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**The Role of ERP in Streamlining Procurement Processes:
Analysing the Impact of Organizational Culture on ERP
Implementation Decisions - A Comparative Study of
Givaudan Hungary and Top Solvent Vietnam**

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Abstract:

Recent years, the world has experienced significant changes which increases the uncertainty and disruptions of the supply chain operations, such as COVID-19 epidemic, rapid technological changes and geopolitical conflicts. In this context, the importance of Enterprise Planning System (ERP) has become more evident. By automating tasks, improving data management and enhancing supply chain visibility, ERP has become a powerful tool to streamline operations and strengthen organizational resilience. However, the ERP implementation doesn't only depend on technology capacities but also heavily relies on organizational culture. Although global markets nowadays have a strong connection between continents, different shades and cultures still exist within organizations, even those operating in geographical proximate regions. Factors such as resistance to change, decision-making style, national culture, and data management practices can impact significantly on the application and efficiency of ERP systems. This research aims to investigate the companies' willingness to implement ERP in their procurement operations or not, based on the organizational cultural differences and the impact of these cultural differences on the procurement decisions using the ERP. This study contributes to a comprehensive overview of the organizational cultural management differences between Vietnam and Hungary. Moreover, this study will explore the impact of ERP on streamlining procurement functions. To obtain these targets, structured literature review method is employed to compare the current situation between two companies: Givaudan in Hungary and Top Solvent Vietnam, as well as the impact of ERP on procurement operations. The findings of this research are adding valuable insights for business owners, managers and decision makers to consider the ERP implementation in different organizational cultures.

Keyword: Procurement, ERP, Organizational Culture, Decision-making.

1. Introduction

Enterprise Resource Planning (ERP) has become an indispensable part of operation organizations, especially in improving and enhancing work quality through the integration and standardization of business processes. In supply chain management, ERP is emerging as a crucial tool for enhancing efficiency and productivity. As supply chains become more complex, ERP integration becomes

essential for achieving organizational resilience. Within the procurement function, ERP plays a key role in streamlining procurement processes (Tarn, Yen and Beaumont, 2002). Besides from managing internal resources, there are different ways of implementing ERP depending on company's policy and leadership decisions. One of the critical factors influencing the decision to implement ERP is organization culture factors (Chadhar and Rahmati, 2004). It is important to understand the impact of organization culture impact on the decision to implement the ERP by the company's top management and decision makers.

1.1. Procurement function in supply chain management and organizations

The procurement function plays a crucial role in organizations; it affects not only operational performance but also sustainability and stakeholder relationships. It acts like a fundamental aspect of organization operations and plays a crucial role in strategic alignment and competitiveness of an organization (Rane, Narvel and Bhandarkar, 2020). In today's competitive market, procurement has evolved into a strategic level for enhancing business performance, fostering partnerships, and achieving social objectives. Organizations have long recognized the benefits that the procurement function can offer. Since it serves as a strategic driver and a key contributor to an organization's overall effectiveness (Nicoletti, 2018). In supply chain management, procurement plays a key role in the success of any organization. It directly impacts supply chain performance, productivity, and long-term competitiveness. The responsibility of procurement including identifying, selecting and approving suitable suppliers. It also help in strategically developing long-term relationships with them (Cornelius du Preez and Folinas, 2019). The procurement function interacts with every department within a company, from sales and marketing to engineering and manufacturing. Thus, it become a key process for assuring project outcomes. Through efficient procurement activities, companies can optimize costs, build flexible supply chains, and engage with sustainability objectives. This is particularly true for manufacturing firms. Normally, a manufacturing firms usually spend up to 80% of their revenues on the procurement of products and services (Mishra, Devaraj and Vaidyanathan, 2013). Procurement typically accounts for over 50% of the total product or service cost is spent by a company. It including purchasing materials, fuel, and services sourced externally to support operations and ensure the delivery of products or services to customers (Ilias P. Tatsiopoulous, 2004). According to (Ross, 2015), procurement has a direct impact on the financial stability and profitability of nearly every trading partner in the supply chain. The procurement costs alone ranging from 40% to more than 70% of total sales dollar. This

highlights the financial significance of procurement across industries. Procurement emerged as a discipline primary of the manufacturing sector in the mid-twentieth century. It has undergone significant transformation. Historically, it was simply a process of acquiring goods and services. However, during the 1980s and 1990s, the increasing pressure to reduce costs in a global market led to significant changes (Rane, Narvel and Bhandarkar, 2020). Today, procurement responsibilities encompass buying materials of the right quality and quantity with minimal investment in inventory and procurement costs. Apparently, poor procurement decisions can have an immediate impact and cause costly damage to organizations. As a result, decisions that are made in the procurement process can influence heavily the supply chain and production planning in general. For that, effective procurement management not only ensures cost-efficient sourcing. It also enhances the flexibility and competitiveness of the supply chain (Rane, Narvel and Bhandarkar, 2020).

Recent research has explored the strategic role of procurement in achieving organizational objectives. (Sengupta *et al.*, 2015) emphasized that effective procurement strategies are essential for the successful implementation. They give an example of solar energy projects. This is because this area need accurate data collection and interpretation are crucial for stakeholders. This emphasize the role of procurement in general. It not only just acts as a transactional function, but also as a strategic enabler that supports project success through informed decision-making. (Blome, Schoenherr and Eckstein, 2014) further point out that procurement is not only about purchasing decisions. It requires the strategic management of resources and suppliers to improve sustainability. Because of that reason, procurement has expanded its scope to achieve a competitive advantage in today's competitive market. It encourages organizations to redesign their procurement strategies to increase agilit. Besides, the organization need to respond quickly to fluctuating demand and customer expectations (AMBE, 2010). This transition from a cost-focused function to a strategic enabler of business shows how procurement can gain a competitive advantage in challenging environments. With the recognition of the importance of the procurement function, organizations have taken steps to apply the advance of technology (Ngai, Law and Wat, 2008). It includes taking an advantage of technology such as ERP in their effort to improve their operations and address cost and revenue pressures.

1.2. ERP in procurement function and organizations

(Bienhaus and Abubaker, 2018) have discussed how digitization can enhance procurement roles from traditional and strategic functions to partnership strategic. By embracing digital tools, procurement can improve organizational efficiency and increase company profit. They highlight key advantages includes enhancing decision-making. Besides, they emphasize that procurement also support for new business models and the alignment of procurement with broader organizational goals. This alignment is crucial for procurement to maintain its relevance in a rapidly changing market.

Existing research has emphasized the significance of ERP systems in enhancing procurement operations. According to Gartner's research (Hofmann, 2008), ERP systems are defined as "a business strategy and a set of industry-domain-specific applications that build customer and shareholder value by enabling and optimizing enterprise and inter-enterprise, collaborative, operational, and financial processes." They are designed to manage a wide range of organizational data across key business functions. It includes finance, human resources, manufacturing, supply chain, and procurement (Aulia *et al.*, 2019). ERP systems act as centralized data management platforms. It helps consolidate and integrate data from different departments into a single computer system. In addition, it allows consistent information flow and effective decision-making (Nizamani *et al.*, 2014). These systems connect diverse internal department function tasks. These tasks include marketing and sales, manufacturing and production, finance and accounting, and human resources (Kenneth C. Laudon and Jane P. Laudon, 2007). It is a competitive strategy that combines a centralized core ERP system with specialized solutions. These functions also enhance corporate cross-function and reduce transaction costs in supply chain management (SCM) (Tarn *et al.*, 2002). More importantly, ERP systems allow procurement to integrate it with other key functions such as finance and production planning. This makes the systems even more vital for businesses with the aim to build more resilient and responsive supply chains in the face of global disruptions. Besides, integration of ERP with customer relationship management (CRM) through collaborative E-business can provide enterprises with competitive advantages. For instance, it helps to improve interactive sales with clients and ensuring smooth data flow (Li Hong-yan, 2004). In additional, ERP give competitive advantages to organization by integrating with knowledge management (KM). This enable enterprises to efficiently manage both intellectual resources and operation assets (Li D. Xu *et al.*, 2006). ERP reduce human involvement by allowing a seamless

information flow. This help to lower errors and increase decision-making processes' overall accuracy.

Presently, more and more organizations seek integrated solutions that help to streamline procurement processes. For that reason, it is essential to understand the multifaceted contributions of ERP systems. ERP systems are now considered to be an essential part in modern businesses. It helps streamline a variety of business processes, including procurement activities (Teo and Lai, 2009; Nizamani *et al.*, 2014). ERP systems provide a comprehensive platform in procurement for managing the entire procurement lifecycle from requisition to payment. ERP systems help organizations track supplier performance, control inventory levels and policies on sustainability (Oelze *et al.*, 2016). Moreover, ERP system can reduce costs and time by automating and integrating procurement processes. Thereby, it would improve the overall efficiency of procurement management (Yan-chun *et al.*, 2011). Procurement is no longer simply about acquiring goods and services. It now involves strategic management of suppliers, resources, and data to drive competitive advantage. ERP systems have transformed procurement by enabling it to become a more integrated and strategic function within the organization. This strategy demonstrates an increasing recognition that procurement is a value-added function. Hence, the business performance can increase overall rather than focus on a cost center.

1.3. Organizational culture concept

Organizational culture plays an important role in shaping the behaviors, values, and practices within companies (Giorgi, Lockwood and Glynn, 2015). It has emerged as a pivotal factor influencing the success and adaptability of businesses in an ever-evolving marketplace. Organizational culture is a complex and multifaceted concept that encompasses the shared values, beliefs, and assumptions that guide the behavior of individuals and groups within an organization (Kimbrough and Componation, 2009). It is a comprehensive, socially constructed concept that is historically formed. This concept significantly effects on the success or failure of organizational initiatives (Dastmalchian, Sangho and Ignace, 2000). This culture tends to be unique and specific depending on each company. It acts as a distinguishing factor that helps them stand out from their competitors. In the context of organizational behavior and innovation, (Martirosyan and Singh, 2015) explore two clusters of culture definitions: organizational cultures and national culture. They note that both of them actively influence practices and outcomes, particularly in innovation

processes. Their findings suggest that culture is not merely a backdrop but an integral component of driving innovation and shaping organizational behavior.

Organizational culture has a significant impact on companies. Organizations operating within high power distance cultures, a feature often linked to national culture, tend to exhibit a pronounced hierarchical management structures (Bashshur and Oc, 2015). This is evidenced by studies that highlight the challenges these organizations have to address regarding employee voice and participation in decision-making. According to (Bashshur and Oc, 2015), in such environments, the effectiveness of employee voice is constrained by established power. Such environment inhibits creativity and individual expression. The top-down approach prevalent in these cultures can result in a disconnect between management and lower-level employees. This is because decisions are primarily decided by a select decision makers (Valmohammadi and Ahmadi, 2015). In high power distance cultures, the hierarchical structure can also reinforce a command-and-control leadership style. Innovation and employee input in these cultures are often secondary to authority and compliance. Therefore, employees in those cultures usually follow the steps that are formed by companies. They barely suggest their ideas for improvement. Moreover, (Rawashdeh, 2018) emphasized that centralized decision-making in high power distance cultures may prevent the adoption of innovative practices. Employees may feel disempowered to contribute ideas, which is critical for fostering an adaptive and sustainable organizational environment. The centralized style of decision-making in high power distance cultures contributes to a culture that prioritizes authority over collaboration. As a result, the company may be limited in taking advantage of employee creativity. This lead to a slowdown in organizational adaptability and responsiveness to market changes. Studies indicate that this centralization can affect performance management practices. This may result in employees feel their insights are undervalued (Bititci, Cocca and Ates, 2016). Consequently, this limitation in participation can inhibit organizations from fully leveraging the potential of their workforce. Additionally, the cultural context plays a crucial role in shaping these dynamics. For example, employees in high power distance environments might hesitate to share ideas or challenge established norms. Therefore, organizations who fail to consider their cultural factors may struggle with implementing effective knowledge management practices (Wu, Zhang and Schroeder, 2011). This unwillingness to engage can inhibit innovation and undermine corporate performance. On the other hand, another example of how national culture influences organizational culture is collectivist societies. This culture prioritizes group harmony and loyalty.

(Imada, 2012) observes that this cultural orientation enhances collaboration and shared responsibility. As a result, performance management practices are more inclusive. In such workplaces, employees are often encouraged to participate in decision-making processes. It helps to enhance motivation and commitment to organizational goals. Liu and her partners (Liu *et al.*, 2019) reveal that individuals in collectivist cultures are more responsive to social norms and expectations. (Tian *et al.*, 2018) further elaborate on the impact of culture on innovation. They highlight how culturally specific factors can facilitate or hinder innovation. Moreover, they reinforce the need for a comprehensive definition of culture that encompasses both organizational and national dimensions.

1.4. Connection between ERP and organizational culture

According to research on Critical Success Factors (CSFs) influencing ERP implementation, such as the study by (Ngai, Law and Wat, 2008), found that there are 18 CSFs. This includes ‘Organizational characteristics’ and ‘national culture’. They emphasize that successful ERP implementation requires a thorough understanding of organizational culture. Besides, ERP has become a mainstay in contemporary business operations. The system harmonizes diverse organizational functions and streamlining processes (Kimbrough and Compton, 2009). (Hofstede, 1990) defines national culture as “the collective programming of the mind which distinguishes the inhabitants of one country from another”. The basic values, beliefs, and norms in different countries affect organizational culture. Therefore, it in turn influences professional activities, including ERP implementation (Kumar, Maheshwari and Kumar, 2003). There are studies, such as those by (Cyrus and Nejad, 2011), have employed Hofstede’s cultural framework to investigate how cultural factors affect the adoption and implementation of ERP systems. This framework outlines six key dimensions of culture: power distance, individualism, masculinity, uncertainty avoidance, long-term orientation, and indulgence versus restraint. These cultural dimensions significantly impact the success of ERP deployments (Cyrus and Nejad, 2011). For instance, companies in high power distance cultures, where there is a clear hierarchy and subordinates expect to be directed by superiors. This makes it very struggle for them to achieve the user empowerment and cross-functional collaboration required for ERP success (Peng and Miguel Baptista Nunes, 2010). Additionally, many studies have investigated the impact of culture on ERP implementation. For example, (Chadhar and Rahmati, 2004) compared the cultural differences between Australia, representing for Western world, and Saudi Arabia, representing the

Arab world. They explore how national culture influences ERP system acceptance. The study found that while ERP systems offer many benefits, cultural and organizational challenges often lead to delays in implementation and budget overruns.

Despite ERP systems provide many benefits, many companies are hesitant to adopt them, especially small and medium-sized enterprises (SMEs) (Snider, da Silveira and Balakrishnan, 2009). It could be challenging for organizations with strong and established cultures to introduce systems that require significant changes in their mindset and operational practices (Sajjad, Eweje and Tappin, 2015). This is especially relevant in hierarchical environments because top-down technology initiatives may make lower-level employees feel disempowered. Moreover, ERP adoption usually requires organizations to change their long-standing procedure. This makes it difficult for companies that have inflexible organizational structures. In China, for instance, organizational culture can be a significant barrier to ERP implementation. Chinese executives often have a higher tolerance for unclear information and tend to value historical approach (Xue *et al.*, 2005). They may consider business data as their personal assets rather than company assets (Davison, 2002). As a result, China executives may less support for information-sharing systems like ERP. Unlike their Western counterparts, Chinese managers are less supportive and often use ERP systems for control over the company rather than process improvement (Martinsons A' and Westwood, 1997). (Zhang *et al.*, 2005) further highlight that Chinese managers often exhibit a conservative approach when it come to the issue of information sharing. This culture makes them very cautions regarding to changing long-established practices and thereby cause barriers for ERP implementation. Additionally, (Davison, 2002) notes that Chinese managers prefer using a large number of printed reports for control purposes. This culture is inherited from legacy system era, which may hinder business process reengineering and ERP implementation. These phenomena highlight the importance of culture toward technology adoption attitudes and the willingness to embrace change. Another study by (Allen, Kern and Havenhand, 2002) focuses on ERP implementation in universities, particularly on the clash between academic and managerial ideologies. Academic cultures embrace freedom and autonomy, and therefore often resist the rigid, standardized processes required by ERP systems. In contrast, business-oriented cultures, which prioritize efficiency and standardization are more aligned with the use of ERP systems.

1.5. Organizational culture in ERP implementation

1.5.1. Cultural dimensions

Hofstede's cultural dimensions' theory is a framework used to understand the differences between national cultures and to distinguish how business is done across countries. In other words, this theory provides a framework to differentiate between different national cultures, the dimensions of culture, and their impact on business. Hofstede describes his theory based on the following dimensions: Power distance, Individualism vs. collectivism, Uncertainty avoidance, Masculinity vs. femininity, Long-term orientation vs short-term orientation, and Indulgence vs. restraint.

Power distance index: from the viewpoint of the less powerful individuals in society, the power distance index indicates how much they accept their position in society and their anticipation of an equal structure (Hofstede, Hofstede and Minkov, 2005; Hofstede, 2011)

Individualism vs. collectivism: This dimension explains the nature of social relationships and whether people belong to cohesive groups or themselves. The significance of the "I," the achievement of personal objectives, and each person's individuality are all expressed by the individual dimension. The collective dimension shows the interdependence of groups and the individuals who belong to these groups and the priority for public benefits "we" over personal benefits (Hofstede, Hofstede and Minkov, 2005; Hofstede, 2011).

Uncertainty avoidance: This dimension explains how people prepare and handle future occurrences as well as how they manage the anxiety that goes along with them. Communities with a high uncertainty avoidance index typically plan rigorously to prevent any adverse events. In contrast, societies with a low uncertainty avoidance index are more laid back and handle things following the information and the event (Hofstede, Hofstede and Minkov, 2005; Hofstede, 2011).

Masculinity vs. femininity: This dimension explains the roles that men and women play in society as well as the significance of each group. High level of competition and the distinction between men's and women's roles are characteristics of a masculine society, since the man is characterized by ambition and firmness, and his primary goal is to acquire wealth. Conversely, women should focus on people and the quality of life. The society of femininity highlights the equality of men's and women's roles, and this society aims at the presence of humility and cooperation among its members and the significance of taking care of the weak (Hofstede, Hofstede and Minkov, 2005; Hofstede, 2011).

Long-term orientation vs. short-term orientation: Short-term oriented societies tend to care about the present and learn from the past and its mistakes. They are considered conservative and

have a fixed mindset. They base their decisions on the present and the lessons they have learned from the past. They also place a high value on stability and societal obligations. On the other hand, societies with a long-term orientation are more likely to focus on saving, plan forward for the future, and persevere in work. According to this society's point of view, planning is essential because the future is unpredictable and they rely on the strengthening of their bonds to maintain stability in the long run (Hofstede, Hofstede and Minkov, 2005; Hofstede, 2011).

Indulgence vs. restraint: This dimension illustrates how cultures address people's natural needs and the basic motives for enjoying life and how to guide their behavior. An indulgence society allows people to fully satisfy their wants and needs. On the other hand, restricted society attempts to control its members' conduct within certain norms and traditions (Hofstede, Hofstede and Minkov, 2005; Hofstede, 2011).

1.5.2. The role of cultural dimensions in ERP implementation

Existing research has explored the relationship between ERP implementation and Hofstede's dimension culture framework. (Van Everdingen and Waarts, 2003) indeed found how Hofstede's cultural values impact ERP adoption. The study indicates that power distance, uncertainty avoidance, and long-term orientation have a significant influence on the probability of adopting ERP. In particular, companies from countries with a low score on power distance, a low score on uncertainty avoidance, and a high score on long-term orientation are more likely to apply ERP in their organization.

(Batenburg, 2007) in his study discusses that organizations based in countries with high uncertainty avoidance scores have low e-procurement adoption rates. This hypothesis is proved in their findings that Poland, Spain, Italy, and France have high uncertainty avoidance combined with low e-procurement adoption. Conversely, Germany and the UK, which have high levels of e-procurement adoption rates, have low scores on uncertainty avoidance.

Relying on (Zhang *et al.*, 2005) research on a framework of ERP system adoption success in China, who used Hofstede's dimensions of power distance, collectivism, femininity, and uncertainty avoidance to measure the implementation success rate, they concluded that the inclination of members of an uncertainty avoidance culture and ambiguity impact significantly on how institutions are organized and managed. According to this logic, uncertainty avoidance will also affect the way individuals use Information systems (IS), which ERP relies on. They further point out that countries with high scores of uncertainty avoidance are more likely to need clear

information. As a result, they tend to deploy ISs across departments within an organization to share information to assist decision-making. However, the low scores of uncertainty avoidance are likely to be inclined to share information. As a result, they are reluctant to use ISs that require real-time information entry and information sharing across different departments.

Based on the previous studies and to link them with the organizational culture impact on ERP implementation, the research will focus on only three cultural dimensions. Which are Power Distance, Uncertainty Avoidance, and Long-term Orientation.

1.5.3. Hungary's culture vs. Vietnam's culture

The reason for choosing Hungary and Vietnam in this study is due to the application of the study in Hungary and the possibility of access to industrial connections from Vietnam. The chart is retrieved from the website theculturefactor.com on October 2024.

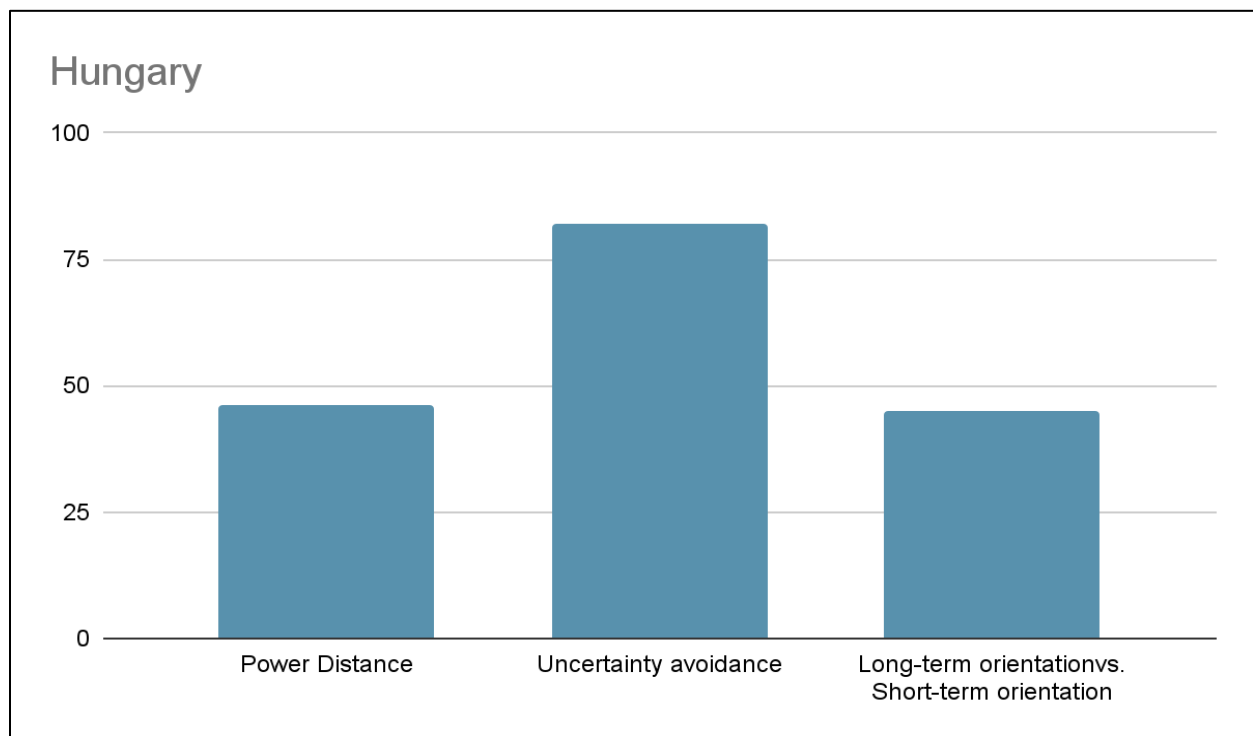


Figure 1. Hofstede cultural dimensions (Hungary)

Source: theculturefactor.com

Figure number 1 shows three Hofstede cultural dimensions for Hungary. Regarding the dimension of Power Distance, Hungary scores low on this dimension (score of 46). This means that the Hungarian style is dependent, with a hierarchy for convenience only, equal rights, superior accessibility, the coaching leader, management facilities, and empowerment. Managers rely on their team members' experience, and the powder is decentralized. Employees expect to be

consulted. Individuals in Hungarian society do not like to be controlled and managers are treated casually. Communication is direct and indirect.

Regarding the dimension of uncertainty avoidance, Hungary scores 82 on this dimension. Thus, they have a preference for avoiding uncertainty. This means that Hungary maintains rigid codes of belief and behavior. Additionally, they are intolerant of unconventional actions and ideas. Key components of this culture are carefully planning for the future and preserving in work.

Regarding the dimension of Long-term orientation vs. Short-term orientation, Hungary scores 45 on this dimension. It is shown that Hungary is a relatively normative country. They have a long-term orientation and tend to plan carefully in advance for the future. They pay attention to savings and preserve in work. From their perspective, it is necessary to plan for the future because they depend on the strengthening of their relations for long-term stability.

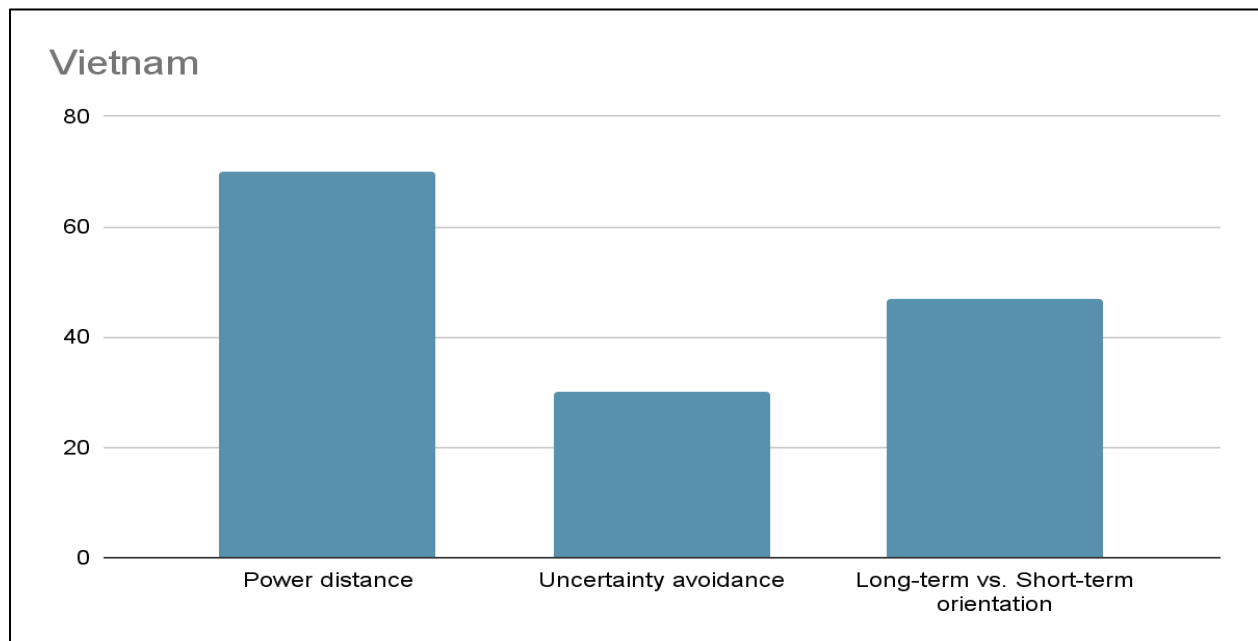


Figure 2. Hofstede cultural dimensions (Vietnam)

Source: theculturefactor.com

Figure number 2 shows three Hofstede cultural dimensions for Vietnam. Clearly, Vietnam has a similar score in Long-term orientation vs Short-term orientation dimension but completely the opposite in the power distance and uncertainty avoidance dimensions.

As for the power distance dimension, Vietnam has high scores on this dimension (score of 70). This means that all individuals in society are not equal. Vietnamese people accept a hierarchical order in which everybody has a place and which needs no further justification. Hierarchy in an

organization is seen as reflecting inherent inequalities, and centralization is popular. The employees expect to be told what to do, and the ideal boss is benevolent.

Regarding the dimension of uncertainty avoidance, Vietnam has a low preference for avoiding ambiguity (score of 30). This means that Vietnamese society promotes a more relaxed attitude in which practice counts more than principles and deviation from the norm is more readily accepted. They feel that there should be no more rules than are necessary and that those that are unclear or ineffective should be abandoned or changed.

Finally, for the long-term orientation dimensions, Vietnam scored 47 points. Similar to the Hungarian society. This suggests a balanced approach between traditional values and a willingness to adapt to modern influences. There is an appreciation for both long-standing cultural practices and the need for progress and innovation.

1.6. Top Solvent Vietnam and Givaudan Hungary Company overview

Procurement is a critical activity in every company. This activity comprising the detailed and meticulously planned processes involved in procuring the essential goods, services, and resources to support the organization's operations and strategic goals. The procurement process begins with the identification of particular requirements. Then continues with the evaluation and selection of qualified suppliers who can meet those demands. This process is not simply a transaction. It is a strategic initiative with the potential to significantly impact an organization's supply chain performance, cost structures, and overall competitiveness. Since the 1980s, the procurement function has grown in significance. Historically, businesses recognized the substantial amount spent on purchases and potential saving costs that may be obtained through a targeted procurement strategy (Hopkins, 2019). In order to maximize these benefits, companies must ensure that the purchasing function is strategically integrated and organized in an effective manner (Preez, 2019).

1.6.1. Top Solvent Vietnam

Top Solvent Vietnam is a subsidiary of TOPNEXT International Company Limited (TX), which operates under Thai Oil Public Company Limited (ThaiOil), a member of PTT Group (National Oil and Gas Group of Thailand). Founded in 2008, TOPNEXT International conducts business as a producer and distributor of solvents and chemicals, serving both local and international markets. Initially, Top Solvent Vietnam (TSV) was a division under Shell Limited Vietnam specializing in solvent business in Vietnam. However, in 2008, ThaiOil made its first international investment by acquiring Shell's solvent business in both Thailand and Vietnam for 120 million dollars. Top Solvent Vietnam was established in Ho Chi Minh City to import and distribute solvents and

chemicals from Thailand and other regions. The company later expanded operations with a primary terminal in Dong Nai Province, southern Vietnam, and in 2018 opened a new terminal in Hai Phong Province to enhance distribution across northern Vietnam. Currently, Top Solvent Vietnam is a leading solvent and chemical distributor in Vietnam, providing products for industries such as paints, coatings, adhesives, sealants, inks, electronics, cleaning and edible oils. Previously operating as Shell Vietnam, the company pioneered solvent and chemical imports by sea freight in 1998 following the normalization of diplomatic relations between Vietnam and the US, a role that is now continued by Top Sovent Vietnam. Top Solvent Vietnam now operates three large-scale terminals: Go Dau 1 and Go Dau 2 in Dong Nai, which has recently been expanded, and Hai Phong in the north. It supplies products across 38 countries. The group hierarchy presented in figure number 3.

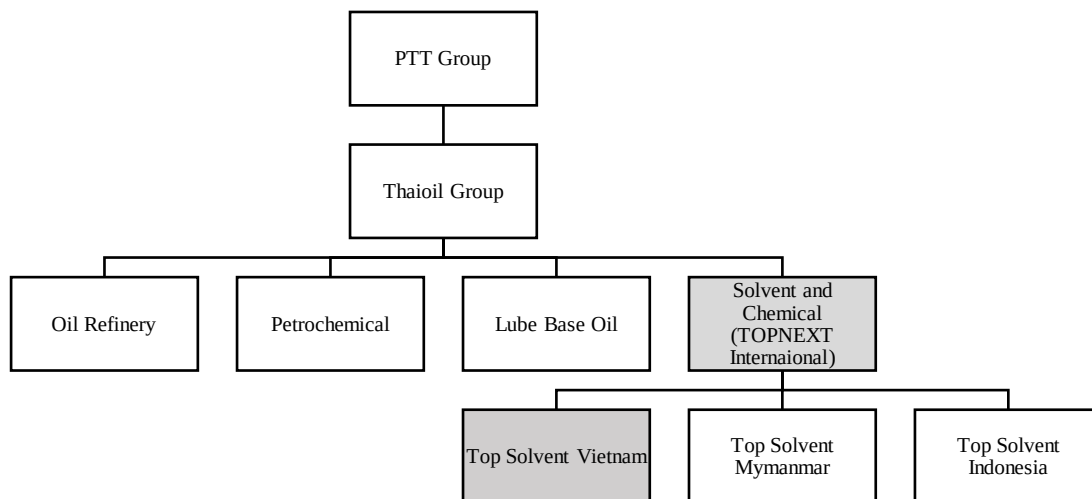


Figure 3. PTT Group Organization Chart

Source: Author's own creation

The procurement function at Top Solvent Vietnam (TSV) includes three contract order criteria: PO/Contract Selection, PO/Contract and Price Comparison Evaluation and Tendering Process.

- For PO/Contract Selection ($\leq \$200$), the custodian/requester can source directly from a supplier and get approval from their line manager in urgent or low-value orders.
- PO/Contract and Price Comparison Evaluation applies to most contracts, with four values tiers, levels 1, 2 and 3 are illustrated in figure number 4:
 - Level 1 (\$200-\$600): The buyer obtains quotations from two suppliers, with authorization from department managers.

- Level 2 (\$600-\$1,500): The buyer gathers quotes from two suppliers, and approval from TX Managing Director with support from TSV General Director or TSV Deputy General Director is required.
- Level 3 (\$1,500-\$2,600): The Procurement Manager secures at least two quotations, with final approval from TX Managing Director.
- Level 4 (\$2600-\$135,000): The Procurement Manager obtains at least two supplier quotes, with a formal approval process overseen by TX Managing Director and TSV top management, illustrated in figure number 5.
- Tending Process ($\geq \$135,000$): TSV issues an Invitation to Bid (ITB) to at least two qualified suppliers, requiring formal documentation.

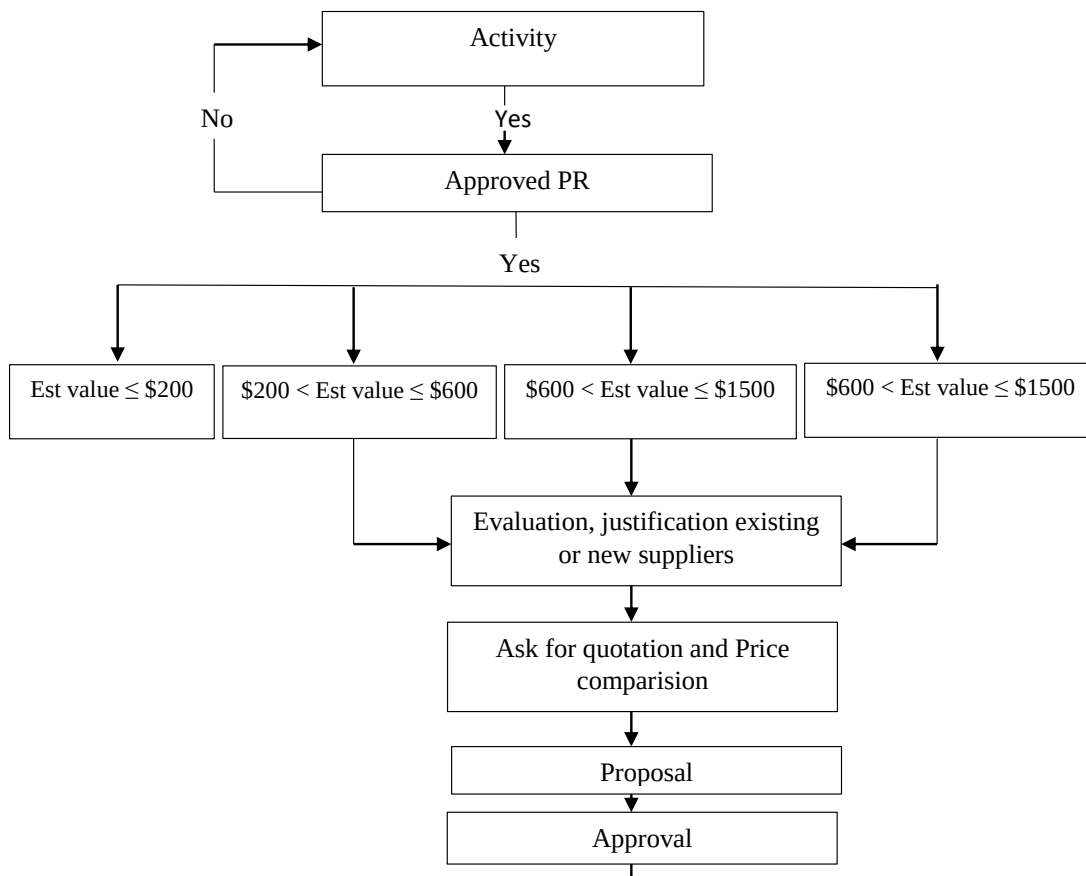


Figure 4: TSV Procurement process for PO values smaller or equal \$2600

Source: Author's own creation

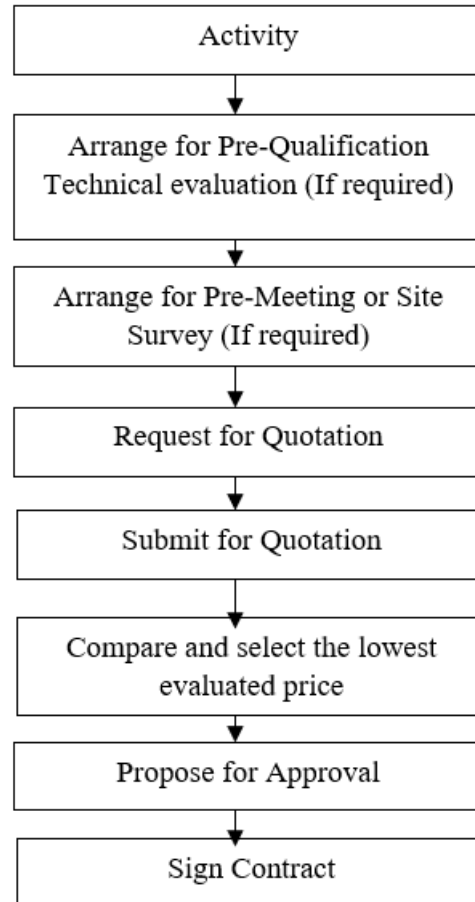


Figure 5: TSV Procurement process for PO values bigger than \$2600 and smaller or equal \$135,000

Source: Author's own creation

The procurement activities at Top Solvent consist of defining a Purchase Requisition (PR), PR Approval, and following a structured procurement process, including contract selection based on PO value, price comparison, and tendering. The procurement process at Top Solvent Vietnam currently operates without an ERP System; instead, communication relies on manual method, emails, and both online/offline meetings. While Top Solvent Vietnam has had an ERP system since its early days, it is only used by Finance, Customer Relation, Sales and Warehouse departments for inventory and auditing tasks purposes. The procurement department at Top Solvent Vietnam comprises only two personnel: A Procurement Manager and a Procurement Coordinator. Furthermore, Procurement and HR are integrated into a single department, reflecting the limited investment in procurement resources. The absence of an ERP system creates

communication challenges, particularly for approvals from the TX Managing Director, who is based in Bangkok, Thailand rather than at Vietnamese headquarters. The current approval hierarchy at Top Solvent Vietnam is vertical, where decision-making flows top-down. Since ERP is only used in the Finance department, tasks related to the procurement department are handled by the Accounting department, placing a significant workload on the department.

The above information is retrieved from the company's website thaioilgroup.com, the company's television commercial (TVC), and internal company documents that have been authorized for use.

1.6.2. Givaudan Hungary

Givaudan is a multinational company specializing in the production of food flavors and fragrance ingredients, headquartered in Switzerland, with branches and manufacturing sites worldwide. It is the largest company globally in the flavor and fragrance industry. The Givaudan Business Solutions (GBS) center in Budapest, Hungary, was founded in 2011 and comprises a multinational expert team across Europe, the Middle East, and Africa. It is one of three delivery centers for Givaudan globally, alongside centers in Malaysia (serving Asia) and Argentina (serving the Americas), dedicated to delivering agile employee and business solutions. The processes these centers manage cover multiple areas: Finance, Controlling, Human Resources, Information Management & Technology, Supply Chain, Procurement, Continuous Improvement, Environment, Health & Safety, Sustainability, and Enterprise Data Management.

The procurement department at Givaudan Hungary, known as Global Procurement, it's composed of teams managing raw materials, indirect materials & services, and sustainability. Annually, Givaudan spends approximately 3,700 million CHF on raw materials as well as services, highlighting procurement's strategic role in profitability. For raw materials procurement,

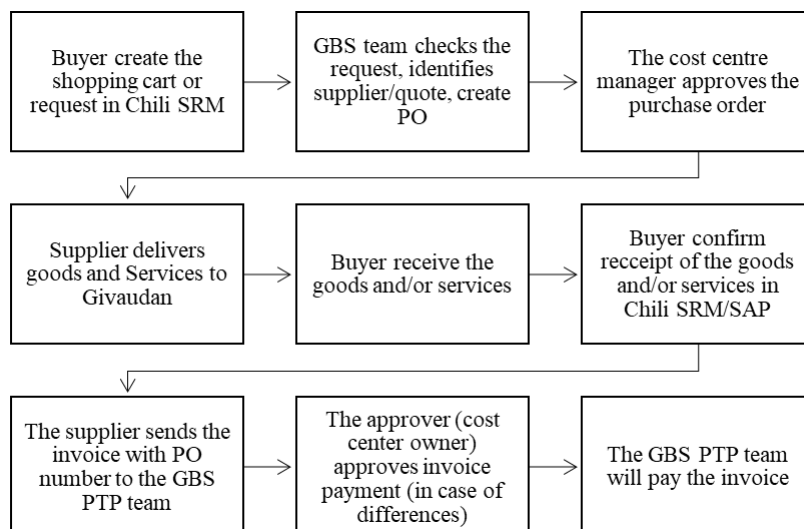


Figure 6: Givaudan's General Procurement Processes

Source: Author's own creation

Givaudan sources 12,400 different materials from 2,700 suppliers in over 120 countries from small farmers to multinational corporations. Givaudan has centralized its procurement activities in three delivery centers including Budapest (Hungary), Kuala Lumpur (Malaysia) and Buenos Aires (Argentina), representing 3 regions of Europe, Asia and the Americas, respectively. Givaudan's procurement process is categorized into two main types: The General Procurement Process for low-value and non-recurring purchases and the General Procurement Process for High-value and recurring purchases. For low-value, non-recurring purchases (below 500 CHF), employees can make immediate payments using a company credit card or cash without involving the procurement department, the vendor no SAP needed and already exist on the system, only direct manager approval is required and Givaudan transfers the approved amount to the requester. For high-value, recurring purchases (above 500 CHF), employees initiate the request by creating a shopping cart in Chili SRM, which is recently introduced at Givaudan. After that, negotiations are handled by the GBS or local procurement teams according to procurement guidelines. The requester manages goods receipts, and invoices must reach the accounts payable team promptly to ensure timely booking and payment. Givaudan's procurement processes are fully integrated with the ERP system (SAP, SRM and Chili), enhancing efficiency and global connectivity. Figure number 6 illustrates Givaudan's general procurement processes.

In addition to these standard procedures, Givaudan also has special processes for exceptions for some cases such as sponsoring and donations, small gifts for customers, hotels or restaurants, legal fees, etc. These exceptional cases have other processes such as One-Time Vendor Process, Manual Payment Process, and Advance & Down Payment processes. All these requests and procedures are managed through the internal AskMe system and SAP.

The above processes highlight that procurement is a core and well-invested function of Givaudan. It is viewed as an essential component of the company's operations. The procurement activities are fully globalized and systematized through the set up of three delivery centers across regions and ERP systems, enabling streamlined and efficient processes. Despite being a global company with procurement activities involving teams across various regions and handling large order volumes annually, Givaudan's ERP system allows for effective management throughout the organization. Givaudan's procurement department is well-structured, with clearly defined roles and responsibilities across various levels. Each team collaborates closely, maintaining strong connections through the company's global ERP system. This approach enhances both efficiency

and coordination. The procurement department is divided into specialized teams for different categories, including the raw materials team, indirect materials and services team, etc. Each focused on distinct procurement needs. Additionally, the department's hierarchy is well-organized, with specific roles like SAP specialists, category managers, planners, and spot buyers, etc. Each handling specialized responsibilities within the procurement process.

The above information is retrieved from the company's website givaudan.com, the company's television commercial (TVC), and internal company documents that have been authorized for use.

2. METHODOLOGY

In this research paper, a rapid structured literature review is applied to explore the impact of ERP in the procurement process and the influence of organizational culture on ERP implementation decisions. This approach is rigorous and systematic, which helps to analyze existing academic literature on the research topic. The prescribed steps are outlined as following in figure number 7:

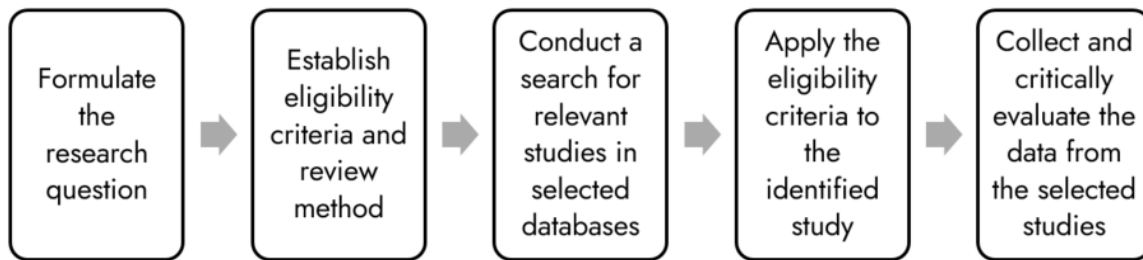


Figure 7. Literature review process steps

Source: Author's own creation

This method aims to gain a deeper and more neutral understanding of the existing knowledge, finding gaps, patterns, and trends in the area. The research method includes formulating the question and searching reputable resources. Moreover, it helps to have a critically reviewing the literature to obtain important information. Important components include a clear search strategy, inclusion and exclusion criteria, and a thorough assessment of study quality and validity (Dumay *et al.*, 2016).

The research aims to examine the role of ERP in streamlining procurement processes and analyze the impact of organizational culture on ERP implementation decisions, with a comparative case study of Givaudan in Hungary and Top Solvent Vietnam.

To achieve this, three research questions (RQ) are developed from the article objective:

- *RQ1. How does ERP impact the procurement process and operations?*
- *RQ2. How does organizational culture influence the decision to implement ERP systems in procurement function?*
- *RQ3. What is the user experience like when adopting ERP in different organizational cultures between Hungary and Vietnam?*

In order to answer these research questions, a structured literature review is conducted, involving the systematic search and categorization of this, using credible databases: ScienceDirect, Research Gate, Taylor and Francis IEEEXplore and IOB Science, with the search language being English. The articles were selected based on their relevance to the research topic. The following keyword combinations: **"Procurement" AND "ERP" AND "Organizational Culture" AND "Implementation"**; **"Procurement" AND "Organizational culture"**; **"ERP implementation" AND "Organizational Culture"**. Inclusion and exclusion criteria were applied as follows:

- Only relevant articles and directly related to the research questions are included
- The language of the articles must be English
- Only review articles and research articles are considered
- Any overlapping articles between the databases are excluded to avoid duplication

The research design is Qualitative (Exploratory) with an aim to gain deeper insight and understanding of the problem. Besides, the semi-structured interviews were used to obtain primary data for this research. The research design process steps are presented in figure number 8 below.



Figure 8. Research design process steps
Source: Author's own creation

2.1. Interviews

The interview questions were divided into two categories with 5 sections. The first category includes sections I, II, and III (section A), which are about demographic information such as age,

gender, level of education, employment time with the company, daily procurement tasks, and ERP usage aims to gain employee insight into ERP systems. The second category includes sections IV and V, which are about internal communication and the organizational culture of interviewers.

The first category (A) is expected to explore the procurement process within organizations and their experience with ERP systems. These are the most important keywords the questions were focused on:

- 1-Daily Workflow: Their main procurement tasks.
- 2-Supplier Count: The number of suppliers monthly/annually.
- 3-Supplier Stability: The frequency of changing suppliers.
- 4-Supplier Location.
- 5-Order Method: How they place the orders.
- 6-Process Pros/Cons: Strengths and weaknesses of the procurement process.
- 7-Purchase Objective: Eg., internal use or end consumers.
- 8-Order Duration: Time from request to contract signing.
- 9-Supplier Monitoring: How Supplier Performance Management.
- 10-ERP Usage: Usage Period & Frequency, Training, Daily and Non-daily ERP Tasks (if any).

The second category (B) aims to investigate the organizational culture of Hungary and Vietnam. These are the most important keywords the questions were focused on:

- 1-Communication Channels: Channels that the interviewer uses for internal and external communication.
 - 2-Communication Challenges: Difficulties with the communication channels.
 - 3-Idea Suggestion: Interviewer's role in contributing ideas within the organization.
 - 4-Company Culture.
 - 5-Resource Accessibility: Level of interdepartmental collaboration and accessibility within the organization.
 - 6-Encouragement for Innovation: The level of innovation and autonomy encouraged in the workplace.
 - 7-Organizational Structure: the structure of decision-making and authority within the organization.
- There were 2 interviews conducted, one in Vietnam, who is a Procurement Coordinator at Top Solvent Vietnam in Ho Chi Minh City. Her name is Nguyen Thi Phuong Thoa. She is 30 years old and she holds a bachelor's degree. Thoa has worked at Top Solvent for more than 1 year since

2023. She used to work with an ERP system for 3 years before leaving the previous company and never used ERP at Top Solvent. I also worked at Top Solvent from 2022 and left the company in 2023. Since then, Thoa has replaced my position at Top Solvent. She allowed me to share my experience and perspective in the interview, and she provided me with an update since I left the company. Since I worked at Top Solvent for a while, I became familiar with the procurement process as well as the company's culture.

The other person is in Hungary, who is an Indirect Material & Service Spot Buyer. Her name is Katalin Keil. She is 47 years old and she holds a bachelor's degree. Katalin has worked at Givaudan in Budapest for 6 years. She is my colleague at Givaudan in Budapest since I have an internship at the company for 5 months. Katalin has worked with an ERP system for 21 years, and she uses ERP frequently for her daily tasks at Givaudan.

The interview with Top Solvent Vietnam employee was conducted online using a Google Meet link with video and audio calls and lasted for 45 minutes. The language used in the interview was Vietnamese and translated into English to collect data. The meeting was video-recorded. Besides, the interview with Givaudan employee was in person and lasted for 45 minutes. The language used in the interview is English, and the meeting was audio-recorded, and the information was transcribed into a case study.

3. Case study of Top Solvent Vietnam and Givaudan Hungary

3.1. Case study of Top Solvent Vietnam

Category “A” answers (Procurement process within organizations and experience with ERP systems):

Recently, there was an update in the procurement process at Top Solvent: A Salesforce system to support the Finance Department in tracking vendor codes. Before implementing Salesforce, employees received extensive training through both online and offline sessions, including e-hour online training every week and in-person training led by staff from Thailand. After the buyer receives PO approval from her line manager via email, they will continue to the vendor code creation step on the Salesforce system. This step includes verifying the information with suppliers by letting them sign the confirmation document, and then the buyer uploads the signed document on the system for approval chain involving approximately 10 participants. This process is fully managed within Salesforce. Despite using Salesforce for vendor code management, the remaining procurement activities still remain manual without ERP adoption.

The procurement process at Top Solvent is generally well structured. However, some challenges still persist. Since purchases are not managed through an ERP system, the buyer must rely heavily on email, which requires constant monitoring and can slow down order tracking. This makes it difficult to efficiently manage and locate specific orders. To address this, the buyer developed an Excel file, “PR/PO Monitoring,” on a shared drive to track PO details like the Purchasing Request (PR) date, approval dates, supplier information, and expected delivery dates. This file is reviewed monthly to notify requesters of any missing PRs. Purchases at Top Solvent are solely for internal use, supporting their operations in two factories in the south of Vietnam and one in the north of Vietnam. A typical order takes two to four weeks from receiving the PR to signing the PO, due to several factors: (1), a policy requiring three quotations from different suppliers, which also applies to existing suppliers and items, extends the sourcing time, (2) Email-based approvals are time-consuming, as managers have high email volumes to manage; (3) the buyer, who also handles office administration, has limited time to process PRs; and (4) frequent supplier changes add complexity. Without an ERP system, tracking supplier performance is done annually and noted in personal calendars. The interviewee believes that an ERP system would streamline the procurement process, especially in approval and payment states, as the current payment process is complex and traditionally. Implementing ERP would minimize the delay with digital document scanning and smoother approvals.

Category “B” Answer (Procurement activities and the organizational culture):

At Top Solvent Vietnam, email and Zalo (a private messaging app) are primary used as communication channels within the organization and to communicate with suppliers. At Top Solvent, the buyer handles fewer than 10 suppliers monthly and around 100 suppliers annually, often changing suppliers due to the one-time nature of the purchased items. The sources are primarily from Vietnamese suppliers. For communication, the buyer prefers email for formal exchanges, while Zalo, a popular messaging app in Vietnam, is often used to reach suppliers quickly. For internal communication, the buyer usually receives PR via email. Although the company also has an internal platform on MS Teams, which is rarely used. Consequently, employees at Top Solvent Vietnam often feel unable to separate work from personal life, as they must use personal accounts for work-related communication. This setup also makes it difficult to track messages from colleagues, reducing work efficiency. Because of the habit of frequently using Zalo to perform procurement tasks, such as negotiating with suppliers. This habit creates

challenges in retrieving information from past orders and suppliers. The habit of using the Zalo application is because the employee finds email communication inefficient, especially when she has to wait for managerial approvals.

In terms of contributing ideas, employees at TSV rarely make improvement suggestions and generally follow instructions from supervisors. They generally follow supervisory instructions and view process changes as difficult. These mentioned issues have existed in the procurement at the beginning. However, the employee accepts these practices as standard, as they believe that the current processes are fixed. The culture at TSV follows a vertical decision-making structure, where decision-making authority lies primarily with top management. This management style creates a top-down approach. This is reflected in the structure of Top Next International (the parent company of Top Solvent) in Thailand. Internal decisions at Top Solvent Vietnam must go through the parent company. For example, the decision to combine the Procurement and Human Resources departments, which is rarely seen in other companies where these two departments are usually separate. This is also reflected in the decision-making process for approving vendor codes in the Salesforce system when the buyer needs to create a vendor code for purchasing: first, the Procurement head, followed by the Deputy General Manager, then the Finance department, and finally the headquarters' Finance department in Thailand. Moreover, the payment process within procurement functions is more likely traditional and complex. The buyer must collect original documents like Good Receipts, POs, and invoices with handwritten signatures from multiple authorizers before submitting them to the Finance Department. This often results in delayed payments, affecting future purchasing cycles.

3.2. Case study of Givaudan in Budapest

Category “A” answers (Procurement process within organizations and experience with ERP systems):

There are various small teams that contribute to the procurement process at Givaudan, with the IM&S Spot Buyer team as an essential part of the department. The IM&S Spot Buyer handles purchase order (PO) ranging from 5,000 CHF to 30,000 CHF, ensuring the acquisition of essential goods and services for both plant and office. Upon receiving three quotations from different suppliers via the requester, the Spot Buyer evaluates three suppliers against specific criteria and presents the findings to the requester, who then selects the supplier. Additionally, the IM&S Spot Buyer's tasks include setting up new vendors in SAP, checking unpaid invoices, monitoring

undelivered POs, and managing stock. All tasks mentioned are managed through the company's ERP systems. While the IM&S Spot Buyer works with many suppliers annually, they maintain a core group of about 5 to 25 suppliers each month and 5 to 10 suppliers annually. These suppliers are mostly based in Germany and Switzerland and connected through the ERP systems SAP and Chili SRM. They are used for every step from receiving quotations to placing orders. The interviewer feels secure with the clear procedural structure, though she at times finds it time-consuming and somewhat administrative. While working with both SAP and Chili SRM can be challenging, they find it manageable. Procurement processes, from PR (Purchase Requisition) submission to approval typically takes only 4 days, with tenders extending to about one week. Chili SRM was introduced recently, and Givaudan provides both face-to-face and online training to help employees adapt. Daily tasks are heavily reliant on ERP systems, especially SAP, which has become integral to their procurement functions. For instance, if a supplier who stopped transactions in 2022 then places an order again in 2024, the Spot Buyer can quickly access vendor codes and historical data within SAP. As a result, the Spot Buyer could make negotiations smoother and more cost-effective. SAP is highly valued by the Spot Buyer, who sees it as not just a tool but an essential knowledge and skillset that benefits them at Givaudan and will be valuable in any organization.

Category “B” Answer (Procurement activities and the organizational culture):

Givaudan's IM&S Spot buyer team contributes significantly to the procurement process, from handling PO to selecting suppliers based on evaluation. The suppliers are managed well based on the long-term contract between Givaudan and suppliers by the Category Manager, which also simplifies the sourcing process. Additionally, the process of supplier selection generally occurs at the lower level, allowing the buyer the freedom to choose suppliers they find suitable. Decisions at Givaudan are made with input from all levels, allowing employees to feel that their contributions genuinely impact outcomes. When challenges arise, employees are encouraged to solve issues independently, and they reach out to higher management only when necessary. This two-way approach, rather than sole top-down decisions, reflects Givaudan's encouragement of “free thinkers.” The buyers at Givaudan find it easy to approach other departments during the procurement process, especially when they need to obtain quotations to move forward with subsequent steps. "I don't mind chasing people," said the interviewee. Additionally, the fact that it only takes four days to complete an order highlights the quick approval process from higher

management, reflecting a culture of efficiency and collaboration. The payment process with suppliers is also streamlined due to the lack of complex paperwork requirements, such as original signed documents. They only need to upload the invoice and good receipt into the system. Overall, in the procurement process, upper management does not need to be heavily involved. This reflects a culture of trust and a lack of tight control.

4. Discussion

Category “B” question discussion: Analysis of Organizational Culture and its impact on procurement decision using ERP

Table number 1 below summarizes the results of the analysis of organizational culture and its impact on ERP implementation.

	Top Solvent	Hungary
Communication channels	Private account (Zalo) - primary Email MS Team	Webex (Primary) Email Phone
Idea suggestion from employee	Not encourage Follow the manager’s guidance	Encourage new ideas Values employee’s input
Organizational structure	Centralized	Decentralized
Working management method	Excel file Salesforce Email	SAP Chili SRM Email

Table 1. Organizational culture of Top Solvent and Givaudan

Source: Author’s own creation

Figure 9 below shows the difference between Hungary and Vietnam in terms of Hofstede’s cultural dimension aspects.

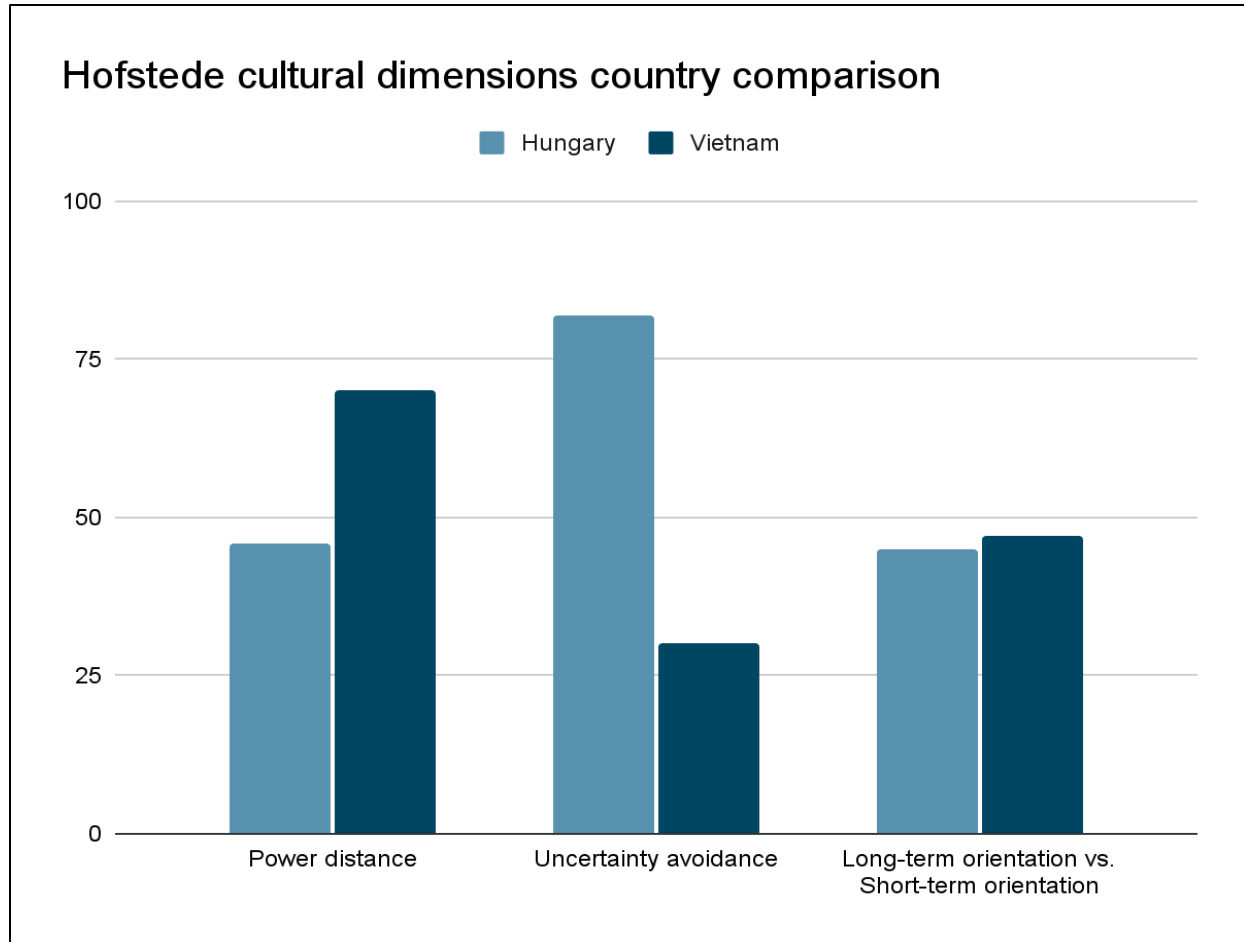


Figure 9. Hofstede cultural dimensions country comparison

Source: theculturalfactor.com

For communication channels, at Top Solvent, formal communication primarily occurs through email, while the Zalo app (a personal messaging app) is widely used for faster contact with colleagues and suppliers. However, employees often rely on their private accounts for work. They feel that this communication style blurs the line between personal and professional life. This setup is mostly to email delays when awaiting management responses, with employees hesitant to follow up with their superiors. This approach aligns with Hofstede's high power distance dimension, reflecting a notable hierarchy within the organization. Additionally, Top Solvent's informal communication channels suggest low uncertainty avoidance. This is because employees lack official records in cases of disputes, which email communication typically provides. This informal approach aligns with a culture that tolerates ambiguity and relies on adaptable, rather than highly standardized procedures. This matches Hofstede's cultural dimension about uncertainty avoidance culture. In contrast, Givaudan relies on official communication tools like Webex and

email. Employees report comfort in following up on delayed responses. It indicates a low power distance and a more egalitarian structure. This formal approach also aligns with Hungary's high uncertainty avoidance, emphasizing thorough preparation and official documentation in future dispute scenarios. Additionally, the fact that all data about suppliers, purchase orders, and purchasing history is uploaded and managed clearly in the system for easy retrieval when needed indicates a high level of uncertainty avoidance. They are prepared for potential situations that may arise.

For idea suggestion from employees, Top Solvent employees barely suggest new ideas. They prefer to follow established protocols and management instructions. This culture of hierarchical structures reflects high power distance, limiting employee-driven innovation. Moreover, employees experience difficulty separating personal life from work due to the informal use of Zalo as a primary channel but they hesitate to voice these concerns. It furthers indication of high power distance. This reluctance to contribute ideas may slow down ERP implementation. This is because employee input is critical for system improvements. Conversely, at Givaudan, employees are encouraged to propose improvements, fostering a culture of continuous innovation. Employees feel valued and motivated to contribute to system improvements. This openness to feedback supports ERP advancements. While both companies score equally on long-term orientation, Givaudan's encouragement of new ideas demonstrates a future-focused approach that enhances ERP adoption, aligning with Hofstede's theories. In contrast, Top Solvent goes against this aspect of Hofstede's theory.

Regarding the working management method, the use of Excel files to manage the procurement process contradicts the concept of long-term orientation. The use of Excel for 'PR/PO Monitoring' reflects a preference for immediate solutions over investing in comprehensive, long-term systems that could enhance efficiency. Additionally, the lack of consistency in performance tracking and annual supplier performance evaluation further indicates a short-term focus at Top Solvent Vietnam. This contrasts with the fact that Vietnam shares the same long-term orientation score as Hungary. At Givaudan, the working management method relies heavily on ERP. This is evident not only through the use of SAP but also by their recent investment in a new system, Chili SRM, which demonstrates their commitment to a long-term strategy.

For organizational culture, the interviewee describes Top Solvent as a centralized structure. In this culture decisions primarily directed by upper management. The multi-step approval chain in

Salesforce which involve up to 10 participants across different management levels from Vietnam to Thailand. This management style demonstrates a hierarchical approach and reflects the organization's emphasis on maximum control. Additionally, the limited application of ERP solely to the Accounting department reflects the absolute control of top management. This matches with Hofstede's high power distance, where authority is concentrated at higher levels. Additionally, the requirement for the buyer to obtain original signatures on paper documents clearly illustrates high power distance, as top management wants to maintain absolute oversight over even the smallest activities, even though these tasks could be performed and monitored by employees themselves. By contrast, Givaudan's decentralized culture promotes broader employee participation, which helps in ERP development by harnessing insights across levels. For example, during the supplier selection process, the decision on which supplier to work with involves both the Requester and the Buyer, in contrast to Top Solvent, where only upper management makes the decision at this step. This collaborative working style decisions are not strictly top-down but involve contributions from employees, empowering them to actively participate in procurement. This matches with the characteristic of Hofstede's theory about low power distance culture. Additionally, the openness in communication with upper management, where employees are free to propose ideas, supports a low power distance, allowing employees to directly influence the procurement process. Although both Top Solvent and Givaudan have the same long-term orientation score, Givaudan's practice of signing long-term contracts with core suppliers from the beginning reflects their long-term vision in procurement strategy. In contrast, Top Solvent frequently changes suppliers, indicating a short-term perspective.

Category "A" question discussion: ERP's impact on Procurement Processes

To sum up the procurement activities for each company, below table number 2 summarizes the result of how ERP's impact on procurement processes.

	Top Solvent	Givaudan
Daily workflow	Manually	ERP involvement
Supplier volume	<10 suppliers monthly	5-25 suppliers monthly
Supplier stability	Frequently change	Fix supplier
Supplier location	Domestic (Vietnam)	International (Germany, Switzerland)

Order method	Private messaging app Email	SAP Chili SRM Phone
Order duration	2 -4 weeks	4 days - 1 week

Table 2. Procurement activities at Top Solvent and Givaudan

Source: *Author's own creation*

Regarding daily procurement workflow, Top Solvent relies heavily on manual processes, which slows down the procurement workflow. In contrast, Givaudan procurement functions use ERP systems (SAP and Chili SRM) in their daily tasks. These systems help in automating processes to improve efficiency, streamline workflows, reduce delays, and minimize human errors.

Regarding supplier volume, Top Solvent works with fewer than ten suppliers monthly, which is a manageable number with manual methods. However, in the future if the business expands, keeping track of suppliers manually may become challenging. On the other hand, Givaudan handles approximately 25 suppliers monthly. Spot buyer at Givaudan have to process high volumes of orders monthly. Thus, the ERP system helps them in managing this workload effectively, which is essential for large-scale procurement at Givaudan.

Regarding supplier stability, Top Solvent often needs to switch suppliers due to the nature of its products. If they keep managing these changes manually, they might complicate future retrieval of vendor information. In contrast, Givaudan maintains stable relationships with core suppliers, supported by the ERP system. This helps ensuring continuity and streamlined access to supplier data.

Regarding supplier location, Givaudan's suppliers are not limited to Hungary, they include vendors from Germany and Switzerland. The ERP systems support the organization in efficient global supplier management, enhancing both reach and coordination.

Regarding order methods, Top Solvent relies heavily on Zalo and email for manual order communication. Thus, it poses challenges in maintaining information accuracy and formal records. In contrast, Givaudan places orders through SAP and Chili SRM. This help to automate the ordering process and ensure greater speed and accuracy. Regarding order duration, the order cycle at Top Solvent ranges from two to four weeks. In contrast, at Givaudan, orders are completed within just four days with the help of ERP system's support.

5. Conclusions

This study has explored the influence of organizational culture on ERP implementation. Besides, it aims to investigate the impact of ERP on procurement processes by analyzing the contrasting cases of Top Solvent Vietnam and Givaudan Hungary. The findings illustrate that cultural dimensions, specifically power distance, uncertainty avoidance, and long-term orientation, have significantly influence ERP adoption. Moreover, the research also highlights its effectiveness within procurement departments. At Givaudan, a low power distance culture, high uncertainty avoidance, and a balanced long-term orientation create an environment where ERP integration is well-supported. Employees are encouraged to take initiative, contribute to continuous improvement, and communicate through structured channels. This helps employees aligning well with the collaborative, data-driven nature of ERP systems. In contrast, Top Solvent's high power distance and low uncertainty avoidance result in a centralized structure. As a result, informal communication practices limit the potential for ERP adoption. These cultural factors reveal how organizational hierarchies and openness to structured processes can either facilitate or hinder ERP implementation.

In terms of operational impact, Givaudan's adoption of SAP and Chili SRM has transformed its procurement processes. These systems enhance efficiency, reduce order times, and enable seamless management of suppliers across international borders. This automation allows Givaudan to handle higher supplier volumes, track performance, and improve procurement cycle times. Meanwhile, Top Solvent's reliance on manual processes, such as email and spreadsheets, results in extended procurement cycles. As a result, Top Solvent faces challenges in maintaining supplier data, and difficulties in order tracking. Without ERP, Top Solvent may struggle in integrating procurement with other functions, which limits operational efficiency and places additional strain on procurement tasks.

Despite these insights, this study has certain limitations that present opportunities for further research. Expanding the interview base to include more employees across different departments could strengthen the reliability of the findings and provide a broader view of ERP's organizational impact, also to increase the number of companies to be included in the study. Additionally, a deeper focus on ERP user experience would be beneficial to understand the benefits of daily ERP interactions, training needs, and employee satisfaction in various cultural settings. Exploring these aspects would provide a richer understanding of ERP's role in organizational change.

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