GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520
Vol. 24 . No.1 2024

Impact Of Dynamic Capabilities And Digital Platform-Based Ecosystems On Implementation Of Lean Production : Current And Future Trends

Alaa Abdulameer Ahmed
Middle Technical University/ Institute of Administrative Rusafa, Iraq
alaameer72@mtu.edu.iq

ABSTRACT

Dynamic capabilities and environmental systems based on the digital platform are among the new topics that organizations and companies have begun to use widely. Therefore, the research aims to identify their impact on lean production. The research adopted a descriptive analytical approach and used the questionnaire as the main tool for collecting data. A structural model was built using the structural modeling method and tested using correlation and regression coefficients. The research reached a set of conclusions, the most important of which is that there is a significant impact of the dynamic capabilities and environmental systems based on digital platforms on implementing lean production, and there are future trends to increase the use of these platforms.

Keywords: Dynamic capabilities, digital platform, ecosystems, lean production.

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

Introduction

With the increase in digital technology and the great complexity of ecosystems (Nambisan et al., 2019), the importance of digital innovation has increased widely (Kinderman et al., 2022), and reliance on multiple digital platforms that depend on ecosystems has spread (Yoo et al., 2012). These platforms have changed and have come to play a major role in their various types in facilitating the attainment and dissemination of globalization, breaking cultural barriers and communicating with everyone because they have crossed all barriers and provided the opportunity for everyone to express what they want with different uses and orientations, and they have become powerful influential tools, and their role in change and influence cannot be ignored (Redjeki & Affandi, 2018). Social networking sites constitute a real revolution in the technical world, as the sites are increasing every day and the companies that manufacture those sites are in constant competition, and the human being in this game is the only commodity that is traded if he surrenders himself to those sites in a random, unbalanced and incorrect manner. Therefore, society must be truly aware (Kinderman et al., 2022).

Digital innovation often involves collaboration within ecosystems of partners, suppliers and customers. Open innovation approaches, such as co-creation and partnerships, enable organizations to leverage external expertise, access complementary resources, and foster innovation through collective intelligence (Nambisan et al., 2019). Also, the emergence of electronic commerce and its methods has a significant environmental impact. United Nations (UNFCCC) reports indicate that electronic commerce has a negative impact on the environment, and this requires that it develop strategies to reduce its impact on the

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

environment. These strategies may include reducing carbon footprint, increasing energy efficiency, sustainable packaging, enabling recycling, and environmentally friendly supply chain management. E-commerce companies aim to act responsibly towards their community and employees (Chatterjee & Bhagorta, 2020) As well as the misinformation provided by social media that supports harmful behaviors and bad ideas, In this field, the Oxford Institute (OII) conducted a study on communication platforms and concluded that they are a source of a large percentage of false information that has negatively affected the environment (Vial, 2020).

Therefore, the negative impact of digital platforms and technology is a complex matter. Industrialization and modern technology have bad effects on the environment. The release of fumes and gases and the dumping of waste led to disruption of food chains, and this was reflected on the human being whose environment was corrupted by industry and sometimes made it unsuitable for his life. Modern technology and industrial development have contributed to increasing the proportion of toxic gases in the atmosphere, eliminating a large percentage of trees and forests, which are the primary source of oxygen in the world, in addition to reducing soil fertility and increasing environmental imbalance (Jacobides et al., 2018). The term ecosystem originated as a metaphor and refers to the group of interacting firms that can depend on its multiple activities (Chatterjee & Bhagorta, 2020). So there is little agreement on how best to organize the many partnerships involved in the innovation ecosystem. This requires correct scientific procedures that rely on the foundations of sustainability and work to employ technology to support the environment instead of managing it. , it still requires strengthening

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

partnerships in digital innovation for environmental support and for these partnerships to be more dynamic (Kohtamaki et al., 2020).

Literature Review

Dynamic capabilities

The term "dynamic capabilities" originally dates back to the work of Schumpeter in 1934 from his writings on the concept of innovation-based competition, where competitive advantage depends on what he called the demolition of existing resources and their recombination to obtain new operational capabilities (Pavlou & El-Sawy, 2011), as some considered it Among the most important works in this field, they considered dynamic capabilities to be the ability to reshape internal and external resources to keep pace with the changing environment (Aishoush, 2021). The concept of dynamic capabilities reflects the importance of updating organizational capabilities to address changes in the environment and allow the organization to respond to them (Singh et al., 2022), through the dynamic capabilities of information technology, to respond with the appropriate speed to environmental risks. Directing opportunities and then searching for, exploring, acquiring, absorbing and using knowledge about resources and opportunities, and how to organize resources to take advantage of those opportunities. Derived from change, acceleration or diversity of demands (Bhatt and Grover, 2005). The term "capabilities" refers to the key role of management in achieving appropriate adaptation, consolidation and reconfiguration of external and internal organizational skills, as well as resources and functional competencies to meet the demands of the changing environment (Jacobides et al. 2018). The concept of dynamic capability indicates that it is a fixed behavioral tendency of the

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

organization in order to integrate, reshape and renew its resources, and rehabilitate its basic capabilities in response to the changing environment in order to survive and sustain it.

The concept of dynamic capabilities works to unify and reshape external and internal systemic skills, as well as functional resources and competencies in order to comply with the requirements of the changing environment, which is the organization's ability to integrate, build and reconfigure internal and external competencies to confront rapid change in the business environment. It supports the possibility of responding to environmental changes and improving performance, and this concept is used in commercial operations or logistics services, and it places among its primary objectives responding to changing environmental conditions in the markets in addition to developing new products and services and working to support dynamic capabilities (Redjeki & Affandi, 2018).

The Importance of Dynamic Capabilities

Nowadays, organizations face many challenges imposed by changes and developments in the external environment, which require these organizations to do more research and development, and to find administrative and organizational methods and tools. In order to confront these challenges, and find appropriate solutions to overcome them according to a studied scientific approach that ultimately reflects positively on the organization’s performance in general, and perhaps the most prominent of these means is enhancing dynamic capabilities (Chatterjee & Bhagorta, 2020).

Dynamic capabilities, with their contents, are considered an important means to enable organizations of all types and activities to draw strategies and determine

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

sound paths to activate their scientific and operational movement to achieve their organizational goals. In light of the great changes and challenges that organizations face in a changing and unstable environment, it is necessary to make many transformations. In the way it does its business, and searching for new strategies that enable it to survive and excel (Zhao & Von, 2020). This prompted organizations to support the dynamic capabilities approach, which provides the appropriate and specific framework for mechanisms that enable the organization to deal with rapid environmental conditions and changes, by rebuilding and identifying available resources and capabilities, and exploiting them optimally in facing and overcoming changing environmental conditions, and thus achieving excellence in performance. Because organizational excellence is based on organizations investing in critical opportunities preceded by effective strategic planning and commitment to realizing a common vision dominated by clarity of purpose, adequacy of resources, and keenness on performance. Most organizations have set their sights on achieving this goal, and this can only be achieved by raising the level of employee performance and paying attention to their training, motivation, etc., which ensures business organizations' survival and continuation in light of the intense competition between them (Khairy, 2014).

Organizations work by adopting dynamic capabilities to activate tasks related to competitive advantage and business development to achieve sustainable competitive advantage, as dynamic capabilities are the best tools that support competitive advantage in a changing environment, as organizations are able to respond quickly to environmental changes, and in this field it indicates (Helfat et al., 2007) indicated that the competitive position of the organization will be better

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

in the case of the ability to adapt to the environment and use dynamic capabilities, and it is considered a competitive advantage that helps achieve strategic goals, reach new opportunities, achieve profitability, growth, and manage risks (Zhao & Von, 2020), and in In this field, the importance of dynamic capabilities are: (Redjeki & Affandi, 2018)

1) Helping organizations respond quickly to changing environmental and market conditions

2) It is the main driver for supporting organizational performance and competitive capabilities

3) Provides a sustainable competitive advantage that is difficult to imitate.

4) It involves discovering new opportunities, shaping capabilities and resources, and renewing and adapting the organization.

5) It is of great importance to organizations looking to achieve success and long-term survival in today's rapidly changing business environment.

6) Organizations with strong dynamic capabilities are better able to create and capture value in the long term.

7) It is particularly important for organizations operating in turbulent or uncertain environments, such as those in the technology or start-up sectors (Zott, Amit, & Massa, 2011).

Dynamic Capabilities Dimensions

The construct of dynamic capabilities is linked to innovation capacity through different components or dimensions (Froehlich et al., 2017), constituting a multidimensional construct. Teece (2012) proposes that the dynamic capabilities of a company can be located in three groups of main activities that must be

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

developed and applied simultaneously to build and maintain competitive advantages:

1. Capabilities to detect, identify, filter, and shape the opportunities of the environment (sensing).
2. Take advantage of opportunities (seizing) by using the skills and resources that you possess and may be expressed through the design of organizational structures, processes, procedures, and operating techniques.
3. Reconfigure or transform intangible and tangible assets through their continuous renewal, improvement, and protection (Rotundo,2020).

In this context, a company with dynamic capabilities and strategies come together to create and refine a business model, guiding the transformation of the enterprise to a level of profits sufficient to allow the enterprise to maintain and enhance its capabilities and resources to make a successful strategy, as shown in Figure 1.

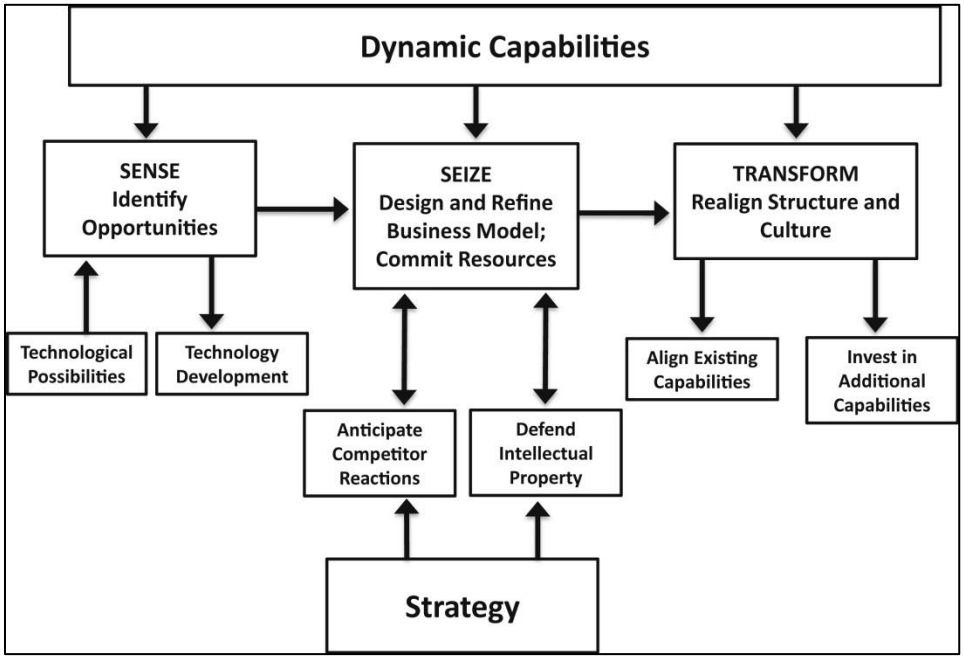

Figure 1. Dynamic Capabilities And Business Model

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

Effect of Ecosystems

Environmental systems affect the way and style of life. They have facilitated the exchange of information and knowledge, and digital platforms that are linked to the ecosystem have spread in a way that raises difficulties regarding the mechanism of controlling them. These platforms have become widely influential in environmental systems, which has raised concerns about the effects of misuse (Chang et al., 2017).Its impacts can be positive, such as easy access to natural resources or the availability of tourism and entertainment opportunities (Macjenzie & Carter, 2019). These systems have negative and positive effects on environmental systems that reflect on organizational reputation. We find that organizations that increase pollution are exposed to penalties and fines (Kumar & Subramaniam, 2021).

On the other hand, the ecosystems of digital platforms depend on the digital and technical networks of the industrial sectors and include both customers and competitors in addition to partners and suppliers (Hein et al., 2020). They give the organization the opportunity to benefit from the ecosystems and employ them to gain value and competitive advantage (Nambisan, 2021). Therefore, it has become necessary for organizations to take into account environmental impacts, work to reduce their negative impacts, set strategic goals related to sustainability, and adopt methods to reduce risks and take advantage of innovation opportunities.

Digital Platforms And Ecosystems

The platform is a set of tools and technologies that contribute to developing services and products and distributing them quickly and easily. Platforms can take

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

many forms, as they can directly affect consumers, such as smartphone systems or coordination and monitoring programs, and there are several types of digital platforms that rely on hybrid installations (Evans & Gawer, 2016). The value of an innovation platform, on the other hand, is added to the system as a whole since it offers a technological and distribution platform on which other businesses can add their own innovation. An illustration of this is the "App" ecosystem from Apple. Platforms for the invention are entirely compatible with the original profit-by-innovation paradigm, which placed a strong emphasis on the necessity for exclusive access to particular supplements. Although the connection between the two is less obvious when it comes to transactional platforms, successful examples like Amazon should draw traders like the Amazon Marketplace (Teece, 2017).

Digital platforms and ecosystems refer to digital networks and technological systems that help deliver digital services and products, the most important of which are the widespread social media platforms and electronic stores, and they have become of great importance in creating value, whether for users, developers, or organizations (Calabrese et al., 2021). The Internet has greatly contributed to linking computers and ecosystems such as social media, e-commerce, and Android and iOS systems, which have been adopted by large platforms, most notably the Apple and Google platforms (Kumar & Subramaniam, 2021).

The “Big Five” (or FAMGA: Facebook, Apple, Microsoft, Google, and Amazon) are the best examples of digital platforms, which consist of digital structures that allow innovation and interaction (Van et al. 2018). In this field, the literature indicates that there is a close link between digital platform and ecosystem, which works in adding value to the business. Digital platform ecosystems are studied

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

through systemic dimensions that include: platform sponsor, platform provider, complements (supply side) and users (demand side) as shown in Figure 2 (Calabrese et al. 2020).

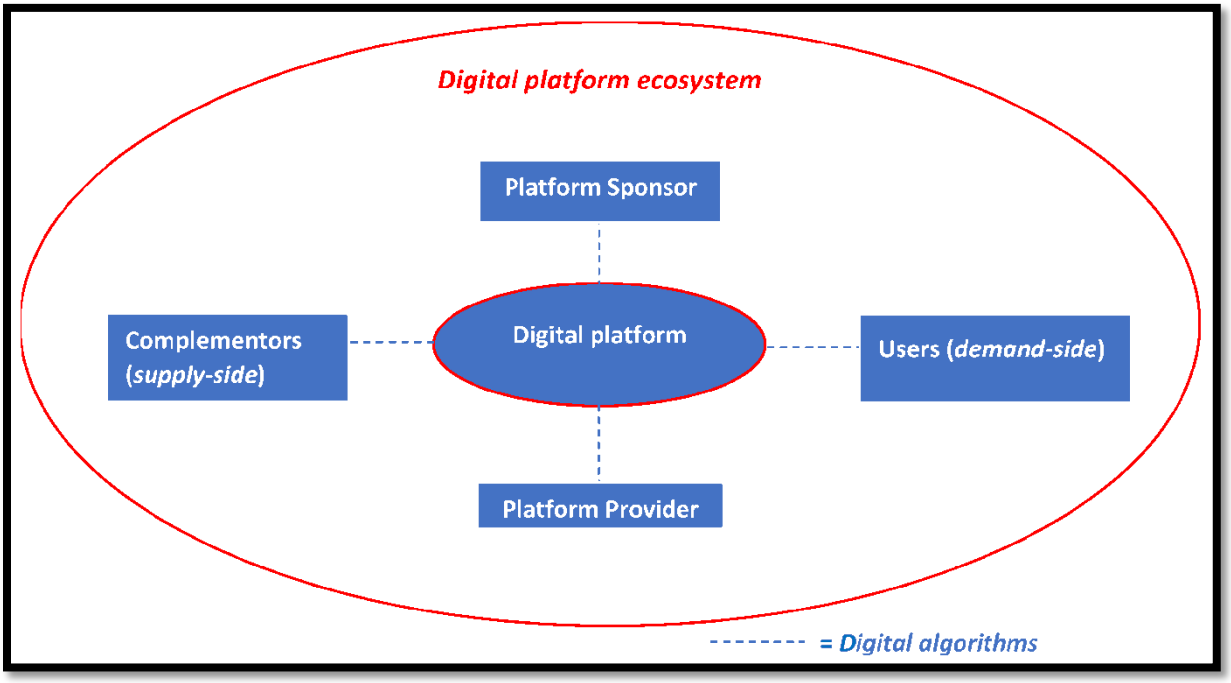

Figure 2. Digital Platforms and Ecosystems

Lean Production

Womack,2005 first introduced the term lean with the publication of the world-changing book based on Toyota production studies. Lean and Lean Manufacturing concepts pursue improvements in operational design or, as Marksbury (2012) refers, competitive advantages including price, cost, delivery speed, consistency, innovation, and flexibility (faster, cheaper, more agile, better, etc.). This is made possible by the ongoing, methodical identification and removal of garbage (Cruz & Burbano, 2012). Lean Manufacturing is defined as "the pursuit of an

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

improvement in the manufacturing system through the elimination of waste, understanding as waste all those actions that do not add value to the product and for which the customer is not willing to pay. “Lean manufacturing can be considered as a set of tools that were developed in Japan inspired in part by the principles of William Edwards Deming” (David, 2018). This production concept is called adaptive production because its goal is to reduce to a minimum all resources required for all aspects of the system, mainly in: manpower, production and storage space, tool investments , and production times. engineering spent on developing new products. On the other hand, the system assumes the ability to manage small batches of raw materials and components, which means a supply policy based on establishing stable relationships with suppliers. Defect levels are significantly reduced as WIP has greater visibility into the system, and the potential to produce a wider range of products increases as smaller batches are more easily fed into precise production planning (Kelly et al., 2021).

Consequently, the main objectives of lean production are very ambitious at the level of productivity, profitability of invested capital and product quality, The concept of lean production leads to shorter work cycles, standardized work methods, minimum number of workers, minimum material stocks, reduced or even eliminated intermediate storage, and reduced workshop space.

Current Trend

Current trends of dynamic capabilities and digital ecosystems focus on supporting competitive advantage, creating value, and facilitating innovation processes (Nambisan, 2021). And work to achieve the maximum possible benefit from these platforms and focus on platform governance in order to facilitate procedures

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

related to environmental systems (Gandal & Salinger, 2017), whether in current systems or future dynamic capabilities (Hein, 2020). One of the most important sectors related to digital platforms is the technology industry. Which is progressing very rapidly, and this requires that organizations keep pace with technological development and digital ecosystems to support business and confront potential challenges and risks (Vial, 2020). International reports provide many examples of policies and measures aimed at protecting and enhancing data infrastructure in the digital environment. These initiatives attest to the parties' support in implementing the objectives and principles of the Convention. In order to ensure digital transformation and its implications for cultural and creative ecosystems, Parties have taken measures related to training and capacity building, as well as networking and other means that enable cultural and creative elements to connect and benefit from digital skills and resources to support ecosystems.

Future Trends

The future of dynamic capabilities, ecosystems, and digital platforms have become of great and increasing importance day after day (Redjeki & Affandi, 2018), as the spread of technology, the Internet, and the Internet of Things have contributed to the presence of large amounts of data that affect decision-making and innovations.

It has become highly competitive, especially after the emergence of artificial intelligence (Muller & Kretzscmar, 2019), which has great importance in supporting capabilities, skills, and businesses quickly and accurately, which is reflected in dynamic capabilities and makes them able to adapt (Zhao & Von, 2020). When focusing on digital platforms, we find that they are a major factor in changing the rules of the game in the fields of education, business, and more. This

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

technology goes beyond the delivery of passive information to dynamic participation and adventurous communication. This requires that there be responsiveness and flexibility in organizational dealings in order to maintain its competitive capabilities and reach high innovative capabilities (Kumar & Subramaniam, 2021).Therefore, we find that the dynamic capabilities and ecosystems of digital platforms have gained great importance in the digital age and the era of artificial intelligence. Therefore, we find that studies and research have become focused on how organizations should conduct their work. We can expect to see even more emphasis placed on dynamic capabilities and digital platform ecosystems. As new technologies companies will need to be even more agile and responsive in order to stay competitive, at the same time the importance of digital platform ecosystems is likely to continue growing, as companies increasingly rely on networks of partners and customers to drive growth and innovation.

Method

This study used a systematic literature review method after previous review studies and structural analysis using a questionnaire as the main tool for collecting data. The study was applied to a sample of 55 university professors. The study model was formulated to include three variables: dynamic capabilities (DC) with dimensions (sensing (DC1), seizing (DC2), transform (DC3)), and digital platform-based ecosystems (DPE), and lean production (LP), as shown in Figure 3.

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

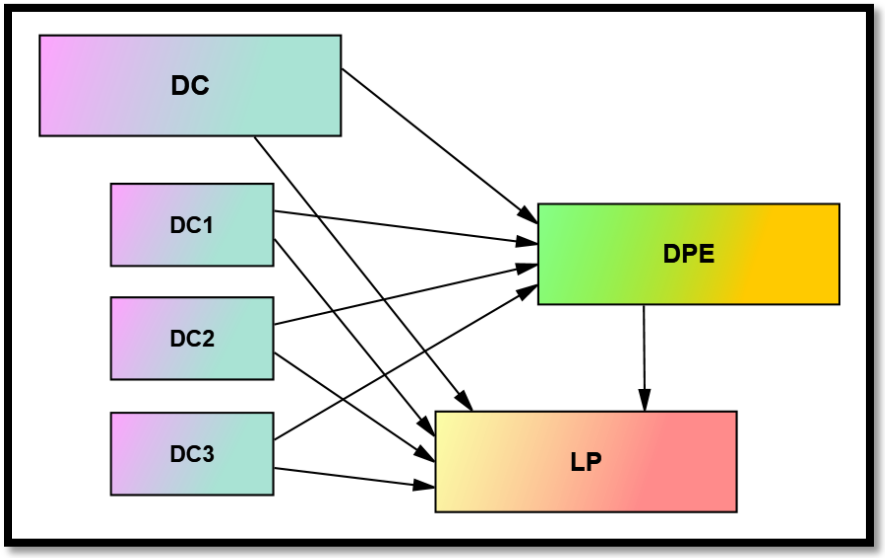

Figure 3 : Study Model

Correlation Analysis

Table 1 indicate that there is a positive and significant correlation between DC and LP (764 **), and at the sub-level there are positive relationships between the dimensions (DC1, DC2, DC3) and LP(671 **, 683 **, 710 **) , all these values are significant at (0.05). which support H1. Also, there is a positive and significant correlation between DC and DPE (944 **), and at the sub-level there are positive relationships between the dimensions (DC1, DC2, DC3) and DPE (895 **, 848 **, 861 **) , all these values are significant at (0.05). which support H2. And there is a positive and significant correlation between DPE and LP (877 **), this value are significant at (0.05). which support H3.

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

Table 1: Correlation Matrix

Correlations							
		X1	X2	X3	X	M	Y
X1	Pearson Correlation	1	.853**	.849**	.942**	.895**	.671**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	86	86	86	86	86	86
X2	Pearson Correlation	.853**	1	.692**	.885**	.848**	.683**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	86	86	86	86	86	86
X3	Pearson Correlation	.849**	.692**	1	.895**	.861**	.710**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	86	86	86	86	86	86
X	Pearson Correlation	.942**	.885**	.895**	1	.944**	.764**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	86	86	86	86	86	86
M	Pearson Correlation	.895**	.848**	.861**	.944**	1	.877**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	86	86	86	86	86	86
Y	Pearson Correlation	.671**	.683**	.710**	.764**	.877**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	86	86	86	86	86	86
**. Correlation is significant at the 0.01 level (2-tailed).							

Path Analysis

The results in Table 2 and Figure 4 indicate a positive effect between DC and LP (0.141), There is also a positive effect between DC and DPE (0.623), In addition, there is a positive effect between DPE and LP (0.431), However, the mediating effect of the DPE variable between DC and LP is (0.268), The mediating effect is greater than the direct effect, and this proves the existence of a mediating relationship and supports H4. The results indicate a positive effect between DC1 and LP (0.223), There is also a positive effect between DC1 and DPE (0.571), In

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

addition, there is a positive effect between DPE and LP (0.431), However, the mediating effect of the DPE variable between DC1 and LP is (0.246), The mediating effect is greater than the direct effect, and this proves the existence of a mediating relationship and supports H4-1. The results indicate a positive effect between DC2 and LP (0.662), There is also a positive effect between DC2 and DPE (0.744),In addition, there is a positive effect between DPE and LP (0.431), However, the mediating effect of the DPE variable between DC2 and LP is (0.321), The mediating effect is greater than the direct effect, and this proves the existence of a mediating relationship and supports H4-2. The results indicate a positive effect between DC3 and LP (0.183), There is also a positive effect between DC3 and DPE (0.513), In addition, there is a positive effect between DPE and LP (0.431), However, the mediating effect of the DPE variable between DC3 and LP is (0.220), The mediating effect is greater than the direct effect, and this proves the existence of a mediating relationship and supports H4-3.

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

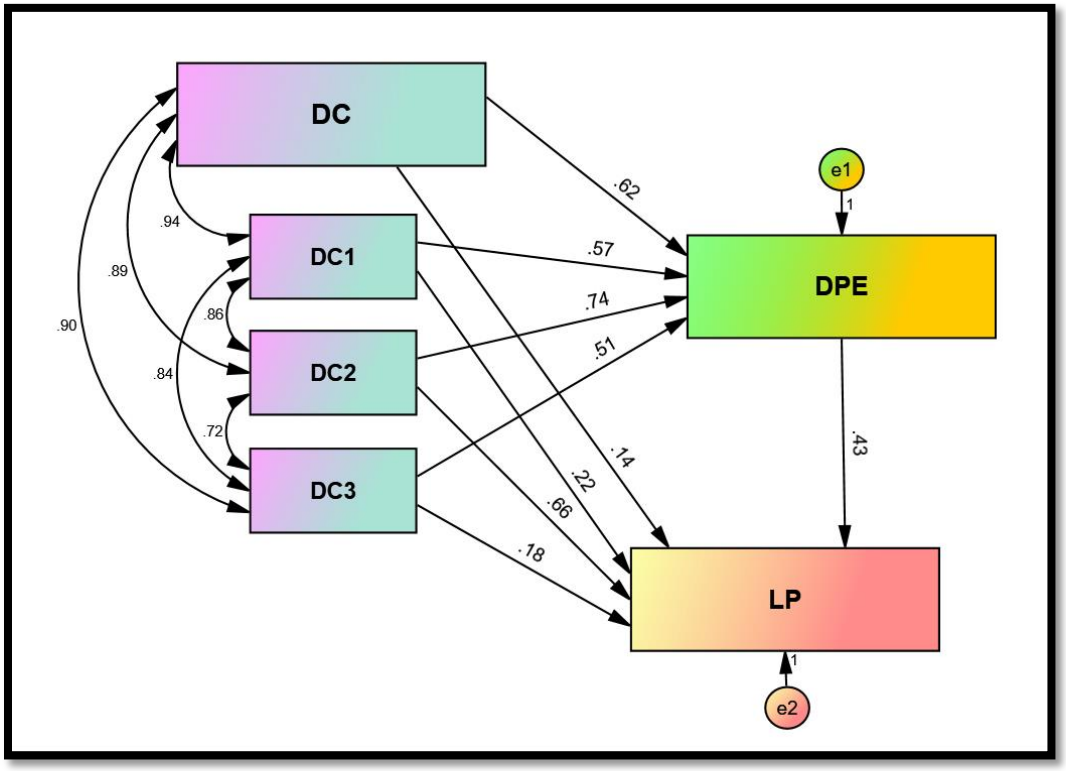

Figure 4: Structural Relationships

Table 2: Path Analysis Results

Path	Estimate	Sig.
DC…> LP	0.141	0.032
DC…> DPE	0.623	0.000
DPE…> LP	0.431	0.000
DC…> DPE …> LP	0.269	0.011
DC1…> LP	0.223	0.018
DC1…> DPE	0.571	0.000
DPE…> LP	0.431	0.000
DC…> DPE …> LP	0.246	0.012
DC2…> LP	0.662	0.000
DC2…> DPE	0.744	0.000
DPE…> LP	0.431	0.000

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

DC…> DPE …> LP	0.321	0.000
DC3…> LP	0.183	0.028
DC3…> DPE	0.513	0.000
DPE…> LP	0.431	0.000
DC…> DPE …>	0.221	0.019

Discussion and Conclusions

This article reviewed the literature on dynamic capabilities, digital ecosystems, and lean production and tested the relationships between their variables. In today's rapidly changing world, where climate change, pollution and resource depletion are becoming increasingly pressing issues, it is essential for individuals, communities and businesses to understand the importance of environmental sustainability and related topics. Hence the role of digital platforms and environmental systems has emerged, which has changed the way in which services and products are provided, and even extended to changing the way of living and dealing in life. Studies indicate that in 2016, 30 platforms achieved revenues of more than $7 trillion (Van et al., 2016). This is a clear indication of the role of platforms in competition and innovation in many fields (Evans, 2019), and their influence extends to the economic and social fields (Kircher and Karpinski, 2010), environmental competition, and many current and future challenges (Zuckerberg, 2018), and this is what makes them part Vital and influential in the economy and society. Hence, the importance of digital platforms for business becomes clear, and the success of these businesses is linked to unconventional strategies that help this model generate more actual and competitive value as well. Since the main goal is to facilitate the task for the parties, the main characteristics of these platforms are

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

to attract more interacting parties and keep them interacting in a way that is attractive to both (Zuuckerberg, 2018), and this is the challenge and difficulty lies in how to create a mechanism to generate economic and social value (Kircher & Karoeinski, 2010) and current and future competition.

Accordingly, a set of conclusions can be drawn as follows:

1. The dynamic capabilities and ecosystems of digital platforms are two important trends shaping the business world today and will continue to do so in the future. Companies that are able to effectively leverage these trends will be better positioned to succeed in this fast-paced and ever-changing business environment.
2. Although companies try to adapt to environmental changes, there is an impact level of their dynamic capabilities in the transition to lean production, but it is not at the desired level.
3. Dynamic capabilities, in their various dimensions, play an important and fundamental role in improving lean production, and adopting the environmental digital platform increases the chances of transitioning to lean production, through capabilities, skills, and activities that enable the organization to confront changes in the external environment.
4. Dynamic capabilities are usually part of organizational processes that allow organizations to adapt to changing circumstances to reshape their resources, enable transformation and adaptation, improve production and achieve competitive advantage.
5. The digital ecosystem focuses on providing added value to customers by improving customer data, workflow, and improving production

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

6. The value resulting from the interaction of multiple digital ecosystems helps improve production and move to lean production
7. The results proved that sensing has a positive effect on improving lean production when adopting environmental systems based on digital platforms, as sensing contributes to supporting the ability to scan the environment, explore and identify the opportunities and threats it creates with the aim of formulating the appropriate strategy for it and moving to lean production.
8. Appropriation positively affects lean production when adopting the environmental digital platform, as it supports the ability to seize opportunities and integrate new knowledge into operational capabilities.
9. Transformation and restructuring have a positive effect on lean production, as a clear value is generated for the ability that supports the feeling of the need to reshape the structure of the organization's assets, and complete the internal and external transformation.

Recommendations

1. The rapid and serious changes and challenges that companies face require many transformations in future.
2. Look for new strategies to gain a competitive advantage so they can survive and achieve their goals. Given these challenges, weak companies that do not improve their capabilities and use their skills will not be able to survive.
3. Unifying new knowledge and incorporating it into the organization's operational capabilities by embodying patterns of joint interaction and collective logic.

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

4. Knowing the implicit capabilities of workers at different levels and encouraging innovation and demonstrating these capabilities
5. Work to adopt digital transformation and use digital environmental platforms to ensure access to lean production.
6. Establishing mechanisms that lead to exploring new opportunities in the environment surrounding the work of organizations through conducting environmental analysis operations.
7. Markets, technology, and best practices must be continuously monitored in order to facilitate both internal and external transformation.
8. Forming a department specialized in developing dynamic capabilities to develop the plans, strategies, and mechanisms necessary to develop dynamic capabilities to help solve organizational problems, adapt to environmental changes, and make appropriate decisions.

References

1. Aichouche Aouatef (2021), Dynamic capabilities as a mechanism to enhance organizational ambidexterity - The case study of some banks in the wilaya of El-Oued, Journal of strategy, No.2.
2. Bhatt, G. D., & Grover, V. (2005). Types of information technology capabilities and their role in competitive advantage: An empirical study. Journal of management information systems, 22(2), 253-277.
3. Calabrese, M., La Sala, A., Fuller, R. P., & Laudando, A. (2021). Digital Platform Ecosystems for Sustainable Innovation: Toward a New Meta-Organizational Model?. Administrative sciences, 11(4), 119.

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

4. Calabrese, M., Laudando, A., & La Sala, A. (2020). Business platform ecosystem: un nuovo modello organizzativo per l'innovazione sostenibile. Business platform ecosystem: un nuovo modello organizzativo per l'innovazione sostenibile, 53-75.
5. Chang, Q., Zhang, D., & Qi, P. (2017).Digital platform-based ecosystems, Hofa: african journal of multidisciplinary research No (1).
6. Chatterjee, S., & Bhagotra, A. (2020). The Multilateral World Trade Organization Framework and Its Contribution Towards Combating Climate Change. Law Essentials J., 1, 169.
7. Cruz Ochoa, I. J., & Burbano López, J. A. (2012). Rediseño de un sistema productivo utilizando herramientas de lean manufacturing. caso de estudio sector de mezclas de ingredientes para panadería industrias XYZ.
8. David, I. E. (2018), Indicators of sustainable production , Hofa: African Journal Of Multidisciplinary Research No (1).
9. Evans, P. C., and Gawer, A. (2016). The Rise of the Platform Enterprise A Global Survey. New York: Center for Global Enterprise.
10. Froehlich, C., Bitencourt, C. C., & Bossle, M. B. (2017). The use of dynamic capabilities to boost innovation in a Brazilian Chemical Company. Revista de Administração (São Paulo), 52, 479-491.
11. Gandal, N., & Salinger, M. (2017). Platform governance. Review of Industrial Organization, 51(1), 33-56.
12. Gawer, A. (2022). Digital platforms and ecosystems: remarks on the dominant organizational forms of the digital age. Innovation, 24(1), 110-124.

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

13. Hein, A., Schreieck, M., Riasanow, T., Setzke, D. S., Wiesche, M., Böhm, M., & Krcmar, H. (2020). Digital platform ecosystems. Electronic Markets, 30(1), 87-98.
14. Helfat, C.E., Finkelstein, S., Mitchell, W., Peteraf, M.A., Singh, H., Teece, D.J. (2007) "Dynamic capabilities: Understanding strategic change in organizations" John Wiley & Sons
15. Jacobides, M. G., Cennamo, C., & Gawer, A. (2018). Towards a theory of ecosystems. Strategic management journal, 39(8), 2255-2276.
16. Kelly F. , Soar F. , Daft H. (2021) . Driving Growth through HR Innovation: A Entrepreneurial Perspective ,Pooda Journal of Business Marketing, Finance, Accounting Studies, Vol.11 No.2.
17. Kindermann, B., Salge, T. O., Wentzel, D., Flatten, T. C., & Antons, D. (2022). Dynamic capabilities for orchestrating digital innovation ecosystems: Conceptual integration and research opportunities. Information and Organization, 32(3), 100422.
18. Kohtamäki, M., Parida, V., Patel, P. C., & Gebauer, H. (2020). The relationship between digitalization and servitization: The role of servitization in capturing the financial potential of digitalization. Technological Forecasting and Social Change, 151, 119804.
19. Kumar, V., & Subramaniam, M. (2021).Enhancing digital platform capabilities and networking capability with Ecosystems, Legfin Multidisciplinary Research Journal, 10(3).

20. MacKenzie, N. G., & Carter, S. (2019).Dynamic capabilities as the key approach to investigate digital ecosystems, Hofa: african journal of multidisciplinary research No (4).
21. Marksbury, P. (2012). The modern theory of the Toyota production system. London: Productivity Press
22. Müller-Bloch, C., & Kretzschmar, L. (2019). Artificial intelligence in business strategy: An empirical analysis of adoption, implementation, and impact. Journal of Business Research, 98, 506-516.
23. Nambisan, S., Wright, M., & Feldman, M. (2019). The digital transformation of innovation and entrepreneurship: Progress, challenges and key themes. Research Policy, 48(8), 103773.
24. Pavlou, P. A., & El Sawy, O. A. (2011). Understanding the elusive black box of dynamic capabilities. Decision sciences, 42(1), 239-273.
25. Redjeki, F., & Affandi, A. (2018) , How platforms are transforming customer information management, Legfin Multidisciplinary Research Journal, 10(3).
26. Rotundo, G. Z. (2020). Capacidades dinámicas e innovación en las organizaciones. Una revisión de la literatura y proposiciones básicas. Compendium: revista de investigación científica, (45), 3.
27. Singh, M., & Singh, G. (2018). Impact of social media on e-commerce. International Journal of Engineering & Technology, 7(2.30), 21-26.
28. Singh, R., Charan, P., & Chattopadhyay, M. (2022). Effect of relational capability on dynamic capability: exploring the role of competitive intensity and environmental uncertainty. Journal of Management & Organization, 1-22.

GARDEN JOURNALS
Journal of Qualitative Research in Business Law, Eco-Fin, Accounting, and Statistics
ISSN : 1533-1520

29. Teece, D. J. (2012). Dynamic capabilities: Routines versus entrepreneurial action. Journal of management studies, 49(8), 1395-1401.
30. Teece, D. J. (2017). Dynamic capabilities and (digital) platform lifecycles. In Entrepreneurship, innovation, and platforms. Emerald Publishing Limited.
31. Van Dijck, J., Poell, T., & De Waal, M. (2018). The platform society: Public values in a connective world. Oxford University Press.
32. Vial, G. (2020). Dynamic Capabilities in Electrical Energy Digitalization
33. Womack, J. P., & Jones, D. T. (2015). Lean solutions: how companies and customers can create value and wealth together. Simon and Schuster.
34. Yoo, Y., Boland Jr, R. J., Lyytinen, K., & Majchrzak, A. (2012). Organizing for innovation in the digitized world. Organization science, 23(5), 1398-1408.
35. Zhao, Y., Von Delft, S. (2020). How can dynamic capabilities make sense in avoiding value co-creation traps, Journal Of Aegaeum , 1(2).
36. Zott, C., Amit, R., & Massa, L. (2011). The business model: recent developments and future research. Journal of management, 37(4), 1019-104.