

| **MSc** | International Business

Managerial Decision-Making in International Business: Effectual Logics in the Context of the MNC

Student: Frank Bijl de Vroe Master's Thesis tutors: Paloma Miravitlles & Fariza Achcaoucaou

Date: 03/07/2022

ABSTRACT

While effectual theory is well-known and widely used in the field of entrepreneurship, research on its application within the context of corporate entrepreneurship, and specifically in the Multinational Corporation (MNC), remains undeveloped. The present study attempts to extend current knowledge on how effectual theory applies to the subsidiary initiative literature. Particularly, it analyses how the subsidiary manager engages in managerial decision-making, and to what extent the process of initiative taking involves the use of effectual logics. This is examined by merging theoretical approaches from extant literature and evidence through an inductive case study. Findings suggest that subsidiary managers are indeed likely to use effectuation logics to implement subsidiary initiatives within the MNC, which is supported by an analysis of the five principles of effectuation within the context of a global firm's foreign subsidiary in Spain.

Keywords: Effectuation, entrepreneurship, subsidiary initiative, decision-making, subsidiary manager

The content of this document is the sole responsibility of the author, who declares that they have not committed plagiarism and that all references to the work of other authors have been correctly cited in the text.

INDEX

1. INT	ROD	DUCTION
2. LIT	ERA	TURE REVIEW
2.1	Sub	sidiary initiative5
2.2	The	subsidiary manager 10
2.3	Effe	ectuation11
2.4	Sub	sidiary managers and effectual logics15
2.4	.1	Bird-in-hand
2.4	.2	Affordable loss
2.4	.3	Crazy quilt
2.4	.4	Lemonade
2.4	.5	Pilot-in-the-plane
2. ME	THO	DOLOGY
2.1	Met	hod description
2.2	Cas	e description
3. RE	SEAF	RCH FINDINGS
3.1	Bird	l-in-hand
3.2	Affo	ordable loss
3.3	Cra	zy quilt
3.4	Len	nonade25
3.5	Pilo	t-in-the-plane
4. DIS	SCUS	SION AND CONCLUSION

1. INTRODUCTION

Multinational corporations, or MNCs, have gained significant attention in international business research in recent decades, and are defined as organisations that control production assets in more than three countries (Birkinshaw & Hood, 1998), whose purpose is to internalise international transactions (Hymer, 1960). A distinguishing characteristic of MNCs is their abundance of subsidiaries, which, through international sales, research and development, and manufacturing capabilities, are highly influential in creating firm-specific advantages within the MNC (Birkinshaw & Hood, 1998; Birkinshaw et al., 1998).

Entrepreneurial activities by subsidiaries, which can take a wide variety of forms (Birkinshaw, 1997; Delany, 2000), are widely known as subsidiary initiatives (Birkinshaw & Ridderstråle, 1999). In developing and implementing initiatives, subsidiaries can strengthen the MNC's competitive stance, local responsiveness, global integration and learning, and open the doors to potential new markets (Delany, 2000; Birkinshaw et al., 1998; Young et al., 2003; Birkinshaw & Fry, 1998). Throughout this process, subsidiary managers play a central role (Dörrenbacher and Geppert, 2010) and are responsible for understanding, developing, and leveraging subsidiary capabilities, while also integrating the subsidiary with the MNC, and working towards the MNC's universal strategy (Bartlett & Ghoshal, 2003; Raziq et al., 2020). However, despite the subsidiary's importance regarding subsidiary development (Raziq et al., 2003), as well as their impact on the MNC's overall performance (Hsu et al., 2013), research on subsidiary managers and their role in subsidiary initiatives has still been largely neglected.

Effectuation logic is a well-known theory developed by Sarasvathy (2001; 2008), that over the past 20 years has grown to be recognised as an important framework to understand the entrepreneurial decision-making process (Perry et al., 2012). Based on patterns drawn from a wealth of case studies, the effectual process is a cycle that assesses the entrepreneur's means, level of risk adversity, ability to gather resources, and level of uncertainty avoidance in order to determine how to navigate an ever-changing business terrain, and achieve control in an unknown future (Sarasvathy, 2001). While effectual theory has been thoroughly researched within the realm of entrepreneurship, its application within the context of the MNC still requires a deeper understanding. Specifically, research on the relationship between effectual theory, subsidiary initiative, and subsidiary managers still remains vastly undeveloped.

In light of the lack of research on both the importance of the subsidiary manager, as well as the application of effectual theory within the context of the MNC and its subsidiaries, this study aims to answer the research question of how the subsidiary manager engages in managerial decision-making, and to what extent the process of initiative taking involves the use of effectual logics. In order to achieve this objective, an inductive case study is performed, which offers insights into the dynamics of effectual logics and subsidiary manager initiative-taking within the subsidiary of a global MNC in Barcelona, Spain.

In doing so, this thesis aims to contribute not only by building on past research on subsidiary initiative, the subsidiary manager, and effectual theory, but also by facilitating knowledge accumulation in the future, thereby advancing academic understanding on the topics addressed. Additionally, this study addresses the United Nations Sustainable Development

Goal of Decent Work and Economic Growth, which aims to "promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all" (*Decent Work and Economic Growth*, 2022). As proposed by Sarasvathy (2001), researching effectual theory holds a variety of benefits for the firm, the industry, and the economy, which implies that while businesses can benefit from this research, governments can also leverage research on effectual theory to gain a deeper understanding on how managerial decision-making can be utilised to achieve their economic development goals, and use this knowledge to enable more effective macro-economic policy making. Especially now, considering the individual, firm-level, as well as government-level uncertainty instigated by both the COVID-19 pandemic and global political conflicts, improving our understanding on decision-making in the face of uncertainty is becoming increasingly important (*Decent Work and Economic Growth*, 2022; Anayi et al., 2022).

The work is structured in four sections. First, in the literature review section, previous research on subsidiary initiative, the subsidiary manager, and effectual logics is used to build a theoretical foundation before merging theories on subsidiary managers and effectual logics. Then, findings on an original case study are analysed to help formulate and support a proposition. Finally, findings from previous literature and the case study are contrasted in the discussion and conclusion, thereby opening the door for future research.

2. LITERATURE REVIEW

2.1 Subsidiary initiative

The implementation of strategic processes and initiatives has received considerable research attention in recent decades. Among these research topics is that of subsidiary initiative, which is defined as "entrepreneurial activities carried out by foreign owned subsidiaries in multinational corporations" (Birkinshaw and Ridderstråle, 1999, p. 149), "beginning with the identification of an opportunity and culminating in the commitment of resources to that opportunity" (Birkinshaw, 1997, p. 207). While past research commonly assumed that the parent company is the source of firm-specific advantages within the MNC, it appears that subsidiaries may carry greater responsibility in the formation and maintenance of these advantages than previously considered (Birkinshaw et al., 1998).

The term subsidiary initiative is in itself somewhat contradictory, considering that subsidiaries are by definition subordinates. This suggests that although subsidiaries are under the direct control of MNC corporate headquarters, they have recently gained more prominence and greater power in decision making. Traditionally speaking, subsidiaries were simply considered an instrument of the parent company tasked with adhering to the demands of the parent company, with the subsidiary's success measured by its ability to do so. The result was a centralised decision-making structure within the network of MNCs (Delany, 2000). Only in the 1980s did authors begin to question the MNCs structure as a hierarchy and propose that of a heterarchy as an alternative (Hedlund, 1986). With this organisational structure, the subsidiary would act less as a single centre and more as a contributor to the network of the MNC (Delany, 2000). This changing of perspectives can be attributed to several factors, including the emerging of research on the subsidiary's ability to contribute to, and lead innovation projects, the subsidiary's ability to provide outflows of valuable resources to other parties within the organisation, and the subsidiary's power to develop and produce products on a global scale (Birkinshaw et al., 1998).

Birkinshaw's (1997) work identifies two main types of subsidiary initiative (external and internal initiatives) which can be further subdivided into smaller categories, as illustrated in Figure 1 by Schmid et al. (2014).

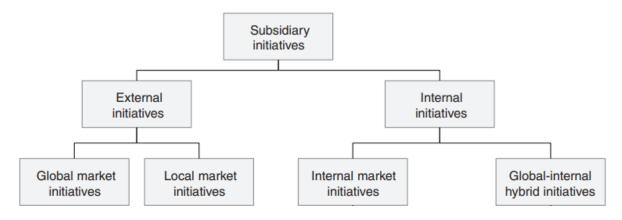


Figure 1. Birkinshaw's (1997) Categorisation of Subsidiary Initiatives Source: Adapted from Schmid et al. (2014).

External initiatives develop outside of the organisation and cultivate through connections with various external stakeholders, such as local customers and suppliers. These initiatives may take place on a local or on a global scale, and are contrasted in Table 1.

Table 1. Contrasting of Local and Global Market Initiatives

Local market initiatives	Global market initiatives
 Aim to develop new products, markets, or processes through opportunities identified in the subsidiary's local market. Are fuelled by local product and/or market needs and are applied globally. 	 Aim to develop on existing mandates in order to satisfy an international product or market opportunity. Are fuelled by unsatisfied product or market needs from suppliers and customers beyond a local scale.

Source: Adapted from Birkinshaw (1997).

Internal initiatives, on the other hand, develop inside the organisation and develop through connections between subsidiary managers and stakeholders internal to the MNC's system. Internal initiatives are generally developed with the aim of improving efficiency or rationalising at either a local or a global scale, within the boundaries of the MNC (Schmid et al., 2014), and are contrasted in Table 2.

Internal market initiatives	Global-internal hybrid initiatives
 Aim to redistribute existing corporate	 Aim to attract global investments
assets or resources in a more	that have already received corporate
efficient manner	support

Table 2. Contrasting of Internal and Global-Internal Initiatives

Source: Adapted from Birkinshaw (1997).

Alternatively, Delany (2000) proposes three different categories of subsidiary initiative, which are: domain developing initiatives, domain consolidating initiatives, and domain defending initiatives, which, with their sub categories, are presented in Figure 2. First, domain developing initiatives involve activities aimed at improving business or sales in the subsidiary's host country, acquiring new bids from head office, adding new activities to existing mandates, or persuading the parent to rationalise internal operations. Second, domain consolidating initiatives aim to increase competitive advantages, such as cost competitiveness, quality, and profitability, and increase subsidiary management's input in corporate decisions where value may be added. Finally, domain defending initiatives involve actions that allow subsidiary management to retain current mandates, increase influence to corporate headquarters, or find new corporate customers for their subsidiary's own capabilities.

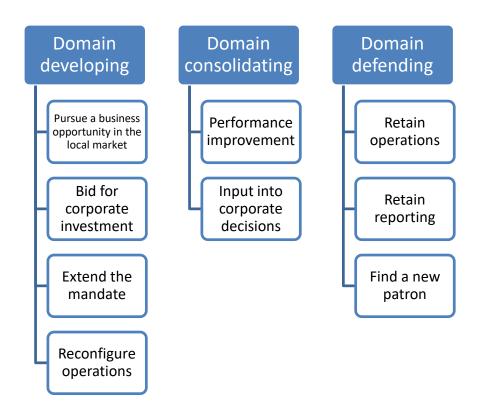


Figure 2. Delany's (2000) Three Types of Subsidiary Initiative and Their Sub-Categories Source: Adapted from Delany (2000).

The implementation and continuation of subsidiary initiative within the organisation will likely be confronted with a phenomenon known as the corporate immune system, which is resistance from the power bases of the organisation, such as the corporate headquarters. Such resistance can take various forms, such as political manoeuvring or restricting funding to the subsidiary, which cause hindrances to the development or implementation of initiatives (Birkinshaw & Ridderstråle, 1999). At the core of this lie two factors. First, the belief that subsidiary initiatives promise uncertain returns on investment, threaten the power of corporate headquarters, and challenge routines and behaviours that are institutionalised within the MNC. Second, the preference of organisations to reject a promising initiative than to admit a rogue initiative (Birkinshaw & Ridderstråle, 1999). In developing initiatives, subsidiaries run the risk of being perceived as uncontrollable, incompliant, and focused on subsidiary gain, rather than actually adding value to the corporate MNC (Delany, 2000), thereby minimising their level of integration within the organisation (Birkinshaw et al., 1998). As a result, the parent may find itself responding in a hostile and dominant manner in an effort to secure subsidiary compliance, consequently minimising the subsidiary's value added to the organisation (Delany, 2000). Additionally, authors highlight that subsidiary initiative is often perceived as subversive behaviour from the perspective of the parent company (Birkinshaw et al., 1998., Delany, 2000) as it is often initiated without explicit consent from the parent, thereby jeopardising the subsidiary-parent relationship (Ambos et al., 2010). The subsidiary manager's motives, and whether their goal is to promote personal interests, subsidiary interests, or parent company interests, are questioned (Birkinshaw et al., 1998), which may undermine subsidiary management's motivation to contribute to the organisation (Delany, 2000).

Therefore, in gaining acceptance of their initiatives, subsidiary managers need to direct headquarters' top management's attention to certain issues and improve their understanding, which is a concept known as issue selling (Ling et al., 2005). Subsidiary managers can approach this process using several different strategies. The first is packaging, which is how issues are framed or presented linguistically (Dutton & Ashford, 1993). Issues can, for example, be packaged as threats or opportunities, or calmly or with urgency (Dutton & Ashford, 1993; Hilgartner & Bosk, 1988). The second is related to selling channels, which are the means through which issues are sold. Issue selling can, for instance, take place publicly through staff meetings or monthly strategy meetings, or take place privately through one-onone conversations or private meetings (Dutton & Ashford, 1993). While public means may make this more difficult to gain top management's attention, they may also enhance the legitimacy of the issue (Dutton & Ashford, 1993; Dutton et al., 2001). The third is involvement, which regards who is involved in the issue selling process (Dutton & Ashford, 1993). While increasing the involvement toward an issue can increase input, it can also alter the direction of the issue (Kanter, 1983). The last is formality, which is whether or not the issue seller's methods follow official processes and procedures (Dutton & Ashford, 1993). Formal issue selling takes place through scheduling presentations and generating reports, whereas informal issue selling involves more casual personal interaction (Ling et al., 2005).

For the parent company, creativity and initiative taking are essential in overcoming the intensifying competition experienced by organisations today (Delany, 2000). Subsidiary initiative can satisfy this need by lubricating the internal market of the MNC, in the sense that pre-existing relationships (e.g. with suppliers), which may fulfil a basic need but add no additional value, are improved or substituted, thereby enhancing performance (Birkinshaw et al., 1998). Subsidiary initiative may also lead to improved local responsiveness of the MNC, as well as enhanced global integration and learning (Young et al., 2003). Furthermore, by embracing change, it may open doors to potential new markets (Birkinshaw & Fry, 1998). Hence, MNCs require subsidiaries that strive to add value to the organisation, and suffer negative consequences from subsidiaries that are merely compliant with the requirements of the parent company (Delany, 2000).

In addition to the benefits experienced by the parent company, subsidiaries themselves may benefit from their initiative as well. The subsidiary's resources and capabilities are best understood by the subsidiary and not the parent, which implies that subsidiary initiative provides subsidiaries with the opportunity to better leverage these resources and capabilities, thereby further driving initiative and enhancing their competitiveness both within the MNC and the external market (Birkinshaw et al., 1998). Additionally, taking initiative may develop the subsidiary's role within the organisation, increase its credibility from the perspective of the parent (Strutzenberger & Ambos, 2014), and increase subsidiary management's motivation to work towards the goals of the MNC and add value to it (Delany, 2000).

2.2The subsidiary manager

As previously mentioned, initiative is an indispensable component in the MNC's task to overcome the intensifying competition that it may face in the global market. In light of this, taking initiative is an essential process in subsidiaries themselves as well, in which the subsidiary manager plays a central role (Dörrenbacher and Geppert, 2010).

Subsidiary managers fall under the category of middle managers (Dutton & Ashford, 1993), who operate at the intermediate level of the corporate hierarchy (Uyterhoeven, 1972). A defining characteristic of subsidiary managers is that they supervise and are supervised by others (Dutton & Ashford, 1993), which implies that, although they have greater access to and control over resources than lower-level managers, decisions regarding these resources are often still made by top-level management (Izraeli, 1975).

Bartlett and Ghoshal (2003) argue that the subsidiary manager's primary role lies in listening and responding to the local market. In doing so, their responsibility spans beyond local customer needs, and also includes listening and responding to the requirements of local governments and actions of competitors. On the subject of initiative, it is the subsidiary manager's responsibility to understand, develop, and leverage subsidiary capabilities (Bartlett and Ghoshal, 2003), while also effectively integrating with the MNC (Raziq et al., 2020), and working towards the MNC's universal strategy (Bartlett and Ghoshal, 2003). Whether the subsidiary manager can effectively fulfil these roles may have a direct or indirect impact on subsidiary development (Raziq et al., 2003) and affect the MNC's overall performance (Hsu et al., 2013).

The subsidiary manager's ability to overcome functional, geographic, and organisational barriers (Tippmann et al., 2012), fuelled by their unique position within the organisational hierarchy that enables them to access information on various internal and external levels (Kostova & Roth, 2003; Tushman & Scanlan, 1981), allows them to access strategically important information, which positions them at the forefront of product development and global strategy (Bartlett and Ghoshal, 2003). This allows for an increase in both knowledge and opportunities that benefit both the subsidiary and the MNC (Sharkey Scott & Gibbons, 2009; Birkinshaw et al, 2005). Additionally, apart from driving initiative and creativity, subsidiary managers are fundamental in mitigating the negative effects of subsidiary remoteness, subsidiary management, and the managing of complex relationships between the subsidiary and the parent company (Raziq et al., 2020). Subsidiary managers are also necessary in driving the organisation's internationalisation and performance (Hsu et al., 2013), to the extent that their performance compensates for the costs of their salaries, which are generally high (Raziq et al., 2020).

In respect to the rationale of the subsidiary manager, there are several factors which determine their behaviour in initiative taking. While some studies argue that the subsidiary manager's nationality, and whether they are a parent-country national, host-country-national, or third-country national, are factors that influence their rationale in taking initiatives, other authors find this to be inconclusive (Raziq et al., 2020). Instead, Dörrenbacher and Geppert (2010), argue that the subsidiary manager's social-political positioning plays a greater role in this regard. This stance builds on the idea of nationality by also taking other social factors, such as career

aspirations (one's intentions to be active in a certain career field) and career orientation (one's pursuit of either advancing in an organisation, increasing knowledge and reputation, or increasing autonomy and innovation), into account as reasoning for the direction in which the subsidiary manager drives their initiatives.

Many variables come into play when it comes to the probability of a subsidiary manager's success in driving initiative, which is determined by an interplay of both external and internal factors. Dörrenbacher and Geppert (2010) identify external political factors, such as access to resources and skills to form alliances, as deciding factors that dictate the subsidiary manager's ability to actually realise these initiatives. One political factor which stands out is organisational structure, which is believed to be of the strongest influence when it comes to the subsidiary manager's ability to take initiative. More specifically, heterarchical organisational structures grant subsidiary managers increased freedom in decision making regarding resources and budgets, access to strategic information, and formal authority. This allows them to take initiatives, which drives entrepreneurialism within the subsidiary and increases the probability of the MNC adopting subsidiary initiatives (Williams & Lee, 2011). In addition to such external factors, internal factors such as the subsidiary manager's personal characteristics are of big influence as well. One of these characteristics is the subsidiary manager's experience, whether locally or internationally. Research indicates that there is a correlation between a subsidiary manager's level of experience and their ability to work autonomously and take initiatives. Managers who have greater international experience are also more likely to successfully integrate with the MNC and thereby increase productivity and subsidiary potential (Raziq et al., 2020). Additionally, the subsidiary manager's capability to think entrepreneurially plays an important role as well, as entrepreneurially-minded managers are more likely to be able to identify opportunities arising from the subsidiary's distinct context (Williams & Lee, 2011). Finally, subsidiary managers must have the social skills to develop initiatives within their own team and effectively communicate their importance through to executives in order for their initiative to be adopted by the MNC (Williams & Lee, 2011; Bartlett and Ghoshal, 2003).

2.3 Effectuation

In her research, Sarasvathy (2001) suggests that entrepreneurs following effectual logic may be more successful in their pursuits than those supplying causation logic. "Causation processes take a particular effect as given and focus on selecting between means to create that effect." On the other hand, "effectuation processes take a set of means as given and focus on selecting between possible effects that can be created with that set of means" (Sarasvathy, 2001, p. 245). More simply stated, while causation is based on the principle of prediction, effectuation is based on the idea of control.

These two forms of reasoning often intertwine in various contexts, including that of decision making. Additionally, effectuation processes are not necessarily more effective than those involving causation. Which form of reasoning is most applicable will depend entirely on the context in which it is being applied (Sarasvathy, 2001).

The anatomy of both causal and effectual decision making may be broken up into four components (goal, causes, constraints and means) that are ordered differently according to the decision-making logic. Causation starts with a specific goal that is to be achieved or a decision that is to be made. Next, various means or causes are identified that may be generated throughout the decision-making process. Then, constraints, whether imposed by environmental or non-environmental factors, on those means are considered. Finally, criteria for selecting the appropriate means, which are usually based on maximising the expected return in regard to the goal specified in the first component, are determined. Under the effectual process, however, similar components follow a different order. Instead, the first component of the effectual process involves a set of means that are generally determined by the personal characteristics or circumstances of the decision maker, which cannot be changed. Next, a set of outcomes that may result from the decision-making process is identified. Then, constraints on those outcomes, which may be imposed by limited means or environmental factors, are considered. Finally, criteria for selecting between the possible outcomes, which are usually determined by two factors: the loss the decision maker is willing to incur and the amount of risk they are willing to take on, are determined (Sarasvathy, 2001). It is this outward movement from means and causes towards effects that is responsible for the process to be referred to as effectuation (Dew et al., 2009). Table 3 offers an overview on the main differences between causation and effectuation logics.

Causation	Effectuation
 The outcome: Aids in selecting means to achieve a certain outcome. Is based on expected returns. Is effect dependent. The choice of means is determined by the decision maker's desired outcome. 	 The means or tools: Aid in selecting outcomes that can be achieved with the available means. Are based on affordable loss and acceptable risk. Are actor dependent. The choice of an outcome is driven by the actor's traits and abilities to find and use contingencies.
Exploiting knowledge.	Exploiting contingencies.
More common in nature.	More common in human action.
Focuses on the predictable aspects of an unknown future.	Focuses on the controllable aspects of an unknown future.
If we can predict the future, we can control it.	If we can control the future, we do not need to predict it.
Market share in existing markets as a result of competitive strategies.	New markets created as a result of alliances and other forms of cooperation.

Table 3. Comparing Characteristics Between Causation and Effectuation

Source: Adapted from Sarasvathy, 2001.

While Table 3 gives a broad overview of the various ways in which causal and effectual processes differ, this information is most effectively summarised according to Sarasvathy et al.'s (2014) five principles.

The first of the five principles is Bird-in-Hand, which argues that the effectual process is initiated with the entrepreneur's reflection on three means: their identity (answering the question: who am I?), their knowledge (what do I know?), and their networks (who do I know?). This reflection allows the entrepreneur to define what they can do, rather than focusing on what they should do (Sarasvathy et al., 2014), which has a positive impact on venture performance (Read et al., 2009).

The second principle is that of Affordable Loss. After considering their means, the entrepreneur needs to consider their investment. Effectual theory states that expert entrepreneurs focus on what they are willing to lose in their endeavours, rather than what their expected gains might be (Sarasvathy et al., 2014). Affordable loss thinking entails less planning (Sarasvathy et al., 2014) and can lead to higher process efficiency (Brettel et al., 2012).

The third principle is Crazy Quilt, which views partnerships as the primary method of expanding resources. Under the effectual approach, these partnerships are formed by rapid engagements with a variety of people already within the entrepreneur's network in an attempt to secure actual commitments to the venture, rather than by following a targeted and planned approach (Sarasvathy et al., 2014). Sarasvathy et al.'s Crazy Quilt principle aligns with the idea of resource-dependency theory, in that the external resource providers of an organisation determine the organisation's strategic choices (Pfeffer & Salancik, 1978).

The fourth principal is Lemonade, which states that effectual entrepreneurs control emerging situations by leveraging uncertainty and viewing surprises as opportunities, rather than threats (Sarasvathy et al., 2014). Avoiding a goal-oriented approach, and leveraging newly emerging opportunities, allows for unsuccessful experiments to be abandoned earlier (Chandler et al., 2011) and for research and development to increase (Brettel et al., 2012).

The final principal is called Pilot-in-the-Plane, which is built on the idea that effectual entrepreneurs transform and reshape the future, rather than try to predict it (Sarasvathy et al., 2014).

A combination of Sarasvathy et al.'s (2001), Sarasvathy's and Dew's (2005), and Sarasvathy et al.'s (2014) work offers a more detailed perspective on the effectual process and how these principles are chronologically brought into practice. First, the entrepreneur starts with a selfreflection (Bird-in-Hand), where they ask themselves who they are, what they know, and who they know, and thereby gain an oversight on their actual means. Depending on the specific context, this step may be performed on both the individual, as well as the firm level. Next, the entrepreneur assesses what they can do, given their actual means, as well as their level of affordable loss and acceptable risk (Affordable Loss), and thereby assess what hypothetical courses of action might be possible. Following this step, the entrepreneur begins their interactions with other stakeholders, which ultimately leads to effectual stakeholder commitments (Crazy Quilt), and it is at this point that two separate courses of action are possible (Lemonade). First, the entrepreneur may pursue new means that were generated by new effectual stakeholder commitments, which expands the cycle of the entrepreneur's resources and returns them to the first step, where they restart the process. Second, the entrepreneur may pursue new goals, where two alternatives are possible. The entrepreneur may encounter constraints on the transformation they are experiencing, bringing them back to step two, where they reassess their actual means, level of affordable loss and acceptable risk, and restart the cycle from there. Alternatively, if no constraints are encountered, they may enter a new market. Pilot-in-the-Plane is an over-arching principle that takes place throughout this whole process.

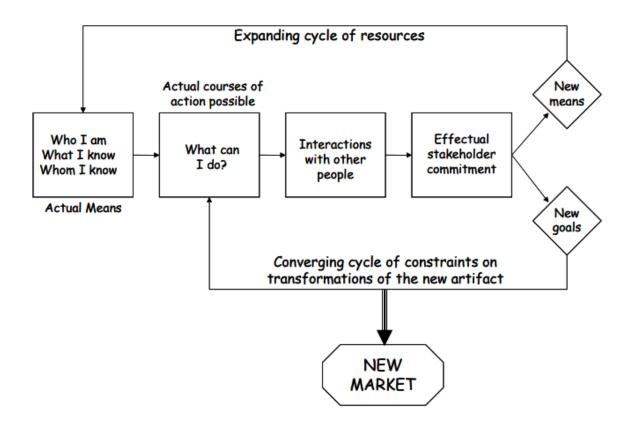


Figure 3. The Effectual Process

Source: From Sarasvathy & Dew (2005).

The process of causal decision making follows a logic based more on prediction (Dew et al., 2009), the scope of which is extremely limited (Sarasvathy & Dew, 2005). Under the effectual method, however, the decision maker enjoys more freedom which allows them to change their goals or reshape them over time, based on contingencies that may arise throughout the process (Sarasvathy, 2001).

2.4 Subsidiary managers and effectual logics

2.4.1 Bird-in-hand

In beginning the effectual process, the central actor, or in this case the subsidiary manager, considers three categories of means: who they are, what they know, and who they know (Sarasvathy et al., 2014). This principle focuses on how their identity and knowledge may be shaped and may impact the organisation, as well as how these characteristics influence their capability of forming a meaningful network.

Subsidiary team members that can develop and communicate capabilities and resources, such as engineers, are strategically important for the subsidiary (Chen & Klimoski, 2003) and essential in expanding subsidiary means (Khanagha et al., 2018). By building new competences, the subsidiary team can increase the likelihood of it receiving new mandates from the parent, even if outside the subsidiary's original competence base, as demonstrating capacity to develop competences increases the parent's trust in the subsidiary (Delany, 2000). In maximising the productivity of such team members, subsidiary managers play an important role. For example, the subsidiary manager's personal characteristics, such as competence and discipline, have a significant impact on the productivity of subsidiary teams and their willingness to invest their time, knowledge, and effort toward the goals of the subsidiary (Kenny et al., 2018).

Subsidiary managers with greater MNC experience can also more effectively communicate and negotiate with other internal stakeholders, such as top level management, as well as external stakeholders, such as customers or suppliers. This is because they have a broader understanding of the MNC's internal and external dynamics, and therefore have greater leverage when negotiating (Nuruzzaman et al., 2017). Building on experience, success in current or previous roles can be an important factor for subsidiary managers as well. Past success acts as a tool to enhance legitimacy of subsidiary activities (Gorgijevski & Andrews, 2021), as headquarter managers, through their limited knowledge of, and limited attention to, the subsidiary, make resource allocation decisions on subsidiary managers' track records instead (Bower, 1970).

Furthermore, strong interpersonal skills allow subsidiary managers to effectively communicate their strengths and use them to build, and utilise, meaningful relationships in a greater network, which is essential in driving initiatives. These relationships may, for example, refer to connections with market decision makers, whether internal or external to the MNC (Delany, 2000; Tippmann et al., 2012). This effect is further magnified among subsidiary managers with a strong sense of confidence, who can use this trait to their advantage by increasing their perceived validity, and leveraging their ability to encourage and secure stakeholder commitments, such as additional funding from the parent (Aldrich & Fiol, 1994; Kenny et al., 2018).

Finally, subsidiary managers with a proactive mindset, rather than a compliant one, are more successful in understanding local, global, and internal markets, as it gives subsidiary managers a greater overview of what their available means are (Delany, 2000).

2.4.2 Affordable loss

In considering the funding and implementation of new initiatives, subsidiary managers consider how much one subsidiary could afford to lose through an initiative, rather than its expected return (Parker et al., 2019). Rather than referring directly to capital, the consideration of potential losses can take several forms, as the subsidiary manager has a multitude of responsibilities. First, subsidiary managers' decisions may be geared toward how much of their time and reputation they are willing to lose in the development of initiatives that may eventually get rejected by top management (Parker et al., 2019), lead to a loss in autonomy, and could result in their dismissal (Dörrenbächer & Gammelgaard, 2011).

Second, subsidiary managers' decisions may revolve around whether or not a certain action could result in the loss of mandates, which are the most prominent manifestation of subsidiary responsibilities (Rugman et al., 2011) and the most important mechanism in subsidiary development (Gillmore, 2022). A loss of mandates could occur if the subsidiary is unable to implement mandates or compete successfully in its local market (Gillmore, 2022), which could result in either a full or a partial loss of the subsidiary's value chain activities (Birkinshaw, 1996).

Third, subsidiary managers' decisions can focus on whether certain decisions or actions may lead to subsidiary divestment. Should a subsidiary manager be unable to navigate hostile host market conditions, such as changes in exchanges, demand, or institutions, be unable to find new business opportunities, or become uncontrollable, then the likelihood of the MNC divesting the subsidiary increases (Cuypers & Martin, 2010; Benito, 2005; Dörrenbächer & Gammelgaard, 2011).

Finally, and building on the last point, is the potential loss of jobs resulting from divestment. Should an initiative fail and the subsidiary face closure, subsidiary staff, including the subsidiary manger, risk losing their jobs. If those staff members have MNC-specific knowledge, it may be difficult for them to find work, or work at equal wages, after subsidiary closure (Sofka et al., 2014). This is because the hiring firm cannot expect to benefit from the previous knowledge of a new employee in the context of the new organisation (Dokko & Rosenkopf, 2010).

It is worth noting, however, that the affordable loss principle is not always adhered to. One of the determining factors for whether or not this might be the case is whether the subsidiary is facing uncertainties. In the face of high uncertainty, organisations are significantly more likely to operate according to the affordable loss principle, as their future returns are difficult or impossible to accurately forecast. In contrast, organisations that face low levels of uncertainty are far more likely to adopt a causal approach based on expected returns than an approach based on affordable loss (in some cases over 15 times more likely), as their idea of their expected returns is trusted to be accurate (Dash & Ranjan, 2019).

Furthermore, apart from considering to what extent the company can afford to lose, managers of established organisations may also take into account to what extent the resources that were not lost in the failure of an initiative can be redeployed into other branches of the organisation, thereby reducing the uncertainty associated with investing in initiatives of which the returns are unclear (Lieberman et al., 2017).

2.4.3 Crazy quilt

In the expansion of their knowledge in order to pursue initiatives, subsidiary managers may bridge functional, geographic, and organisational boundaries (Tippmann et al., 2012) by

searching for information from both within the MNC network (Kostova & Roth, 2003), as well as outside of it (Tushman & Scanlan, 1981). Their ability to do this effectively increases access to knowledge and opportunities for both the subsidiary (Sharkey Scott & Gibbons, 2009) and the MNC (Birkinshaw et al., 2005), which forms a competitive advantage for both parties (Figueiredo, 2011; Frost et al., 2002).

As for internal actors, subsidiary managers are likely to have peers, seniors, and other colleagues spread throughout the MNC network (Tippmann et al., 2012). Each of these players has a different strategic role within the organisation (Achcaoucaou et al., 2014), which gives subsidiary managers access to a wide variety of knowledge (Tippmann et al., 2012). As for external actors, subsidiaries can improve their innovative performance through their ability to effectively and frequently form partnerships with players located in their local, external context (Achcaoucaou et al., 2014). Through these external actors, the subsidiary can draw on new knowledge, which can play an important role in developing the subsidiary's capabilities to engage in technological and organisational innovation and helps the subsidiary to contribute to its internal network as well (Andersson et al., 2002).

2.4.4 Lemonade

Leveraging uncertainties can help MNCs and their subsidiaries navigate disruptions that they may face in their respective environments (Khanagha et al., 2018), which can be caused by a variety of factors, including institutional and economic conditions (Del Sol & Kogan, 2007), as well as home-market instability and a shortage of resources (Dikova & Veselova, 2020).

Subsidiary management themselves may face uncertainty as well, specifically in resource allocation and market decisions from the parent company (Martin et al., 2015). This is because subsidiaries that face less strategic autonomy are confronted with risks posed by bureaucratic decision-making processes from the headquarter's end (Kawai & Strange, 2014). However, subsidiary managers who embrace uncertainty as an opportunity to learn, and are willing to interpret the varying aspects of complex situations, are more likely to successfully leverage uncertainty (Beck & Plowman, 2009).

With Ericsson's case as an example, Khanagha et al. (2018) provide evidence for how exactly the lemonade principle comes into practice in the context of the MNC and its subsidiaries. Ericsson started as a small mechanical workshop in 1876 and grew to hold 35% of global market share as one of the world's leading telecommunication companies by 2012. However, with technological advancements reducing the value and life cycles of technological hardware, Ericsson was unable to compete with low-cost competitors on price. While disruptive to Ericsson's core business, the rise of cloud technologies provided a solution to these issues, and in navigating these disruptions, Ericsson's subsidiaries played a vital role. Ericsson's subsidiaries experimented with lead customers who were smaller in size and willing to afford losses associated with launching, while also taking expected returns of being the first to differentiate into account. When it comes to leveraging uncertainties within the context of an MNC, Ericsson's case provides several valuable lessons. First, the subsidiary's ability to identify and select the right customer to test initiatives with is crucial in determining their ability

to continue to drive initiatives and leverage uncertainty. This is because the success of early initiatives determines the subsidiary's ability to attract bigger customers, who are vital to the MNCs survival, in the future (Khanagha et al., 2018). Second, when leveraging uncertainty in accordance to the need of multiple stakeholders, even large organisations may be forced to take actions that are not in alignment with their official stance (Khanagha et al., 2018). Finally, Ericsson's case demonstrates that the leveraging of one uncertainty can lead to the emerging of unexpected opportunities. Such opportunities can generally not be anticipated or planned for, as they require in-depth knowledge on complex factors (Donaldson, 2001) and are therefore best found by adapting to the changing environment (Morton & Hu, 2008). Alternatively, the MNC can make decisions based on subsidiary interpretations, given that subsidiary management is well informed (Khanagha et al., 2018)

2.4.5 Pilot-in-the-plane

Through their intentional attitude, subsidiary managers play a significant role in determining the shape of things to come. Subsidiary managers with the intent to develop the subsidiary, and develop both their role and surrounding opportunities, have a large impact on subsidiary welfare and development. This same intent is also responsible for the subsidiary manager's willingness to engage in knowledge creation and partnering with various stakeholders early in the subsidiary's life. Subsidiary managers that have previously had strong intentions to take initiatives try to develop resources and enhance power to make the MNC dependent on them and in this way, they can control part of its future (Ryan et al., 2018).

Through the complexities associated with the global structure of the MNC, headquarters' control over subsidiaries becomes more of a challenge. Instead of focusing on one single unit, headquarters need to deal with a variety of different structures and processes, which differ from subsidiary to subsidiary (Rosenzweig & Singh, 1991; Ghoshal & Westney, 1993). One major factor in this, where the subsidiary manager plays an important role (Bartlett, 1985), is the subsidiary's dependence on resources needed for operations. While headquarters can offer resources such as capital, the subsidiary's critical resources come from the subsidiary's relationships with customers, suppliers, and other stakeholders (Andersson & Forsgren, 1996). These external resources are difficult for headquarters to secure, and shift the dependence of the subsidiary on the headquarters, to dependence of the headquarters on the subsidiary (Andersson & Forgren, 1996), as headquarters influence is perceived as less beneficial (Foss et al., 2012).

The above can be demonstrated through the case of Volkwagen, when they were experiencing a decrease in car sales for the first time in two decades (Metz & Prange, 2021). During this time, Volkswagen's CEO, Herbert Diess, announced that "the future of the Volkswagen Group will be decided in the Chinese market", and that Volkswagen Group "will become more Chinese" (Erling, 2019). In this case, Volkswagen is an example of how subsidiaries can transform from merely being an implementer of strategies, to being in control of the future of the entire MNC, where the headquarters becomes dependent on the subsidiary, instead of vice versa (Metz & Prange, 2021). Dörrenbächer and Gammelgaard (2011) call this resource-dependency power, which can unfold when a subsidiary gains the ability to leverage

opportunities that emerge in their local environment. In their research, Dörrenbächer and Gammelgaard (2011) identify three more forms of subsidiary power, each of which is described below.

First, micro-political bargaining power arises when subsidiaries successfully influence their headquarters via their own initiatives, issue selling, manipulative behaviour, and politics around strategic information (Surlemont, 1998). Second, systemic power occurs when a subsidiary specialises in the provision of a certain product or service for either all parts, or the majority of the MNC's internal network. Subsidiaries always have systemic power if they hold labour that is essential for the functioning of the MNC's value chain (Dörrenbächer and Gammelgaard, 2011). Finally, subsidiaries hold institutional power if the institutional structures within the subsidiary's host countries are a source of strong, sustained power. Institutional power is different to resource-dependency power in the sense that, in the case of institutional power, there is a lack of deep economic or societal embeddedness (Dörrenbächer and Gammelgaard, 2011).

2. METHODOLOGY

2.1 Method description

To explore the use of effectual logics by subsidiary managers within MNCs, an inductive case study was used as an approach to build a deeper understanding on how subsidiary managers make decisions and drive initiatives according to Sarasvathy et al.'s (2014) five principles. This approach was considered most appropriate as case-oriented processes are especially appropriate in new topic areas (Eisenhardt, 1989).

Due to time constraints, the sample size was limited to one individual, who had been selected based on several criteria. The first was that this person should be a subsidiary manager within an MNC and should fit the definition of a middle manager, meaning that they are supervised by others while also supervising others (Dutton & Ashford, 1993; Uyterhoeven, 1972). This would ensure that they have the authority to make decisions but lack full access to resources (Izraeli, 1975). Secondly, the subsidiary manager should be experienced in their role, as experienced subsidiary managers often have a broader understanding of the MNC's internal and external dynamics (Nuruzzaman et al., 2019). Third, the subsidiary manager would preferably be a local, rather than an expatriate manager from headquarters, as expatriate managers can be a control mechanism from the parent (Beechler, 1990), which can affect subsidiary autonomy and its ability to implement initiatives (Chatzopoulou et al., 2021). Finally, it was important that the individual could communicate in English and was available within short notice. Criteria on specific organisations, industries, or countries were not considered.

Both the author's and their supervisors' networks were leveraged in order to identify prospects, who were contacted via email, LinkedIn, and Whatsapp. Upon expression of interest, prospects were introduced to the research topic and given minimal information on the theory in order to ensure that responses would be as spontaneous and open as possible. Only one interview was conducted, which took place online for a duration of one and a half hours, and was held by one interviewer and one interviewee. Prior research on the interviewee had been conducted, and an interview structure was constructed based on Sarasvathy et al.'s (2014) principles. Sticking to this structure would facilitate knowledge accumulation and make it easier to advance academic understanding of effecuation in the future (Perry et al., 2012). First, the interviewee was given the freedom to explain the nature of their company, the role of the subsidiary within the organisation, and their role as a manager within the subsidiary. Then, the concept of effectuation was introduced by the interviewer, after which Sarasvathy et al.'s (2014) five principles were addressed one by one, and the interviewee was given the freedom to share their experiences throughout the conversation. Pre-prepared questions were used to keep the interviewee's responses on-topic, and improvised questions were used to gain more detail on relevant material.

The interview took place on Zoom and was recorded using a mobile phone. Next, the interview was transcribed using online software and then manually edited to remove errors. While the interview had taken place in order of Sarasvathy et al.'s (2014) five principles, some examples given in response to one principle were also relevant to other principles. For this reason, the

author followed an inductive coding procedure where quotes were categorised according to the five principles, and analysis was based on that information.

2.2 Case description

Founded in 1863, ABC is a life sciences company specialising in healthcare and agriculture. The company is represented globally in 83 countries with a total of close to 100,000 employees. Within Europe, the biggest markets (UK, Germany, France, Italy, and Spain) are individual, and the remaining countries are part of clusters (EMEA1, EMEA2, etc.).

The Spanish market is divided into three divisions: pharmaceuticals, consumer health, and crop science. Spanish subsidiaries focus on marketing, sales, and medical services, with enabling functions such as IT and legal. The only department not present in Spain is research and development.

ABC has a global division, as well as local subsidiaries. While ABC's organisational structure was previously hierarchical, organisational change led to a flatter organisational structure, where different squads consisting of individuals from various departments and hierarchical levels were formed. This meant that the organisation did not have a vertical structure, but a "cross-way" structure. This structure also meant that people working for the global division could be working locally, as was the case in Spain.

The Barcelona subsidiary has over 600 employees and is ABC's headquarters in the Iberia region, as well as the headquarters of pharmaceutical and consumer health divisions within the region.

At the time of the interview, the interviewee was a digital lead, responsible for accelerating digital transformation, as well as an innovation lead, with 14 years of experience working for ABC. They were a local to the Barcelona subsidiary, but had also worked for the global team by giving service to Spain.

3. RESEARCH FINDINGS

3.1 Bird-in-hand

The findings suggest that there are several means that are essential for subsidiary managers in driving initiatives. First, subsidiary managers require a deep knowledge of the organisation, both in regard to their team's capabilities, as well as the capabilities and actions of other subsidiaries within the MNC. This grants them an overview of the organisation that they can use in their decision making. Subsidiary managers with greater experience have deeper knowledge on the organisation, stronger communication skills, and a stronger network. According to the interviewee, to carry out successful subsidiary initiatives "it's important to connect the dots, and connect the different programs and different projects that are going on in the organisation at different levels". Subsidiary managers require strong communication skills, in which they are empathetic toward others, and thereby understand their needs and respond to them effectively. Strong communication skills encourage information sharing between subsidiaries and help subsidiary managers in persuading stakeholders of new initiatives. Through their communication skills, subsidiary managers can also build and benefit from an extensive network that can help them bring their ideas to life. In the words of the interviewee, "Communication, but with empathy. So empathy, but thinking in the way, of course, [to] understand others, [and] their situation. Then you could influence them better." "In the end we are humans and everything is relying [on] relationships between us". Moreover, subsidiary managers need resilience in order to be able to resist pressures from both external actors and headquarters, persevere throughout the process of driving initiatives, and deal with many stakeholders, whose opinions are subject to constant change. In that sense, the interviewee posits:

"I always say that we have a hamburger effect…because you have to harmonise the local requirements with local needs, but also with the global guidelines…So it's very important to be resilient"

"One of the members of the board told [us that] moving a car two degrees is easy, [but] moving two degrees an aircraft is a totally different thing. That's what happened to us. It's not easy to do something, because a lot of people [get] bored, [there are] a lot of people to convince, [and] a lot of people to communicate [with]"

3.2 Affordable loss

Subsidiary managers make decisions in regard to the affordable loss principle, which is generally calculated as a loss of reputation, whether internal or external, and how that can result in financial loss in the form of legal fees. *"There is a lot of image loss. It's not only about money. Sometimes it's more, but [in] the end it's money" says the interviewee.* The different

departments within the same organisation calculate affordable loss differently. For example, while innovation teams may be more focused on a loss of internal reputation, legal and regulatory teams may be more focused on loss of external reputation: "[For] departments like legal or regulatory, [it's] the loss of reputation [to] the company, that there will be a damage in that sense". Furthermore, organisational changes can influence the dynamics of affordable loss. Organisations with heterarchical structures calculate affordable loss as a loss of reputation from outside the organisation, because there is no governing body within the organisation to lose reputation from. The interviewee summarises this as follows:

"[In the past], someone, maybe [from] global, or someone from my organisation that is higher than me, would say to [me that I am] not allowed to do that... But this is something that is changing. For example, with this creation of squads, that at the end, all the team is autonomous, and all the teams are [on] the same level"

Finally, the interview also provided insight into how affordable loss thinking can be difficult to implement, especially in a rapidly developing environment, which may prevent subsidiaries from pursuing certain initiatives. "Sometimes the regulation is not following as fast as [the development is] progressing..., and then if there is a grey zone, the decision is not to go"

3.3 Crazy quilt

The interviewee highlighted the importance of personal networks to push initiatives forward within the MNC. They talked about "hidden networks", which were described as the relationships formed throughout a person's career without the intent of being leveraged, and were argued to be what really helps progress the development of ideas and projects. These are, for example, contacts made during the entrepreneur's earlier career, who are later promoted into roles that help the entrepreneur push their ideas forward. They posited that "hidden networks are what really help you in progressing some projects...You can address to these people...and say: How are you? Do you remember me? We are working on that, and then you get help immediately". Moreover, they also provided further evidence of the subsidiary manager's positioning between the local and global, external and internal markets, which not only allows them to draw resources from various areas, but also enables them to prevent a duplication of initiatives that are already being developed elsewhere. "You have to harmonise the local requirements with local needs, but also with the global guidelines". In that sense, the creation of working groups from various levels of the organisation's hierarchy, as well as open office spaces, can change the dynamics of networks and make resources easier to access. The interviewee said that, as a result of the MNC's structural changes, "decisions are faster than in the past for sure, and in terms of communication, it's easier because [in] the end, you have all the relevant people in the project"

3.4 Lemonade

Established organisations are actively working to leverage uncertainties in several ways. The interviewee even went as far as to say that reacting to changes was a main focus in their organisation. The first example revealed by the case study was that, by hiring younger employees, organisations are building teams that are more willing to innovate in the face of uncertainty. The interviewee specifically posited that "with the cooperation of younger people. this is also helping us to change because they have a different mindset. They want to do new things and experiment". Furthermore, the implementation of procedural changes can be used to enhance flexibility and leverage uncertainty as well. For example, organisations may take a more customer-centric approach by shortening planning horizons for projects. This allows them to not only learn from campaigns and implement changes in the future, but also allows them to monitor changes in customers' demands and respond accordingly. In that sense, the interviewee pointed out that: "[in the past], you planned a project and you were building something for two years...and then what happened [was] that what [you were] delivering [was] not the need of the customer. Yes, two years ago, but not now, right now". "We are iterating and always double checking with our customers..., so we are thinking as we are doing. This is more or less the ideal philosophy"

It is worth noting that ABC does not only behave in this way due to changes caused by the COVID-19 pandemic, but due to change in general. "Because at the end, hospitals are changing, your stakeholders are changing, [and] regulations are changing, so you have to react quickly [to] these changes to make them an opportunity and not just the opposite"

3.5 Pilot-in-the-plane

While ABC's subsidiary managers may not always have full access to the resources or authority required to execute initiatives, they actively seek to take control in determining the future of the Spanish subsidiary, or already have control to a certain degree. The interviewee's first comment regarding this principle was that self-imposed barriers of the subsidiary manager can be mistaken for headquarters' resistance, and that subsidiary managers therefore may have more control than they realise. In the words of the interviewee, "Because what I saw and I learned from many years is that you put yourself the barriers sometimes"., Moreover, similar to the case study on Volkswagen (Metz & Prange, 2021), ABC demonstrated a shift in headquarters' mentality from believing that they are the main brain and decision maker within the organisation, to the belief that subsidiaries most effectively understand their own resources and the market. In this process, subsidiaries are granted an increased amount of autonomy in decision making. Additionally, organisational changes, such as the cross-hierarchical collaborations mentioned earlier, can help encourage autonomy in decision making, as a flatter organisational structure eliminates the need to ask for a manager's permission. In that sense, the interviewee posited that under flatter organisational structures, "you're allowed to make your opinion and make a decision, because you are also autonomous and you are in the same level".

Finally, a longer example explained by the interviewee further illustrates how subsidiaries can play a significant role in steering the direction of the organisation and increase their influence both internally and externally. Through a bottom-up initiative by the Spanish subsidiary, innovation hot spots were established globally which specialised in local internal, and in some cases local external, strengths. In doing so, those subsidiaries would become references for innovation for both internal and external stakeholders. For example, the UK was the leader for innovation regarding radiology and artificial intelligence, whereas other regions specialised in other areas. In implementing the initiative, a group consisting of people from various levels within the MNC was formed. They decided what people needed to be involved, decided on their governance model, services, etc., and once they reached an agreement, started to communicate to different stakeholders. However, it was emphasised that the team did not ask for permission, but rather communicated their intent and discussed how they could collaborate with stakeholders, such as their global division. Their perspective on initiative taking was that you need to decide on who you need to collaborate with and then establish a relationship with those parties in order to be successful.

All in all, in the light of this explorative case, we observe that there is evidence that insinuates that subsidiary managers are likely to use effectuation logics in accordance to Sarasvathy et al.'s (2014) five principles to develop and implement subsidiary initiatives within the MNC. Hence, we make the following proposition:

Proposition: "Subsidiary managers are likely to use effectuation logic to implement subsidiary initiatives within the MNC".

4. DISCUSSION AND CONCLUSION

Sarasvathy et al.'s (2014) research assisted in developing a broader and deeper understanding on how entrepreneurs approach decision making. Further research provided evidence for how the principles of effectuation may manifest in subsidiary manager behaviour in the context of the MNC. In gaining a deeper understanding on how effectual thinking takes place in the subsidiary level, an interview was conducted, of which the findings are summarised in Table 4.

Principle		Lessons Learned	earned		
Bird-in-Hand (Subsidiary managers require)	Subsidiary/MNC knowledge.	Strong communication skills.	Flexibility.	Resilience.	Experience.
Affordable	Is calculated in terms of:	of:	Affordable loss focus:	ss focus:	
S S S S S S S S S S S S S S S S S S S	- Reputation (Internal and external). - Capital (e.g. legal fees).	al and external). fees).	- Hierarchies: In headquarters). - Heterarchies: I	Hierarchies: Internal (e.g. headquarters). Heterarchies: External (e.g. media).	.g. (e.g. media).
Crazy Quilt	Key internal stakeholders come from hidden networks.	Subsidiary managers can access local, global, and external stakeholders.	rs can , and rs.	Hetararchies facilitate easier access to resources.	facilitate s to
Lemonade	Younger teams are more willing to experiment.	ore willing to	Customer-or shorter planr quicker resp	Customer-oriented approaches and shorter planning horizons allow for quicker responses to change.	ches and allow for ge.
Pilot-in-the- Plane	Self-imposed barriers are sometimes mistaken for headquarters' resistance	Subsidiaries understand their own resources and capabilities best.	tand their capabilities	Heterarchies positively influence subsidiary influence and power.	positively sidiary I power.

Table 4. Summary of Case Study Findings

Source: Own elaboration based on case study findings.

Regarding the Bird-in-Hand principle, findings from the case study suggest that extensive subsidiary and MNC knowledge, strong communication skills, flexibility, resilience, and experience all play a significant part in the subsidiary manager's ability to drive subsidiary initiatives. While several previous studies had highlighted knowledge, communication skills, and experience as relevant factors (Kenny et al., 2018; Delany, 2000; Tippmann et al. 2012; Nuruzzaman et al., 2019), flexibility and resilience were two new traits that were not encountered in the literature review.

In measuring risk perception of subsidiary managers, and the driving forces behind committing or rejecting the prospect of pursuing a certain initiative, the case study added to Parker et al.'s (2019) work by providing further evidence for affordable loss practice in the MNC context. The findings suggest that these considerations are not usually made in regard to the capital invested, but rather a loss of reputation and how this could lead to potential capital loss in the future. Furthermore, the study demonstrates how a shift from a hierarchical to a heterarchical structure can influence affordable loss thinking. Results suggest that as organisations become flatter, the focus, in terms of affordable loss, shifts to external actors, as the probability of receiving internal criticism is reduced.

With regard to the Crazy Quilt principle, as previous research (Tippmann et al., 2012; Kotsova & Roth, 2003; Tushman & Scanlan, 1981) suggests, the findings further supported the idea that subsidiary managers have access to local, global, as well as external network resources. However, the interview revealed that the relationships that are built up over the duration of a subsidiary manager's career are the most important when gathering the resources required for the development of initiatives. Moreover, as proposed by Williams and Lee (2011), shifting from a hierarchy to a heterarchy can make resources easier to access, and initiatives therefore easier to develop.

With reference to the Lemonade principle, while previous research (Martin et al., 2015) emphasised headquarters' resource allocation and decision making as the main sources of subsidiary managers' uncertainty, findings suggest that stakeholders' changing demands can be of influence as well. Two coping mechanisms have been suggested, the first being to recruit younger staff members, as they are more open to experimentation. Secondly, organisations can implement procedural changes, such as shorter planning horizons, as well as customer-centric approaches, to be more responsive to change.

Similar to the Volkswagen case (Metz & Prange, 2021), the findings demonstrated how MNCs can experience a shift in the division of control between the headquarters and the subsidiaries through the belief that subsidiaries understand their resources best. Additionally, examples showed how shifting from a hierarchical structure to a heterarchical structure can increase subsidiaries' power in making decisions. Finally, the study highlighted that some cases that were previously perceived as examples of resistance from headquarters, may in fact have been self-imposed barriers of the subsidiary manager.

While the study supports previous research and provides several findings not included in the literature review, there are several limitations that need to be taken into account. Due to time constraints, only one person was interviewed. Interviewing several subsidiary managers would have provided a more complete view of how the effectual principles manifest in the foreign subsidiary, and would have made it possible to identify outliers and correct possible bias. In

fact, the subsidiary manager who was interviewed was heavily involved in organisational change, innovation, and new initiatives. Therefore, in order to gain a more complete perspective, interviews should be performed with subsidiary managers both involved and not involved in structural changes. Additionally, interviewing subsidiary managers from different MNCs and industries could have provided a view on how approaches to certain principles, such as affordable loss, differ between those industries. In future research, extending empirical work could benefit by contrasting the proposition posed. This work could, for example, take the form of additional case studies that provide a more complete perspective on decision-making strategies in subsidiaries, or it could take the form of quantitative questionnaires that contrast our hypotheses.

REFERENCES

- Achcaoucaou, F., Miravitlles, P., & León-Darder, F. (2014). Knowledge sharing and subsidiary R&D mandate development: A matter of dual embeddedness. *International Business Review*, 23(1), 76-90.
- Aldrich, H., & Fiol, M. (1994). Fools rush in? The institutional context of industry creation. The Academy of Management Review, 19(4), 645-670. Retrieved from https://www.proquest.com/scholarly-journals/fools-rush-institutional-contextindustry/docview/210942415/se-2?accountid=15293
- Ambos, T., Andersson, U. & Birkinshaw, J. (2010). What are the consequences of initiativetaking in multinational subsidiaries? *Journal of International Business Studies*. 41, 1099–1118. https://doi-org.sire.ub.edu/10.1057/jibs.2010.19
- Anayi, L., Bloom, N., Bunn, P., Mizen, P., Thwaites, G., & Yotzov, I. (2022, April 16). The impact of the war in Ukraine on economic uncertainty. VOX EU. https://voxeu.org/article/impact-war-ukraine-economic-uncertainty
- Andersson, U., & Forsgren, M. (1996). Subsidiary embeddedness and control in the multinational corporation. *International business review*, *5*(5), 487-508.
- Andersson, U., Forsgren, M., & Holm, U. (2002). The strategic impact of external networks: Subsidiary performance and competence development in the multinational corporation. *Strategic Management Journal*, 23(11), 979–996.
- Bartlett, C. A. (1985). Roles and Responsibilities of the Country Manager: MNC Operations From the National Organization's Perspective. In *ICCH Note No. 9-385-326*. Harvard Business School Boston, MA.
- Bartlett, C. A., & Ghoshal, S. (2003, August). What Is a Global Manager? *Harvard Business Review*. https://hbr.org/2003/08/what-is-a-global-manager
- Beck, T., & Plowman, D. (2009). Experiencing rare and unusual events richly: The role of middle managers in animating and guiding organizational interpretation. *Organization Science*, 20 (5): 909–924.
- Beechler, S. L. (1990). International management control in multinational corporations: The case of Japanese consumer electronics subsidiaries in Southeast Asia. University of Michigan.
- Benito, R. G. (2005). Divestment and international business strategy. *Journal of Economic Geography, 5*(2), 235–251.
- Birkinshaw, J. (1996). How multinational subsidiary mandates are gained and lost. *Journal of International Business Studies*, *27*(3), 467-495.
- Birkinshaw, J. (1997). Entrepreneurship in Multinational Corporations: The Characteristics of Subsidiary Initiatives. Strategic Management Journal, 18(3), 207-229. 10.1002/(SICI)1097-0266(199703)18:3<207::AID-SMJ864>3.0.CO2-Q

- Birkinshaw, J., & Fry, N. (1998). Subsidiary initiatives to develop new markets. Sloan Management Review, 39(3), 51. Retrieved from https://www.proquest.com/scholarlyjournals/subsidiary-initiatives-develop-new-markets/docview/1302967325/se-2?accountid=15293
- Birkinshaw, J. & Hood, N. (1998). *Multinational Corporate Evolution and Subsidiary Development*. Springer.
- Birkinshaw, J., Hood, N., & Jonsson, S. (1998). Building Firm-specific Advantages in Multinational Corporations: the Role of Subsidiary Initiative. *Strategic Management Journal*, *19*, 221-241.
- Birkinshaw, J. M., Hood, N., & Young, S. (2005). Subsidiary entrepreneurship, internal and external competitive forces, and subsidiary performance. *International Business Review*, 14(2), 227–248.
- Birkinshaw, J., & Ridderstråle, J. (1999). Fighting the corporate immune system: a process study of subsidiary initiatives in multinational corporations. *International Business Review*, 8(2), 149-180. https://doi.org/10.1016/S0969-5931(98)00043-2
- Bower, J. (1970). Planning within the Firm. The American Economic Review, 60(2), 186-194.
- Brettel, M., Mauer, R., Engelen, A., & Kuepper, D. (2012). Corporate effectuation: Entrepreneurial action and its impact on R&D project performance. Journal of Business Venturing, 27(2), 167–184.
- Chandler, G.N., DeTienne, D.R., McKelvie, A., & Mumford, T.V. (2011). Causation and effectuation processes: A validation study. Journal of Business Venturing, 26(3), 375–390.
- Chatzopoulou, E. C., Dimitratos, P., & Lioukas, S. (2021). Agency controls and subsidiary strategic initiatives: The mediating role of subsidiary autonomy. *International Business Review*, *30*(3), 101807.
- Chen, G. & Klimoski, R. (2003). The Impact of Expectations on Newcomer Performance in Teams, as Mediated by Work Characteristics, Social Exchanges, and Empowerment. *Academy of Management Journal*, 46 (5):591–607.
- Cuypers, I. R. P., & Martin, X. (2010). What makes and what does not make a real option? A study of international joint ventures. *Journal of International Business Studies, 41*(1), 47–69.
- Dash, R. & Ranjan, K. (2019). An effectual-causal view of managerial decisions in the internationalization of Indian MNEs. *Journal of International Management*, 25, 101-120

Decent Work and Economic Growth. (2022). United Nations. https://sdgs.un.org/goals/goal8

- Delany, E. (2000). Strategic development of the MNC subsidiary through subsidiary initiativetaking. Long Range Planning, 33, 220-244
- Del Sol, P., Kogan, J. (2007) Regional competitive advantage based on pioneering economic reforms: the case of Chilean FDI. *Journal of International Business Studies*, 38, 901– 927. https://doi.org/10.1057/palgrave.jibs.8400299
- Dew, N., Read, S., Sarasvathy, S., & Wiltbank, R. (2009). Effectual versus predictive logics in entrepreneurial decision-making: Differences between experts and novices. *Journal* of Business Venturing, 24(4), 287–309. https://doi.org/10.1016/j.jbusvent.2008.02.002
- Dikova, D., & Veselova, A. (2021). Performance Effects of Internationalization: Contingency Theory Analysis of Russian Internationalized Firms. *Management and Organization Review*, 17(1), 173-197. doi:10.1017/mor.2020.39
- Dokko, G., & Rosenkopf, L. (2010). Social capital for hire? Mobility of technical professionals and firm influence in wireless standards committees. *Organization Science*, *21*(3), 677-695. https://doi.org/10.1287/orsc.1090.0470_
- Donaldson, L. (2001). The contingency theory of organizations. Sage Publications.
- Dörrenbächer, C., & Gammelgaard, J. (2011). Subsidiary power in multinational corporations: the subtle role of micro-political bargaining power. *Critical perspectives on international business*. 7(1). pp. 30-47. https://doiorg.sire.ub.edu/10.1108/17422041111103822
- Dörrenbacher, C., & Geppert, M. (2010) Subsidiary staffing and initiative-taking in multinational corporations A socio-political perspective. *Personnel Review*, Vol. 39 No. 5, 2010, pp. 600-621
- Dutton, J. E., & Ashford, S. J. (1993). Selling issues to top management. Academy of management review, 18(3), 397-428.
- Dutton, J. E., Ashford, S. J., O'Neill, R. M., & Lawrence, K. A. (2001). Moves that matter: Issue selling and organizational change. *Academy of Management journal*, *44*(4), 716-736.
- Eisenhardt, K. M. (1989). Building theories from case study research. Academy of management review, 14(4), 532-550.
- *Ericsson Annual Report.* (2021). Ericsson. https://www.ericsson.com/4943ad/assets/local/investors/documents/2021/annualreport-2021-en.pdf
- Erling, J. (2019, 07 01). "The future of Volkwagen will be decided in China". *Welt*. https://www.welt.de/wirtschaft/article186697100/Herbert-Diess-Die-Zukunft-von-Volkswagen-wird-in-China-entschieden.html
- Figueiredo, P. N. (2011). The role of dual embeddedness in the innovative performance of MNE subsidiaries: Evidence from Brazil. *Journal of Management Studies*, 48(2), 417–440.

- Foss, K., Foss, N.J. and Nell, P.C. (2012), "MNC organizational form and subsidiary motivation problems: controlling intervention hazards in the network MNC", *Journal of International Management*, Vol. 18 No. 3, pp. 247-259.
- Frost, T. S., Birkinshaw, J. M., & Ensign, P. C. (2002). Centers of excellence in multinational corporations. *Strategic Management Journal*, 23(11), 997–1018.
- Gaur, A., & Lu, J. (2007). Ownership strategies and survival of foreign subsidiaries: Impacts of institutions and experience. *Journal of Management*, **33**, 84–110. https://doi-org.sire.ub.edu/10.1177/0149206306295203
- Ghoshal, S. and Westney E. D. (1993) Introduction and Overview, in Ghoshal, S. and Westney E. D. (Eds), Organization Theory and the Multinational Corporation. St. Martins Press, New York
- Gillmore, E. (2022). Mandate dynamics and the importance of mandate loss for subsidiary evolution. *International Business Review*, 101994.
- Gorgijevski, A., & Andrews, D. (2021). Getting the seal of approval: Pathways to subsidiary initiative acceptance. *Journal of International Management*, 100879. https://doi.org/10.1016/j.intman.2021.100879
- Hedlund, G. (1986). The hypermodern MNCA heterarchy?. *Human Resource Management* (1986-1998), 25(1), 9.
- Hilgartner, S., & Bosk, C. L. (1988). The rise and fall of social problems: A public arenas model. *American journal of Sociology*, *94*(1), 53-78.
- Hsu, W.-T., Chen, H.-L., & Cheng, C.-Y. (2013). Internationalization and firm performance of SMEs: The moderating effects of CEO attributes. *Journal of World Business : JWB*, *48*(1), 1–12. https://doi.org/10.1016/j.jwb.2012.06.001
- Hymer, S. H. (1960). *The international operations of national firms, a study of direct foreign investment* (Doctoral dissertation, Massachusetts Institute of Technology).
- Izraeli, D. N. (1975). The middle manager and the tactics of power expansion: A case study. *Sloan Management Review (pre-1986)*, *16*(2), 57.
- Kanter, R. M. (1984). Change masters. Simon and Schuster.
- Kawai, N. and Strange, R. (2014), "Subsidiary autonomy and performance in Japanese multinationals in Europe", *International Business Review*, 23(3), 504-515.
- Kenny, P., Mandy, T., & Chishen, W. (2018). Are overconfident CEOs better leaders?
 Evidence from stakeholder commitments. *Journal of Financial Economics*, 127(3), 519-545. https://doi.org/10.1016/j.jfineco.2017.12.008
- Khanagha, Ramezan Zadeh, M. T., Mihalache, O. R., & Volberda, H. W. (2018). Embracing Bewilderment: Responding to Technological Disruption in Heterogeneous Market Environments. *Journal of Management Studies*, *55*(7), 1079–1121. https://doi.org/10.1111/joms.12348

- Kostova, T., & Roth, K. (2003). Social capital in multinational corporations and a micro-macro model of its formation. *Academy of management review*, *28*(2), 297-317.
- Lieberman, B., Lee, G., & Folta, T. (2017). Entry, exit, and the potential for resource redeployment. *Strategic Management Journal*, *38*(3), 526–544. https://doi.org/10.1002/smj.2501
- Ling, Y., Floyd, S. W., & Baldridge, D. C. (2005). Toward a model of issue-selling by subsidiary managers in multinational organizations. *Journal of international business studies*, *36*(6), 637-654.
- Martin, G., Gozubuyuk, R. and Becerra, M. (2015), "Interlocks and firm performance: the role of uncertainty in the directorate interlock-performance relationship", *Strategic Management Journal*, 36(2), 235-253.
- Metz, A. and Prange, C. (2021), "Interfere! How Chinese subsidiaries manage their global headquarters", *Journal of Business Strategy*, Vol. 42 No. 3, pp. 151-158. https://doi-org.sire.ub.edu/10.1108/JBS-02-2020-0041
- Morton, N. A., & Hu, Q. H (2008), Implications of the fit between organizational structure and ERP: A structural contingency theory perspective. *International Journal of Information Management*, 28(5), 391–402. https://doi.org/10.1016/j.ijinfomgt.2008.01.008
- Nuruzzaman, N., Gaur, A. S., & Sambharya, R. B. (2019). A microfoundations approach to studying innovation in multinational subsidiaries. *Global Strategy Journal*, *9*(1), 92-116.
- Parker, J., Doyle Corner, P., Woodfield, P., & Singh, S. (2019). Developing Endogenous Innovations: Corporate Entrepreneurship and Effectuation. *Entrepreneurship Research Journal*, 11(1). https://doi.org/10.1515/erj-2017-0122
- Perry, J. T., Chandler, G. N., & Markova, G. (2012). Entrepreneurial effectuation: a review and suggestions for future research. *Entrepreneurship Theory and Practice, 36*(4), 837–861.
- Pfeffer, J., & Salancik, G. R. (2003). *The external control of organizations: A resource dependence perspective*. Stanford University Press.
- Raziq, M. M., Benito, G. R., & Igoe, J. (2020). Subsidiary country managers and subsidiary development: Upper echelons and resource-based perspectives. *German Journal of Human Resource Management*.
- Read, S., Song, M., & Smit, W. (2009). A meta-analytic review of effectuation and venture performance. Journal of Business Venturing, 24(6), 573–587.
- Rosenzweig, P. M. and Singh, J. (1991) Organizational Environments and the Multinational Enterprise, Academy of Management Review, 16(2), 340-361.
- Rugman, A., Verbeke, A., & Yuan, W. (2011). Re-conceptualizing Bartlett and Ghoshal's classification of national subsidiary roles in the multinational enterprise. *Journal of Management studies*, 48(2), 253-277.

- Ryan, P., Giblin, M., Andersson, U., & Clancy, J. (2018). Subsidiary knowledge creation in co-evolving contexts. *International Business Review*, *27*(5), 915-932.
- Sarasvathy, S (2001). Causation and effectuation: toward a theoretical shift from economic inevitability to entrepreneurial contingency, *The Academy of Management Review*, 26(2), 243-263.
- Sarasvathy, S. & Dew, N. (2005): New market creation through transformation, *Journal of Evolutionary Economics*, 15, 533-565. 10.1007/s00191-005-0264-x
- Sarasvathy, S.D. (2008). Effectuation: Elements of entrepreneurial expertise. Cheltenham, U.K.: Edward Elgar.
- Sarasvathy, S., Kumar, K., York, J. G., & Bhagavatula, S. (2014). An effectual approach to international entrepreneurship: Overlaps, challenges, and provocative possibilities. *Entrepreneurship Theory and Practice*, *38*(1), 71-93.
- Schmid, S., Dzedek, L., & Lehrer, M. (2014). From Rocking the Boat to Wagging the Dog: A Literature Review of Subsidiary Initiative Research and Integrative Framework. *Journal of International Management*, 20, 201-218.
- Sharkey Scott, P. and Gibbons, P.T. (2009). How subsidiaries are battling to survive and grow. *Strategy & Leadership*, Vol. 37 No. 4, pp. 43-47. https://doi-org.sire.ub.edu/10.1108/10878570910971638
- Sofka, W., Preto, M. & de Faria, P. (2014). MNC subsidiary closures: What is the value of employees' human capital in new jobs? *Journal of International Business Studies*, 45, 723–750. https://doi-org.sire.ub.edu/10.1057/jibs.2014.17
- Strutzenberger A., & Ambos, T (2014) Unravelling the Subsidiary Initiative Process: A Multilevel Approach. IJMR 16, 314-339
- Surlemont, B. (1998). A typology of centres within multinational corporations: an empirical investigation. In *Multinational corporate evolution and subsidiary development*, 162-188. Palgrave Macmillan, London.
- Tippmann, E., Sharkey Scott, P., & Mangematin, V. (2012). Learning in MNCs: How subsidiary managers do (and do not) create global solutions. *Journal of International Business Studies*, 43, 746–771.
- Tushman, M. L., & Scanlan, T. J. (1981). Boundary spanning individuals: Their role in information transfer and their antecedents. *Academy of management journal*, *24*(2), 289-305.
- Uyterhoeven, H. (1972). General managers in the middle. Harvard Business Review, 50(2), 75-85.
- Williams, C., & Lee, S. H. (2011) Political Heterarchy and Dispersed Entrepreneurship in the MNC, *Journal of Management Studies*, 48, 6.

Young, S., Dimitratos, P. & Dana, L. (2003). International Entrepreneurship Research: What Scope for International Business Theories? *Journal of International Entrepreneurship* 1, 31–42. https://doi.org/10.1023/A:1023286232541

ANNEXES

Annex A Interview

Interviewer:

All right, so I have a little bit of a plan for what we could talk about today. First I would like to start with hearing what exactly the subsidiary does here in Spain within the context of ABC.

Interviewee:

Well, ABC, at the end, Spain is one of the five big European markets. So for example, we took from services and so on. Normally the five major countries has their own services, and the other are normally clustered. For example, EMEA1, EMEA2, one that is people for Nordics, South Africa, and so on. So in the case ABC Spain, I have to say that we are three divisions, and I am working for Pharma division. So everything I will talk to you is more related to the pharma division. That is the one that I really know, but more or less it's the same in the others. But for example, in the case of consumer health, Portugal and Spain is a cluster also for crop, and crop is working related to crops. So Mediterranean crops, the structure is like an Echo. It's a little bit different. And in the case of pharmas, as I said to you, we differentiate between the five major countries: UK, Germany, France, Italy, and Spain, and the rest of the countries that are clustered. I have to say that Spain has the same therapeutics areas like global. So we are working oncology, ophthalmology, multiple sclerosis, also general medicine, that is cardiovascular diseases, and hemophilia. So the same as in global, and what we are doing here is marketing, sales, and medical services, so the same as the global. The only thing that we are not doing is research and development.

Interviewer:

Then, I would like to hear what role that plays in the international value chains. How do those different units communicate with each other on a global scale? Because you mentioned you have different EMEA units.

Interviewee:

Well, normally we have the different departments. That has normally a link with the global one. Let me just...Just to assure that I don't forgot anyone, because normally when you talk from a list, well, I don't know the rest of the people, but I normally forget always one. So we have the business units, specialty medicine, and we have the therapeutic area of oncology, hemophilia and ophthalmology, and then we have general medicine where is women health. Sorry, I forgot that in the beginning women health and cardio, this is the two business units. That is how the different therapeutics area are divided. Then we have the medical

department where we have the medical specialist in different therapeutic areas, and of course there is a medical department also in global. Then we have market access and public affairs and also quality, regulatory, and I think I don't forgot anyone else. Of course, there are what we call enabling functions. As IT, legal, and so on that are giving services to the whole divisions not only to pharma. So in the case this is how we work but we are changing the organisation right now and it's just that we will work in cross teams. So for example, we have started to work with Scrum methodology and the squads are formed with people from the different areas. So the teams are not working in their vertical but in a cross way. So we have a brand from any of our therapeutic areas, and different people from the different departments build a team to work in this brand. Let me say that the organisation is more plain, not as hierarchical as it was before. For example, make decisions faster and so on, and we have some special cases like for example in medical department we have clinical trials. And clinical trials is part of a global team, because Spain is one of the big markets. In fact, I see that we are the second country doing clinical trials below USA if I remember. We have a global Department, that is part of the local one. So for example in the case of IT, IT has different structures for the different divisions, for two years. In my case, for example, I had a digital lead for Pharma. I am part of a global team. But giving service to Spain. This is happening in other functions.

Interviewer:

Interesting. I think the structural change that you were talking about before will be interesting to come back to later. In a second, I'll explain what exactly my thesis is about and then I'll go through and a bunch of principles, and I think that structural thing will be interesting to come back to in one of the principles. So basically, what my thesis is about is forms of entrepreneurship that happen in an established organisation. So basically, in the theory that I'm looking at, they distinguish between two types. One of them is causation. That's what I'm not focusing on. Basically, the way you could summarise causation is you have a goal, you figure out what you need to achieve that goal, and you go and achieve exactly that. Effectuation is the opposite of that. That is what I'm focusing on, which basically involves the thought of: what do I have and which goals can I achieve with that. So in effectuation, the approach is much more flexible, and even though there's a focus on the outcome, the outcome is not necessarily fixed. Research on effectuation has primarily had its focus on start-ups and newer organisations, but there's more of a research gap concerning established organisations. So in my research, I basically view managers in subsidiaries, like yourself, as, in a sense, entrepreneurs, and I seek to understand how these principles of effectuation come into play in your role. So in effectual theory, the author who created it identified five principles, and I thought that maybe we could just go through them one by one. As I explain one principle, we can talk about how you experience that in your organisation. The first one is called Bird-in-Hand. I'll just read out what the author wrote. So basically, the idea is that effectuation begins with a central actor who has three categories of means: an identity, so who you are, knowledge, which is what you know, and your network, so who you know. The combination of those three answers the entrepreneurial question of what can I do, based on the means that I have, rather than what I should do. So it's more of an open-ended consideration of how what you have can help you achieve certain things. So yeah, basically

the approach relies on identity, knowledge, and networks to gain potential opportunities. That can be knowledge located within your team, or it can be your own knowledge as well or knowledge within your organisation. So first, I would like to ask: what for you or your team are the means that benefit you the most in helping you achieve your goals? Whether it's your own knowledge or the skills of your team members, what do you feel benefits you the most?

Interviewee:

Well I think what you talk about the combination of these three topics because in a large organisation like us it's very important the (inaudible), not only the knowledge you have. But also the dots that you could arrive from your side. And especially when we are talking about a relationship with global for example. I think that it's a combination of three. Of course, for example, in case of digital, we are doing re-skilling of the different roles in the organisation because we are introducing a lot of things. In fact, I am responsible of accelerating digital transformation internalisation, and we are doing a lot of things that of course need some reskilling of the different roles. Like for example the sales force. For example, using a virtual assistant to help them to be in touch with doctors. So this is a different way of working from before of course. For example, after the pandemic, during the pandemic, they have to do all the communication with the SAPs remotely. Majority of the people cannot go to the hospitals and maintain the face-to-face meetings that they had before. So it's necessary, this upskilling of the different people in the organisation for digital. But I think that it's important that the three of them. What I know the knowledge of the team and the knowledge that we have but also the network, especially in a role like me, like mine. I need to contact with different points in global. Many different departments. It's important to have this relationship. That will help you a lot in your daily work, for sure.

Interviewer:

In your role, when you try to pull those different components together, which characteristics would you say benefit you most? Whether it's, for example, being able to communicate well, or confidently, or being empathetic, what characteristics would you identify yourself with that help?

Interviewee:

Well, I think that's communication, but with empathy. So empathy, but thinking in the way, of course, understand others, their situation, then you could influence them better. If you don't take into account that. So communication is very important, but empathy also. But flexibility is another one. Because we are running now in a way that every day is (inaudible). We talked about before. I don't know if you sure that you know Bucha we are talking about the war that is next step, and it means more uncertainty than before. For example, after the pandemic thinks that somethings that we thought that were sure now, it's not. Uncertainty, let me say, behind the flexibility. For me, it's very important also resilience, especially in a role like mine. It's very important because I always say that we have a hamburger effect that you have pressed from the top press further down, because you have to harmonize the local requirements with local needs but also with the global guidelines and what is going on on

global. Okay. So it's very important to be resilient and harmonize this kind of thing. And it's important being observer and connecting the dots. Because we are a large organisation, there are a lot of things running in different departments and sometimes it's difficult to know what is running in different departments. Just to find synergies, for example, and not repeated things. And this is very difficult in a large organisation like ours. It's important to connect the dots, and connect the different programs and different projects that are going on in the organisation at different levels.

Interviewer:

Let's say you were talking to me. I want to be a subsidiary manager and I want to be someone who can effectively observe the dots. What comes into play then? Does that come down to personal characteristics or does it just come down to experience and having an overview of the organisation?

Interviewee:

I will say you good luck. No, I think that the network is so important. Of course, the experience, working in the organisation for many years. Let you know what's going on. If not, it's very difficult because it's not because we are not communicating, it just the opposite. We are communicating a lot and you don't have time to be aware of everything, so the focus is difficult to have a focus because you receive a lot of info from different parts of the organisation. So it's more important this network, these different touch points that you have with different departments or parts of the organisation that are relevant for you and then know what's going on in them.

Interviewer:

Okay, interesting. It's funny because you've already touched on two of the other principles. It'll be interesting when we actually get to them. First we have another one. It's called Affordable Loss. So basically, it's a principle that has to do with the idea of risk perception. The idea under effectuation, which I'm studying, is that expert entrepreneurs make decisions based on what they can afford to lose, rather than predictions of possible gains. So by focusing on affordable loss, the need to predict on future returns is eliminated, which implies less time needed in planning. Also, the use of the principle in innovation in research and development has been shown to lead to higher process efficiency. It can be calculated pretty quickly because the entrepreneur already knows what they and their environment have and they can estimate how much is affordable to lose. So basically, what I would love to hear is, if you have a goal or a new initiative, or there's a change occurring, do you look at how much money you can make, or do you just see what can we invest that we're willing to lose and you go from there?

Interviewee:

I always said that we are a risk-zero organisation. This is something that we are working on is to change the mindset of the people. Because it's an historical topic. Pharma is a very conservative industry. Why? Because there is a lot of image loss. For example, if something is going wrong or whatever, you know, what happens if some news come in newspaper or whatever related to that, any lab has on whatever run. Yeah, it's like it's going up. So that's why traditionally, the Pharmacist is very conservative, and normally when they have to make a decision, if there is some risk behind, they are always very conservative. But this is changing. This is changing, and I'm part of the people that are trying to change that because of my role, for example, because I have two roles. One is the digital lead, but I also in terms of open innovation and working also in cultural mindset change. For example, that innovation will be part of your daily work and so on. And what I always told to the people is that you have to balance the risk, and it's about majority. It's not only about money, sometimes it's more, but at the end it's money. Your lost reputation, but it's like balancing. What I got and what is the risk behind. I need to balance both things and decide if it makes sense to do it or not. But we cannot be. It could not be a stopper always. Because what's happening, what happened in the past is that if there is a minimal risk, the system was we will not do it. No. There is a lot of benefit behind for the vision, for the healthcare professional, whatever, so you have to balance. Maybe it's some risks, but you have risks also with products that you are developing of the collateral effects sometimes and so on. But this is not means that you will not do it. You are doing it. Let me say that it's something that is changing. We are progressing at a, I have to say, and I think that with the cooperation of younger people, this is also helping us to change because they have a different mindset. They want to do new things and experiment. This is also related to experiment, and we are trying to instill the organisation that they have to experiment and learn from the mistakes, not only from the successes. To learn also from the failures, and let them know that failure is admitted, it's not a problem. But, yeah, it's important that people know that you could experiment and learn from failures. It's not a problem that we fail. It's also a benefit from this failure.

Interviewer:

In considering the possibility of failure in trying new things. What types of loss? Because basically, the research suggests that in the context of established organisations, you don't necessarily just consider loss in terms of money. You could lose a mandate or you yourself could lose reputation. What factors come into play there? Usually when you're engaging in these kinds of things, what factors come into play in regard to affordable loss when you engage in these like forms of experimentation or initiatives?

Interviewee:

Do you mean factors are not allowing to you to take the risk?

Interviewer:

Yeah. So for example, let's say that I am a subsidiary manager and I want to pursue something new, but there's a risk of failure and in the end I decided not to do it because if I fail my staff lose their jobs. They're not going to be able to find work, or my reputation gets affected, or maybe I'll get fired. What are the things that you take into account in your role?

Interviewee:

In my role? I think that it's not my case because as I am working in innovation, I try the opposite, but normally. But I see, for example from departments like legal or regulatory, is the loss of reputation in the company, that there will be a damage in that sense. As I said before, that in the newspaper is appearing that ABC has done something that is not allowed. This is more of the fees that we have to pay. In this case, this is money because we are doing something that is not allowed. I think that in the case of new digital business models, for example, this is one of the main barriers. I think that they are behind. Sometimes, for example, the law is not clear, because at the end we are talking about new things and sometimes the regulation is not following as fast as it's progressing. The topic. And then if there is a grey zone, the decision is not to go. Because this grey zone and maybe this means that in the future, but it's a grey zone. The law is also not saying that it's black or white, so there is a grey thought. Maybe we can take profit thinking always that we are not doing something wrong. This is happening. For example, if we would like to do an application to help patients. And what's happening that the law is saying that if there is telemedicine, a pharma industry could not go in. Because it's like you are prescribing but also producing the products, but that's not true because I'm giving you the tool. But the one that is using the tool is the health professional, not me. The law is not so clear. The system in general, it's okay, we will not do it because it would be understood that's not right. We are not doing that, but this would be the interpretation, so the decision is not to do it. This kind of thing.

Interviewer:

So that's more external. But looking internal as well, is there a worry, for example, of losing reputation from the perspective of headquarters quarters, or other subsidiaries globally? Or is that not really a concern as much?

Interviewee:

I think that as I said before, the pharma industry was very conservative and also very hierarchical. So it's like, if I am not doing, if I am doing something that is not a law, maybe it could be interpreted as something wrong. Someone, maybe global, or someone from my organisation that is higher than me, would say to you, you are not allowed to do that while you are doing. But this is something that is changing, for example with this creation of squads that at the end all the team is autonomous and all the teams are in the same level. So this is something that is changing, and we saw that for example in some squads that you mix people, that was before the boss and you see this kind of hierarchical relationship still in the squad and you have to say to the people: no, you are on the same level. You don't need

to wait that he or she said something. You're allowed to make your opinion and make a decision because you are also autonomous and you are in the same level. I think that these kind of things are the ones that make people some avoid the risk of making some decisions. For example, it's like everyone has to be involved and everyone has to be informed and something like this before making a decision, but it's a slow without the time for making decisions, and that's why we are changing everything because we saw that it's difficult to make a decision internally. People are looking for example for the agreement of everyone and sometimes, you could be accountable or responsible of doing this or making this decision, and that's all.

Interviewer:

Interesting. In that case, we'll head on to the next one. You already talked about this one, but I'd like to hear more. This one is called Crazy Quilt. Do you know what a quilt is? It's essentially a blanket that you would sleep under and they're usually composed of different parts. The author for the theory is very poetic. But the idea is that, like you said, organisations are one combination of units. So under Crazy Quilt, the idea is that rather than trying to secure commitments from targeted stakeholders, effectual entrepreneurs seeks to create avenues for people that self-select or people they already know, and thereby create a network that is genuinely invested. So, for example, that could be people within the organisation, that could be people on a global scale, or it could be people within your local market as well. So then my question is: you are in your role or even a subsidiary. What parts of your network do you draw on for support, and in what situations would you do that? What methods do you use?

Interviewee:

Well, I think you mentioned. We talked about this before. It's very important to know people. And it helps a lot to have been working in an organisation for some time. I can be working in ABC for 14 years, but in the end we are humans and everything is relying in relationships between us. And what happens sometimes that people that you met two or three years ago in some project now it's working in whatever that you need. It's very important that you have this relationship, and you can address to these people to this person and say: how are you? Do you remember me? We are working on that, and then you get help immediately. For me, it's very important to be empathic and respectful with the work of everyone, and that helps you in the future. You are building all the time in relationships that will help you in the future. It's very important for me, and I think that this is let me say not hidden, but let me say hidden networks, are what really helps you in progressing some projects.

Interviewer:

So I had a quote that I pulled from your interview that I read. It's translated, so obviously you didn't say it like this, but it says: another important function is to manage the digital portfolio of all projects, seeking standardisation in the region and creating synergies between therapeutic areas and different countries. How do you bring those worlds together? You

know, like the therapeutic areas in the different countries and then where the subsidiary plays and where you personally play a role as well.

Interviewee:

This is what I were talking before about connecting the dots. Because sometimes it's happening that even the organisation didn't know what's going on in the different parts of the organisation, and sometimes you don't know what your neighbor is doing. It's not easy. At the end you have to identify the relevant department or part of the organisation that is important for a specific project, and then assure that you are communicating to them what you are going to do. Just to assure that, for example, they are not doing something similar, or maybe they can help to you because they have done something similar in the past. It's important to identify these relevant parts. Also, in my case, it's very important that the access that we have between the different digital leads because at the end we have a cross view of the organisation, a very good cross view of the organisation of the different departments in the local part. So it's easy to identify something similar that is happening in different countries. For example, let me say that there are different levels. One is a local one. That I have to say, in my case, I am aware about practically everything that's going on related to digital, because I'm identified as the, let me say, that reference for digital. And if it is something happening related to the digital, normally they contact first of everything with me. So in the local level, let me say that I can more or less control what's going on, and I have a periodical touch point with the relevant stakeholders. This is one level, then the other level is with my colleagues that the other data leads from the different European markets. This is my team, and we have regular (inaudible). And I have to say to be honest, a very good communication collaboration between all of us. And normally what happens if something is a demanding something new, first thing I do is to ask my colleagues and say, okay, there's something going on similar in your country, in one of the countries? And then yeah, we have done something similar, not whatever. Then the other level is to identify, in global, the relevant departments for each topic, and that could be marketing of the different therapeutics area. IT, what's going on in IT. And for example, they are planning something, a global solution for something you are looking for, for example, and then the other global departments like, for example, the case of digital business model like integrated care or other departments like that. That could be also interesting for what you are doing, and then it's important to maintain relationship with all these levels to know what's going on, but also something coming. It's new you have to ask sometimes to these different levels and see if there is something that is going on related to your (inaudible) or whatever.

Interviewer:

And you said these contacts are located globally or does that communication mostly take place in Europe, for example, in markets that are more similar?

Interviewee:

It's local and global. Both.

Interviewer:

And then you mentioned relevant stakeholders that you talk to them in the local market. What type of stakeholders are we talking about? Are we talking about, for example, like suppliers? Are we talking about internal stakeholders or customers or...

Interviewee:

It's more in this case internal stakeholders. Business unit heads, the heads of the different management team of pharma. Those are the heads of the different Departments, but also customer experience manager. More or less. I have identified with the relevant stakeholders for my work, and normally maintain regular touch points. Of course there's another level in case of doing new projects. Providers, I don't know because what happens here is we have established global providers that we have to use to do different things and then maybe new providers for me are for example startups. Special projects. We are looking to the startups if there is some solution or something that could help to achieve our goal.

Interviewer:

And do you feel that the flatter structure that you guys are incorporating right now makes it easier to facilitate that communication and teamwork?

Interviewee:

Well we haven't started. I have to say that I need some time to really see if it is happening or not. We started with this new organisation on January so not so many months working in this new structure. What I say I see is that it's easier in the squads and the people that is working with scrum methodology. Decisions are faster than in the past for sure and in terms of communication it's easier because at the end you have all the relevant people in the project that you are doing, so you have the information and the daily meetings for example, help you a lot of knowing what is going on so it will help. But we are working only a few months on this new organisational landscape and we have to see. The intention of doing is yes.

Interviewer:

All right, so the next one, the fourth one, it's called Lemonade. The idea is just this. I'll read it out. So an effectual approach leverages uncertainty by treating surprises as opportunities to control the newly emerging situation. Since entrepreneurs often operate in conditions of enhanced uncertainty, effectuation means that they might benefit from embracing surprises rather than just following a goal oriented process that seeks to avoid leaving the path. So then my question to you is, what types of uncertainty does your subsidiary face or you personally in your role? Yeah, I'll let you answer that one. I've got an example from your interview as well, but I'd like to hear your opinion on that.

Interviewee:

Yeah, I can answer. I think that this is one of the main pain points in our organisation, how we react to changes. Because we are living in an environment everything is changing all the time. This organisation, that I told you before, had lots of relationship in how we react to these changes, how flexible we are just to do what you said. That these changes, it is not a punishment, but an opportunity, because we react fast and we can adapt to these kind of changes. For example, working in a (inaudible) mode in doing campaigns, for example, with healthcare professionals is an example. So we are not doing like in the past, marketing strategy for the whole year in December, what we will do in the whole year. We are working and changing campaigns every time and learning from the campaign before, just to do the next one. Because everything is changing. Another example is a budget. For example, we planned the budget for the whole year and what happened in the last time before, many years ago, it was not like that, but in the moment, what's going on that you planned ten projects and at the end you are doing two and five new ones that are not the ones that we considered. It does make sense to do this planning. It's better to have a target and then you will do what you need, what you consider you have to do each time. So we have a lot of examples that how we are changing to avoid just that and just to react fast and make this as an opportunity. And be more customer centric. Because another topic is that we are iterating and always double checking with our customers of our patients. So we are thinking as we are doing. This is more or less the ideal philosophy. So we are sure that what we are delivering is what the customer needs. Because years ago, what the way of doing things? You planned a project and you were building something for two years and then you deliver and then what happened that what you're delivering is not the need of the customer. Yes, two years ago, but not now, right now. So that's why we are changing this kind of things. So just linking to your question, just to make the changes an opportunity, but you have to do organisational change just to do that, because if we operate the model that we did before, that was not possible to do it.

Interviewer:

I feel like we're not necessarily talking about uncertainty due to COVID. Are we just uncertainty in general, like before COVID as well?

Interviewee:

Yeah, it's not about only COVID, it's everything. Because at the end, hospitals are changing, your stakeholders are changing, regulations are changing. So you have to react quickly these changes to make them an opportunity and not just the opposite.

Interviewer:

You kind of touched on it already, but I just want to ask to make sure: what stakeholders are we talking about? Because I have a quote here. It kind of talks about the same thing. You said: digital therapies are an evolving market, especially with the pandemic, and I think that

they will make a difference in this market. I detect opportunities for all stakeholders. So are we talking about, for example, end customers and hospitals then? Or are we talking about...

Interviewee:

We identify as stakeholders, of course the patient, the healthcare professional, the payers and the pharma industry and the national health system. So there are a lot of different stakeholders and that's why it's very difficult to make success for a digital health solution because you have to take it into consideration. It's a plan, okay? It's like working in an ecosystem. You cannot do something only for some of them. You have to take into account each of them. It's very important. You have to know what are the benefits for the patient, like equity or addressing diseases that are poorly addressed. For example, now in the health system, for the healthcare professionals, giving them the data to make better clinical decisions, for example, have a holistic overview of the patient. That without returning, removal and so on, it's difficult for the payers, taking into account cost saving. For example, it's very important for them and that's also for national health systems and the pharma industry, how to, for example, increase adherence to the treatment. So there are lot of benefits for different for them and you have to consider them when you are planning this kind of project, of course the patient is the focus, but you have to take into consideration the others also.

Interviewer:

Yeah, cool. Then we are coming up to the last principle. It's called Pilot-in-the-Plane. Kind of as the name suggests, the idea is that effectual entrepreneurs don't see history running on autopilot. They rather see themselves as the pilot controlling history, or rather being a copilot in the course of history. So this is more an idea of having control. Not in a manipulative sense, but rather control of what's happening around you and, for example, leveraging uncertainties, like we just talked about. So I want to ask you, in your role within the subsidiary, do you feel like you have control in being able to make decisions? With the flatter structure I feel like it's easier, probably. But usually in business hierarchies, you have the headquarters, they tell you what to do and you're kind of stuck with that.

Interviewee:

No, I think that it depends on you because what I saw and I learned from many years is that you put yourself the barriers sometimes. Sometimes you didn't make a decision because of the fear of what will happen if you make this decision without telling whoever. Let me say that we have to differentiate. I am in control of making decisions, but if I would like that, this decision will be a success. I have to communicate what I'm going to do in the right way into the right people, so it's like to it's not that you don't have the power to make decisions, but it's like an ecosystem. We talked before. If you want a digital *therapist solution or digital solutions to be a success, you have to take into consideration the main stakeholders. So here is the same. You could make the decision, but you have to do your work to take into consideration making stakeholders to assure that this decision will be a success if you got to

progress on it. We have several examples here. For example, we are right now, next week, Monday, we will integrate our LifeHub in Barcelona. This was a bottom up story, okay? This was a bottom-up story, and now it's happening. But of course, during the day, the journey, we have to promote to the relevant stakeholders to assure that this will be a success. But we decided we will go for it, but that doesn't mean that you have to do the work of linking with different stakeholders to ensure that this will work.

Interviewer:

And do you think you could talk more about how LifeHub started then from the bottom up?

Interviewee:

It's an open innovation concept. We have different life hubs around the world, in innovation hot spots. There's always a relationship between the focus of this LifeHub and the location. For example, in the case of UK, it's focused in radiology and artificial intelligence. Because UK is a well-known okay, I don't know how to say in English, potential in terms of artificial intelligence. It makes sense in the case, for example, of our LifeHub, in the case of pharma, because it's focused in farming crop. In the case of pharma, in digital health and digital therapeutics. Why? Because there is a lot of innovation around digital health in Barcelona. Innovation habits around health, and specifically this topic. The ABC Spain organisation three years ago, if I remember correctly, decided to start an initiative okay. With different pilots, thinking in how to the organisation will be in 2023. It was called at the beginning 2023. So we have different panels. One of them was Transformation and Innovation, and there were different work groups for the different ABCs working on the things that (inaudible) and organsation in 2023, and then decided initiative that will help in achieve this picture, and one of them was the LifeHub. This group was composed of people of the organisation from different levels. There was no manager there. The manager was the sponsors and one from the board, but there was no manager in the team. And then the idea came from, okay, we would like to be a reference inside ABC but also outside for innovation. So we decided to, okay, we will build a LifeHub here. And that was the start, the beginning of this Lifehub that now, two years later, it's a reality. Well, we convinced that top level management that this is a good idea and that this will help us to achieve this vision of 2023.

Interviewer:

Interesting. And then they just communicate that through headquarters or something?

Interviewee:

It was communicated to everyone! I have to say, I explained what LifeHub is to, I don't know, 1000 People. No. Yeah. It was communicated. We decided: what are the people that need to be involved? We need to communicate about what we will do, and then we started the communication. First of all, we decided what our life will be, our governance model, services and so on, and then when everything was processed and the local organisation agreed in the

model, then we started to communicate to the different stakeholders. But it was not asking for permission communicating what we will do and how we could collaborate in the future, so that's why I was talking to you before that it was is not about asking permission or making the decision. But of course, if you would like a success, then you have to decide who you need to collaborate with and who you need to establish a relationship to make it a success. We asked only to LifeHub committees that we would like to create. Then they ask okay, what will be your focus? Why this? Okay, then go ahead. That's what's all. But then to the other relevant stakeholders we were communicated to them about the system and not asking for permission to do it.

Interviewer:

Interesting. It must be really cool to work for an organisation where you have the freedom to implement projects.

Interviewee:

That's why I took it to you before that resilience is very important. Yeah, because we talked first time about life three years ago. We need three years to convince and make it a reality, make it happen. And that's why, because the organisation is still too slow making decisions and doing things. In this project, one of the members of the board told to us: yeah, moving a car two degrees is easy. Moving two degrees an aircraft is a totally different thing. That's what happened to us. It's not easy to do something, because a lot of people bored, a lot of people to convince, a lot of people to communicate, and everything okay. So it's not easy. I will be happy if I could do a lot of things, and sometimes so that's why resilience is very important, because maybe not I have left of doing years ago.

Interviewer:

That's super interesting, the way that works. I didn't expect it to be that way somehow. I don't know why, but I didn't. It's interesting because I was reading about a story as well, about Volkswagen, the other day, which I also didn't really expect like that. It was about the shift of power from headquarters to a partial shift of that power to the subsidiaries in China, because Volkswagen was experiencing a decrease in sales for the first time in 20 years or something like that, and they realized that China was going to be the answer for them. Suddenly the headquarters and the rest of the organisation were dependent on the subsidiary in China for their survival, and suddenly the Chinese subsidiary was in control. Of course, not in control of the organisation, but significant control over the future of the organisation. So I found that really interesting. And then this is another really interesting story, too. It was just a team....

Interviewee:

Yes, that's. Misunderstanding. This is also happening here, right? Of course. The countries that are the big business has more power to do things than the others. Yeah, that's also happening. But it's true that what's going on with global and this is something that is

changing last years is that normally they decide whatever and they push to the countries. Now this is changing because at the end, what they realized, is that at the end who's saying is the countries, and we cannot build things that at the end is not answering to the needs of the countries. Because we are at the end, we have a lot of money, we are investing money, many things that when we push to the company, they say: no, I don't need that. My requirements are others. So we see as time goes by that this is changing normally. For example, our role is very important on that. When they decided to do something, they asked to ask: what are your needs? So to assure that what we build, it's covered in your needs. But yeah, at the end it's right that we have a power, but limited power. Sometimes, depending on the topic, we can do more things, but it's true that it also depends in the market sides of your country.

Interviewer:

Yeah, true. So would you have examples for some subsidiaries or ways in which your subsidiary has control that others don't, or knowledge that you guys have, or not really?

Interviewee:

For Spain? No, because we are not such a big country. It's happening, for example, if this is a topic that happened at the end of last year that global decided to change the way we are reporting with a new platform and so on. And then when they push to do the change, we saw that it was not covering what we need, so we convinced to global to go on with our local one. And this happened in two other countries because we show them I cannot do my business. But with this platform that you are selling to me, I cannot do my business. I need mine. And when you adapt yours to cover my needs, then I will change. But for example, it's this case after. We raise our hand and say "what's going on?", and say we will we want to go on with our system. Other countries go behind us, other countries in Europe say okay, I also want to do the same that is paying, because it's also happening the same, and then they received the permission to go on with their system. It's more like what you were talking, that we were able to influence the global decision and make it happen to other countries.

Interviewer:

Okay, yeah, right. And does, for example, the UK with their AI capabilities set them ahead in that sense as well? Like, does ABC depend on the UK subsidiaries' AI capabilities or is it more...

Interviewee:

No, I think that it's more like when we build something, we always think conceptualizes the topic thinking in the scalability, so that if something is built in the LifeHub of UK could be scalable to other countries, to other markets and to other divisions sometimes or therapeutic areas. So it's more that we depend on. We depend always from the headquarters. Let me say that the bigger markers are deciding the strategy at the end.

Interviewer:

Yeah, cool, very cool. I guess in that case, there's one more question that I'd like to ask, and then I promise I'll let you go. Promise. There's a concern in this style of entrepreneurship that the subsidiary manager is too... okay, let me phrase it this way: in some cases, the headquarters becomes concerned that the subsidiary manager is more so focused on their own goals than the needs of the entire organisation. Do you feel that pressure or does this happen within your organisation? Where the headquarters thinks like, man, this manager of ABC UK, for example, only cares about them and their market, but not about how that affects ABC Germany or Spain or...

Interviewee:

Let me say that maybe this happens in the past, but now I've seen that there is any manager in the organisation that is thinking only in their own words. Of course not a manager, but within the country. Each country has their own goals. But these goals have been agreed with global. So it's not that we have, let me say, the freedom to decide the goals because we know our market, but of course they have to be agreed with global and say okay, we decided that. And then maybe if we are talking about sales, the therapeutic area could say okay, but maybe you are talking about, I don't know, 5% increase in sales. So it could be 7%, but I don't think that this is happening because we are working together. The countries are not isolated. You have too many touch points related to the different projects and whatever that it's difficult that this could happen, to be honest.

Interviewer:

Okay, so then I was going to ask: why do you think that changed? Is that a matter of globalisation then, or easier communication?

Interviewee:

No, we lived on globaliation on the past. With this organisation that is also affecting global, and the organisation is flatter. It's easier, this communication between global and local, because there are less touch points than before.