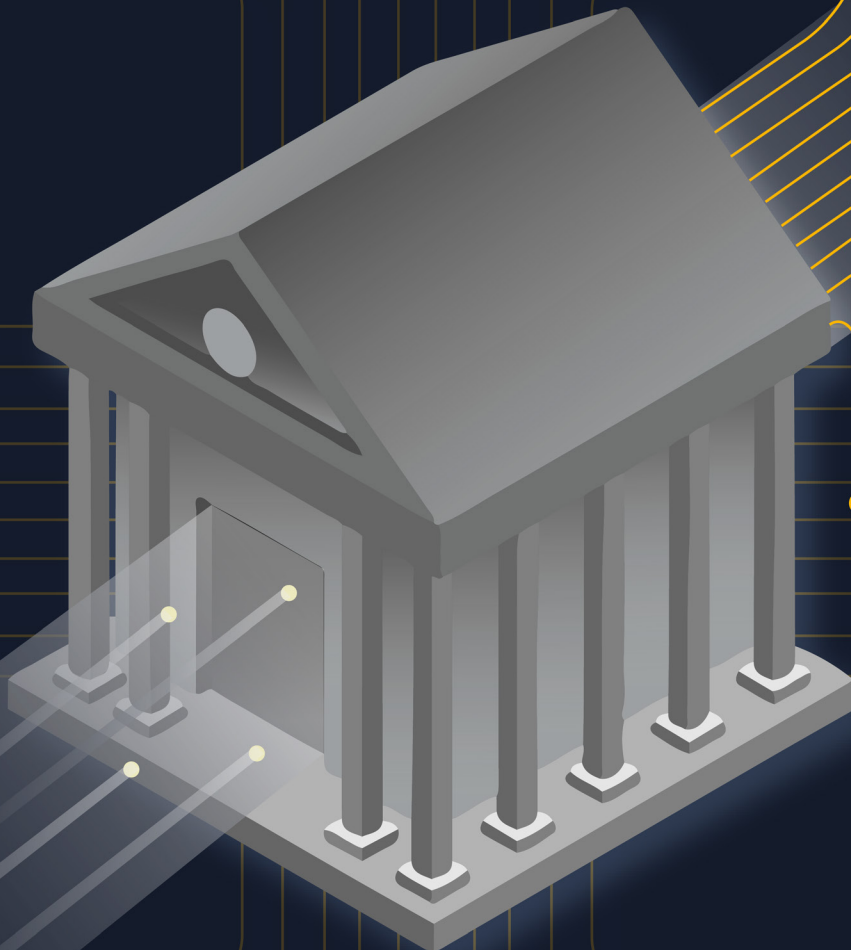


# A STORM TO TRANSFORM

An Outlook of Digital Transformation of Financial Institutions in Jordan



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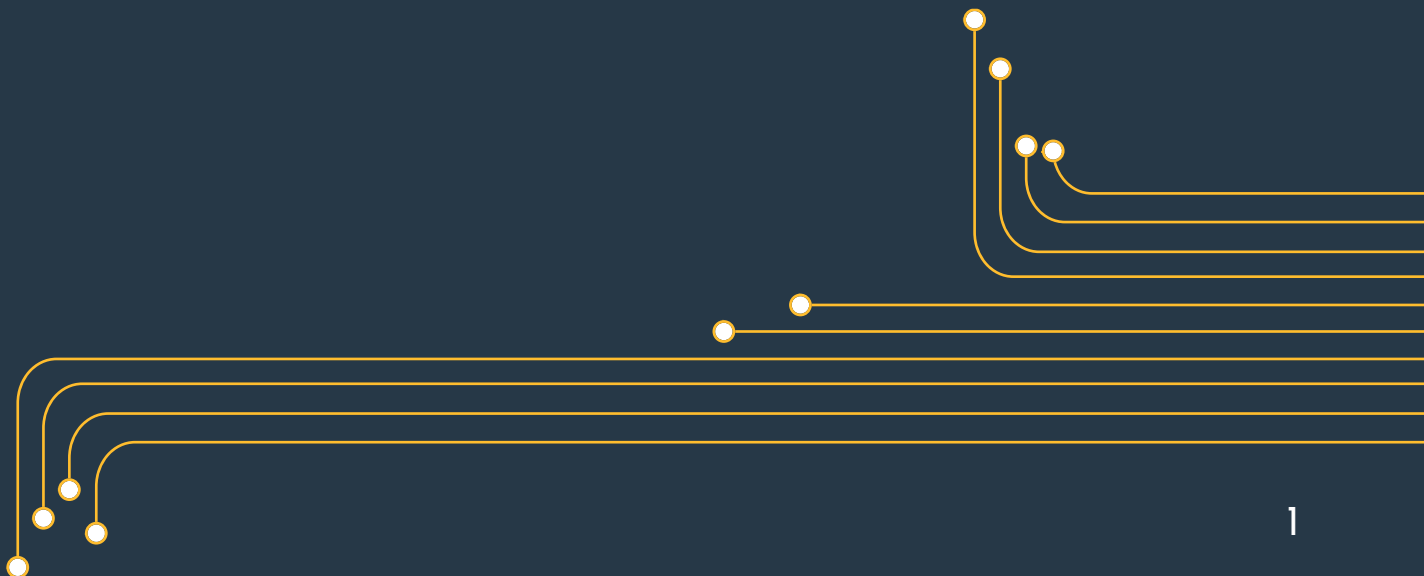
# Foreword

By Maha Bahou, JoPACC CEO



With every passing day, technological innovation becomes less of a competitive advantage and more of an absolute necessity for survival. Although financial technology had been slowly making its way into the daily lives of consumers since the advent of cards, its uptake by financial institutions greatly accelerated following the 2008 financial crisis. This can be, to a significant extent, explained by a shift in consumer trust which transpired during the Great Recession, which witnessed trust in Financial Institutions falling significantly, and that in Technology companies rising in comparison. This posed a major problem for financial institutions, as unlike most other sectors, the financial sector's guiding principle is consumers' trust.

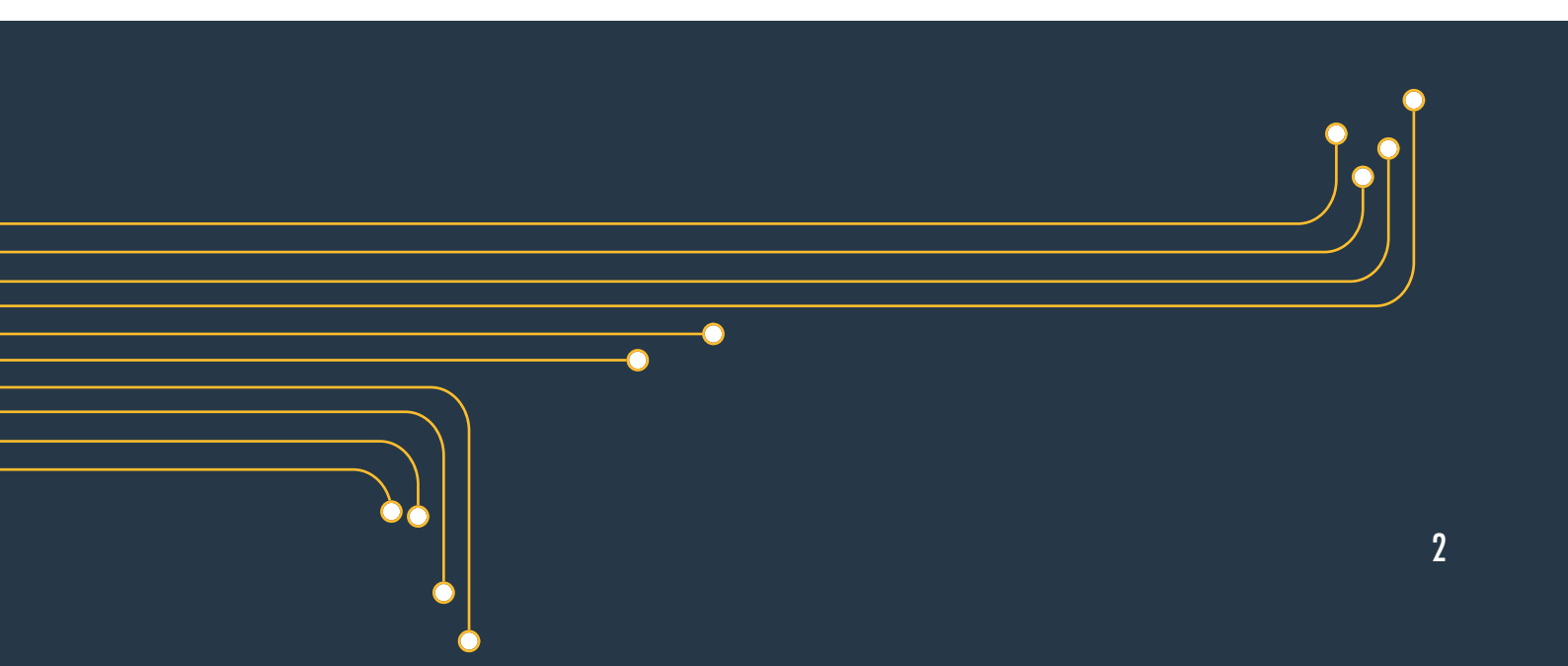
In building the trust of consumers back, and observing their preferences with regard to financial instruments, FinTech became a central figure in financial innovation. It also diffused to other aspects of finance giving rise to more specialized fields of financial technological innovation such as Regulatory Technology (RegTech), Supervisory Technology (SupTech), Payment Technology (PayTech), Lending Technology (LendTech), and Insurance Technology (InsurTech).



Through technology, financial institutions began reallocating their priorities to once again position the customer at the heart of their operations, and with new FinTech entrants in the market, competition for consumer trust became even fiercer. In Jordan, FinTech and Digital Transformation of banks has become top priorities across the financial sector, including the Central Bank, who is now a true champion of innovation in the local market.

However, a disproportionate degree of the effort went towards Payment technology, with the other areas of financial innovation being somehow neglected. This has resulted in a highly competitive, robust payment infrastructure in Jordan, but little innovative applications built on top of that in other areas of finance.

At JoPACC, our central mandate includes the development of digital payment systems and instruments. However, our high-level goal, of an accessible and inclusive digital Jordanian economy, motivates us for widespread, cross-cutting innovations and digitalization across all the different functions within the economy: from digital identity all the way to innovations in credit, we are watching the evolution of banking and finance around the world closely and with ambitious plans of our own for the Jordanian economy. This report presents the results of a sector-wide survey, to begin understanding the true extent of digital transformation in the market, both to help the sector prepare for their next steps, and to help us understand the journey which lies ahead.



## List of Abbreviations

<b>FI</b>	<b>Financial Institution</b>
<b>API</b>	<b>Application Programming Interface</b>
<b>AI/ML</b>	<b>Artificial Intelligence/ Machine Learning</b>
<b>Fintech</b>	<b>Financial Technology</b>
<b>Regtech</b>	<b>Regulatory Technology</b>
<b>eKYC</b>	<b>Electronic Know Your Customer</b>
<b>PSP</b>	<b>Payment Service Provider</b>
<b>DT</b>	<b>Digital Transformation</b>
<b>JoPACC</b>	<b>Jordan Payments and Clearing Company</b>
<b>STP</b>	<b>Straight Through Processing</b>
<b>QR code</b>	<b>Quick Response code</b>
<b>CBJ</b>	<b>Central Bank of Jordan</b>
<b>JoMoPay</b>	<b>Jordan mobile payment switch</b>
<b>MoDEE</b>	<b>Ministry of Digital Economy and Entrepreneurship</b>
<b>SupTech</b>	<b>Supervisory Technology</b>
<b>PayTech</b>	<b>Payment Technology</b>
<b>LendTech</b>	<b>Lending Technology</b>
<b>InsurTech</b>	<b>Insurance Technology</b>

# Introduction

The 21st century has, to date, witnessed stark technological innovations and advancements. This has prompted researchers, analysts and experts globally to embrace this era as the Fourth Industrial Revolution. The Fourth Industrial Revolution describes the social, political, cultural, and economic transformations expected to arise in the 21st century [1]. This is predominantly fueled by the global success of the Digital Revolution, or the Third Industrial Revolution, which took place over the latter half of the 20th century (figure 1).

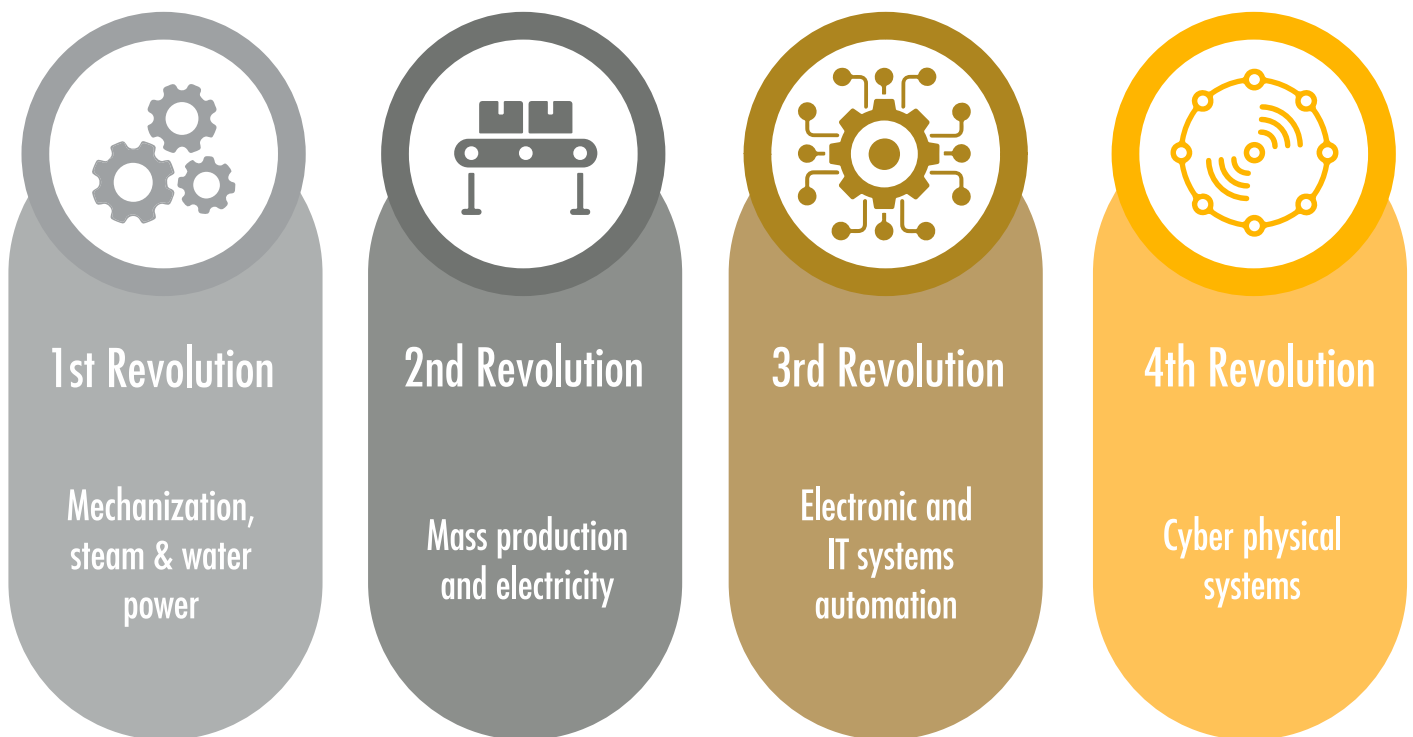


Figure 1: This figure shows the industrial revolution

Thus, the process of digital transformation has engulfed various industries in the last decade, driven by two strategic objectives; responding better to customer needs and thus widening the customer base, and increasing efficiency and therefore reducing costs. Regardless of the industry, global digital transformation trends, facilitated by the increased connectivity made possible through today's technologies are geared towards data-driven businesses, homogenizing the consumer experience, utilizing the capabilities of artificial intelligence, machine learning, and multi-cloud computing, partnering with the IT sector to turbocharge businesses, and fueling business performance with APIs [2].

In the financial sector, digital transformation has taken a foothold. Fintech and technology companies entered financial services markets, with innovative financial digital solutions carrying a profound positive impact on several fronts. The digital transformation in financial services is leading to more efficient, cost-effective operations, enhanced customer experience, and increased competitiveness in the market.

For the digital transformation process to bear fruit, it has to start from within financial institutions focusing on the employee experience to be able to make the desired impact on the customer experience. The journey can be long; it requires institutions to shed old habits, update cultural norms, upskill employees, change strategies and invest in sometimes costly tech solutions. Most importantly, it requires institutions to reengineer its offerings, so as not to merely transport old legacy systems and practices across their digital transformation journey, where they may not belong.

In Jordan, fintech start-ups are emerging, digital banking is spreading and key digital concepts and solutions are leading the scene; from cloud computing, blockchain, and mobile payments to data analytics. The demand by customers is growing and the adoption of digital services is on the rise. In Cisco's Global Digital Readiness Index 2019, Jordan was placed in the "Accelerate" level, out of three levels: Activate, Accelerate, Amplify[3]. The middle level "Accelerate" includes countries that have taken some steps forward, but have significant opportunities to accelerate or improve in their digital readiness. The financial sector in Jordan is keen to adopt new solutions, enhance their services and products, and be a catalyst for innovation in the region.

## Scope

To analyze current trends in the local market and assess the readiness of the Jordanian financial sector for digital transformation, Jordan Payments and Clearing Company (JoPACC) conducted a survey on digital transformation with the focus placed on three key areas; institutions' internal approach, external factors influencing the progress of transformation, and a look into how enabling the environment is. Surveyed financial institutions include banks, mobile payment service providers (PSPs) and payment system operators. 72% of all said institutions in Jordan participated in the survey.

## Current Implementation

In assessing the readiness and future outlook of digital transformation for Financial Institutions in Jordan, it is of great importance to first understand the progress, culture, and expectations of Financial Institutions surrounding digital transformation. The high-level thematic areas of focus for bank and non-bank institutions differed significantly. Thematic focus areas are the abstract goals and objectives that underlie current and future strategies and institutional directions. For banks in Jordan, a primary thematic focus was reducing the friction experienced by customers in accessing financial services. This was highlighted in conjunction with full process flow automation and seamless integration of financial services in the daily digital lives of clients. Additionally, banks perceive digital transformation as an opportunity to drive a culture of change within their institutions, and to reinvent operating and business models. As for non-banks, the thematic areas of focus could be summarized along two main pillars: increasing and promoting financial inclusion in the kingdom, and disrupting the current payments ecosystem, to drive wider market digitalization from the bottom up.

Overall, financial institutions believe they have what it takes to successfully transform their processes to the digital arena. Most of them have a clear strategy for digitalization that is championed by the higher management of these institutions. Flexibility and quick adaptation are also highlighted as strength points to succeed in the implementation process. Moreover, investing in digital services and having skilled teams with digital payments expertise contribute to the success of the transformation process. However, the majority of financial institutions believe that their distinguishing advantage in digital transformation is related to either strategy or executive management support. While these two factors are indeed necessary for the success of digital transformation, financial institutions should engage in a process of reiterative evaluation of existing business models, product offerings and 'banking ideology' to determine whether they truly should exist in the digital world, or whether financial institutions are merely digitizing legacy processes. In the case of the latter, financial institutions may find that their digital transformation journeys are proving to be unsustainable in the long run. Furthermore, partnerships should become one of the key priorities for financial institutions looking to become leaders in the future of digital financial services in Jordan.



Financial institutions in Jordan unanimously perceive improvement in the customer experience as a benefit of a successful digital transformation process. This is a positive indicator, as it implies that financial institutions have customers at the heart of their digitalization efforts. Enhanced brand reputation is reported much more frequently by banks than by non-bank institutions. This is interesting as the brand reputation of non-bank institutions, predominantly FinTechs, is deeply anchored in their technological capabilities and degree of digitalization. Overall, a higher proportion of bank respondents believed in the benefits of digital transformation, as compared to non-bank respondents. A possible explanation of this discrepancy lies in the nascence of non-bank financial institutions as compared to banks, where the latter may be perceiving a heightened importance for Digital Transformation due to the extent of its reliance on outdated, legacy systems. This poses a major disadvantage for banks. Nonetheless, given their superior resource capabilities these ideological shifts position banks at a significant advantage in digital transformation.

### Benefits of A Successful Digital Transformation Process

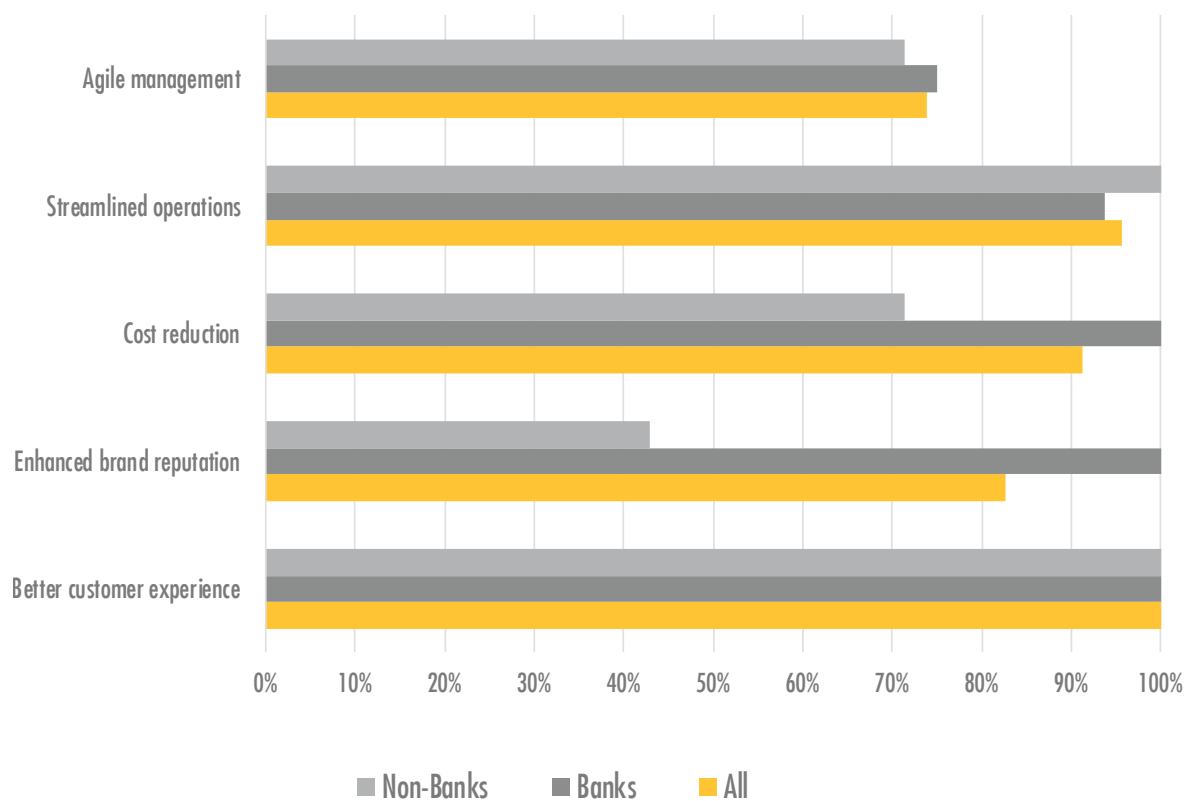


Figure 2: This chart shows the benefits of a successful digital transformation process for financial institutions.

To what degree then, have financial institutions committed their available resources towards their digital transformation journeys? Approximately 68% of financial institutions have allocated human resources and a budget for the transformation process. Both banks and non-bank institutions have strategically committed to digital transformation to a high degree. Non-bank institutions have also dedicated significantly more team members to the process of digital transformation, as compared to banks, whereas banks reported higher budget allocation than non-bank institutions.

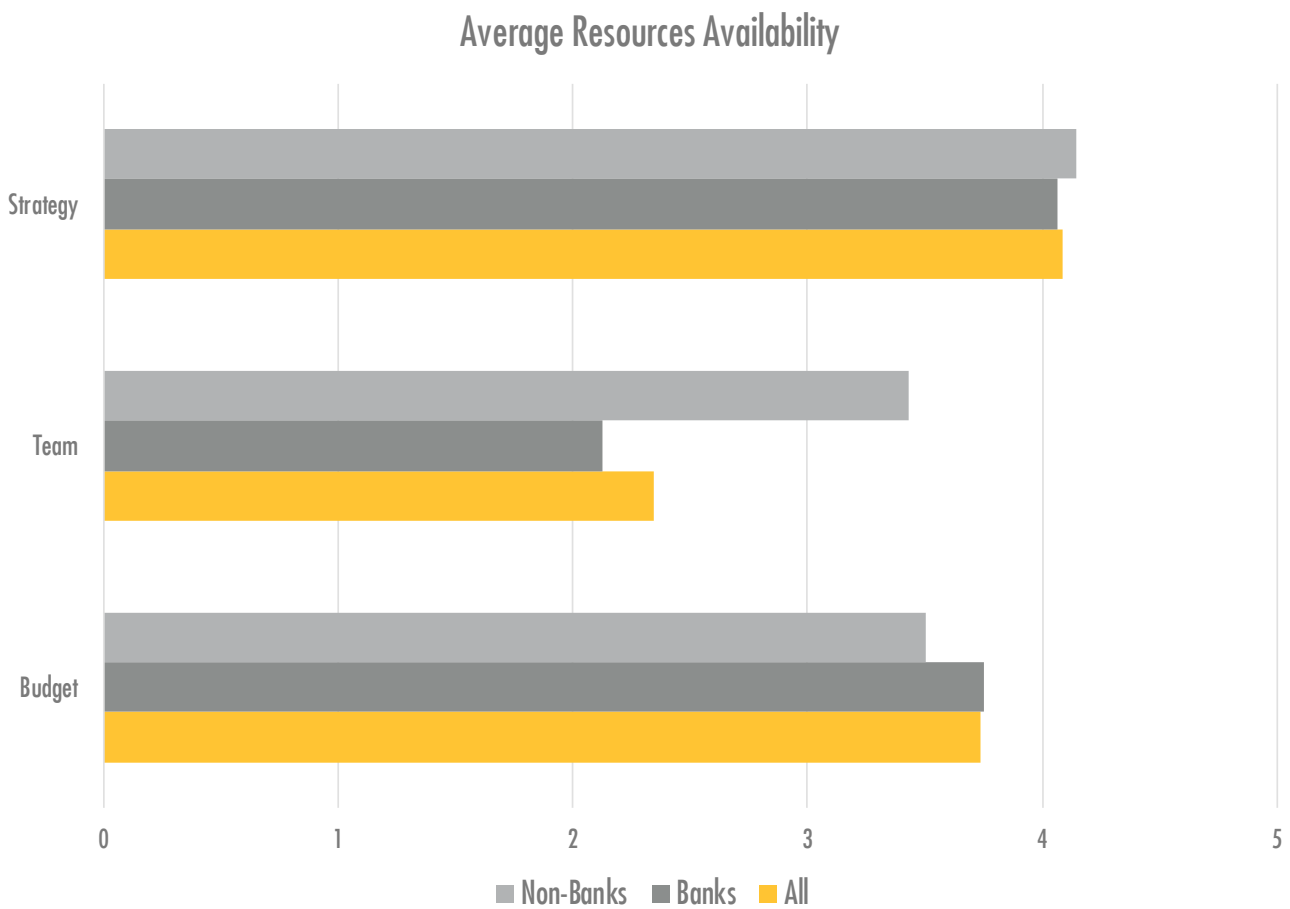


Figure 3: This chart shows the average relative degree of resource allocation for the digital transformation of financial institutions in Jordan. Strategic dedication and commitment were reported as the highest resource commitment, whereas a dedicated team was reported as the least resource commitment.

Thus Far, the survey elucidated plausible thematic areas of focus of FI; what they believe differentiates them from their competitors, the perceived benefits of digital transformation, their strategic objectives and the dedicated resources towards their digitization journey. Consequently,

financial institutions appear to be well-positioned for a successful digital transformation journey. In fact, 74% of financial institutions are partially deploying or deploying digital transformation strategies at scale (figure 4). This is especially promising as it indicates the agility of the Jordanian financial sector.

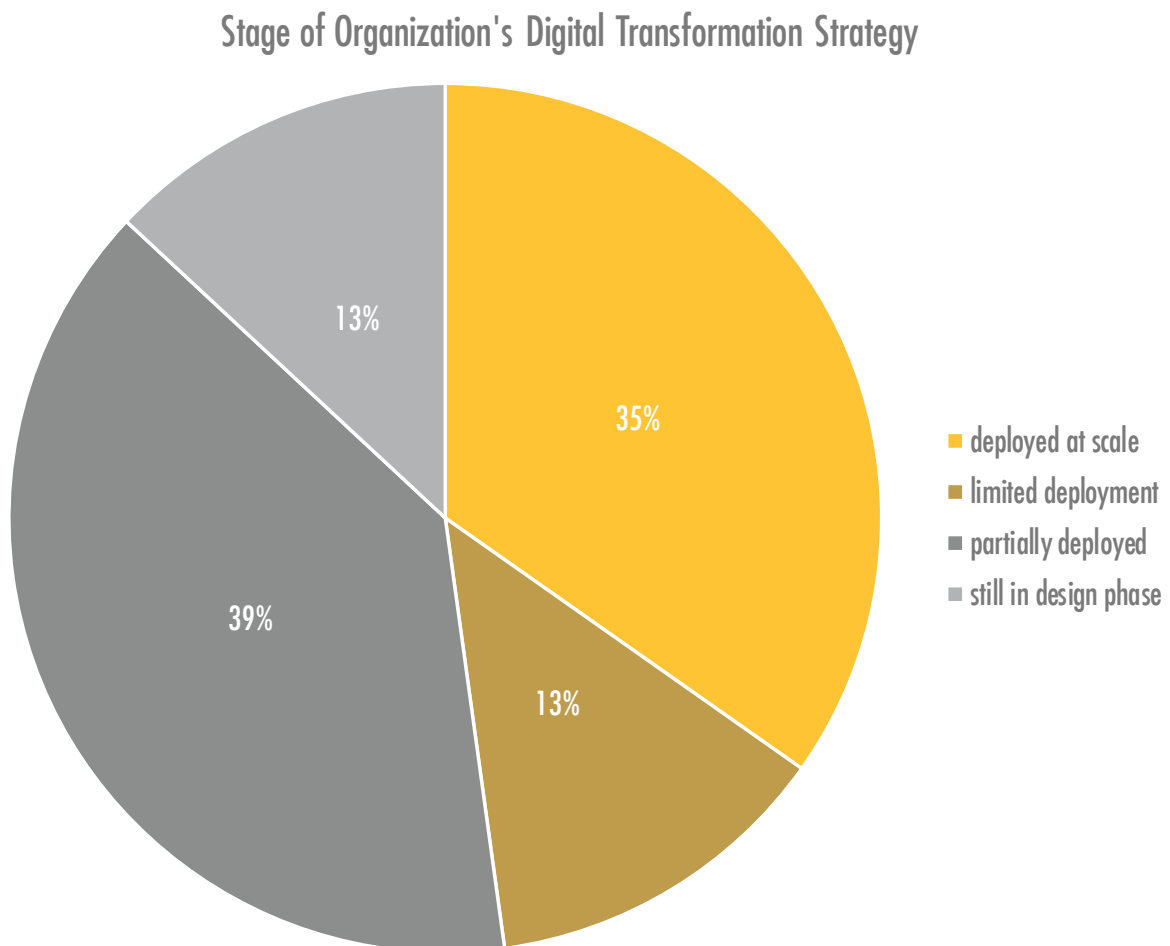


Figure 4: Shows the stage of institutions' digital transformation strategy, where 35% is deployed at scale, 39% is partially deployed, 13% is limited deployment, and 13% is still in the design phase.

That being said, while digital transformation strategies are being deployed, straight-through processing (STP)- the execution of transactions without human intervention- has not been largely achieved, with only 13% of institutions implementing it fully, suggesting that automation of processes is still primitive across the financial sector. Given that automation represents the hallmark of the 4th industrial revolution, this result contrasts with that of figure 4.

With regard to the strategic objectives successfully met through digital transformation, 91% of financial institutions believe they have fully or mostly achieved their strategy objectives of improving customer experience, accelerating the delivery of digital products, enhancing innovation processes, improving marketing and sales, improving back-office efficiency and ultimately reducing cost. Figure 5 shows the success that digital transformation had on a number of financial institutions' objectives. Overall, financial institutions have observed an improved customer experience as a result of digital transformation, which was reported highly by banks. Financial institutions reported an improvement in back office-inefficiencies as a result of digital transformation. As for the cost and time needed for compliance, this witnessed a relatively low improvement as reported by the financial institutions. This is indicative of the inefficiencies of highly manual, legacy-structure of current regulation and compliance practices and hints at low maturity of both Regulatory Technology (RegTech) and Supervisory Technology (SupTech) in the Kingdom. Relatively low reporting of a reduction in costs further validates this, due to the high cost of compliance incurred by financial institutions.

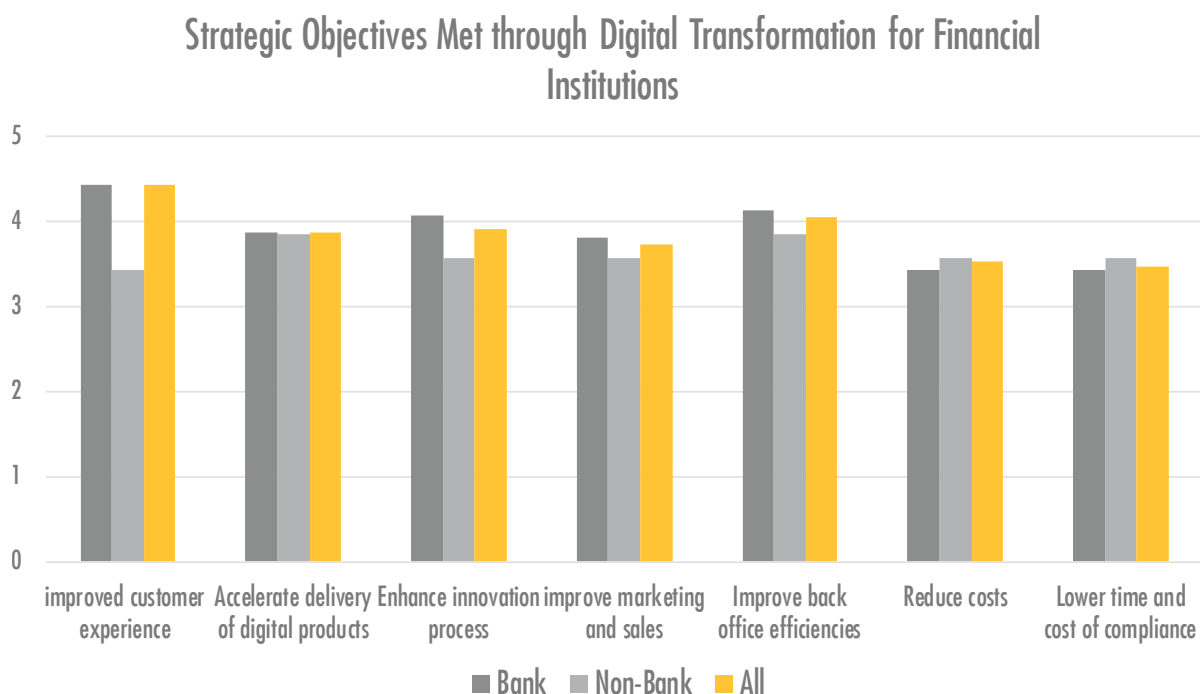


Figure 5: Strategic objectives met through digital transformation for Financial Institutions

Market dynamics, competition, and institutional strategies can position institutions in different capacities within the overall ecosystem. Leaders are those players, usually incumbents, who have a higher appetite for risk in order to continually innovate and pull the market along with its strategic direction. Followers are those institutions that prefer studying and understanding the implications of new innovations, so as to reengineer them in a more suitable way for the market and/or their customer base. Challenger institutions are those institutions wishing to become the new leaders, where often they have a much higher risk appetite and are continuously exploring new innovations. 56% of banks perceive themselves as leaders, as compared to 86% of non-bank institutions. 25% of banks perceive themselves as challengers, as compared to 14% of non-bank financial institutions. 19% of banks perceive themselves as followers, as compared to 0% of non-bank financial institutions. A very interesting observation here is the perception of non-banks of themselves as “Leaders” rather than “Challengers”, suggesting that these institutions believe that they have reached maturity and positioned themselves as leaders in the financial market in Jordan.

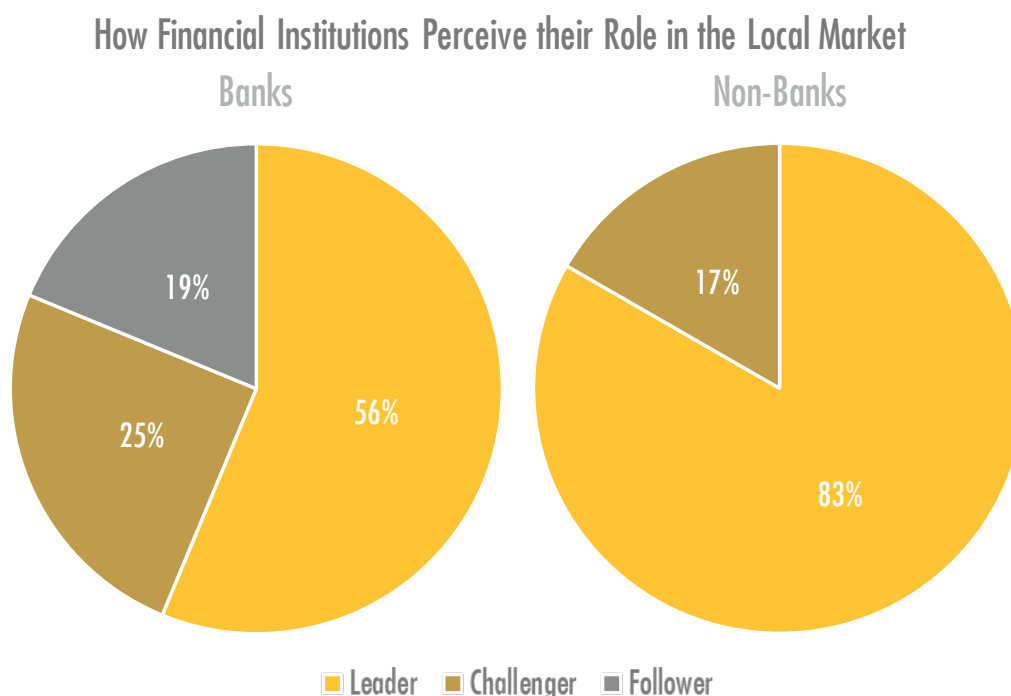


Figure 6: How do financial institutions perceive themselves in the local market? (Banks and Non-Banks)

## Technologies

Technology is one of the most influential factors with regard to the evolution of the financial sector. However, technological innovation, unlike the financial sector, has largely been decentralized, unregulated, and more often than not unstandardized. This can pose a challenge for players in the financial sector aiming for standardization and secure development of their digital capabilities. However, certain technologies are taking the international financial community by storm due to their groundbreaking potential for both retail and corporate banking. In Jordan, 47% of Financial Institutions believe there is high availability of technologies required for DT in the local market, and only 18% perceive them as not sufficiently available. However, 44% of financial institutions in the Jordanian market are neither satisfied nor dissatisfied with the services offered by local technology vendors, while 30% of financial institutions are satisfied, 17% dissatisfied, and 9% very dissatisfied (figure 7). This suggests the need for better partnerships between the IT sector and the financial sector to improve the latter's satisfaction with the former.

Level of Satisfaction with the Services Offered by Local Tech Companies

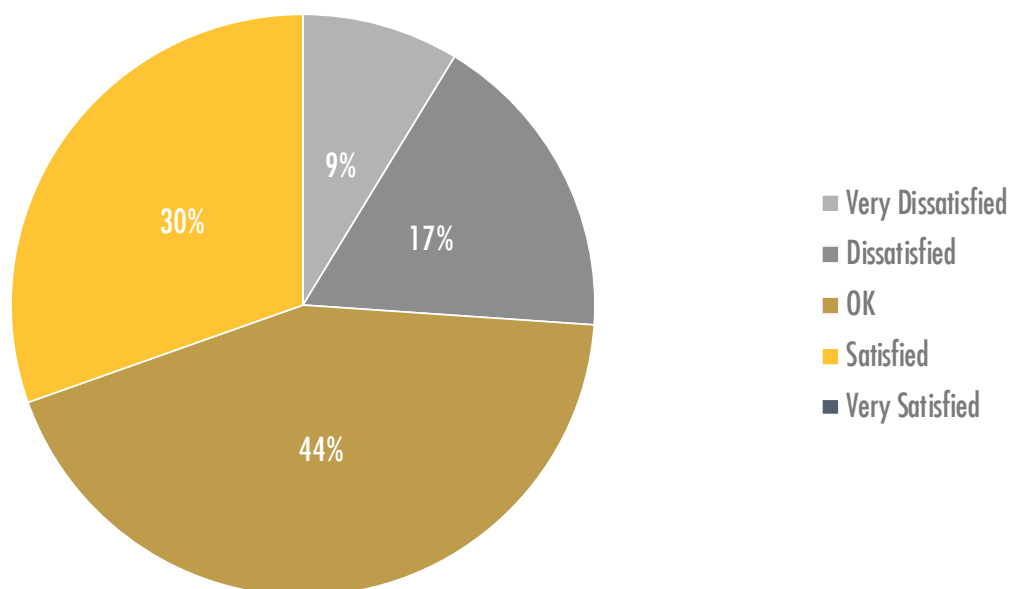


Figure 7: Level of satisfaction of financial institutions with local technology providers.

Not all technologies hold the same potential for the Jordanian market, as demonstrated in figure 8. Open APIs were reported highest by both banks and non-banks, a promising sign for the future of FinTech evolution in Jordan as Open APIs will enable direct cooperation and partnership between bank and non-bank financial institutions. Banks highly rated Artificial Intelligence and Machine Learning, and non-banks Blockchain and Distributed Ledger Technology. On average, cloud computing and storage were deemed by all respondents as a high impact technology, despite the technology existing in the Jordanian market through both local and international vendors for some time now.

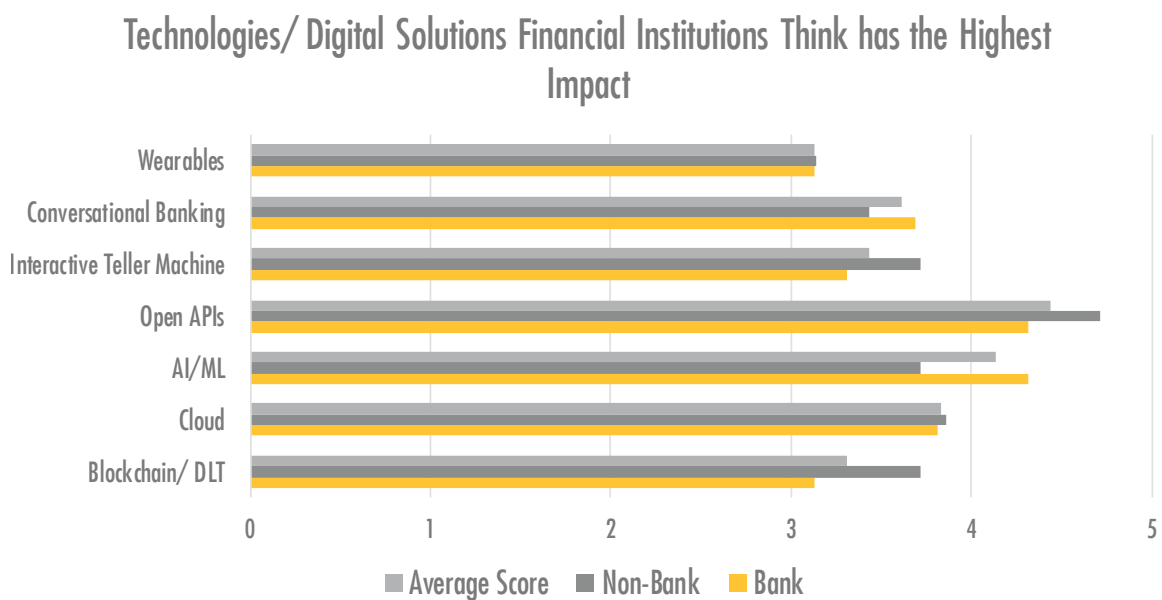


Figure 8: financial institutions' perception of the potential of new technologies for the Jordanian market

When it comes to implementation, the key technologies taking priority in the transformation process of financial institutions are open APIs, digital banking, Artificial Intelligence and Machine Learning (AI/ML), cloud and blockchain successively (figure 9). The thematic focus areas for financial institutions in their transformation processes are mostly customer-centric and encompass digital onboarding and electronic Know Your Customer (eKYC), digital customer journey, digital bank branches, instant payments, mobile payments, and simplifying payments generally. There is also considerable interest in automating processes and services, enabling QR code payments, deploying

cloud storage capabilities, and conducting data analytics. These focus areas are aligned with the Top 7 Digital Transformation Trends in Financial Services for 2019, as published by Forbes [4], which are:

Mobile banking	Big data
Mobile pay	Automated wealth managers
Mobile apps	Blockchain
Cleaning up the smoke and mirrors- referring to automating processes fully	

### Top Technologies Implemented

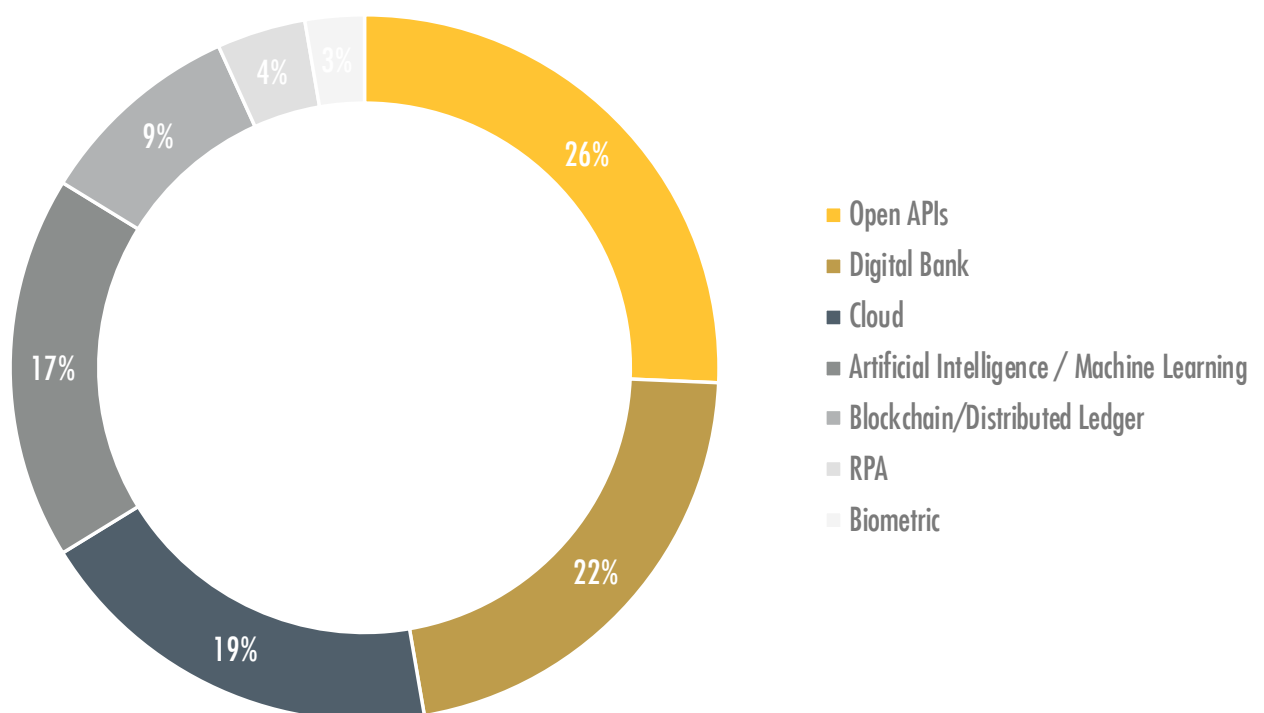


Figure 9: the top technologies implemented by financial institutions as part of their digital transformation journey

Many financial institutions have successfully implemented digital services that positively contributed to their growth. Many benefits can be derived from the successful implementation of digital transformation strategies. These comprise better customer experience, streamlined operations, cost reduction, enhanced brand reputation, and agile management.



# Customer Experience

Customers lie at the core of digital transformation processes. Enhancing the customer experience is a key driver of digital transformation in most industries. In Jordan, financial institutions face common challenges (figure 10) to enhancing their customer experience, ranging from risk management, changing business models, keeping up with digital trends, building trust and loyalty with young clients, to regulations. With regard to regulations, financial institutions feel challenged by regulatory limitations. In particular, financial institutions feel limited in introducing remote, digital banking services that would currently require a “wet signature” or ID presentment in branch. Allowing these solutions is expected to reduce the friction experienced by customers. Another concern financial institutions often express is compliance requirements. To fully capitalize on digital transformation opportunities, FIs call on the regulators to align the regulatory framework with the emergence of new technologies, such as cloud computing and storage, blockchain, open banking, and digital signature.

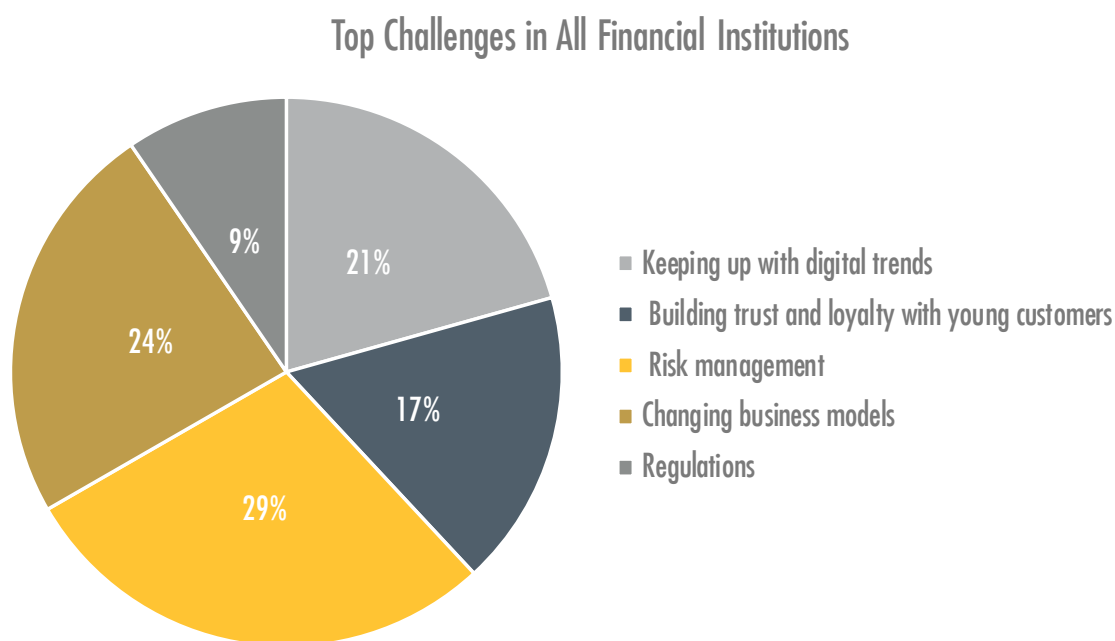


Figure 10: challenges faced by financial institutions in improving their customers experience and reducing friction

To increase the demand by customers and the uptake of digital services, financial institutions are working to increase the readiness of their customers to adopt digitalized services by maximizing awareness and marketing efforts in branches and through social media bi-lingually. Some FIs reduce fees on digital services and enroll new clients directly in digital services, while others offer loyalty programs and build products for different age groups.

On the satisfaction of customers with available services, only 50% of FIs see that their customers are mostly satisfied with their digitalized services, which calls for improvement in offered services. Customers' expectations of financial services have dramatically increased over the past decade. Due to high technological literacy and familiarity with purely digital experiences, customers are increasingly demanding from their financial institutions similar seamless integration with their daily lives through available technology; from digital banking to convenient payments, digital self-onboarding, in addition to more automated services. Simplified processes and online-enabled transactions and processes carry the highest value to customers because they save them time and effort.

When looking at the other side of the table, and while the center of most transformation processes is enhancing the customer experience and expanding the customer base, very few services are developed to cater to a key customer segment; female users. High importance and priority have been placed in the National Financial Inclusion Strategy of Jordan (2018-2020) on increasing the financial inclusion of women and reducing the gender gap in access to financial services. However, and with a few exceptions of some female-focused products, most surveyed FIs don't have any special products to attract or serve female clients. Amongst those financial institutions that do offer female-targeting products, a significant proportion of products plays along stereotypically-observed financial needs of women. This could be the result of lack of communication channels between female clients and their financial institutions. Owing to the low rates of financial inclusion of women in Jordan, financial institutions stand to greatly increase customer acquisition by developing better products to meet female clients' needs, through understanding the financial needs of women better.

## Regulations

There is a common belief that the regulator is in the best position to enable the development of payment systems and creation of new digital channels, and is seen as a fintech champion in global markets. In Jordan, the financial sector appreciates the orientation towards reducing the use of cash and the governance framework put in place, fostering trust in and interoperability and security of e-payments. FIs value the proactive approach regulators followed in Jordan by building the

infrastructure for e-payments and launching systems like JoMoPay and eFAWATEERcom (Electronic Bill Presentment and Payment System) to enable mobile payments. Nonetheless, they find the regulatory requirements demanding, consuming valuable resources to implement. According to FIs, the current regulatory and legal framework should be more dynamic and adaptive. It requires updating to be aligned with new technologies. While keeping in mind security requirements, the regulations should enable simplified enrollment of customers. The majority of FIs find that digital signature would be a key milestone in simplifying services and succeeding in fully digitizing them.

Likewise, the overall public sector can have a detrimental role in the development of the respective market sectors. Its policies, measures, and procedures can greatly influence innovation, entrepreneurship, and growth in the private sector. Around the world, an age-old topic of debate has surrounded this with citizens and policymakers alike demanding more or less involvement of the public sector in the private sector, in the hopes of protecting and nurturing the latter. However, regardless of the degree of intervention, the end result of this is of most value; whether the public sector is an enabler, an accelerator, or an inhibitor. 67% of the financial sector in Jordan believe the public sector to be an enabler of the financial sector, insinuating the private sector looks towards the public sector for the foundations unto which they can craft their innovation and growth. 29% of the financial sector believe that the public sector is an accelerator, viewing the public sector as a leader, and only 5% believe the public sector to be an inhibitor of the private sector (figure 11).

The Role the Public Sector Currently Plays in Facilitating Digital Transformation

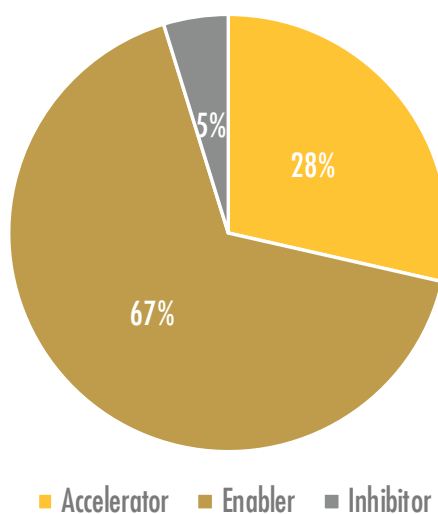


Figure 11: Financial institutions' perception of the role of the public sector

The financial sector believes the government and the financial regulator have a primary role to play to accelerate and facilitate the success of digitizing financial services. To play this role, the sector presents the following **recommendations**:

1. Improving the legal and regulatory framework to adapt to the constantly evolving digital wave. FIs expressed interest in getting involved in the shaping of regulations to bring in the sector perspective. Moreover, the regulator can incentivize FIs that introduce break-through technologies and relax some of the regulatory requirements.
2. Activating Digital IDs and expediting the acceptance of the digital signature. This step shall allow self-onboarding and enable the eKYC process.
3. Developing comprehensive e-government services. The government can influence the culture of cash and acceptance of digital finance by leading the introduction of digitized services that could be enforced to increase adoption. This requires a clear strategy for the digitization process and strong promotion of digital services.
4. Introducing higher education programs that cater to the needs of the financial sector in relation to digital services, especially AI & ML, and data science.
5. Regular interaction between the financial sector and the government/regulators to ensure alignment with the regulator on new technologies and new services.

## Opportunities, Threats and Challenges

Rarely, can a success occur without the emergence of challenges on the way. Overall, 33% of financial institutions reported regulations and compliance as a major challenge experienced during the conceptualization and implementation of digital transformation. 4% of financial institutions reported technological volatility as a challenging aspect of remaining up-to-date with regard to their digital services. Bank and non-bank institutions differed on two elements, however, where 50% of non-banks reported their limited resources as an obstacle commonly faced (as opposed to 29% of banks), and 37% of banks reported Internal Culture as a barrier (as opposed to 17% of non-banks) to the success of their Digital Transformation Journey (figure 12). As non-bank financial institutions are relatively nascent, and small- to medium-sized players in the financial sector, they are

expected to struggle with the availability of resources. However, with sufficient process optimization and adequate resourcefulness, these institutions can be robust enough to deliver on their goals and strategies with a fraction of the resources needed by big institutions. Big institutions, on the other hand, face little challenge in allocating resources towards Digital Transformation. That being said, the sheer size of these institutions will inevitably render them more resistant to change than smaller financial institutions. Nevertheless, as demonstrated by the content of this report, banks have dedicated extensive resources to impact change on a large, institutional level, making them highly competent in adopting digital transformation.

One financial institution reported the 'separation between the roles of the business units, IT, and innovation units' as a primary challenge in implementing digital transformation. This challenge specifically has been a hot topic of discussion in modern analyses of organizational structures in the face of digitization of corporations from various sectors [5]. This is especially true with banks, as banks' organizational structures have slowly evolved from the predominantly branch-based model of banking. As banks experience less branch traffic and shift their focus towards digital banking, characterized by banking utility rather than banking products, they should especially be mindful of integrating their organizational functions and competencies in a manner fit for the digital age.

A number of financial institutions reported on an area of immense importance of the development of the overall financial sector: the lack of communication and interoperability between the different functions existing within the financial sector itself. It is true that Jordan's payments infrastructure is very developed relative to the MENA region. However, although payments are of great importance to any financial system and economy, players in the sector must remember that payments represent the channels of fund transfer. Without utilizing these channels, their true power may never be observed. From credit, to corporate banking, to investments, to savings, digital transformation is essential across the board for financial institutions to remain competitive and able to meet the needs of their clients. For instance, despite Jordan's advancements in PayTech and FinTech, not much has happened in the realm of LendTech. Given the importance of lending and credit for the financial sector and the overall economy, financial institutions need to build bridges through digitalisation between previously isolated financial functions. As mentioned previously, partnerships are nothing but a necessity in the digital era, and this includes partnerships of ideas, business units and functions.

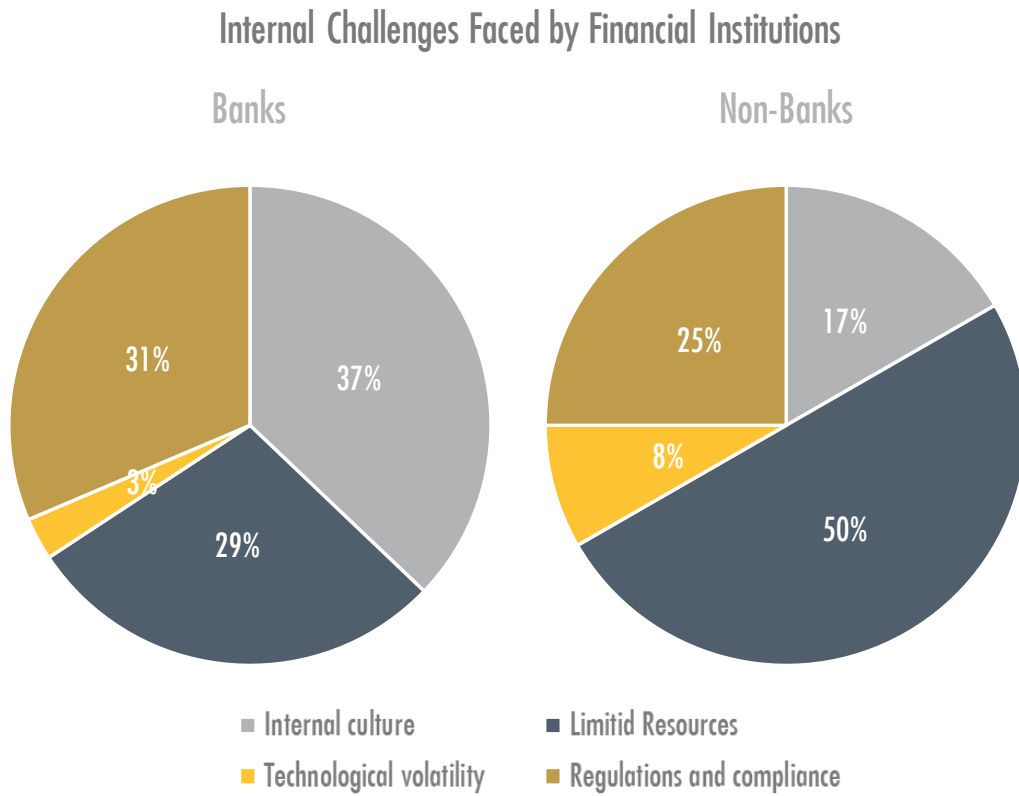


Figure 12: Internal challenges faced by financial institutions in their conceptualization and implementation of digital transformation strategies



Figure 13: a word map showing the most frequent words financial institutions used in describing their perception of threats to the digital transformation of the sector.

Financial institutions recognize some threats that could hinder the success of their digital transformation processes. The biggest two threats are the cultural resistance and limiting regulations (figure 13). Because Jordan is a dominantly cash-based society, transitioning the different segments of users to digital finance can be a lengthy process. Changing the culture of cash and increasing the level of acceptance and adoption of digital financial services put pressure on financial institutions to intensify awareness efforts and use the right communication tools and messages to familiarize users with available solutions and build trust in those services and self-confidence to use them. With regards to regulations, 45% of surveyed institutions find the regulations limiting and believe they need to be more adaptive and must be updated regularly (figure 14). Compliance requirements, according to FIs, are stringent and can cripple the progress of digitalizing financial services. Another threat that FI's referred to previously as a challenge in enhancing the customer experience is risk management, where concerns are centered around security and cyber threats. This explains the increasing demand for expertise in digital security to succeed in leading comprehensive digital transformation processes. A few institutions find the existing infrastructure of digital financial services weak and lack solid standards. This is perceived as a result of the lack of expertise in digitization in the local market. Financial constraints and the low return of investment are also obstacles for achieving the desired digitization of financial services.

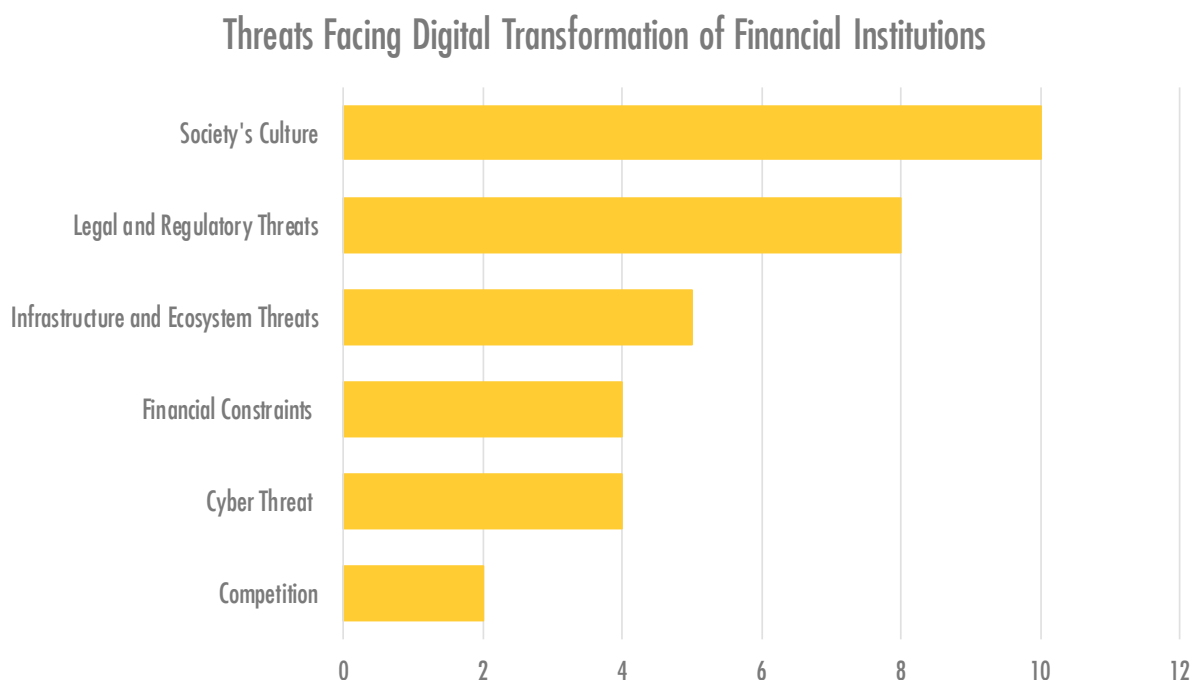


Figure 14: threats facing the digital transformation of the financial sector

Human resources are a fundamental enabler of a successful digital transformation process. The nature of required skills and competences in the financial sector has changed, with needs shifting to digital security skills, data science and analytics, expertise in fintech and new technologies (such as API, blockchain cloud and AI/ML), and expertise in user experience, product development, and RegTech. On the soft skills side, the demand is stronger than ever for creativity and innovation, agile project management and mindset of change. In the Jordanian market, there is notable scarcity in some of the desired skills; mainly in AI/ ML, data science, digital security, user experience expertise, critical thinking, and creativity. This necessitates better coordination with the higher education sector to ensure it caters to the changing demands and needs in the labor market and closes the gap between available higher education outputs and desired outputs.

The financial sector sees a huge potential for the expansion of digital financial services in Jordan; from QR-enabled payments and instant payments to digital merchant acquiring, eKYC, digital ID and digital signature (figure 15). In addition, enforcing e-government payments and establishing partnerships- between the government and the private sector and between banks and fintech start-ups- shall advance the spread and use of digital financial services. Governmental institutions such the Central Bank of Jordan (CBJ) and the Ministry of Digital Economy and Entrepreneurship (MoDEE) are supportive of digital transformation, and public sector initiatives such as MoDEE's Sanad Program for activating the digital ID will contribute to increasing the acceptance of digitized services by all population segments.

On another front, and with proper awareness and knowledge dissemination efforts, financial institutions can capitalize on the young segment of the Jordanian population, which has nearly 70% youth under the age of 30. Furthermore, Jordan enjoys high mobile, smartphone and internet penetration rates, which shall pave the way for the adoption of digitized services.

As for the emergence of FinTech service providers, 58% of financial institutions believe this increases the opportunities for collaborations in the market (figure 16). This is an especially promising outlook, given the reliance of FinTech success on fruitful partnerships. In fact, only 8% have a negative view of the entrance of FinTech service providers to the Jordanian market, signaling a promising future for the prosperity of FinTech in Jordan's local market.





Figure 15: Opportunities in the market which can facilitate the digital transformation of the financial sector

### The Emergence of Fintech Service Providers

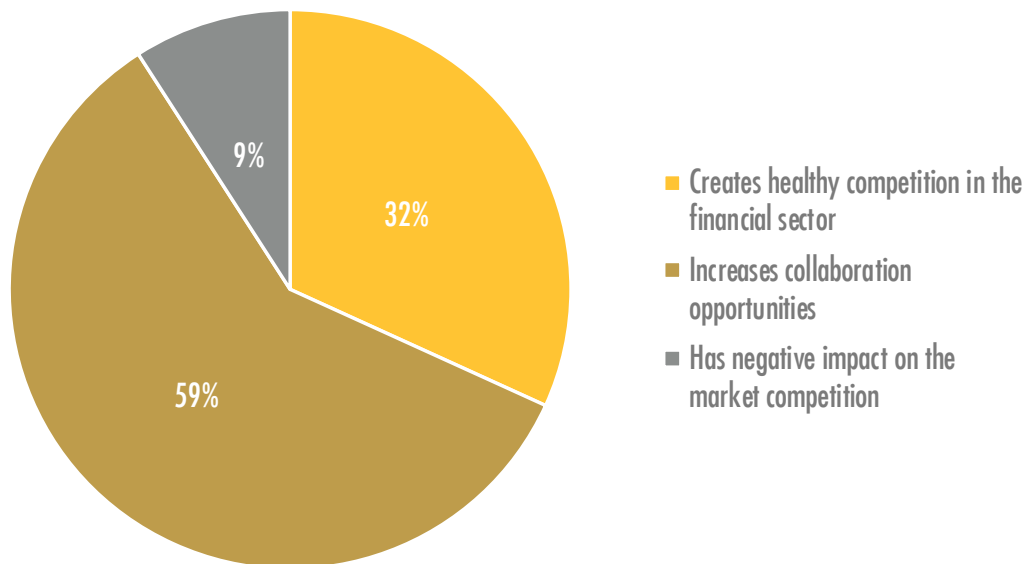


Figure 16: How do financial institutions perceive the emergence of fintech service providers in the local market?

As the backbone of the economy, the financial sector supports all industries and sectors within any market. That being said, it is also supported by those industries as well. Both banks and non-banks believed that the Information Technology and the Telecommunication industries are the most enabling with regard to the Digital Transformation of the financial sector (figure 17).

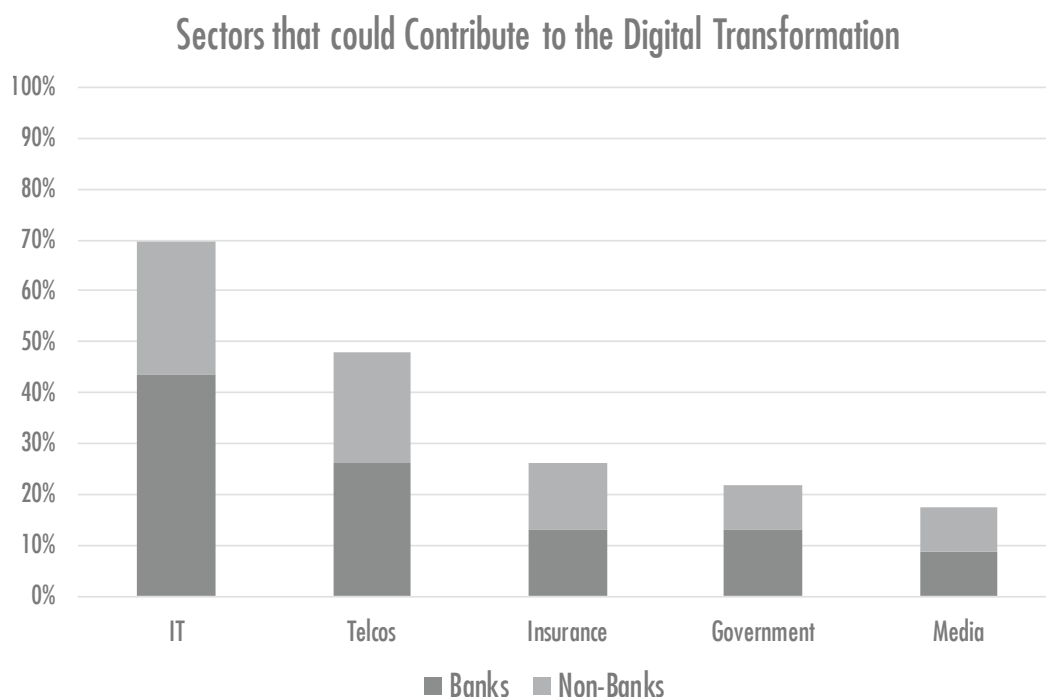


Figure 17: Sectors which financial institutions believe could contribute to the digital transformation of the financial sector in Jordan

## Conclusion

Jordan is blessed to have an enabling regulatory environment, and a competent financial sector. While we may not have arrived at a comprehensive level of sector-wide digital transformation, there is consensus on the importance of reducing friction experienced by customers in accessing Digital Financial Services. Most prominently, Financial Institutions believe Digital Identification and legal acceptance of digital signatures are key to enabling fully digitalized financial services.

The digital era has not only brought with it widespread technological advancements, but it has also redefined the importance of partnerships. To be precise, players in the ecosystem need to engage in more fruitful partnerships, as they may well be the missing piece of the puzzle towards a comprehensive digitalized financial environment. The regulator and the public sector can play the role of enablers and can lead the way by digitalizing governmental services. The regulator specifically is fundamental for the evolution of financial services by fostering innovation and enabling the sector, without compromising on its key priorities of a secure and low risk financial ecosystem. This can be

achieved through expanding and nurturing its RegTech and SupTech capabilities, in order to lead the digitalization of the financial sector by example, and to maintain its international status as a renowned innovative regulator.

The importance of human capital in digital transformation is strongly highlighted by financial institutions, and the scarcity of desired specializations in the local market is reported as a significant challenge. These worries should be mitigated by aligning the outputs of Jordan's higher education system with the needs and requirements of the local market. This is both an opportunity for the educational sector to introduce in-demand specializations, and for the financial sector to support the sponsor educational programs of specializations it will require to achieve its long-term strategies. Additionally, the IT sector, the provider of technologies enabling digital transformation, should strive to constantly cater to the growing needs and interests in fintech solutions.

As for the diversity in customer segments, financial institutions should endeavor to address all client segments in their products. A special attention should be given to attracting women to adopt digital financial services, whether as individuals or as business owners. Digital Services should also be expanded to serve micro, small, medium and large companies as the digitalization efforts have not sufficiently expanded to them.

Finally, communication across the sector and with the regulator will ensure alignment in focus and efforts and smoother implementation for all entities involved. In fact, this report crystallizes JoPACC's commitment towards open communication channels for the overall benefit of the Jordanian Financial Sector. Be it through new technological innovations or exploring new business models, the financial sector should keep in mind that through collaboration, it can yield many important milestones for the Jordanian economy.

## References

- [1] <https://www.britannica.com/topic/The-Fourth-Industrial-Revolution-2119734>
- [2] <https://www.zdnet.com/article/top-7-digital-transformation-trends-shaping-2020/>
- [3] [https://www.cisco.com/c/dam/en\\_us/about/csr/reports/global-digital-readiness-index.pdf](https://www.cisco.com/c/dam/en_us/about/csr/reports/global-digital-readiness-index.pdf)
- [4] Forbes.com: <https://www.forbes.com/sites/danielnewman/2019/01/16/top-7-digital-transformation-trends-in-financial-services-for-2019/#208ebabe5310>
- [5] <https://mitsloan.mit.edu/ideas-made-to-matter/overdue-a-new-organizing-model-it>

