Contents available at the publisher website: G A F T I M . C O M

International Journal of Theory of Organization and Practice (IJTOP)

Journal homepage: https://journals.gaftim.com/index.php/ijtop/index

How Cloud Computing and DevOps can add value to Managing Projects

Mounir El Khatib[1], Muaid Salami[2], Humaid Al Shehhi[2], Ahmed Al Naqbi[2], Mohammed Al Nuaimi[2]

[1] *Associate Professor, Hamdan bin Mohamad Smart University, School of Business & Quality Management, Dubai. UAE*

[2] *Graduate Business Management, Hamdan bin Mohamad Smart University, School of Business & Quality Management, Dubai. UAE.*

A R T I C L E I N F O

Keywords:
Cloud Computing, Devops, Project Management, Digital Transformation, Disruptive Technology

Received: July, 26, 2023
Accepted: Sep, 09, 2023
Published: Dec, 22, 2023

A B S T R A C T

While a digital transformation plan begins in the C-suite, it is in the implementation that project managers must grab the reins. Project managers, as the executive muscle of any business, are in charge of putting senior leadership's vision into action and delivering the company's new digital capabilities. Cross-team communication is one of the most significant areas where new digital technology is reshaping project management. When it comes to collaboration, traditional methods like email are inconvenient because they aren't meant for real-time communication. Important information is quickly lost in long email exchanges, and email saturation saps productivity. Collaborative work management software, on the other hand, allows team members and coworkers from other departments to engage, connect, and interact in real time, drastically reducing email clutter and saving time. However, these technologies do more than just improve the efficiency of intra-work communication; they also improve its effectiveness. A good example is the viability of AI as a transformation tool in several businesses. It has been effectively used and underlined in several businesses as important. According to Soni & Sharma et al.(2019), the importance of AI can be seen in its wide and seamless integration across several sectors of business that ultimately helps them in the growth and expansion of their various services. This study therefore seeks to look at the influence of digital transformations on the overall outlook of businesses from various industries.

1. INTRODUCTION

A new wave of disruptive technologies is compelling organizations to adapt to new methods of working, and digital transformation is gaining traction across all industry sectors. As businesses seek to capitalize on the benefits of digital disruption, the importance of more sophisticated and strategic project management methods continues to rise. Next Practices: Maximizing the Benefits of Disruptive Technologies on Projects, a new global study from the Project Management Institute (PMI), investigates the impact of digital disruptors like cloud technology and DevOps on enterprises and project management practices. Both big difficulties and huge opportunities for company growth and competitive advantage exist as a result of digital disruption. (Bughin,2017). Many organizations, however, are unaware of the relevance of this and are still yet to fully maximize the capability and the advantage that these disruptions bring to the concerned industries.

The term "disruptive technology" refers to a wide range of tools, processes, and even completed goods that provide a competitive edge. Cloud solutions, AI, and IoT were selected as the three most significant technologies by survey respondents, which is rather unsurprising. AI, in example, might be considered as playing a key role in increasing the strategic importance of the PM function by relieving them of mundane chores like scheduling and budgeting. The automation of these more routine aspects of project management gives the project manager additional possibilities to own all of the project's leadership components. This is significant because, along with strategy and business management, leadership skills are a cornerstone of the PMI Talent Triangle of technical project management, which was developed in response to a growing demand for soft skills such as leadership, strategy, and human intellect creativity, which disruptive technologies are unable to provide. These are the skillsets that will shape project management in the future and continue to be the core of the basics that are used in determining the usefulness of these technologies in the industry of project management. Blockchain, 5G mobile Internet, advanced robotics, 3D printing, and autonomous, or self-driving vehicles were among the other disruptive technologies deemed important by the PMI's respondents. These and other upcoming disruptive technologies will benefit innovator businesses that see them as an opportunity to develop, focus on the value delivery landscape, and enable project managers to play a more strategic role in managing disruption.

2. LITERATURE REVIEW

This section covers literature relevant to the case study, looking at various project management capabilities and their amalgamation with disruptive technologies in various industries.

2.1. Business

2.1.1. Markets

All market dynamics are shifting as a result of digital transformation. These digital transformations that are continually being driven by DevOps form a continually growing and ever-accelerating client demand on the demand side (M. T. Alshurideh, Alzoubi, Ghazal, et al., 2022; Ghazal, Hasan, Alzoubi, et al., 2023; Yasir et al., 2022). It has substantially cut entry barriers for suppliers, resulting in the emergence of a new breed of digital-native rivals that are upsetting established industries and aggressively stealing market share from incumbents. This has been seen in the capabilities of digital transformations to lead in the change in channels necessary for market distribution and content outreach during the market phases of the work.

2.1.2. Pricing

Many businesses embark on pricing changes as a means of generating value quickly and consistently. Indeed, in B2B settings, pricing excellence setting the appropriate rates and ensuring the right price is paid in each transaction is driven by precision, attention to detail, and agility, all of which are facilitated by digital pricing revolutions. According to (Ahmed & Nabeel Al Amiri, 2022; R. S. Al-Maroof, Alnazzawi, et al., 2021; M. T. Alshurideh, Alzoubi, El khatib, et al., 2022; H. M. Alzoubi, Alshurideh, Al Kurdi, et al., 2022; M. M. El Khatib & Ahmed, 2018), shows that, when done well, such conversions can increase price by two to seven percentage points over time, with initial advantages in as short as three to six months. B2B organizations are rapidly using approaches such as end-to-end price optimization and management, configure-price-quote (CPQ) software, and business intelligence (BI) packages to enable digitally enabled pricing changes (H. M. Alzoubi, Ahmed, et al., 2022; M. El Khatib, Khadim, et al., 2023; M. T. Nuseir, Aljumah, & El Refae, 2022b). Pricing reforms and technology selections are more likely to be successful if they are based on a complete rethinking of the pricing process. In this setting, decision makers such as project managers must review their current systems, build future-state systems that match their needs, and deploy the appropriate tools to support and sustain the transformation's benefits (Nadzri et al., 2023). Companies can only hope to quickly capture the considerable margin improvements at stake if they take a more holistic strategy.

2.1.3. Delivery

Digital transformation in service delivery has been revolutionized mostly by several factions in the AI industry, mostly which come in form of drones, autonomous trucks, 3D printing among others. Drones can assist logistics businesses provide

cheaper (25 per cent), faster, and reduced deliveries by bypassing traffic congestion during the last supplies, as per the Productivity Commission (2016) (Kassem & Martinez, 2022). Robotics, on the other end, make up just under 0.5% of all operational shipments around the world. As technology progresses and rules change, companies may benefit from fees for faster/same-day deliveries. We predict that it could be equivalent to a total of about $20 billion in profitability over the next decade. Drones can be important to humans as well.. It has the potential to reduce emissions by 15 million metric tons and avoid up to 4,000 deaths due to traffic accidents (A. Al-Maroof et al., 2021; A. I. Aljumah, Nuseir, et al., 2022a; Ghazal, Hasan, Abdullah, et al., 2023). Self-driving passenger vehicles have gotten a lot of attention recently, but autonomous trucks promise to reduce road accidents and carbon dioxide (CO2) emissions while also boosting company profits. According to the International Transport Forum, the volume of freight transported by road will nearly double between 2010 and 2050 (M. Alshurideh et al., 2023). The introduction of autonomous vehicles is anticipated to take place in stages, with the benefits accruing first to B2B logistics organizations. 3D printing, also known as additive layer manufacturing (ALM), manufactures three-dimensional solid items from digital blueprint files (Alhamad et al., 2021; Farrukh et al., 2023).. ALM yields 5 to 10% waste material (which can be recycled and reused) on average, compared to 90 to 95 percent for machining processes that manufacture a product by cutting away a solid block of material rather than layering it up (A. Aljumah et al., 2020; M. El Khatib et al., 2022). At first appearance, 3D printing appears to be a major threat to the logistics business, as products may be manufactured on-site, minimizing the need for shipments. However, logistics companies might diversify their services by repurposing themselves as printers, transporters, and installers of 3D-printed goods.

2.2. Technology

2.2.1. Invention

Digital transformation uses technology to produce value and new services for a variety of stakeholders (customers in the broadest sense), innovate, and gain the ability to quickly adapt to changing conditions. Within the regards of inventions, these transformation and disruptive process often provide new ways to change mindset of inventions and the approaches used in making these ideas come to light. These transformations form the basis of these various inventions in the minds of the inventors (M. Alshurideh, Almasaeid, El Khatib, Alzoubi, et al., 2022; M. M. El Khatib & Ahmed, 2020).

2.2.2. Design

According to (A. I. Aljumah et al., 2021b; Ghazal, Al-Dmour, et al., 2023), various DT technologies have been created and been leveraged with the main aim of improving the design of products and services it is integrated with. These disruptive technologies have especially increased the user friendliness of website and software that increase the comfortability space that has been defined by these technologies improving the overall outlook of these business and the possibility of having site visits and clicks, depending on the nature of the business being run (I. A. Akour et al., 2022; A. H. Al-Kassem et al., 2022). Some of these disruptions include the formation of new integrated coding languages, 5th generation languages that make graphic design easy and have cause positive disruptions that many companies continue to adopting bids to increase the growth of their business (El khatib, Beshwari, et al., 2023; Louzi, Alzoubi, El Khatib, et al., 2022). The most common indicator of the efficient use of design technologies can be seen in data mining. This is the increase frequency of the data that is realized from these websites as a result of increased traffic towards these website (I. Akour et al., 2023; M. M. El Khatib et al., 2019). As a direct result of the technologies, the use of data mining as an indicator is valid and can be confirmed in several ways as being a worthy indicator of the efficiency of disruptive transformations in the capacity of the technological industry.

2.2.3. Usage

Digital transformation is transforming the way businesses are conducted and, in some cases, spawning entirely new industries. With digital transformation, businesses are taking a step back and rethinking everything they do, from internal processes to online and in-person client interactions. We are fully ensconced in the digital age, and businesses of all kinds are inventing new and innovative ways to leverage technology. Netflix

is a good illustration of this. It began as a mail order service and quickly became a major competitor in the video rental industry (Abudaqa et al., 2021; El khatib, Mahmood, et al., 2023). Then, thanks to technological advancements, large-scale streaming video became conceivable. Netflix now competes with traditional broadcast and cable television networks as well as production studios by providing a growing library of on-demand content at extremely low costs. New approaches in the usage of technologies is another sector that digital transformation seeks to cover (R. S. Al-Maroof, Alahbabi, et al., 2022). Of course, using digital technology to improve the efficiency of contact centers and in-store service desks is a fantastic idea. However, true transformation occurs when you evaluate all accessible technologies and how adapting your business to them might improve the consumer experience (A. I. Aljumah et al., 2021a). Although social media was not designed to replace call centers, it has evolved into an extra channel (and opportunity) for providing superior customer support. Another fantastic example of a digital transition is adapting your service offerings to include social media.

2.3. Industry

2.3.1. Process

All firms now face a shared strategic imperative: digital transformation. It improves the customer experience and provides operational efficiencies by using innovations born by developing cloud and mobile technology. However, many transformation programs have yielded results to date, although not always and in all circumstances (M. Alshurideh, Alzoubi, Alshurideh, Kurdi, et al., 2022) (M. El Khatib et al., 2022; Lee, Nawanir, et al., 2023). These attempts were frequently too narrowly focused on process redesign and automation using a new generation of older business process management (BPM) software (R. S. Al-Maroof, Alhumaid, et al., 2021). Digital automation platforms (DAPs), which were better developed and made more efficient by DevOps, made it easier to work with business and technology professionals to optimize, automate, and modify business processes as needed (M. El Khatib, Khayat, et al., 2023; M. T. Nuseir & Aljumah, 2020). Process improvement, on the other hand, has broader implications that may not have been considered, such as how change affects workforce behavior and interactions with customers and suppliers, and how systems, applications, and processes must adapt and interoperate to achieve desired business outcomes. According to (H. M. Alzoubi, Kurdi, Alshurideh, et al., 2022; M. El Khatib, Alnaqbi, et al., 2023), to do so, organizations will need a new generation of planning and modeling tools that allow them to visualize and understand how their people, processes, and technologies must work together as a coordinated system in order to achieve the strategic goals of modern digital firms. These includes factors like security and data privacy that are most importantly considered in the paramount nature of company secrets among other things. Technologies in this include companies like CyberSec (pioneer DevOps companies), which have disrupted the data privacy and information security space and continue to take the fore front in the work that they do (H. Alzoubi et al., 2020; M. El Khatib, Ahmed, et al., 2023; Hani Al-Kassem, 2021; Sakkthivel et al., 2022).

2.3.2. Standard

Disruptions have continued to occur in various levels that continue to underline the importance of raising the products standards and raising the bars of production for each of the involved companies. These according to Skog & Wimelius et al (2018), necessarily need not be directly linked to product or service improvement, but can also be directly linked within organizational ranks that helps to improve various factors and elements among the employees that is ultimately used to raise service and product standards. Functions are well-run by good companies (H. M. Alzoubi et al., 2019; Nuseira & Aljumahb, 2020). Great firms excel at bridging the gaps between departments. Future commercial value is harnessed in such organizational seams, and the company achieves speed with size. This is critical to understand since bringing a product to market requires the efforts of an entire organization, including R&D, marketing, sales, supply chain, customer service, finance, legal, and partners (H. M. Alzoubi, Ghazal, El khatib, et al., 2022; M. T. Nuseir & Aljumah, 2022). This necessitates a shift in legacy businesses' operating models to a more modern, cohesive manner of working across the firm. Combining new work models with complementary digital platforms, according to the study, will help (M. Alzoubi et al.,

2021; Mubeen et al., 2022). These improvements will be supported by the installation of digital tools and process upgrades, as well as the establishment of a nimbler operating model that is, the hardwiring of the organization into the improved overall being thereby effectively raising the standards set by the organization in itself (Ahmed et al., 2022; R. S. Al-Maroof, Alnazzawi, et al., 2022).

2.3.3. Method

This incorporates the evolution that these businesses have to face in their quest to grow and constantly show change to the market and within as a result of direct improvement by digital transformations. Customer and employee behavior, beliefs, and expectations are the actual threat and opportunity in the face of technological change (M. T. Alshurideh et al., 2023; M. T. Nuseir et al., 2020). When it comes to allocating budget and resources to current business and technology strategies (usual business) vs. the unfamiliar in regards to how such investments integrate with customer and consumer shifts, businesses face a challenge. This is an era of technological Evolution, during which innovation and society advance at a faster rate than businesses can organically adjust (Amiri et al., 2020; M. T. Nuseir, 2021; Varma et al., 2023). This marks the beginning of a new phase of administration, and a future model of revenue models, all governed by the slogan "adapt or perish." Rather than responding to or being harmed by change, some foresighted firms are spending in digitalization to adapt and surpass their rivals. Capgemini, a research-based firm, produced a report in November 2012 examining the digital maturity of companies seeking digital transformation (Al-Awamleh et al., 2022; Arshad et al., 2023; M. El Khatib, Zitar, et al., 2023). In its study "The Smart Advantage: How innovators outclass their colleagues in every industry," Capgemini observed that organizations that are heavily invested in both cloud-based intensity and value innovation intensity obtain more income from their own tangible assets, are much more lucrative, and seem to have significant market stock prices (M. T. Alshurideh, Alquqa, Alzoubi, Al Kurdi, & Hamadneh, 2023; H. M. Alzoubi, Kurdi, Akour, et al., 2022; M. El Khatib, Beshwari, et al., 2023). These new incorporation methods formed the baseline of activities that constantly produce the evolution of the environment under which thy exist in, making them to constantly improve.

2.4. Society

2.4.1. Culture

The digital transformation process is fundamentally uncertain: changes must be made provisionally and then changed, choices must be made swiftly, and people from across the company must participate (Tariq, Alshurideh, Akour, & Al-Hawary, 2022). Traditional hierarchies become a hindrance as a result. It's essential to go with a flat organizational structure that's kept separate from the rest of the company. Because so many digital technologies may be tweaked, the demand for agility and prototyping is much greater than it could be in conventional change-management programs (Elkhatib, M., Al Hosani, A., Al Hosani, I., & Albuflasa, 2022). Leaders must decide which vendors' apps to use and how to better incorporate Cloud and DevOps based solutions to , areas of the business which will benefit the most from the new technology, whether the transition should be done in stages, and so on (Alshawabkeh et al., 2021; Amiri et al., 2020; M. El Khatib et al., 2023). This is then the fundamental basis through which culture is changed, both in the inside and the outside of the organization by the entire processes of digital transformations.

2.4.2. Habits

For decades, the impact of digital technology has influenced customer choices, resulting in a considerable quantity of eCommerce, especially in the home furnishing industry (H. M. Alzoubi, Alshurideh, Kurdi, et al., 2022). In its study "The Smart Advantage: How innovators outclass their colleagues in every industry," Capgemini observed that organizations that are heavily invested in both cloud based intensity and value innovation intensity obtain more income from their own tangible assets, are much more lucrative, and seem to have significant market stock prices (A. I. Aljumah, Nuseir, et al., 2022b; H. Alzoubi & Ahmed, 2019). In the purchasing sector, there is a scarcity of research on internet purchase habits. The advent of digitalization and the introduction of digital marketing platforms as opposed to offline marketing has altered purchasing habits for a variety of products (I. Akour et al., 2021; M. T. Nuseir et al., 2021). According to the report, people preferred an omnichannel approach when buying

furniture, which improves competitive costs and customized designs and services (H. M. Alzoubi et al., 2020; Blooshi et al., 2023; M. Nuseir & Elrefae, 2022). Taking full advantage of their purchases, consumers anticipate rewards both online and offline. The influence that these transformation processes especially E-commerce and Cloud based storage and computing habits have on the consumers can be seen as a direct influence on purchasing habits and be used to identify the presences.

2.4.3. Movement

In recent years, movement through the DevOps has gained traction. To use agile business techniques, an increasing number of companies are considering making adjustments that favor production and operations collaboration specially to ensure efficient delivery and supply of goods and products (H. Alzoubi et al., 2022; M. T. Nuseir, Aljumah, & El Refae, 2022a). DevOps is rapidly becoming the most important tools for startups. However, before making significant changes to deploy DevOps principles, business owners must be certain that the risk and effort are worthwhile. People wait for other people and other machines in a typical IT environment, or are delayed sorting out the same issue time after time (Aityassine et al., 2022; H. Al-Kassem, 2014; Almasaeid et al., 2022). This results in delays in customer deliveries and sluggish productivity in a business environment. Employees desire to be productive, yet churning leads to dissatisfaction and frustration. Everyone gains when individuals can spend less time on the aspects of their job that are unsatisfying and more time on the aspects of their job that bring value to the business, which is enabled by technologies that improve speedier performance and mobility to deliver to consumers (A. H. Al-Kassem, 2017; M. M. El Khatib et al., 2023; Louzi, Alzoubi, Alshurideh, et al., 2022). People wait for other people and other machines in a typical IT environment, or are delayed sorting out the same issue time after time (Tariq, Alshurideh, Akour, Al-Hawary, et al., 2022). This results in delays in customer deliveries and sluggish productivity in a business environment.

Step 1

Create a list of top 10 digital transformations in your industry and then do a SWOT analysis of your industry.

#	**Key Digital Transformations**
1	AI based processing.
2	Software developments for project management.
3	3D printing for project models.
4	Edge Processing
5	Customer Experience Gap
6	Blitz scaling for Operations scaling.
7	Logistics and Operations, UPS.
8	Cloud Computing and DevOps
9	Customer engagements via AI.
10	Networking Planning Tools for better networking.

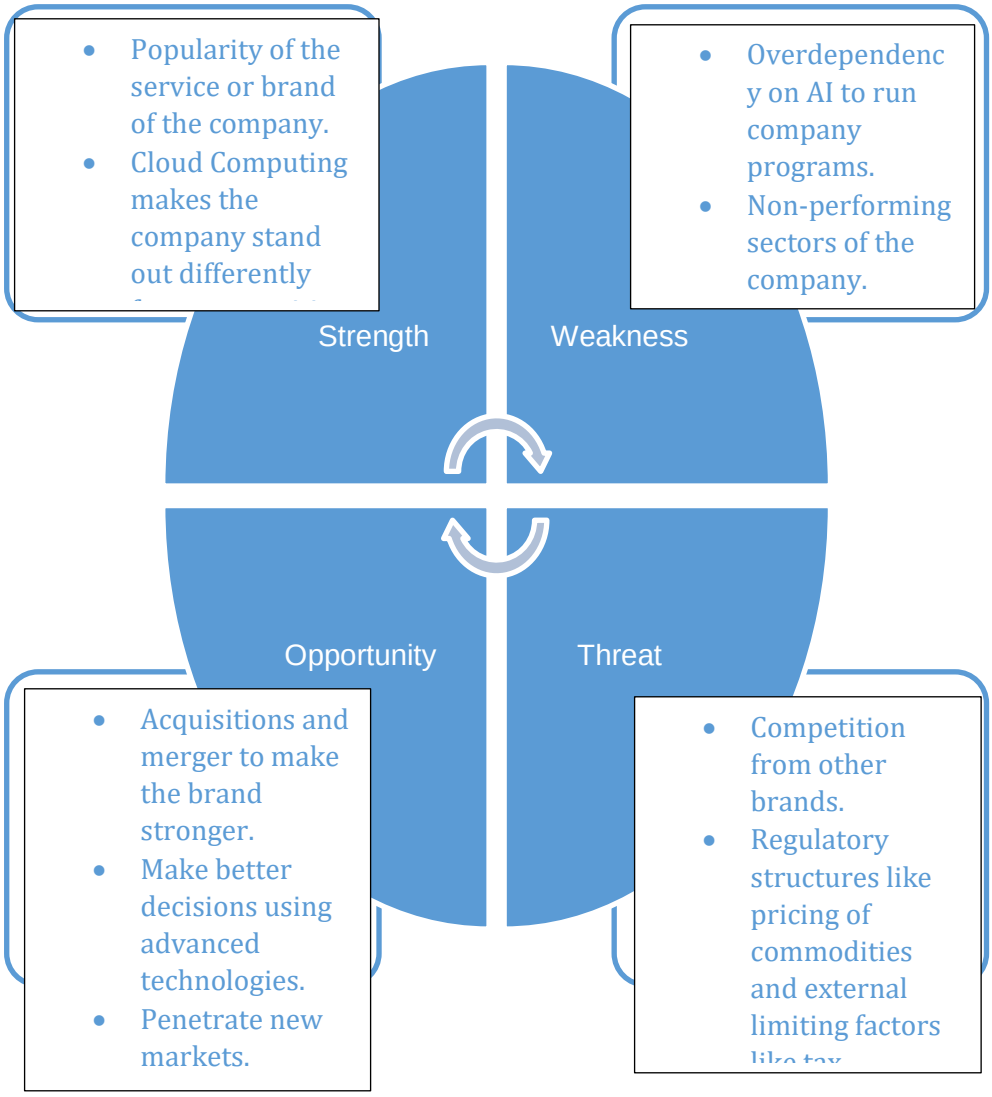


Figure (1)

Step 2

Create a list of top 10 digital initiatives by digital native disruptors most relevant to your organization and/or industry. Use a what, how, and outcome framework to brainstorm the information.

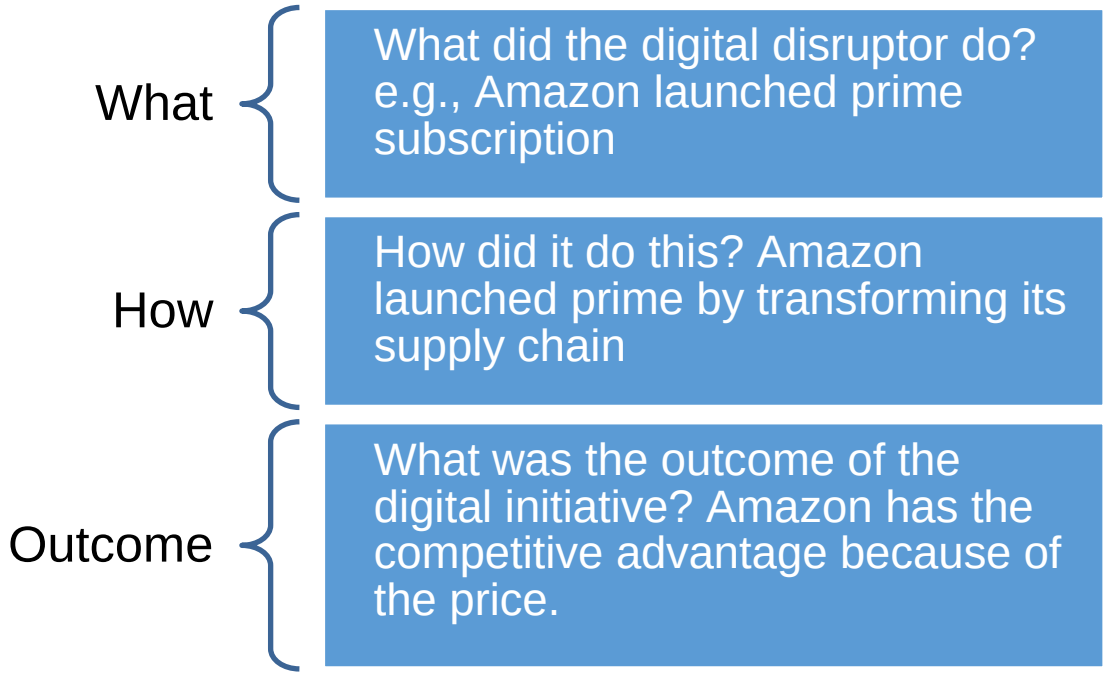


Figure (2)

Companies face more obstacles, especially from disruptive companies which bring competition, more than ever before. However, they're also surrounded by greater opportunities. Some of the companies have to do more with less in order to prosper (I. Akour et al., 2022; M. El Khatib, Yaish, et al., 2021; M. T. Nuseir, Aljumah, & El-Refae, 2022). The use of Artificial Intelligence to enhance development is one way to address the problem, and it may contain features that are useful to the others in the current environment. According to (Halkett, 2010), crises such as disruptive competitors cause us to return to our old habits. And we're in the midst of a global catastrophe unlike any we've seen in recent memory (H. M. Alzoubi, Sahawneh, Alhamad, et al., 2022; M. El Khatib et al., 2020; Gulseven & Ahmed, 2022; M. T. Nuseir, 2020). As a result, many businesses are conserving capital and moving to safeguard what seems to be their 'core business.' This being done by keeping abreadth international standards and by incorporating Cloud computing and DevOps in their daily operations. At best, most people choose for little tweaks and gradual transformation. Efforts for innovation are shelved; such activities are deemed more acceptable for when the economy is doing well (M. T. Alshurideh, Alquqa, Alzoubi, Al Kurdi, & Alhamad, 2023). However, the need for innovation persists, and those that develop now will benefit from the rebound.

Disruptive innovations, according to (Abudaqa et al., 2022; A. I. Aljumah, Shahroor, et al., 2022; Lee, Wong, et al., 2023), were technologically simple, comprised of off-the-shelf components assembled in a product design that's often simpler than previous techniques. They offered less of what clients in established markets wanted, thus they could only be used there as a last resort (A. Al-Kassem et al., 2013). They presented a unique set of characteristics that were only valued in emerging markets far off from, and inconsequential to, the mainstream. Some of the disruptive technology companies include;

2.4.4. Microsoft

Microsoft is a thriving computer server and tools industry, which had prospered providing virtualization software as well as other tools for corporations to put in their data centers, was disrupted by AI service growth (H. M. Alzoubi, In'airat, et al., 2022; M. El Khatib et al., 2021). On the disruption front, Microsoft understands. According to Brooks, Artificial Intelligence's stealth attack on the workplace is comparable to Microsoft's client-server technology, such as the Microsoft environment and Active Directory tools, which have fueled main headquarters for the past two decades. "Microsoft influenced every element of the software market," (M. T. Alshurideh et al., 2023) says, "primarily because a lot of people had

to rebuild their product to operate on Windows, much as software suppliers had to join in the AI service cloud or make their program compatible with AI resources."

2.4.5. Google

Google is a cloud native corporation, which offers it a competitive advantage over Artificial Intelligence services. While Google introduced its commercial new google Apps at about the same time as AI, the company took its time expanding its Cloud presence to the infrastructure industry, first dabbling in 2008 with the Application Servers. Since then, Google has developed its own Cloud Services, that are used by Coca-Cola, Disney, and Best Buy, among others. The presence of Google shows the importance of Cloud Computing to the industry (A. I. Aljumah, Nuseir, et al., 2022c; Khan et al., 2022).

2.4.6. Oracle

We don't know of another software company that has had its business rocked more than Oracle. AI has added business intelligence and data-warehouse tools to its stack, posing a direct challenge to Oracle's database software business. Oracle's response to the intrusion has been to go all-in on cloud computing. (M. T. Alshurideh, Obeidat, Victoria, Alzoubi, et al., 2022; M. El Khatib, Al Qurashi, et al., 2021) claims that Oracle has bought multiple companies and persuaded clients to switch from on-premises to cloud-based versions of Oracle software, basically switching one cash stream for another. Venturing into DevOps to secure the Cloud business model, Oracle is an example of a disruptive technology that has efficiently used the DevOps as a technology for the future.

2.4.7. IBM

Due to difficulties in its systems division, which comprises mainframes and operating-system software, IBM's sales and profit have been continuously declining. IBM obtained SoftLayer and is already developing Bluemix cloud services as a result of the top-line fall, which is an example of how AI is driving the industry in its direction. IBM is also expecting for success with its Cognitive analytics and blockchain endeavors. "AI Services [and cloud vendors] have disrupted everybody in the hardware sector," (Al-Kassem et al., 2012; Aziz et al., 2023) argues.

2.4.8. HP

There has only been one HP until just few years ago. In 2015, HP separated into two companies: HP Inc., which sells computers and printers, and HPE, which sells enterprise IT (AlDhaheri et al., 2023; M. El Khatib, Alzoubi, et al., 2023; Ghazal, Hasan, Ahmad, et al., 2023). HPE has set off its software solutions companies this year in an effort to be nimbler and reclaim territory lost to Artificial Intelligence services and other enterprise cloud providers.

2.4.9. Dell

Dell, like HP, was once a strong vendor of servers, storage, and desktops, but it has undergone similar, if not more, changes (Al-Dmour et al., 2023; Mat Som & Kassem, 2013). Dell closed it down in 2013 as AI and other cloud providers harmed its prospects, and it has since reimagined itself with a broker of the same cloud services that Amazon Web Services, Microsoft, Google, and others supply. Later, it merged with EMC, a struggling storage company, and leased its services, software, and enterprise content divisions.

2.4.10. Verizon

Telecommunications providers with plans to enter the cloud industry have found it difficult to compete with Verizon Artificial Intelligence Services. Verizon just sold 29 server farms to co-location vendor Equinix as it concentrates on its main mobile and video operations, recognizing that AI, Amazon Web Services, Microsoft, and others are far ahead in the game.

2.4.11. IT Security Market

Companies have been trusting the data security to their cloud providers as more technology assets migrate to public clouds owned by AIs, Microsoft, Google, and a hundred other firms, which implies they have less data centers guarded by guards. Automated methods are used by cloud providers to detect hackers (A. Aljumah et al., 2023; Gaytan et al., 2023; E. Khatib et al., 2021). Companies are increasing their investments in measures to identify social-engineering breaches via PCs, such as cybercrime and whaling schemes, as well as enhanced antivirus software and actionable insights to prevent attacks. According to (Brooks et

al, 2019), "it has flipped the data security market inside out."

2.4.12. Compliance Market

Prior to the web, compliance was mostly a paper-intensive, manual process overseen by auditors. Companies don't have to rely on human interaction as much now that Artificial Intelligence as well as other solution providers automate compliance capabilities. "AI is eliminating those requirements and that will be a huge change since compliance is complex and time consuming and a resource-intensive and unpleasant task for IT," (Bawaneh et al., 2023; M. El Khatib, Ibrahim, et al., 2023).

2.4.13. Channel Resellers

Microsoft, as well as many of the conventional hardware manufacturers and on-premises software suppliers listed above, continue to stock warehousing with PCs, servers, and software packages. They've also evolved into cloud brokers, similar to what Dell considers itself to be. To adapt for the cloud shift, Ingram, CDW, Avnet, and others have changed their models. (Brooks et al, 2019). A structural upheaval from around model is yet to be seen apart from what AI services pioneered and now dominate.

Use the above framework to create a list of key initiatives by digital disruptors in your industry.

#	Key Digital Transformation Initiatives
1	Transform project design
2	Autotomize projects and work
3	Transform project process
4	Reduce project time for completion
5	Increase ease of project supervision
6	Increased distribution of work among project handlers
7	Transform project outlook and results.
8	Base with clientele more.
9	Reduce project supervision and accountability
10	Increasing the efficiency of the project detail.

Step 3

Create a list of top three digital disruptions across all four elements – business, technology, industry, and society – most relevant to your organization and/or induction.

#	Elements of Digital Disruption	Impact of the Element Relevant to Your Organization
1	Business	Increase the supply chain efficiency
2		Boost the product market and clientele base online
3		Revolutionize pricing mechanisms to boost competitive advantage
4	Technology	Increase the angles of approach necessary to put an invention into place.
5		Making the design standards more efficient to promote resource saving .
6		Give multiple frameworks for the usage of the inventions to the wide range of users.
7	Industry	Making the process of service and manufacturing industries easier to promote better time saving mechanisms.
8		Raising the bar of standards that are necessary to improve the quality of market products and services.
9		Put in place new methods and revolutions old habits of production and processing.
10	Society	Promote the intermingling of culture to create a diverse global

		village of culture
11		Make more efficient the habits of regular users and impacts of the digital transformations.
12		To better allow and track movements of the society for safety and security reasons.

While looking at the technology dimension, use the following framework to identify key initiatives.

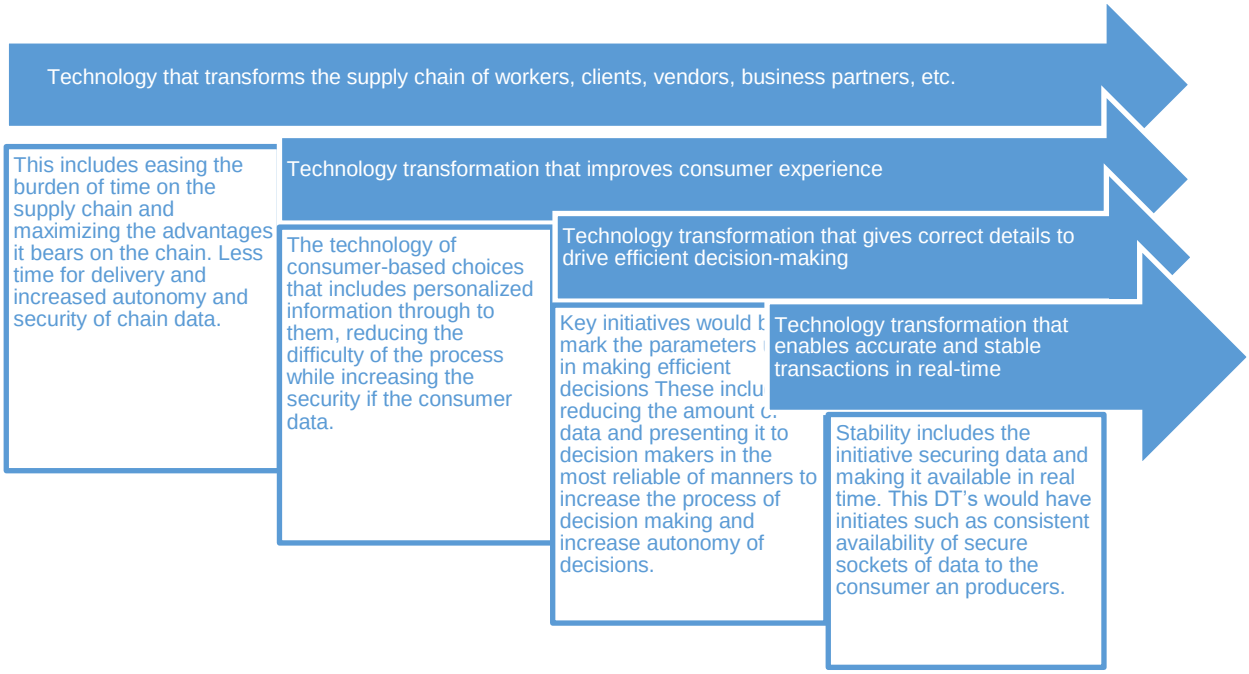


Figure (3)

Step 4

Create a list of top three digital initiatives by your competitors.

#	Competitors	Key Digital Transformation Initiatives
1	Competitor 1	Reduce project management costs
2		Reduce time of project completion.
3		Increased output of DT towards company goals.
4	Competitor 2	Improved project team coordination and communication.
5		Reduce time of project completion
6		Increased outreach of company brand to the relevant market.
7	Competitor 3	Reduced time for project completions.
8		Reduced project management and implementation costs.
9		Efficient design of company software and use in project automation.
10	Competitor 4	Increased levels of project automation and DT use in various departments.
11		Reduced project completion time.
12		Efficient prioritizing of clientele data and digital methods that ultimately lead to efficient decision making.

Competition analysis can provide insights into several digital disruptions. Use the NOISE framework to get the top three initiatives of your competitors.

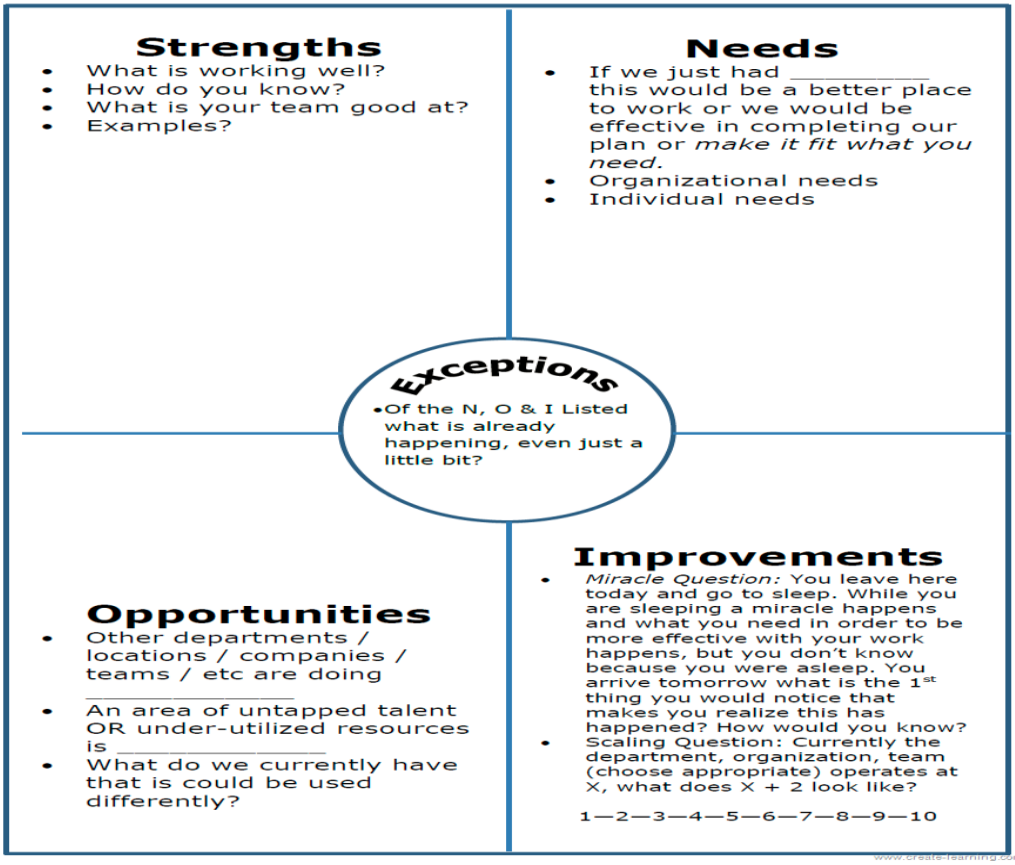


Figure (4)

Step 5

Create a list of top three digital disruptions across all the five key areas of disruption that are most relevant to your organization.

We are making progress with our understanding of the digital initiatives. Now how about getting some ideas going?

Let's look at each of the key areas of digital disruption one by one using the trend-benefit framework

Trend 1 IOT based distribution

Reduced cost of distribution.
Reduced time of distribution.
Increased autonomy and clientele satisfaction on product choices and company instructiveness.

Trend 2 AI – Based Company software

Increased customer interactives that leads to brand trust and identification.
Efficient automation processes that lead to increased resource output in other key areas.
Reduced cost of company expenditure i.e. customer service.

Trend 3 3D Delivery

Reduced cost of distributions of goods.
Increased environmental friendliness, safe to use printing material.
Security of goods of the consumer.

Finally, you must list the top three initiatives across all five areas of digital disruption in the table below.

#	key areas of disruption	Digital initiatives
1	Marketing and distribution	Efficient customer outreach
2		Increased distribution chains and supply mechanisms.
3		Increased brand awareness and enhanced customer experience in marketing.

4	Product and service	Increased product and service standards on the market.
5		Availability of product availability on customer need basis.
6		Increased automation of product and service provision.
7	Processes	Enhanced process automation with minimal supervision.
8		Efficient working of the various processes of work.
9		Decreased resource wastage on the aspects of work.
10	Ecosystems	Improved protection of ecosystems i.e. 3D printings.
11		Enhanced customer-based awareness through AI models on ecosystem importance.
12		Enhanced and invention of new ecosystem protection mechanisms.
13	Supply chains	Efficient supply chain coordination and communication.
14		Increased ability of supply chain automation.
15		Increased ability to identify supply chain gaps and fill them.

Step 6

Create a list of top three transformations across the following key technologies that are most relevant to your industry.

#	Key Technology Areas	Top 3 Digital Opportunity for Your Industry
1	Platforms	Sales Platforms
2		Brand Marketing
3		Customer outreach
4	Customer Network	Networking
5		
6		
7	Big Data	Data Structuring
8		Data Analysis
9		Data Presentation
10	AI	
11		
12		
13	IOT	IOT distribution
14		IOT processing
15		IOT data collection
16	RPA	
17		
18		
19	XR	
20		
21		
22	Edge Computing	

23		
24		
25	Drones	
26		
27		

Taking Platform to understand the use cases of such industries, it is being used to understand better marketing strategies to increase the overall brand awareness of most of the companies who have adopted the company platforms to work on their various portfolio and other mechanisms of distribution of information and advertising. Reference points for the use of these platforms exist in many scenarios, most of which are companies who have since moved digital after the explosion of digital marketing and the whole industry of online influencing.

Tesla, Cyber X, are some of the companies who have improved their portfolio and increased the market share through online marketing and branding using the platform industry as a pillar. The immense benefits that stood to be realized are plain, to increase the awareness of Cloud and DevOps presence in the lives of the market and the ordinary citizen and build a better brand name from the presence of the companies and the industry on various platforms for marketing and advertising.

A TAF framework captures three key details about the technology.

- Use cases: List of use cases of technology in the industry e.g., AI being used for customer segmentation
- Reference point: Is there anybody already doing it? Reference point helps you validate the feasibility of the use case.
- Benefits: What's the expected outcome of the initiatives? Improved customer helps you understand the outcome of the use case implementation.

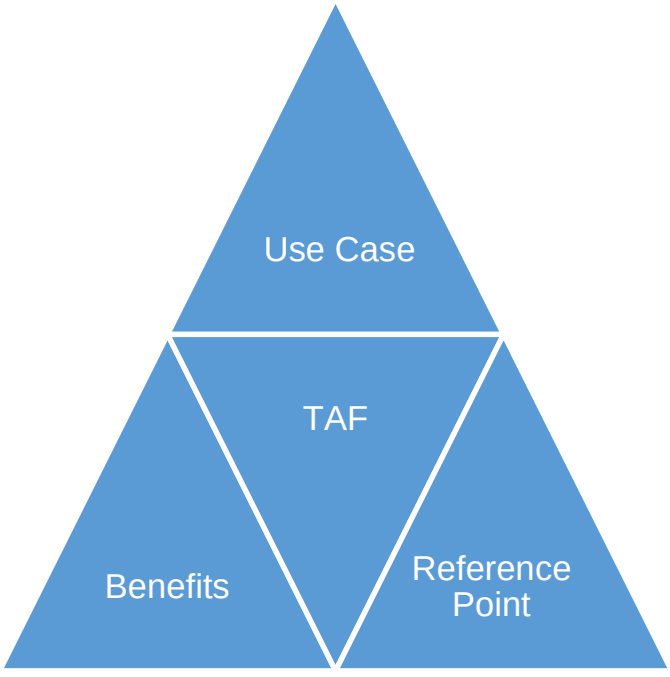


Figure (5)

Step 7

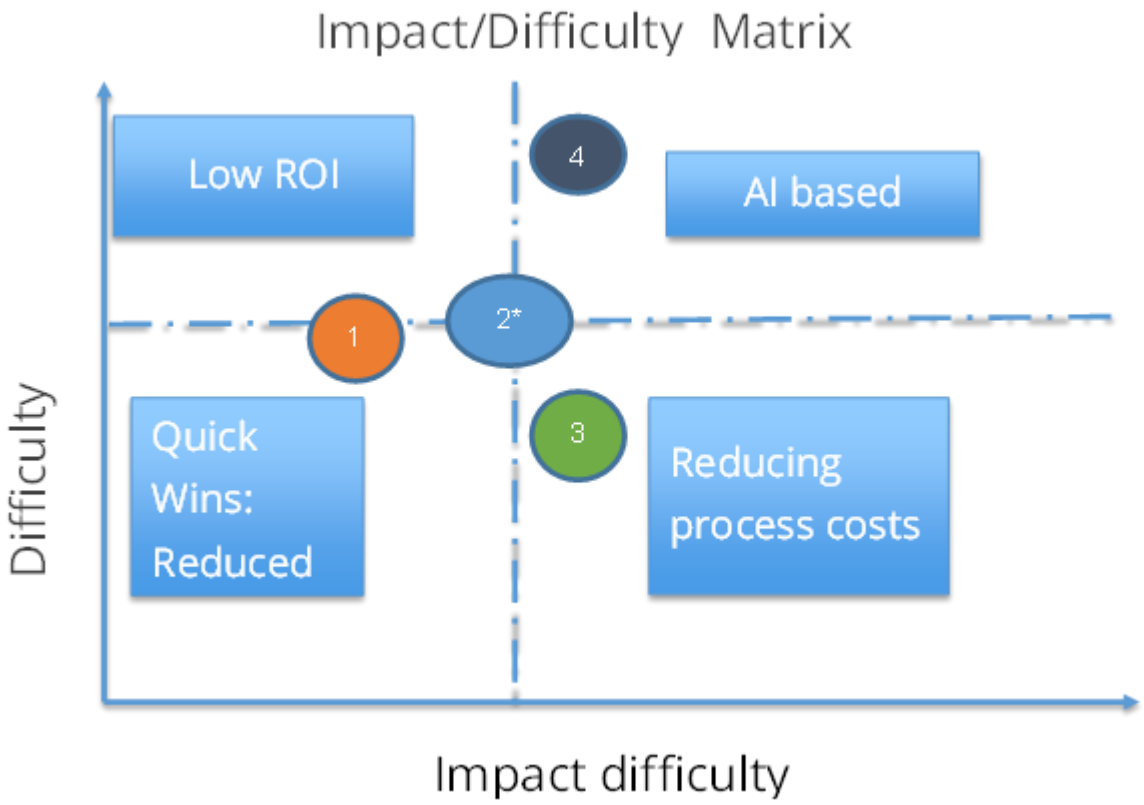
Based on the previous steps, compile a list of all key transformations.

#	Key Transformations
1	Efficient working of the various processes of work.
2	Efficient customer outreach
3	Increased product and service standards on the market.
4	Availability of product availability on customer need basis.
5	Increased automation of product and service provision.
6	Improved protection of ecosystems i.e. 3D printings.
7	Enhanced customer-based awareness through AI models on ecosystem importance.
8	Enhanced and invention of new ecosystem protection mechanisms.
9	Efficient supply chain coordination and communication.
10	Increased ability of supply chain automation.
11	Increased ability to identify supply chain gaps and fill them.
12	Increase the supply chain efficiency
13	Boost the product market and clientele base online
14	Revolutionize pricing mechanisms to boost competitive advantage
15	Increase the angles of approach necessary to put an invention into place.
16	Making the design standards more efficient to promote resource saving .
17	Give multiple frameworks for the usage of the inventions to the wide range of users.
18	Making the process of service and manufacturing industries easier to promote better time saving mechanisms.
19	Raising the bar of standards that are necessary to improve the quality of market products and services.
20	Put in place new methods and revolutions old habits of production and processing.
21	Transform project design
22	Autotomize projects and work
23	Transform project process
24	Reduce project time for completion
25	Increase ease of project supervision
26	Increased distribution of work among project handlers
27	Transform project outlook and results.
28	Base with clientele more.
29	Reduce project supervision and accountability

Finally, compile the list of all transformation initiatives into a single table; the notion is to consolidate your thoughts and ideas into one place.

Step 8

Make a list of transformations across the impact/difficulty matrix.



1*- First transformation initiative
2*- Second transformation initiative
3*- Third transformation initiative
4*- Fourth transformation initiative

Step 9
Identify the most relevant digital transformation plans.

#	Final List of Digital Transformation Strategies	Priority
1	Increased product output.	Product
2	Reduced time of product formation.	Process
3	Ecosystem protection via widespread saving mechanisms.	Ecosystem
4	Increased automation of processes on the industry.	Process
5	Increased security of consumer data.	Consumer Data
6	Autonomity of project supervision	Project supervision
7	Increased design process and investment in design.	Design.
8	Enhance communication between the supply chains to increase cohesiveness	Supply chain
9	Customer outreach through aggressive DT deployment.	Customer

10	Supply chain efficiency through automation processes	Supply chain

3. RECOMMENDATION AND CONCLUSION

Based on the understanding of the project, it is necessary to include the multifaced technologies in the addition of digital transformations across the platforms of technology. It is variable to conclude that the understanding of these digital transformations plays an important role in the revolutionization of the project management to usher in the use of technology in these various capacities. The effect of Cloud Computing and DevOps on the technological space cannot be ignored, especially with disruptive technologies that use these aspects of technology in their being.

It is preferred concentrate on a few roles when describing the basic changes experienced by DevOps: the guys developing the code, the ones supplying and supporting facilities, as well as the people evaluating and doing quality assurance. However, as the DevOps culture grows, so too does its effect on other parts of the company. Take project management, for example, DevOps significantly alters how IT groups approach projects, moving away from homogenous, inter (or multi-year, in certain circumstances) initiatives in light of increasing speed and quickness in the development lifecycle. This has ramifications for project managers as well.

Moreover, project managers are still useful in the DevOps era. "The requirement for operation speed – as well as cutting-edge DevOps platforms and procedures – does not eliminate the need to know what you're going to accomplish with them," says Josh Collins, Janeiro Digital's technical architect. "To keep projects on track and with a clear emphasis on dependencies, a robust project management approach is essential." However, PMs must evolve for the DevOps era, just as developers, operations professionals, security professionals, and others must abandon old habits in favor of new ones that are best suited to the digital era.

Given DevOps' fluid nature and continuous deployment continuous integration (CD/CI) approach, the methodology may appear at variance with planning and scheduling that typically follow timeframes with a defined start and endpoint. These methods appear to be more in line with classic software delivery methods such as the waterfall method. Project management.

REFERENCES

Abudaqa, A., Alzahmi, R. A., Almujaini, H., & Ahmed, G. (2022). Does innovation moderate the relationship between digital facilitators, digital transformation strategies and overall performance of SMEs of UAE? *International Journal of Entrepreneurial Venturing*, *14*(3), 330–350. https://doi.org/10.1504/ijev.2022.124964

Abudaqa, A., Hilmi, M. F., Almujaini, H., Alzahmi, R. A., & Ahmed, G. (2021). Students' perception of e-Learning during the Covid Pandemic: a fresh evidence from United Arab Emirates (UAE). *Journal of E-Learning and Knowledge Society*, *17*(3), 110–118. https://doi.org/10.20368/1971-8829/1135556

Ahmed, G., Abudaqa, A., Jayachandran, C., Limbu, Y., & Alzahmi, R. (2022). Nation Branding as a Strategic Approach for Emerging Economies: The Case of UAE. In *Marketing Communications and Brand Development in Emerging Economies* (pp. 41–57). Springer. https://doi.org/10.1007/978-3-030-88678-3_3

Ahmed, G., & Nabeel Al Amiri. (2022). the Transformational Leadership of the Founding Leaders of the United Arab Emirates: Sheikh Zayed Bin Sultan Al Nahyan and Sheikh Rashid Bin Saeed Al Maktoum. *International Journal of Technology, Innovation and Management (IJTIM)*, *2*(1), 1. https://doi.org/10.54489/ijtim.v2i1.58

Aityassine, F., Soumadi, M., Aldiabat, B., Al-Shorman, H., Akour, I., Alshurideh, M., & Al-Hawary, S. (2022). The effect of supply chain resilience on supply chain performance of chemical industrial companies. *Uncertain Supply Chain Management*, *10*(4), 1271–1278.

Akour, I. A., Al-Maroof, R. S., Alfaisal, R., & Salloum, S. A. (2022). A conceptual framework for determining metaverse adoption in higher institutions of gulf area: An empirical study using hybrid SEM-ANN approach. *Computers and Education: Artificial Intelligence*, *3*(10005), 2. https://doi.org/10.1016/j.caeai.2022.100052

Akour, I., Alnazzawi, N., Alshurideh, M., Almaiah, M. A., Al Kurdi, B., Alfaisal, R. M., & Salloum, S. (2022). A Conceptual Model for Investigating the Effect of Privacy Concerns on E-Commerce Adoption: A Study on United Arab Emirates Consumers. *Electronics (Switzerland)*, *11*(22), 3648. https://doi.org/10.3390/electronics11223648

Akour, I., Alshurideh, M., Al Kurdi, B., Al Ali, A., & Salloum, S. (2021). Using Machine Learning Algorithms to Predict People's Intention to Use Mobile Learning Platforms During the COVID-19 Pandemic: Machine Learning Approach. *JMIR Medical Education*, *7*(1), 1–17.

Akour, I., Rahamneh, A. A. L., Al Kurdi, B., Alhamad, A., Al-Makhariz, I., Alshurideh, M., & Al-Hawary, S. (2023). Using the Canonical Correlation Analysis Method to Study Students' Levels in Face-to-Face and Online Education in Jordan. *Information Sciences Letters*, *12*(2), 901–910.

Al-Awamleh, H. K., Alhalalmeh, M. I., Alatyat, Z. A., Saraireh, S., Akour, I., Alneimat, S., Alathamneh, F. F., Abu-Farha, Y. S., & Al-Hawary, S. I. S. (2022). The effect of green supply chain on sustainability: Evidence from the

pharmaceutical industry. *Uncertain Supply Chain Management*, *10*(4), 1261–1270. https://doi.org/10.5267/j.uscm.2022.8.002

Al-Dmour, N. A., Ali, L., Salahat, M., Alshurideh, M., Alzoubi, H. M., Ghazal, T. M., & Chabani, Z. (2023). Information Systems Solutions for the Database Problems. *Studies in Computational Intelligence*, *2023*(1056), 703–715.

Al-Kassem, A., Bakri, A., & In'airat, M. (2013). Evaluation Tools of Total Quality Management in Business Organizations. *European Journal of Business and Management*, *5*, 41–51.

Al-Kassem, A. H. (2017). Recruitment and Selection Practices in Business Process Outsourcing Industry. *Archives of Business Research*, *5*(3), 40–52. https://doi.org/10.14738/abr.53.2180

Al-Kassem, A. H., Aguenza, B. B., & Alghurabli, Z. E. (2022). Accreditation of Academic Programs : Implications on Quality Governance and Administrationof Taguig City University. *Journal of Positive School Psychology*, *6*(4), 3908–3923. https://journalppw.com/index.php/jpsp/article/view/3992/2625

Al-Kassem, Aguenza, B. B., Hami, A., & Som, A. P. M. (2012). Social Media and Productivity in the Workplace: Challenges and Constraints. *Interdisciplinary Journal of Research in Business*, *2*(2), 22–26. http://www.idjrb.com/articlepdf/article223.pdf

Al-Kassem, H. (2014). Determinants of employee's overall satisfaction toward training and development programs. *International Journal of Economics, Finance and Management*, *3*(3), 129–135. http://www.ejournalofbusiness.org

Al-Maroof, A., Salloum, A., Al-Maroof, R. S., Akour, I., Aljanada, R., Alfaisal, A. M., Alfaisal, R. M., Aburayya, A., & Salloum, S. A. (2021). Acceptance determinants of 5G services Title Acceptance determinants of 5G services International Journal of Data and Network Science Acceptance determinants of 5G services. *Canada. International Journal of Data and Network Science*, *5*(4), 613–628. http://usir.salford.ac.uk/id/eprint/61985/

Al-Maroof, R. S., Alahbabi, N. M. N., Akour, I., Alhumaid, K., Ayoubi, K., Alnnaimi, M., Thabit, S., Alfaisal, R., Aburayya, A., & Salloum, S. (2022). Students' perception towards behavioral intention of audio and video teaching styles: An acceptance study. *International Journal of Data and Network Science*, *6*(2), 603–618. https://doi.org/10.5267/j.ijdns.2021.11.004

Al-Maroof, R. S., Alhumaid, K., Akour, I., & Salloum, S. (2021). Factors that affect e-learning platforms after the spread of covid-19: Post acceptance study. *Data*, *6*(5). https://doi.org/10.3390/data6050049

Al-Maroof, R. S., Alnazzawi, N., Akour, I. A., Ayoubi, K., Alhumaid, K., Alahbabi, N. M., Alnnaimi, M., Thabit, S., Alfaisal, R., Aburayya, A., & Salloum, S. (2021). The effectiveness of online platforms after the pandemic: Will face-to-face classes affect students' perception of their behavioural intention (BIU) to use online platforms? *Informatics*, *8*(4), 4. https://doi.org/10.3390/informatics8040083

Al-Maroof, R. S., Alnazzawi, N., Akour, I., Ayoubi, K., Alhumaid, K., Nasser, N. M., Alaraimi, S., Al-Bulushi, A. A., Thabit, S., Alfaisal, R., Aburayya, A., & Salloum, S. (2022). Students' perception towards using electronic feedback after the pandemic: Post-acceptance study. *International Journal of Data and Network Science*, *6*(4), 1233–1248. https://doi.org/10.5267/j.ijdns.2022.6.010

AlDhaheri, H., Hilmi, M. F., Abudaqa, A., Alzahmi, R. A., & Ahmed, G. (2023). The relationship between HRM practices, innovation, and employee productivity in UAE public sector: a structural equation modelling approach. *International Journal of Process Management and Benchmarking*, *13*(2), 157–176.

Alhamad, A. Q. M., Akour, I., Alshurideh, M., Al-Hamad, A. Q., Kurdi, B. Al, & Alzoubi, H. (2021). Predicting the intention to use google glass: A comparative approach using machine learning models and PLS-SEM. *International Journal of Data and Network Science*, *5*(3), 311–320. https://doi.org/10.5267/j.ijdns.2021.6.002

Aljumah, A. I., Nuseir, M. T., & Alam, M. M. (2021a). Organizational performance and capabilities to analyze big data: do the ambidexterity and business value of big data analytics matter? *Business Process Management Journal*, *27*(4), 1088–1107.

Aljumah, A. I., Nuseir, M. T., & Alam, M. M. (2021b). Traditional marketing analytics, big data analytics and big data system quality and the success of new product development. *Business Process Management Journal*, *27*(4), 1108–1125.

Aljumah, A. I., Nuseir, M. T., & El Refae, G. A. (2022a). Business Analytics and Competitive Advantage for SMEs in UAE: A Mediating Role of Technology Assets. *In 2022 International Arab Conference on Information Technology (ACIT)*, 1–9.

Aljumah, A. I., Nuseir, M. T., & El Refae, G. A. (2022b). Exploring the Effect of Social Media Marketing and Destination image on Destination Loyalty in Covid-19 Times: Sequential Mediating Role of Brand Love and Brand Loyalty. *In 2022 International Arab Conference on Information Technology (ACIT)*, 1–8.

Aljumah, A. I., Nuseir, M. T., & El Refae, G. A. (2022c). The effect of sensory marketing factors on customer loyalty during Covid 19: Exploring the mediating role of customer satisfaction. *International Journal of Data and Network Science*, *6*(4), 1359–1368. https://doi.org/10.5267/j.ijdns.2022.5.015

Aljumah, A. I., Shahroor, H., Nuseir, M. T., & El Refae, G. A. (2022). The effects of employee commitment and environment uncertainty on product quality: The mediating role of supply chain integration. *Uncertain Supply Chain Management*, *10*(4), 1379–1386. https://doi.org/10.5267/j.uscm.2022.7.001

Aljumah, A., Nuseir, M., & Refae, G. (2023). Examining the effect of social media interaction, E-WOM, and public relations: Assessing the mediating role of brand awareness. *International Journal of Data and Network Science*, *7*(1), 467–476.

Aljumah, A., Nuseir, M. T., & Islam, A. (2020). Impacts of service quality, satisfaction and trust on the loyalty of foreign patients in Malaysian medical tourism. International journal of innovation. *Creativity and Change, 11*(2), 451–467.

Almasaeid, T., Alzoubi, H., El Khatib, M., Ghazal, T., Alshurideh, M., Al-Dmour, N., Sattar, O., & Ae. (2022). Futuristic Design & Development of Learning Management System including Psychological Factors Resolution. *Journal for*

ReAttach Therapy and Developmental Diversities, *5*, 176–188.

Alshawabkeh, A., Nuseir, M. T., & Aljumah, A. (2021). Impacts of social media on the buying intention of the consumers in Edinburgh, UK. *International Journal of Procurement Management*, *14*(4), 470–486. https://doi.org/10.1504/IJPM.2021.116036

Alshurideh, M., Al Kurdi, B. H., Alzoubi, H. M., & Salloum, S. (2023). *The Effect of Information Technology on Business and Marketing Intelligence Systems* (Vol. 1056). Springer Nature.

Alshurideh, M., Almasaeid, T., El Khatib, M., Alzoubi, H., Ghazal, T., Hamadneh, S., Al-Dmour, N., & Sattar, O. (2022). Components Determining the Behavior and Psychological impact of Entrepreneurship among Higher Vocational Students. *Journal for ReAttach Therapy and Developmental Diversities*, *5*, 189–200.

Alshurideh, M., Alzoubi, H., Alshurideh, M., Kurdi, B., Obeidat, B., Hamadneh, S., & Ahmad, A. (2022). The influence of supply chain partners' integrations on organizational performance: The moderating role of trust. *Uncertain Supply Chain Management*, *10*(4), 1191–1202.

Alshurideh, M. T., Al-Hadrami, A., Alquqa, E. K., Alzoubi, H. M., Hamadneh, S., & Al Kurdi, B. (2023). The effect of lean and agile operations strategy on improving order-winners: Empirical evidence from the UAE food service industry. *Uncertain Supply Chain Management*, *11*(1), 87–94. https://doi.org/10.5267/j.uscm.2022.11.007

Alshurideh, M. T., Al Kurdi, B., Alhamad, A., Hamadneh, S., Alzoubi, H. M., & Ahmad, A. (2023). Does social customer relationship management (SCRM) affect customers' happiness and retention? A service perspective. *Uncertain Supply Chain Management*, *11*(1), 277–288. https://doi.org/10.5267/j.uscm.2022.9.015

Alshurideh, M. T., Alquqa, E. K., Alzoubi, H. M., Al Kurdi, B., & Alhamad, A. (2023). The impact of cyber resilience and robustness on supply chain performance: Evidence from the UAE chemical industry. *Uncertain Supply Chain Management*, *11*(1), 187–194. https://doi.org/10.5267/j.uscm.2022.10.008

Alshurideh, M. T., Alquqa, E. K., Alzoubi, H. M., Al Kurdi, B., & Hamadneh, S. (2023). The effect of information security on e-supply chain in the UAE logistics and distribution industry. *Uncertain Supply Chain Management*, *11*(1), 145–152. https://doi.org/10.5267/j.uscm.2022.11.001

Alshurideh, M. T., Alzoubi, H. M., El khatib, M., Ghazal, T. M., Al-Dmour, N. A., Sattar, O., & Kukunuru, S. (2022). An Experimental Evaluation on Resource Attribute, Internal Risks and Regime Structure of R&D Association-Including Exploration of Moderating Effect of Association Management Capability, Psychological. *Journal for ReAttach Therapy and Developmental Diversities*, *5*(2), 201–215.

Alshurideh, M. T., Alzoubi, H. M., Ghazal, T. M., Alami, R., & Al Masaeid, T. (2022). Risk Management Model for Telecom Enterprises Based on Variables (RM, SO, RC, SI) with Nature, Sense and Positive Psychology Hypothesis. *Journal for ReAttach Therapy and Developmental Diversities*, *2022*, 5.

Alshurideh, M. T., Obeidat, B. Y., Victoria, V., Alzoubi, H. M., Fatima, A., Ilyas, A., & Rustam, I. (2022). A Systematic Literature Review of Security in 5G based Social Networks. *International Conference on Cyber Resilience, ICCR 2022*. https://doi.org/10.1109/ICCR56254.2022.9996068

Alzoubi, H., & Ahmed, G. (2019). Do TQM practices improve organisational success? A case study of electronics industry in the UAE. *International Journal of Economics and Business Research*, *17*(4), 459–472. https://doi.org/10.1504/IJEBR.2019.099975

Alzoubi, H., Alshurideh, M., Gasaymeh, A., Ahmed, G., & Kurd, B. Al. (2020). Loyalty program effectiveness: Theoretical reviews and practical proofs. *Uncertain Supply Chain Management*, *8*(3), 599–612. https://doi.org/10.5267/j.uscm.2020.2.003

Alzoubi, H., Alshurideh, M., Kurdi, B. Al, Akour, I., & Aziz, R. (2022). Does BLE technology contribute towards improving marketing strategies, customers' satisfaction and loyalty? The role of open innovation. *International Journal of Data and Network Science*, *6*(2), 449–460. https://doi.org/10.5267/j.ijdns.2021.12.009

Alzoubi, H. M., Ahmed, G., Al-Gasaymeh, A., & Al Kurdi, B. (2020). Empirical study on sustainable supply chain strategies and its impact on competitive priorities: The mediating role of supply chain collaboration. *Management Science Letters*, *10*(3), 703–708. https://doi.org/10.5267/j.msl.2019.9.008

Alzoubi, H. M., Ahmed, G., & Alshurideh, M. (2022). An empirical investigation into the impact of product quality dimensions on improving the order-winners and customer satisfaction. *International Journal of Productivity and Quality Management*, *36*(2), 169–186. https://doi.org/10.1504/IJPQM.2021.10037887

Alzoubi, H. M., Alshurideh, M., Kurdi, B. Al, Akour, I., Obeidat, B., & Alhamad, A. (2022). The role of digital marketing channels on consumer buying decisions through eWOM in the Jordanian markets. *International Journal of Data and Network Science*, *6*(4), 1175–1185. https://doi.org/10.5267/j.ijdns.2022.7.002

Alzoubi, H. M., Alshurideh, M. T., Al Kurdi, B., Ghazal, T. M., Said, R. A., AlHamad, A. Q., Hamadneh, S., Sahawneh, N., & Al-kassem, A. H. (2022). Fuzzy assisted human resource management for supply chain management issues. *Annals of Operations Research*, *2*(308), 617–629. https://doi.org/10.1007/s10479-021-04472-8

Alzoubi, H. M., Ghazal, T. M., El khatib, M., Alshurideh, M. T., Alami, R., & Al Masaeid, T. (2022). Creation of Indicator System for Quality Estimation of Safety Management of Personnel and it's Psychological impact on Industrial Enterprises. *Journal for ReAttach Therapy and Developmental Diversities*, *5*(SpecialIssue2), 143–151.

Alzoubi, H. M., In'airat, M., & Ahmed, G. (2022). Investigating the impact of total quality management practices and Six Sigma processes to enhance the quality and reduce the cost of quality: the case of Dubai. *International Journal of Business Excellence*, *27*(1), 94–109. https://doi.org/10.1504/IJBEX.2022.123036

Alzoubi, H. M., Kurdi, B. Al, Akour, I., & Alshurideh, M. T. (2022). The effect of blockchain and smart inventory system on supply chain performance: Empirical evidence from retail industry. *Uncertain Supply Chain Management*, *10*(4), 1111–1116. https://doi.org/10.5267/j.uscm.2022.9.001

Alzoubi, H. M., Kurdi, B. Al, Alshurideh, M., Akour, I., Tariq, E., &

Alhamad, A. (2022). The effect of social media influencers' characteristics on consumer intention and attitude toward Keto products purchase intention. *International Journal of Data and Network Science*, *6*(4), 1135–1146. https://doi.org/10.5267/j.ijdns.2022.7.006

Alzoubi, H. M., Mehmood, T., Alshurideh, M., Al-Gasaymeh, A., & Ahmed, G. (2019). Schumpeterian entrepreneurship theory: Evolution and relevance. *Academy of Entrepreneurship Journal*, *25*(4), 1–10.

Alzoubi, H. M., Sahawneh, N., Alhamad, A. Q., Malik, U., Majid, A., & Atta, A. (2022). Analysis Of Cost Prediction In Medical Insurance Using Modern Regression Models. *International Conference on Cyber Resilience, ICCR 2022*. https://doi.org/10.1109/ICCR56254.2022.9995926

Amiri, N. Al, Rahim, R. E. A., & Ahmed, G. (2020). Leadership styles and organizational knowledge management activities: A systematic review. *Gadjah Mada International Journal of Business*, *22*(3), 250–275. https://doi.org/10.22146/gamaijb.49903

Arshad, M., Brohi, M., Soomro, T., Ghazal, T., Alzoubi, H., & Alshurideh, M. (2023). *NoSQL: Future of BigData Analytics Characteristics and Comparison with RDBMS* (pp. 1927–1951). https://doi.org/10.1007/978-3-031-12382-5_106

Aziz, A., Brohi, M. N., Soomro, T. R., Alzoubi, H. M., Ghazal, T. M., & Alshurideh, M. (2023). Aircraft Turnaround Manager (ATM): A Solution to Airport Operations. *Studies in Computational Intelligence*, *2023*(1056), 679–702.

Bawaneh, A., Massadeh, D., Akour, I., Abu haija, A., & Alshurideh, M. (2023). The Impact of Green Auditing on Organizational Performance in Jordan: the Moderating Effect of the Auditor's Opinion. *Information Sciences Letters*, *12*, 1505–1512. https://doi.org/10.18576/isl/120338

Blooshi, I., Alamim, A., Said, R., Taleb, N., Ghazal, T., Ahmad, M., Alzoubi, H., & Alshurideh, M. (2023). *IT Governance and Control: Mitigation and Disaster Preparedness of Organizations in the UAE* (pp. 661–677). https://doi.org/10.1007/978-3-031-12382-5_35

El Khatib, M., Ahmed, G., Alshurideh, M., & Al-Nakeeb, A. (2023). Interdependencies and Integration of Smart Buildings and Smart Cities: A Case of Dubai. In M. Alshurideh, A. K. B. Hikmat, R. Masa'deh, A. H. M., & S. Salloum (Eds.), *The Effect of Information Technology on Business and Marketing Intelligence Systems* (pp. 1637–1656). Springer International Publishing. https://doi.org/10.1007/978-3-031-12382-5_89

El Khatib, M., Al Qurashi, F., & Al Brieki, S. (2021). Challenges of Design and Implementation of Program Governance
—Cases from Government Bodies in UAE. *American Journal of Industrial and Business Management*, *11*(05), 566–581. https://doi.org/10.4236/ajibm.2021.115036

El Khatib, M., Alabdooli, K., AlKaabi, A., & Al Harmoodi, S. (2020). Sustainable Project Management: Trends and Alignment. *Theoretical Economics Letters*, *10*(06), 1276–1291. https://doi.org/10.4236/tel.2020.106078

El Khatib, M., Alnaqbi, A., Alnaqbi, A., Alsuwaidi, H., Marri, M., & Ankit, A. (2023). Implementing IOT in Effective Project Management. *International Journal of Computers and Their Applications*, *30*, 192–200.

El Khatib, M., Alzoubi, H., Hamidi, S., Alshurideh, M., Baydoun, A., & Al-Nakeeb, A. (2023). Impact of Using the Internet of Medical Things on e-Healthcare Performance: Blockchain Assist in Improving Smart Contract. *ClinicoEconomics and Outcomes Research : CEOR*, *2023*, 397–411. https://doi.org/10.2147/CEOR.S407778

El khatib, M., Beshwari, F., Beshwari, M., Beshwari, A., Alzoubi, H. M., & Alshurideh, M. (2023). Covid19 Unknown Risks---Using AI for Disaster Recovery. In M. Alshurideh, A. K. B. Hikmat, R. Masa'deh, A. H. M., & S. Salloum (Eds.), *The Effect of Information Technology on Business and Marketing Intelligence Systems* (pp. 2113–2137). Springer International Publishing. https://doi.org/10.1007/978-3-031-12382-5_116

El Khatib, M., Beshwari, F., Beshwari, M., Beshwari, A., Alzoubi, H. M., & Alshurideh, M. (2023). Can Better Capabilities Lead to Better Project and Program Governance? Cases from Dubai. In M. Alshurideh, A. K. B. Hikmat, R. Masa'deh, A. H. M., & S. Salloum (Eds.), *The Effect of Information Technology on Business and Marketing Intelligence Systems* (pp. 1295–1313). Springer International Publishing. https://doi.org/10.1007/978-3-031-12382-5_71

El Khatib, M., Hamidi, S., Ameeri, I., Zaabi, H., & Marqab, R. (2022). Digital Disruption and Big Data in Healthcare - Opportunities and Challenges. *ClinicoEconomics and Outcomes Research*, *14*, 563–574. https://doi.org/10.2147/CEOR.S369553

El Khatib, M., Ibrahim, A., Blooshi, S., Almansoori, S., & El Khatib, A. (2023). *Digital Transformation and Disruptive Technologies: Effect of 3D Printing on Managing Projects*. 1–13. https://doi.org/10.1109/ICCR56254.2022.9996011

El Khatib, M., Khadim, S., Ketbi, W., Kuwaiti, N., & El Khatib, A. (2023). *Digital Transformation and Disruptive Technologies: Effect of Blockchain on Managing Construction Projects*. 1–9. https://doi.org/10.1109/ICCR56254.2022.9995756

El Khatib, M., Khayat, A., Mansoori, S., Alzaabi, A., & Ankit, A. (2023). *Metaverse Skills for Executives and Senior Managers: The Pros and Cons*. 1–7. https://doi.org/10.1109/ICBATS57792.2023.10111483

El Khatib, M. M., Abidi, N., Al-Nakeeb, A., Alshurideh, M., & Ahmed, G. (2023). Dubai Smart City as a Knowledge Based Economy. In M. Alshurideh, A. K. B. Hikmat, R. Masa'deh, A. H. M., & S. Salloum (Eds.), *The Effect of Information Technology on Business and Marketing Intelligence Systems* (pp. 1657–1672). Springer International Publishing. https://doi.org/10.1007/978-3-031-12382-5_90

El Khatib, M. M., & Ahmed, G. (2018). Improving Efficiency in IBM Asset Management Software System "Maximo": A Case Study of Dubai Airports and Abu Dhabi National Energy Company. *Theoretical Economics Letters*, *08*(10), 1816–1829. https://doi.org/10.4236/tel.2018.810119

El Khatib, M. M., & Ahmed, G. (2020). Robotic pharmacies potential and limitations of artificial intelligence: A case study. *International Journal of Business Innovation and Research*, *23*(3), 298–312. https://doi.org/10.1504/IJBIR.2020.110972

El Khatib, M. M., Al-Nakeeb, A., & Ahmed, G. (2019). Integration

of Cloud Computing with Artificial Intelligence and Its Impact on Telecom Sector—A Case Study. *IBusiness*, *11*(01), 1–10. https://doi.org/10.4236/ib.2019.111001

El khatib, M., Mahmood, A., Al Azizi, A., Al Marzooqi, A., Al Abdooli, K., Al Marzooqi, S., Al Jasmi, S., Alzoubi, H. M., & Alshurideh, M. (2023). A Trial to Improve Program Management in Government Bodies Through Focusing on Program Resource Management: Cases from UAE. In M. Alshurideh, A. K. B. Hikmat, R. Masa'deh, A. H. M., & S. Salloum (Eds.), *The Effect of Information Technology on Business and Marketing Intelligence Systems* (pp. 1315–1340). Springer International Publishing. https://doi.org/10.1007/978-3-031-12382-5_72

El Khatib, M., Yaish, A., & Ali, H. (2021). Implementation Challenges of Data Quality Management -Cases from UAE Public Sector. *IBusiness*, *13*, 144–153. https://doi.org/10.4236/ib.2021.133009

El Khatib, M., Zitar, R., Alnaqbi, K., Alnaqbi, W., Alharmoodi, S., & Baydoun, A. (2023). Effect of Big Data and Analytics on Managing Projects. *International Journal of Computers and Their Applications*, *30*, 173–182.

Elkhatib, M., Al Hosani, A., Al Hosani, I., & Albuflasa, K. (2022). Agile Project Management and Project Risks Improvements: Pros and Cons. *Modern Economy*, *13*(9), 1157–1176.

Farrukh, M., Soomro, T. R., Ghazal, T. M., Alzoubi, H. M., & Alshurideh, M. (2023). Perspectives of Online Education in Pakistan: Post-covid Scenario. In *The Effect of Information Technology on Business and Marketing Intelligence Systems* (pp. 519–550). Springer.

Gaytan, J. C. T., Rafiuddin, A., Sisodia, G. S., Ahmed, G., & Paramaiah, C. (2023). Pass-through Effects of Oil Prices on LATAM Emerging Stocks before and during COVID-19: An Evidence from a Wavelet -VAR Analysis. *International Journal of Energy Economics and Policy*, *13*(1), 529–543.

Ghazal, T. M., Al-Dmour, N. A., Said, R. A., Moubayed, A., Ali, L., Alzoubi, H. M., & Alshurideh, M. (2023). DDoS Intrusion Detection with Ensemble Stream Mining for IoT Smart Sensing Devices. *Studies in Computational Intelligence*, *2023*(1056), 1987–2012.

Ghazal, T. M., Hasan, M. K., Abdullah, S. N. H. S., Alzoubi, H. M., & Alshurideh, M. (2023). An Integrated Cloud and Blockchain Enabled Platforms for Biomedical Research. *Studies in Computational Intelligence*, *2023*(1056), 2037–2053.

Ghazal, T. M., Hasan, M. K., Ahmad, M., Alzoubi, H. M., & Alshurideh, M. (2023). Machine Learning Approaches for Sustainable Cities Using Internet of Things. *Studies in Computational Intelligence*, *2023*(1056), 1969–1986. https://doi.org/10.1007/978-3-031-12382-5_108

Ghazal, T. M., Hasan, M. K., Alzoubi, H. M., Alshurideh, M., Ahmad, M., & Akbar, S. S. (2023). Internet of Things Connected Wireless Sensor Networks for Smart Cities. *Studies in Computational Intelligence*, *2023*(1056), 1953–1968.

Gulseven, O., & Ahmed, G. (2022). The State of Life on Land (SDG 15) in the United Arab Emirates. *International Journal of Social Ecology and Sustainable Development*, *13*(1), 1–15. https://doi.org/10.4018/ijsesd.306264

Hani Al-Kassem, A. (2021). Significance of Human Resources Training and Development on Organizational Achievement. *PalArch's Journal of Archaeology of Egypt / Egyptology*, *18*(7), 693–707.

Kassem, A., & Martinez, E. B. (2022). Operationalization of Negosyo Center as an Entrepreneurial Strategy to Selected Micro, Small, and Medium Enterprises in Taguig City. *Global Business and Management Research*, *14*(2), 88–104.

Khan, A., Hasana, M. K., Ghazal, T. M., Islam, S., Alzoubi, H. M., Mokhtar, U. A., Alam, R., & Ahmad, M. (2022). Collaborative Learning Assessment via Information and Communication Technology. *Proceedings - 2022 RIVF International Conference on Computing and Communication Technologies, RIVF 2022*, 311–316. https://doi.org/10.1109/RIVF55975.2022.10013841

Khatib, E., M., Z., A., R., & Al-Nakeeb, A. (2021). The effect of AI on project and risk management in health care industry projects in the United Arab Emirates (UAE). *International Journal of Applied Engineering Research (Netherlands)*, *6*, 1.

Khatib, M. El, Alzoubi, H. M., Mulla, A. Al, & Ketbi, W. Al. (2022). The Role of Blockchain in E-Governance and Decision-Making in Project and Program Management. *Advances in Internet of Things*, *12*(03), 88–109. https://doi.org/10.4236/ait.2022.123006

Khatib, M. El, Beshwari, F., Beshwari, M., & Beshwari, A. (2021). The impact of blockchain on project management. *ICIC Express Letters*, *15*(5), 467–474. https://doi.org/10.24507/icicel.15.05.467

Khatib, M. El, Shehhi, H. Al, & Nuaimi, M. Al. (2023). How Big Data and Big Data Analytics Mediate Organizational Risk Management. *Journal of Financial Risk Management*, *12*(01), 1–14. https://doi.org/10.4236/jfrm.2023.121001

Lee, K. L., Nawanir, G., Cheng, J., Alzoubi, H., & Alshurideh, M. (2023). *Educational Supply Chain Management: A View on Professional Development Success in Malaysia* (pp. 2473–2490). https://doi.org/10.1007/978-3-031-12382-5_136

Lee, K. L., Wong, S., Alzoubi, H., Al Kurdi, B., Alshurideh, M., & El Khatib, M. (2023). Adopting smart supply chain and smart technologies to improve operational performance in manufacturing industry. *International Journal of Engineering Business Management*, *15*, 1–14. https://doi.org/10.1177/18479790231200614

Louzi, N., Alzoubi, H. M., Alshurideh, M. T., El khatib, M., Ghazal, T. M., & Kukunuru, S. (2022). Psychological & Prototypical Model of Execution Management evaluation for the framework Development. *Journal for ReAttach Therapy and Developmental Diversities*, *5*(SpecialIssue2), 216–223.

Louzi, N., Alzoubi, H. M., El Khatib, M., Ghazal, T. M., Alshurideh, M., & Kukunuru, S. (2022). Psychological Health and Environmental Effect of using Green Recycled Amassed Concrete on Construction. *Journal for ReAttach Therapy and Developmental Diversities*, *5*(SpecialIssue2), 163–175.

M. Alzoubi, H., Ghazal, T., Hasan, M., Alshurideh, M., Ahmad, M., Akbar, S., Al Kurdi, B., & Akour, I. (2021). IoT for Smart Cities: Machine Learning Approaches in Smart Healthcare-A Review. *Future Internet*, *13*(8), 218. https://doi.org/10.3390/fi13080218

Mat Som, A. P., & Kassem, H. Al. (2013). Domestic Tourism

Development in Asir Region, Saudi Arabia. *Journal of Tourism & Hospitality*, *02*. https://doi.org/10.4172/2167-0269.S5-001

Mubeen, S., Shahid, M. H., Sahawneh, N., Al-Kassem, A. H., Ahmad, A., & Naseer, I. (2022). *Education, Employment and Women Empowerment in an Agrarian Economy: A Case Study*. 1–9. https://doi.org/10.1109/icbats54253.2022.9759025

Nadzri, W., Hashim, A., Majid, M., Jalil, N., Alzoubi, H., & Alshurideh, M. (2023). *Share Your Beautiful Journey: Investigating User Generated Content (UGC) and Webrooming Among Malaysian Online Shoppers* (pp. 2265–2285). https://doi.org/10.1007/978-3-031-12382-5_124

Nuseir, M., & Elrefae, G. (2022). The effects of facilitating conditions. *Customer Experience and Brand Loyalty on Customer-Based Brand Equity through Social Media Marketing*, *6*(3), 875–884.

Nuseir, M. T. (2020). Potential impacts of blockchain technology on business practices of bricks and mortar (B&M) grocery stores. *Business Process Management Journal*, *27*(4), 1256–1274. https://doi.org/10.1108/BPMJ-06-2020-0267

Nuseir, M. T. (2021). Assessing the impact of brand equity and customer experience on brand loyalty in the United Arab Emirates' hotel industry. *International Journal of Business Excellence*, *25*(4), 459–473. https://doi.org/10.1504/IJBEX.2021.119753

Nuseir, M. T., & Aljumah, A. (2020). The role of digital marketing in business performance with the moderating effect of environment factors among SMEs of UAE. *International Journal of Innovation, Creativity and Change*, *3*, 310–324.

Nuseir, M. T., & Aljumah, A. (2022). The impact of entrepreneur orientation on sustainable entrepreneurship among SMEs in the UAE: mediating effects of the sustainability orientation and bricolage behaviours of entrepreneurs. *International Journal of Trade and Global Markets*, *16*(1–3), 250–264. https://doi.org/10.1504/ijtgm.2022.128134

Nuseir, M. T., Aljumah, A. I., & El-Refae, G. A. (2022). Digital marketing and public relations: A way to promote public relations value. *International Journal of Data and Network Science*, *6*(4), 1331–1340. https://doi.org/10.5267/j.ijdns.2022.6.002

Nuseir, M. T., Aljumah, A. I., & El Refae, G. A. (2022a). The Influence of E-Iearning M-learning. *And D-Learning on the Student Performance: Moderating Role of Institutional Support*, 1–9.

Nuseir, M. T., Aljumah, A. I., & El Refae, G. A. (2022b). Trust in Adoption of Internet of Things: Role of Perceived Ease of Use and Security. *In 2022 International Arab Conference on Information Technology (ACIT)*, 1–7.

Nuseir, M. T., Basheer, M. F., & Aljumah, A. (2020). Antecedents of entrepreneurial intentions in smart city of Neom Saudi Arabia: Does the entrepreneurial education on artificial intelligence matter? *Cogent Business and Management*, *7*(1). https://doi.org/10.1080/23311975.2020.1825041

Nuseir, M. T., El-Refae, G. A., & Aljumah, A. (2021). The e-Learning of Students and University's Brand Image (Post COVID-19): How Successfully Al-Ain University Have Embraced the Paradigm Shift in Digital Learning. In *Studies in Systems, Decision and Control* (Vol. 334, Issue April). Springer International Publishing. https://doi.org/10.1007/978-3-030-67151-8_10

Nuseira, M. T., & Aljumahb, A. (2020). Digital marketing adoption influenced by relative advantage and competitive industry: a UAE tourism case study. *International Journal of Innovation, Creativity and Change, 2020*(11), 617–631.

Sakkthivel, A. M., Ahmed, G., Amponsah, C. T., & Muuka, G. N. (2022). The influence of price and brand on the purchasing intensions of Arab women: an empirical study. *International Journal of Business Innovation and Research*, *28*(2), 141–161. https://doi.org/10.1504/IJBIR.2022.123260

Tariq, E., Alshurideh, M., Akour, I., & Al-Hawary, S. (2022). The effect of digital marketing capabilities on organizational ambidexterity of the information technology sector. *International Journal of Data and Network Science*, *6*(2), 401–408. https://doi.org/10.5267/j.ijdns.2021.12.014

Tariq, E., Alshurideh, M., Akour, I., Al-Hawary, S., & Kurdi, B. Al. (2022). The role of digital marketing, CSR policy and green marketing in brand development. *International Journal of Data and Network Science*, *6*(3), 995–1004. https://doi.org/10.5267/j.ijdns.2022.1.012

Varma, A. J., Taleb, N., Said, R. A., Ghazal., T. M., Alzoubi, H. M., & Alshurideh, M. (2023). A Roadmap for SMEs to Adopt an AI Based Cyber Threat Intelligence. *Studies in Computational Intelligence*, *2023*(1056), 1903–1926.

Yasir, A., Ahmad, A., Abbas, S., Inairat, M., Al-Kassem, A. H., & Rasool, A. (2022). How Artificial Intelligence Is Promoting Financial Inclusion? A Study On Barriers Of Financial Inclusion. *2022 International Conference on Business Analytics for Technology and Security (ICBATS)*, 1–6. https://doi.org/10.1109/ICBATS54253.2022.9759038