

# Investigating the Reconfiguration of Internationalization Strategies under Digitalization

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**Abstract:** Digitalization can induce the structural changes of multinational enterprises (MNEs), therefore, it is important to reconsider their internal organization. In this paper, the changes in the roles of the subsidiaries of MNEs due to digitalization was investigated. By adopting the internalization theory perspective, the local organizations, including the market demand, the digital technology, infrastructure platform, the institutional systems of the host country, including the legitimacy, substantial institutions, and symbolic rules, in contributing to the changes in the role of subsidiaries was also illustrate in this paper. Additionally, the implications of the framework on entry mode, knowledge transfer and other research issues was also discussed in this paper.

**Keywords:** Internalization theory; Multinational enterprises; Digitalization; Subsidiary

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## 1. Introduction

Digital flows, such as transmitting information, ideas, and innovation around the world, are soaring in recent years, further the outbreak of the COVID-19 epidemic has greatly accelerated the global digitalization process, leading to the growth of Internet traffic, which brought a profound impact to human behavior, business activities, living environment, and other aspects. Digitalization brought a profound effect, and development of the global economic, especially to the newly emerging market, such as, China and India. The contribution of the digital economy, has increased significantly, where the influences of the digital economy in the national economic growth have become more prominent. The economy's share of GDP has increased on a yearly basis, further strengthening its position in the development of the national economy.

Following this trend, a lot of enterprises and company which is involved in the digital technologies has born, such as Google, Apple, and Samsung as the pioneers, and more recent companies like Tesla, Uber, and Airbnb, where digitalization becomes more consummate, and brings distinct impacts to human activities. In the year 2019, Banalieva and Dhanaraj mentioned that, digitalization increases the transferability of technology and firm-specific advantages (FSAs) <sup>[1]</sup>, further, Rangan and Sengul also argue that, the advances of information and communication technology (ICT) lead to the cost-efficient, effective observability, monitoring, and easier, and cheaper coordination, thus call for the need for asset specificity <sup>[2]</sup>. As digitalization evolves, more information was gathered, shared, and co-owned easily, thus, there is a need to develop a platform, which can bridge between the sharing of information and knowledge, and also function as a product showcasing, aggregation, or export trend analysis <sup>[3-5]</sup>. Digitalization is also allowing the transfer of information and intangible, attainable, and codified knowledge internally, giving

an extraordinary impact on the firm's global strategy. As digital technologies, reshaping, and refiguring the global value chain, and connecting economic activities worldwide, benefiting the MNEs through the greater access to a cheaper resource, increased market reach, and allowing faster or more effective communications.

Following digitalization, MNEs must consider the roles of their subsidiaries, and subsequently change their applicability into two dimensions, which are competence of local organization, and strategic importance of the local environment, with higher integration of capability. In contrast, the concept of 'value-chain activities,' could not hold-on under the effect of digitalization, unable to unifies the whole ecosystems, and separates those activities into different parts inside the value ring. Therefore, a new classification of subsidiaries based the concepts of 'transaction-based competence of local organizations' and 'institutional systems of host countries' was proposed.

## 2. Theoretical reflection

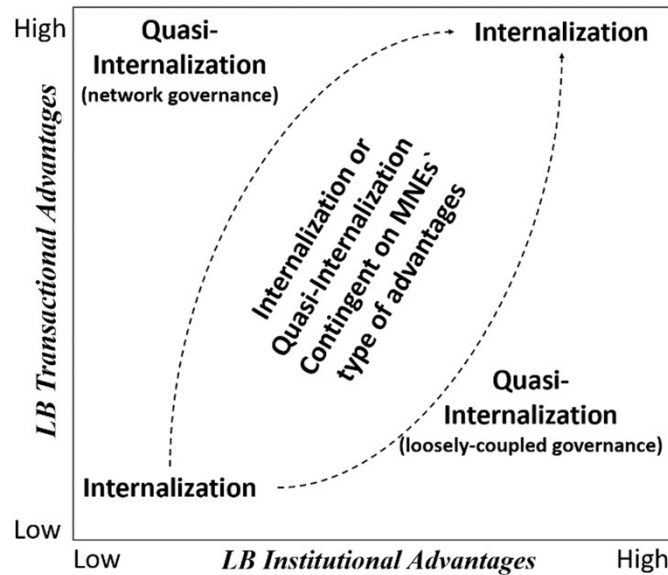
In the internalization process, a firm declined to integrate their production process, unless the cost of internalization supersedes the benefits of reducing the coordination and transaction costs. It is believed that, a MNE's international growth is largely dominated by the costs, and depended on the benefits of the internalizing process on its activities in the foreign markets <sup>[7-8]</sup>. Internalization theory has retained its validity and vitality over the past 30 years, and it is currently extended into a new field of international business research <sup>[9]</sup>. The core tenet of these studies, view firm as an organization that, internalizes its production value chain activities through vertical integration, however, the digitalization improvement has challenged the foundations of the international business field in a big way <sup>[10]</sup>. Digitalization alters the information costs of the cross-border transfers of the firm-specific advantages, and modifies their nature <sup>[11]</sup>. Digitalization, is defined as the process of transforming the essence of an organization's products, services, and processes into the Internet- compatible data packages that, can be created, stored and transferred into bits and bytes <sup>[12,13]</sup>, enhancing the knowledge transferability and enabling the near-decomposability of a firm's FSAs <sup>[14]</sup>.

In the digital age, internalization theory has been challenged as the digitalization strengthens for bundling the existing resources, and uses digitization to transform the digital resources and digital capabilities into digital assets to resolve internally and external conflicts based on FSAs <sup>[15]</sup>, suggesting an ecosystem-specific advantages (ESAs) to account for the bundling of co-specialized resources and value the co-creation.

Despite ESAs in the digital age, internalization theory remains to be the cornerstone for the expansion of the international firms, even under the emergence circumstances of the firm platform <sup>[15]</sup>. Development of the digital transformation calls for the tradeoff between internalization and quasi-internalization. Companies should acknowledge the difficulties of digital transformation, where this transformation increases the compatibility of their existing in the operating systems and responsiveness of local firms. When the needs and the demands of the physical infrastructure platform is higher, it is essential to transfer and codified the knowledge, to enhance the absorbing and innovative capabilities of the local firms. If the local, could not respond to the digitalized operations, MNEs' FSAs could lose their path towards the international market. Thus, it is suggested that, the quasi-internalization may be an optimal choice for the MNEs to build up their subsidiaries in those locations.

MNEs need to evaluate the transactional and the institutional advantage of the host country, based on the location bounded (LB) in the internalization theory. If a country has both high transactional and institutional advantages, this will be the best choice to cultivate the digital capability and core digit assets for MNEs. Additionally, if the country has low advantages in the term of transactional and institutional, MNEs should only internalize their activities in this country to minimize the potential risk, suggesting that MNEs could internalize in any markets. In contrast, if a country has one advantage while, it is unfavorable

condition in the other, MNEs will could internalize some advantages while externalize/quasi-internalize other disadvantage. For example, in countries with high LB transactional advantages and low LB institutional advantages, MNEs could consider having a network relation with the local firms, to utilize the existing hardware conditions, and protect themselves from institutional voids. Meanwhile, in the country with low LB transactional advantages and high LB institutional advantages, MNEs could choose a loosely coupled partnership, like joint venture with the local firms to cover the disadvantage as shown in the **Figure1**.



**Figure 1.** Internalization Theory Revised

### 3. Transaction-based competence of local organizations

In this section, the current IB theories which, are useful to explain the digital internationalization in a situation that some of the boundary conditions are modified or extended, by discussion on the internalization theory, which provides the solution to market and hierarchy <sup>[16]</sup> by focusing on the transaction-based competence of the local organizations in host countries, and how they could influence the position of subsidiary roles in the MNEs. This paper proposed two-dimensional framework to conceptualize the modified of the re-classification, that works in the process of digitalization.

The early views of the IB scholar, is that a firm exists as a means to reduce the transaction costs by performing internalization, and coordination of the imperfect markets extended to an international landscape to remain intact, or functioning even after digitalization <sup>[17]</sup>. For example, by updating the information and communication technology through applying the ICT in the same organization, can generate a unique ICT to communicate, and to transfer information within the organization, further can help to reduce the communication costs, and save the knowledge acquisition time, subsequently, improve the management of the organization, and promote the overall integration process.

At present, due to the internationalization of the digital age, the strategic position of the subsidiaries has undergone many changes. Digitalization has helped in reducing certain transaction costs of the MNEs, however, the degree of difficulty in the cross-border transactions is still varies. For example, some transactions even with the help of digital technology, the costs remain high, and cannot be eliminated, therefore, the role of the subsidiaries should be redefined, and the ability of the local organizations based on transactions can be a good indicator to judge the ability of the host countries to complete the transaction activities.

Digitization could bring unity within the company, further promoting the integrating of the

knowledge, establishment in the internal integration capability of the company, effectively communicating and coordinating the company's internal activities, resources (including knowledge) and capabilities, investment and goals [18]. We propose that in the context of digitalization, the ability of the local organizations based on transactions is composed of three factors which are market demand, digital technology and the infrastructure platform.

The market demand is one of the most stable market attributes, that affect a company's progress in the market, and affect the company's digital reform, therefore if the market demand is stronger, it is easier for the foreign MNEs to initiate the digital transformation. For example, a subsidiary of the German BMW in China has developed a system for an online test drive, where the users can use 3D projection technology to understand, and test drive the target models without the need to go to the physical stores, in a way promoting consumers' desire in improving their digital transformation process. Additionally, market demand has also promoted product differentiation to a greater extent, where companies are required to take actions to record, and responds to the demands based on the product differentiation, further enhancing the company's competitive advantage in producing different products based on the market demand.

Another deciding factor, is digital technology, which is an essential tool in the digitalization process. Although digitalization brings attractive prospects and benefits, digital reform relies on the usage of high-tech technologies. The advances of a subsidiary in the digital technology have affected the entry, and the international competitiveness, which are two other important factors in market structure, suggesting that digital technology and market demand are intertwined. The large market demands drive the improvement of the technology capabilities which are required for digitization, in return, these technological capabilities lead to increase and improve the market demand responses and effectiveness.

Lastly, the infrastructure platform, which is most likely a piece of hardware. Traditional technology development research, accept that knowledge can be transferred as long as it can be elaborated, codified, and understood. Even in countries with relatively backward technology, there is the possibility of the country to accept, understand, and digesting the knowledge from more developed countries via knowledge acquisition or knowledge procurement [19,10]. In return, the developing countries must have the infrastructure platform that is sufficient for software to analysis a large amount of data that is received from the developed countries. Although knowledge can be transferred, whether it can be applied in other environments is depending on the infrastructure platform of the host. A part of the three unique factors that consist of the transaction-based capabilities of the local organization, there is still a need for interaction to collectively determine each other task or capability. Countries with the strong capabilities, is more attractive to MNEs, to internalize transaction-based advantages in the global market.

#### **4. Institutional systems of the host country**

Institutional theory was first proposed by Meyer and Rowan [21,22], and its application has been extended into IB research fields, covering the studies on the merging and acquisition decisions [23] between MNEs and other fields [24,25]. Sociologists have found that the formal structure, as the basic requirement in the process of the organization's founding is by incorporating the blueprint for activities that includes the table of organization, goals, policies and rational theory on how, and what activities to be included [21].

Institutional theorists suggest that, the external institutions exert a significant influence on the organization's decision-making process, behaviors, and its structure. Early work in institutional theory recognized that, institutional environments are differed and varies by nation [21], therefore, to address the complexities of an organization that is faced when, operating in multiple the institutional environments, Rosenzweig and Singh [26] proposed the first conceptual framework describing the determinants, that is influencing the structures and the processes of MNEs. The embeddedness of MNEs in the multiple institutional environments has to be central to the application of the institutional theory to this special organizational form, particularly among the international management scholars [27]. Three pillars, which

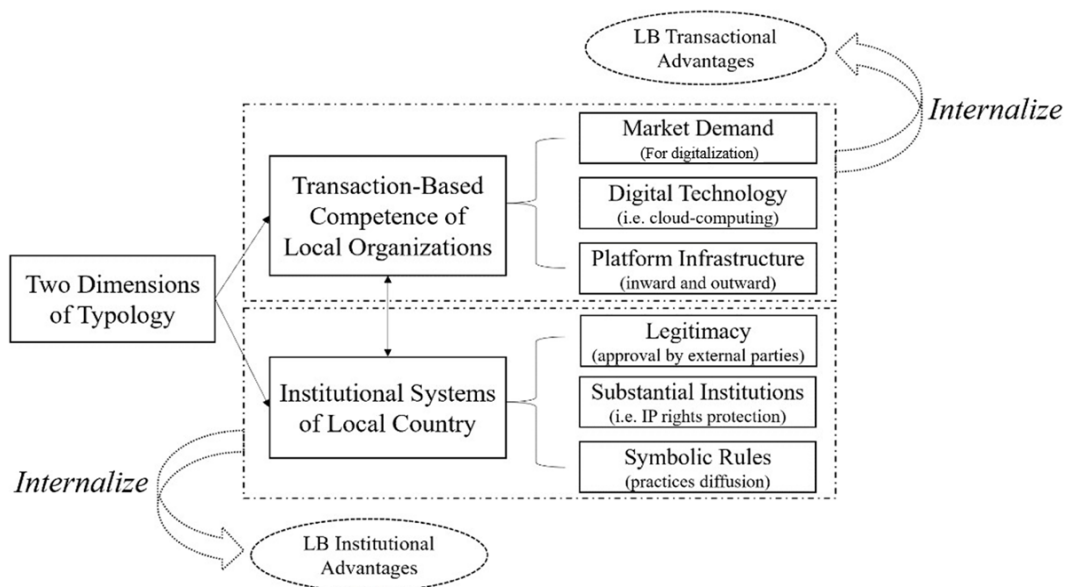
are cognitive, regulatory, and normative, which are proposed by Scott's classification in 2001 [28], has been used to frame our ideas. Some scholars have argued that, the three pillars are independent of each other [29], whereas some have also challenged this idea [30].

The first pillar, is called the cognitive pillar. The thinking patterns, and categories of the organizational decision makers are based on their perception of reality, therefore, the decisions and ideas that they make are based on the norms, values, beliefs, and the definition of the systems constructed by the certain societies. Therefore, when some host countries have values or norms which are different from the decision makers, some of the managers' faced difficulties in making the decisions, especially, the host countries with less acceptance of digitalization, may inhibit the entry of the MNEs to their country.

The second pillar, is called the regulatory pillar. The MNEs need to recognize and ensure the host country's behaviors. Additionally, when MNEs gains advantage on the weaker countries with less supervision, they need to consider the weak local intellectual property protection system, to avoid information leak or plagiarism in the host country.

Lastly, the normative pillar refers to those informal values, norms, and beliefs about human behavior that are socially accepted [30], which are manifested in the national culture of a host country [31], meaning that, the normative pillar represents the social consensus, and collective attitude towards certain things. As digitalization should be carried out by humans, the issues of how, and to what extent it can gain social support determines the effectiveness of its implementation in the host countries. Compared with transaction-based competence of the local organizations that determine whether, and how the transformation practice could be carried out appropriately, the institutional systems of host countries determine to what extent the practice could be carried out smoothly.

In summary, the institutional systems can be those that facilitate the implementation of the digitalization for MNEs in the host countries. They refer to an institution, because they can support the headway of the digitalization, such as intellectual property rights protection (substantial institutions) and social culture and cognition (symbolic rules). In most of the host countries, they do not have a well-established institutional system to entail the rules, norms, and a consensus, which can provide further instructions for the MNEs. As a result, there is an increase in uncertainty, for example, MNEs could risk cyber theft and privacy disclosures due to the lack of a strong, enforced mechanism on the intellectual property rights protection when sharing their own digital assets with the host countries. The framework of three pillars that proposed in the paper is presented in **Figure 2**.



**Figure 2.** Framework of this study

## 5. Interactive effects of reclassification of subsidiary roles

Next, we discuss on the interaction between the two dimensions, which are the transaction-based competence and complete institutional systems by focusing on interaction as a main point to our conceptual framework.

MNEs in countries with stronger trading capabilities, can make full use of the local technology and infrastructure platform to internalize their digital-related activities, from technology to management and organization, allowing the subsidiaries to learn, and gain advantage from the advanced technologies, further send then source information to their headquarters, this process is called the ‘knowledge source effect’ [19]. In countries with weaker capabilities, subsidiaries can play the role as a raw materials provider, which are required for the digital manufacturing including data, information, and consumer preferences. In developing countries, the subsidiaries still can gain sufficient benefits from the host be combining the benefits of digitalization with raw materials.

The institutional system also differs in different countries, where, some countries have established relatively complete institutional systems, such as strict regulations, mature practices, and socially recognized the support for digitalization. In these countries, although the company’s intellectual property rights are relatively protected, host countries, and MNEs still need to ensure, and reduce the degree of freedom to conduct experiments. In contrast, if the regulatory environment is loose and the administration turns a blind eye, MNEs have much more freedom, and opportunity to carry out digital transformation pilots in their subsidiaries. For example, China’s has relatively loose social regulations that have stimulated many local benefits, however, the corresponding company has to bear the risk of intellectual property leakage.

By combining these two dimensions, which are the transaction-based competence, and complete institutional systems, four different types of subsidiaries can be generated as described below.

(1) Strong transaction-based competence x complete institutional systems. The subsidiary roles in type I could be used as a “data center,” because they can build up the core competency, thus acting as a data center to coordinate, control, and communicate with others. Advanced countries, such as European countries, can easily integrate and incorporate digital transformation into business, which can then be applied in practice.

(2) Strong transaction-based competence x incomplete institutional systems. The subsidiary roles in type II could be as an “experimental field,” in which MNEs can encourage subsidiaries to launch more advanced innovations related to technology, managerial intentionality, and organization structure. An example of the type II subsidiaries, is China who has a strong market demand for digitalization, which can provide foreign entrance with a better platform to perform experiments. However, China is one of the emerging markets, therefore, its institutions, especially in regulatory and administrative support needs to be improved. Intellectual property rights protection in China, which is one of the significant examples used to illustrate the deficiency of the institutions in China, preventing the entry from abroad to carry out core competency development. Thus, it would be dangerous for foreign MNEs to set up their core data center in such countries, because core data are the key unique assets of the MNEs.

(3) Weak transaction-based competence x complete institutional systems. The subsidiary roles in type III could be used as an “implementation platform,” which is rarely found in any countries. Such weak transaction-based competency, can hardly bring any tight institutional regulations, or an effective social consensus, therefore only ideological were included. If set up subsidiaries in the countries classified as type III, MNEs can transfer the knowledge that is explored in the type II locations to type III locations to check the efficiency of the knowledge transfer.

(4) Weak transaction-based competence x incomplete institutional systems. The subsidiary roles in type IV could be used as a “processing factory,” to collect and process the raw materials, and to convert them into available information in the global value ring. These countries, mostly exist in the relatively less-developed

countries. **Table 1** illustrates the described points more clearly.

**Table 1.** Typology of the analytical framework

	Complete	Incomplete
<b>strong</b>	Type I: “Data Center” e.g., European countries	Type II: “Experimental Field” e.g., China, emerging markets
<b>weak</b>	Type III: “Implementation Platform” e.g., Rare, currently no country with obvious characteristics	Type IV: “Processing Factory” e.g., less-developed countries

**Table 2.** Application: entry modes

	Complete	Incomplete
<b>strong</b>	Type I: “Data Center” wholly owned	Type II: “Experimental Field” partially owned
<b>weak</b>	Type III: “Implementation Platform” partially owned	Type IV: “Processing Factory” wholly owned

**Table 3.** Application: Knowledge Transfer Activities

	Complete	Incomplete
<b>strong</b>	Type I: “Data Center” creation, knowledge sourcing	Type II: “Experimental Field” creation, knowledge sourcing
<b>weak</b>	Type III: “Implementation Platform” exploitation, knowledge accessing	Type IV: “Processing Factory” exploitation, knowledge accessing

## 6. Applications

Based on the analytical framework presented above, overseas subsidiaries were further subdivided into four categories as shown in the **Table 2** and **Table 3**, and define the movement as ‘processual positioning. This is an ex-ante requisite which need to be considered, when building overseas subsidiaries for MNEs. Digitalization contributes to the heterogeneities in the role among the host countries, especially, in the transaction-based competency of local organizations and the institutional systems of local countries. The two benefits of digitalization are to reduce the operational costs, and the feasibility to increase the knowledge transfer, therefore, by focusing on these issues, we proposed some deductive propositions as below to illustrate our implications.

Proposition 1: If subsidiaries are in countries in type I and IV, MNEs could be more likely to adopt wholly owned arrangements.

Proposition 2: If subsidiaries are in countries in type II and III, MNEs could be more likely to adopt partially owned arrangements.

Proposition 2a: Network governance is preferred in countries with type II.

Proposition 2b: Loosely-coupling governance is preferred in countries with type III.

In IB research, knowledge plays a vital role in determining the border decision of MNE, where the choice of transfer the knowledge to other corporations depends on the efficiency of the MNEs, rather than being related to abstract of market transactions <sup>[32]</sup>. The concept of a company specializing in knowledge

transfer, and reorganization is the basis of the evolutionary theory of multinational corporations.

Since international competition is more to technology-intensive, and the sources of knowledge are more dispersed, the capability of MNEs to handle, and enhance their innovative capabilities transnationally is becoming one of their competitive advantages [33,34]. Under the process of digitization, MNEs need to balance the creation of technologies in domestic with foreign subsidiaries, from the headquarters to the research and development, distribution to the subsidiaries for analysis, or to generate knowledge, and finally, transfer back the benefits to the headquarters. Different factors, trigger different knowledge transfer effects such as knowledge accessing, or knowledge sourcing [35]. MNEs main knowledge is obtained relatively from its foreign R&D affiliates, therefore, the headquarters needs to negotiate with the subsidiary to initiate the reverse of the knowledge flow. Some scholars have mentioned that, the process of knowledge accessing, is contrasted with the goal of the MNE, where the headquarters need to initiate the teaching of the knowledge flow [35], and the knowledge accessing is also regarded as a reverse innovation [36]. Host countries in any one of these four types of locations, can show different method, and acceptance of knowledge transfer. We argue that, whether a knowledge should be created, or exploited in host countries depends on the transaction-based competency of the local organizations, then the institutional systems of local countries, because the knowledge creation is an innovative activity. The development of the digital technology, inward, and outward infrastructure platform, and market demand for a digit as a resource element play an important role in determining which kinds of knowledge transfer should be carried out, then institutional arrangements, such as intellectual property rights protection and social approval. The rationale behind this idea is relatively more straightforward, compared to the one that is discussed in the entry mode choice section, and echoes the concept of ecosystem-specific advantages. Especially, the strong transaction-based competency of the local organization benefits from the development of digital capability within industrial organizations, and encourages organizations to share and communicate, which eventually makes it more plausible to achieve ecosystem integration. Hence, in those countries with relatively strong transaction-based competency, knowledge creation could be induced easily, compared to knowledge exploitation. The following propositions were proposed based on arguments between knowledge 'exploration' and 'exploitation'.

Proposition 3: Subsidiaries located in countries in type I and II would be more likely to be a 'knowledge-creation' base, and participate in more knowledge-sourcing activities.

Proposition 4: Subsidiaries located in countries in type III and IV would be more likely to be a 'knowledge-exploitation' base, and participate in more knowledge-accessing activities.

**Table 3** illustrates this implication of the proposed proposition. Host countries with a strong transaction-based competency of the local organizations would source the knowledge abroad, while weak transaction-based competency of the local organizations would access knowledge more easily under digitalization.

## 7. Discussion

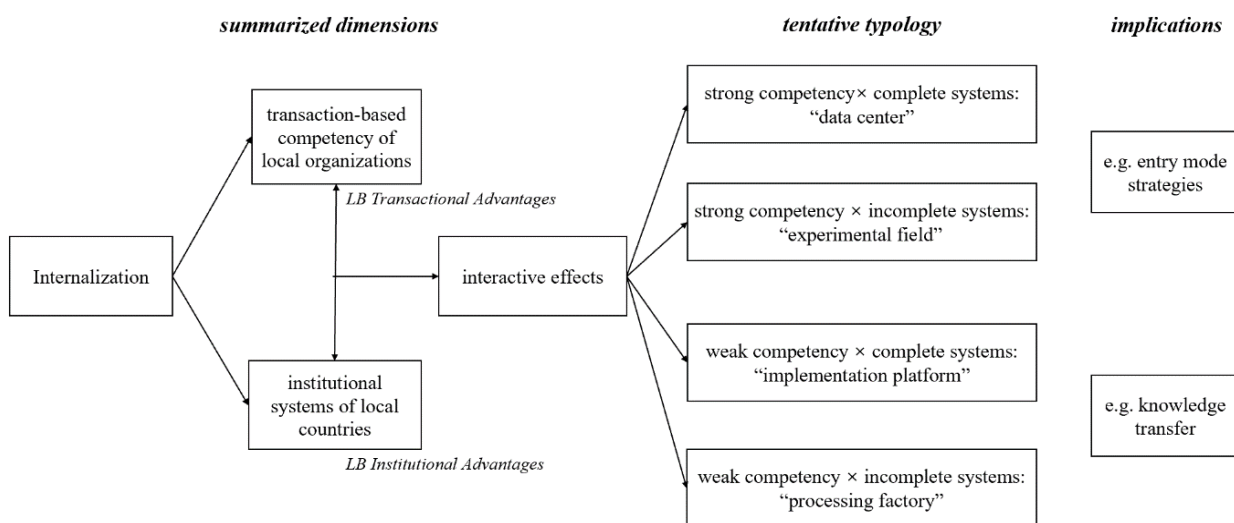
In this paper, the new classification of subsidiary roles when faced with the wave of digitalization is discussed. We extend the previous typology in MNEs, by focusing on the transaction-based competency of the local organizations, which further determines whether digitalization can be implemented across the different subsidiaries, and also elaborate the importance of institutional systems of local countries, which may determine the extent to implement of the digitalization.

Following internalization theory, we summarize the distinct features of studying evolutionary reclassification. The interaction between the two dimensions, generating a 2×2 matrix is presented in **Table 1**. This matrix stresses the idiosyncratic characteristics of the host countries. Under digitalization, one should not solely consider the effects of centralized control or institutional distance, as shown by previous



studies. The combined effort, contributes to a deep understanding of the relationship between digitalization and IB research. We summarized, our points in a schematic diagram as shown in the **Figure 3**, to make our ideas more comprehensive.

Our paper has three main contributions. Firstly, it is different from the existing research, where the status of the platform economy has been emphasized, and the focus was switched from the platform in the traditional IB research fields, for example, what factors are considered by MNEs in choosing their subsidiaries location. Although, the business world is changing rapidly as digital technologies, such as the internet and communication technologies, become faster, cheaper and more responsive to our needs, and these changes begin to bring an impact on the business and enterprises world-wide. We hope our efforts on studying and describing the relationship between digital changes, and IB research deserves attention, and expansion.



**Figure 3.** The effect of digitalization on reclassification of subsidiary roles in digitalized MNEs

Next, in this paper, we manage to answer the question of whether, existing theories could still be applied in the new settings, and to what extent they can be applied. There are many arguments on this issue, example are, Banalieva and Dhanaraj asserted in their study, that digitalization alters internalization theory’s assumptions about the nature of firm-specific assets, and the theory’s predictions about governance choices in cross-border transactions, and brings up a new advantage-the network advantage-which emerges as a distinct strategic resource that merit separation from asset-based advantages and transaction-based advantages, meanwhile Hennart <sup>[37]</sup>, proposed that network advantages are not a new category of firm-specific assets, and shows that the use of network advantages by digitalized service multinationals has been well explained in extant theory. Similarly, Singh and Kundu <sup>[38]</sup>, in their study, explained the growth of e-commerce corporations well, by extending and applying the eclectic paradigm. Their work extended the explanatory power of the eclectic paradigm not only by interpreting the paradigm in the context of e-business but also by including elements of network-based advantages to the OLI configuration. Thus, determining whether extant theories are appropriate is valuable. In this paper, we also try to modify and extend the existing conditions where extant theories can be applied. We explain that existing theories can be useful even though digitalization has changed the mode of production, the nature of competitive advantage, the mobility of assets, etc. Despite these changes, the issue of control still important, the agency is still socially situated and socially constituted <sup>[39]</sup>, and knowledge transfer still does matter.

Third, based on the theoretical framework, a new classification was developed. This system is consistent with the principles behind internalization theory. We summarize two key dimensions of the host

countries and derive a 2×2 matrix to explain our arguments. We show that under our framework, four types of host countries can be identified, which are “data centers, experimental fields, implementation platforms and, data processing factories.” This effort helps to identify what kinds of host countries could help MNEs to suitably locate their responsive subsidiaries. Moreover, we also discuss the implications of our typology. We list two examples, namely, entry mode choices, and knowledge transfer, which show their significant improvements with the assistance of digitalization, to examine the application of this framework and how it complicates the two research issues as it is generated by digitalization.

Although our research contributes to digitalization and IB, there are still some limitations. One might challenge our arguments as lacking in empirical evidence. Due to the shortage of quantitative data, we conducted a deductive study to illustrate our argument. Future research can use a bigger data to test our ideas. For example, the future research can investigate on how MNEs enter host countries through their subsidiaries, and whether their decisions depend on the two dimensions of the host countries. Second, research on to what extent the proposed typology could be applied in the emerging and advanced markets. Although we reveal that there are four types of host countries, when confronted with digitalization, we did not reveal what forces contribute to the structural process of transaction-based competency and institutional systems. Additionally, regarding the proceeding of staging, we did not give enough attention, on what conditions, and how the movement could be achieved, and what the proceedings indicate for countries. Lastly, the internationalization strategies could also contain aspects other than setting up subsidiaries, thus, in the future, researchers can test their research applicability, by utilizing this framework as a reference.

## **8. Conclusions**

In this article, we focus on the impact of the development of digitalization on the current transformation of MNEs. Compared with new companies in the digital age, we focused on the changes in the role of subsidiaries in MNEs, where we classified the functions of our subsidiaries according to the characteristics of the country where they are located, and given possible development directions. According to the inference of this article, high-tech industrial parks such as Silicon Valley can operate as data centers. A large number of high-tech enterprises conduct digital exchanges and R&D, and are protected by relevant local policies. In addition, some companies are also trying to enter China, and other countries to develop potential markets, and talents, however, limited due to relatively imperfect policies such as copyright law, patent and law, although the cost of research and development is relatively low. According to the functional division of labor in different regions, different information exchange methods are adopted to maximize the functions of subsidiaries. Although digitalization is a new thing, it is consistent with the previous theoretical mainstream thinking, therefore, by borrowing the main arguments of internalization theory, we can further strengthen our understanding of the characteristics of the host country in the digital age. Ultimately, the pace of globalization will be accelerated by the digitization of the world.

## **Disclosure statement**

The author declares no conflict of interest

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