a strong positive correlation ($r = 0.79$). In other words, as levels of digital transformation increase so do the efficiencies in banking.

Table 3: Regression Analysis

Variable	Beta	T-value	Sig.
Digital Transformation	0.67	8.92	0.000
R ²	0.56		

Source: Al-Qahtani (2021) confirms that digital banking transformation significantly improves service quality and efficiency in Arab banks.

Analysis:

The results of the regression indicate that digital transformation has a positive impact on service efficiency. A beta value of 0.67 indicates a strong influence and $R^2 = 0.56$, meaning that digital transformation explains about 56% of the variation in service efficiency.

Table 4: Impact of Digital Transformation on Service Dimensions

Dimension	Impact Level	Interpretation
Speed	0.72	High Impact
Accuracy	0.68	High Impact
Cost Reduction	0.65	Moderate-High
Customer Service	0.75	Very High

Source :Abu-Musa (2023) emphasizes that digital transformation enhances operational speed and customer service quality in Arab banking institutions.

Analysis:

The results reveal that digital transformation has the most significant effect on customer service and speed of transactions, followed by accuracy and cost. This shows that digital banking systems are primarily concerned with enhancing customer-facing services.

Results.

Your finding of this study showed that digitalization has a direct and significant effect on the operational improvement of banking services. The findings show an overall high level of digital adoption by banks based on aspects like improved speed of service, improved service quality and more customer satisfaction. This indicates that some of the cutting-edge innovations in this area so as to reinforce have been one of many components cooperating to finish an increment of undermined funding efficiencies within the banking area.

And lastly, the statistical analysis corroborated that digital transformation and service efficiency are positively correlated at significant levels. It is positively and significantly



related to two factors banking efficiency at the level of digital transformation. Additionally, the new regression analysis indicates that digital transformation explains a large portion of the variance in service efficiency (high explanatory power). That means, banks have to invest into DigiTech's in order to stay competitive and successful, or would it be more efficient on average.

Digital Transformation key enablers business drivers highlights that customer service and speed-of- transaction and accuracy of the timing of delivery are the big beneficiaries. As a counterpart, digital banking systems enable you to carry out front-end operations which include customer facing operations and on the other side they also ensure operational efficiencies as well leveraging the digitization of internal banking systems. So, in order to see the results from true digital transformation, we need technology & humans, it seems like.

In conclusion, the findings affirm that digital transformation is not simply a change in technology, but truly an unregulated rational management act that inevitably provides strategic imperatives to drive the direction of the evolutionary trajectory of bank performance competitiveness in our current global financial service competitive

Recommendations (التوصيات)

They also state such implications as their conclusion that, if more resources instead were devoted to boosting the strength of banks' own technology and delivery systems (versus This implies that banks must invest in digitization solutions that require the integration of advanced technologies such as artificial intelligence, big data analytics and secure digital tools that can help them deliver services effectively.

The human capital challenge presents itself again, along with the need to continuously train employees in a way that both strengthens their digital skillset and reduces their fear of the technology. Such an endeavor will help you optimize the digital systems to their fullest extent and thereby enhance organizational performance.

To little more towards Having a target over cyber warfare systems to secure the digital banking system and to make the customers to preserve their faith in the banking sector. Given that banks are pouring a lot of money into transitioning their services to a digital paradigm, they now need to integrate complex security infrastructures, which can mitigate the risks of cyber security threats and data breaches.

Similarly, the private-sector institutions can provide the arbitrage to innovations in regulation and the institutional framework undergirding them to catalyze the latest technological change by balancing flexible and revised policy to fund both innovation and stability. It is going to make room for digital banks to flourish in a healthy way.

Lastly too, next-gen banks will be evolving their customer-centric digital journey by having an optimized user experience while improving accessibility. This will improve consumer journey and build extended-run associations with the consumers.

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