COMMUNICATION OUTSOURCING PRACTICES IN THE PHARMACEUTICAL INDUSTRY:

A TRANSACTION COST APPROACH

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DECLARATION

I hereby declare that no portion of the work referred to in this thesis has been submitted in support of an application for another degree, or qualification thereof, or for any other university or institute of learning.

I declare that this thesis is my independent work. All sources and literature are cited and included.

I also hereby acknowledge that my thesis will be made publicly available pursuant to Section 47b of Act No. 552/2005 Coll. and AAU's internal regulations.

Cassandre Bintein

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Table of Content

LIST OF FIGURES v

LIST OF ABREVIATIONS vi

1. INTRODUCTION 01

2. THE "MAKE OR BUY" DECISION

2.1. From the "Make" decision, insourcing, to the "Buy", outsourcing 03

2.2. What to outsource? 05

2.3. Benefits of outsourcing 06

2.3.1. Expertise 07

2.3.2. Focus on core activities 08

2.3.3. Economies of scale 08

2.4. Drawbacks of outsourcing 09

2.4.1. Control loss 09

2.4.2. Increased risks 10

2.4.3. Hidden costs 11

2.5. The Knowledge-based view theory: outsourcing perceived through knowledge .. 12

2.6. The Principal-Agent Theory: outsourcing perceived through interactions and incentives 13

2.6.1. Basic Principal-Agent Problem 13

2.6.1.1. Adverse selection 14

2.6.1.2. Moral hazard 14

2.6.2. The Triadic relationship in marketing 15

2.7. The Transaction Cost Economics Theory: outsourcing perceived through costs of transactions 17

2.7.1. Asset specificity 18

2.7.2. External and internal uncertainty 20

2.7.3. Transaction frequency 21

2.7.4. Hidden costs 21

3. **TRANSACTION COST ANALYSIS APPLIED TO THE COMMUNICATION OF PHARMACEUTICAL COMPANIES**

3.1. Defining communication activities 24

3.1.1. Marketing-mix and the 4Ps Model 24

3.1.2. Promotion and the "Buy" decision 25

3.2. Degree of specificity of pharmaceutical communication activities 28

3.2.1. Reputation of pharmaceutical companies 28

3.2.2. Distribution model: OTC and POM 28

3.2.3. EU Regulation 29

3.3. Degree of uncertainty 30

3.3.1. Evolution of the pharmaceutical industry 31

3.3.2. Drugs production and marketing process 31

3.3.3. Pharmaceutical culture and communication 32

3.3.4. Organizational model and internal uncertainty 33

3.3.4.1. Shift toward centralization 33

3.3.4.2. Limits to the centralization of pharmaceutical communication 34

3.3.5. Communication suppliers 35

3.3.6. Principal-Agent problem and internal uncertainty 37

3.4. Campaign management and transaction frequency 38

3.4.1. Launch and product campaigns 38

3.4.2. Brand and engagement campaigns 39

4. **EMPIRICAL ANALYSIS OF OUTSOURCING**

4.1. Marketing expenses of pharmaceutical companies 42

4.2. Data collection and methodology 45

4.2.1. Criteria 45

4.2.2. Sources of data 45

4.2.3. Methodology 46

4.3. Analysis 47

4.3.1. Preliminary results 47

4.3.2. Data type and product type 48

4.3.3. Pharmaceutical companies' communication partners 49

4.4. Bayer 51

4.4.1. Communication partners 51

4.4.2. Evidence of B1 brand 52
4.4.3. Decentralization of media activities 53
4.5. Roche 54
4.5.1. Communication partners 54
4.5.2. Guidelines and evidence of "Make" decision 55
4.6. Novartis 55
4.6.1. Communication partners 55
4.7. Sanofi 56
4.7.1. Communication partners 56
4.7.2. Attempts of central coordination 57
4.7.3. Impacts on outsourcing of communication activities 58
4.8. GSK 59
4.8.1. Communication partners 59
4.9. Merck 60
4.9.1. Communication partners 60
4.9.2. The task-sharing model 61
4.10. Limits 63
4.11. Summary 64

5. CONCLUSION 66

LIST OF APPENDIXES I

LITERATURE II

LIST OF FIGURES

FIGURE 1. Structural Alternatives of Outsourcing 04

FIGURE 2. The Triadic Relationship: Supplier - Marketing - Supply Management....... 15

FIGURE 3. The 4Ps Model 25

FIGURE 4. Managing the Ecosystem........ 26

FIGURE 5. Comparison of Revenue of The Six Biggest Worldwide Communication Groups Between 2018 And 2008 35

FIGURE 6. Comparison of Marketing Expenses of The Six Studied Pharmaceutical Companies in Relation with their Revenue Between 2018 and 2008 42

FIGURE 7. Tree chart with preliminary results 47

FIGURE 8. Type of data classified per pharmaceutical client 48

FIGURE 9. Agencies from Five Communication Groups Working for Six Pharmaceutical Companies 49

FIGURE 10. The task-sharing model for branding between Merck and a production agency 61

LIST OF ABBREVIATIONS

AD – Advertising

CRM – Customer Relationship Management

DTC – Direct to consumer

DTCA – Direct to consumer advertising

KBV – Knowledge-based view

KPIs – Key performance indicators

LBMs – Local Brand Managers

LMMs – Local Marketing Managers

NDA – Non-disclosure agreement

OTC – Over the counter

PA – Principal-Agent

POM – Prescription-only medicine

R&D – Research and development

ROI – Return on investment

RFI – Request for information

RFP – Request for proposal

RFQ – Request for quotation

TCE – Transaction cost economics

UK – United Kingdom

1. INTRODUCTION

Firms manage their activities in different ways. Whether it is about their core business or secondary activities, companies must make the "Make or Buy" decision: either they should keep the activity in-house, or outsource it to a joint venture, via spot transactions on the market, or via short and long-term partnerships with suppliers. To assist firms with making this decision, several theories propose different analyses of the activities. The Knowledge-Based View Theory focuses on the opportunity to gain and maintain knowledge in-house, as well as to purchase and enjoy a specific expertise from external suppliers (Kotabe *et al.,* 2012; Lee, 2001). The Principal-Agent Theory sees partnerships with third parties through an analysis of the misalignment of each party's own incentives and interests (Coleman, 1990; Miller, 2005). Finally, the Transaction Cost Economics Theory examines outsourcing relationships through the costs they incur (Anderson and Gatignon, 1986; Williamson, 1985). By considering and applying these three theories to their own activities, firms can appraise their organizational and contractual choices.

This thesis will focus on the pharmaceutical industry and the decisions of outsourcing communication activities. Although communication is a secondary activity, it is especially important in the pharmaceutical industry as firms are facing a loss of trust from the public (Innoplexus AG and Haven Insights, 2018). Furthermore, the specific set-up of the pharmaceutical industry poses a challenge to communication activities since there must be a consideration of both Over the Counter (OTC) drugs, with a communication directly addressed to the public, and Prescription-Only Medicine (POM), which communication needs to target health professionals. This thesis will evaluate the "Make or Buy" decisions of six pharmaceutical companies about their communication activities in Europe and will bring a large theoretical analysis to these decisions, mainly based on arguments from the transactional costs economics.

This paper will support the theoretical analysis with an analysis of data collected on the six major operating pharmaceutical companies in Europe. Five companies have been selected for having the highest revenues in Europe in 2018:

Bayer (DE), Roche (SW), Novartis (US), Sanofi (FR) and GSK (UK), and the German Merck (DE) for its recent rebranding, suggesting an active communication. Such data are an examination of their marketing costs, the interviews of three Global Client Directors and one Chief Growth Officer working in communication agencies with more than 20 years of experience on pharmaceutical accounts, and an online analysis of existing relationships between the six studied pharmaceutical companies and the five major communication groups. Communication groups have been selected based on their worldwide revenue in 2014: WPP Group (UK), Omnicom Group (US), Publicis Groupe (FR), Interpublic Group (US), and Havas Groupe (FR).

This thesis is structured as follows: Section 2 will present a theoretical analysis of the three main theories explaining the decision to outsource. Section 3 will apply the TCE theory, and other two theories when necessary, to the communication of pharmaceutical companies and develop the hypothesis that firms should outsource such activity. Section 4 will present the research analysis and conclude that when it comes to their communication activities, pharmaceutical firms don't make the "Make or Buy" decision but rather the "Make and Buy from many suppliers" choice. It will also link these findings to the centralization model of companies. Finally, section 5 will conclude the thesis and identify areas for potential future research.

2. THE “MAKE OR BUY” DECISION

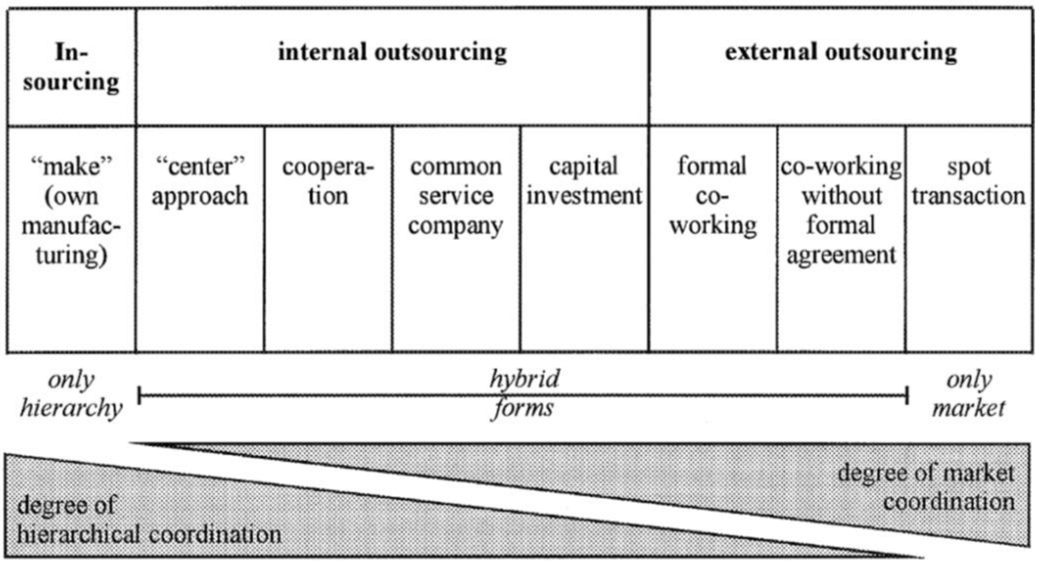
Outsourcing, representing the trade-off of doing a task in-house or by an external company, is a capital decision in the firms’ economics. In today’s ultracompetitive markets, firms are presented with many options when it comes to organizing their activities: should a specific product or service be part of the internal activities of the company (Make), or can it be purchased from a supplier (Buy)? Which choice will best benefit the firm? Can everything be outsourced? Which activity does the firm want its internal resources to focus on? This first part will introduce the “Make or Buy” decision, by presenting the choices of firms, with a specific focus on advantages and disadvantages of the “Buy” decision (as the opposite in general applies to the ‘Make’). It will then introduce three economics theories: The Principal-Agent (PA) Theory, the Knowledge-Based View (KBV) Theory, and the Transaction Costs Economics (TCE) Theory to lead to a better understanding of how firms make the decision to outsource.

2.1. From the “Make” decision, insourcing, to the “Buy”, outsourcing

Outsourcing is defined by Vaxevanoua and Konstantopoulosa (2015) as *“the process of creating and managing a contractual relationship with an external vendor for the supply of skills that used to be provided by the firm’s internal services in the past”* (pg. 568). It is the decision of a firm to receive a specific product or service by an external party for a qualified price (Heywood, 2001). Therefore, outsourcing implies that there is a relationship regulated by a contract between a user of a specific product or service, known as the firm, and the producer of this specific product or service, referred to as the vendor, supplier, or partner. This definition also implies that outsourcing is a shift from what is an existing internal activity to an external purchase (McCarthya and Anagnostou, 2003); from insourcing to external outsourcing.

In comparison to insourcing, there are different degrees of outsourcing which involves the decision to produce the product or service in-house without contracting with an external partner. Arnold (2000) considers external outsourcing as *"spot transactions or long-term relationships with suppliers"* (pp. 24-25), which is a common definition given to outsourcing. A firm is looking for a supplier of a specific product or service, and can either seek market transitions, which are spontaneous purchases in the spot market, or short-term and long-term contracts. Another solution for firms in need of being provided a product or service is internal outsourcing, in which an independent business unit of the firm itself, a profit center or even a joint venture would become the supplier (Arnold, 2000; Williamson, 2008). The figure below illustrates the differences between insourcing, internal outsourcing, and external outsourcing in relation with the degree of coordination it requires.

FIGURE 1. STRUCTURAL ALTERNATIVES OF OUTSOURCING



Source: Arnold, Ulli: New dimensions of outsourcing: a combination of transaction cost economics and the core competencies concept. European Journal of Purchasing & Supply Management, Vol. 6 (2000), pg.25

If insourcing requires a higher degree of hierarchical coordination (on the left) as it involves vertical integration, then external outsourcing requires a higher degree of market coordination as it implies a contractual relationship with a market supplier. Hierarchical coordination will be further developed in the following sections. Everything in-between is considered as a "hybrid form", implying a mix of hierarchical and market coordination.

The interpretation of several surveys by Robinson (1978) suggest that firms are not always aware of the costs and benefits involved when making their "Make or Buy" decision. In this decision process, a firm must consider the degree of control it wants to retain. According to Anderson and Gatignon (1986), control is the main factor influencing the choice to "Buy". As a firm makes ownership decisions, it must consider whether it wants to conserve high-control, medium-control, or low-control modes in the decision-making process (Anderson and Gatignon, 1986). It is assumed that with high-control modes, such as fully owned subsidiaries (vertical integration), a firm can expect a high return on investment. However, as it commits to dedicate resources, it also faces a higher risk. On the other hand, low-control modes such as nonexclusive and nonrestrictive contracts limit the risks by limiting the committed resources at the expense of higher returns. As stated by Williamson (2008), medium-control modes are a *"hardheaded and wise"* way of contracting (pg. 13). In credible contracting, the involved parties are open to exercise feasible foresight and compromise so that they can enjoy mutual benefits. Henceforth, there is not one best decision between "Make" or "Buy", but it is rather a trade-off of several factors such as control, resource commitment, and risk. This trade-off is further discussed in the section 2.7.

For the purpose of this research paper, and due to the lack of accessibility to data on the internal structures and internal outsourcing, the outsourcing of communication activities by pharmaceutical companies will focus on external outsourcing only.

2.2. What to outsource?

Along with the "Make or Buy" decision lies another essential question: what to outsource? One of the main advantages of outsourcing is to enable firms to focus on their core competencies. Therefore, core competencies should be kept internally. According to Alexander and Young (1996), core activities are grouped into four categories: traditional internal activities, activities critical to the business success of the firm, activities creating a competitive advantage for the firm, and activities playing a major role in the future growth of the firm's business. Belcourt (2006) defines competences as *"a combination of technology, management and collective learning"* (pg. 273) while arguing that core competences depend on management, leadership, performance, and organization change. Therefore, these activities should not be outsourced (Belcourt, 2006). Barthélemy (2003) states that core competencies are *"resources and capabilities that are valuable, rare, difficult to imitate, and difficult to substitute for lead to superior performance"* (pg. 88). For example, the U.S. consumer electronics industry has demonstrated that outsourcing its core competencies to Asian suppliers had a dramatic impact on lowering costs. In some cases, they had to teach the technology to their suppliers. Eventually, suppliers could not provide U.S. firms with the requested supply. Due to this specific choice to outsource a core activity, U.S. firms, which had lost their manufacturing skills, could not compete with their suppliers, who in the meantime decided to enter the market (Barthélemy, 2003). This illustrates that before making the "Buy" decision, firms should extensively reflect on what is capital for them to "Make".

Based on the answers to over 70 questions relating to outsourcing, the 2016 Deloitte Global Outsourcing Survey established that the most common outsourced activities are: IT services (72%), legal services (63%), real estates and facility management (60%), tax preparation (53%), human resources (47%), finance (42%), and procurement services (41%). These activities are not part of the core competencies of companies, but rather necessary services to maintain the organizational operations. Call centers, website management, campaign creative management and database management (McGovern and Quelch, 2005) as well as research, development, and retail sales (Quinn, 2000) are other activities widely outsourced. This paper will focus on the role of outsourcing marketing activities.

2.3. Benefits of outsourcing

All firms have limited resources pushing them to analyze the trade-off between what to keep in-house and what to outsource. In a firm's organizational design, there are many activities which are needed for the firm's functioning: HR services, procurement, IT department, marketing division, R&D department, etc. The general analysis is made by comparing the costs and benefits of external outsourcing. The benefits are, in particular, gaining the expertise of suppliers while focusing on core business activities and enjoying economies of scale.

2.3.1. Expertise

If cost optimization has long been the main justification for outsourcing, the 2018 Deloitte Global Outsourcing Survey reports the primary reason to outsource to a supplier is to benefit from its competitive advantage (Deloitte, 2018). Today, the competitive advantage that can be acquired by outsourcing the production of products or services is seen as one of the most attractive sides of outsourcing (Heywood, 2001; Hayler, 2015). A partner is specialized in the production of one single type of product or service while presenting firms with a competitive advantage (Hayler, 2015) or with specific technologies firms may not be able to access in other ways (Belcourt, 2006). This point is a main argument of the Knowledge-Based View theory and will be further discussed in section 2.5. For instance, a media agency provides its diverse clients with media space purchases. It can be assumed employees of the media agency will know the process of media purchase better than an employee from the firm's marketing team with general marketing knowledge. Media agency employees, in general, have better and more contacts to local channels while owning specific technology to enhancing the process (such as online transfer platforms or project management tools). Overall, the media agency will perform better at providing media purchase services than an in-house department. From a competitive advantage standpoint, the firm will benefit from the expertise of its partner, working faster and with better resources, while efficiently using its own resources for its core competences due to outsourcing this non-specific service to an external partner. Moreover, it was established that a positive correlation exists between competition in the market and outsourcing activities of the firms (Kotabe *et al.,* 2012). Outsourcing enables firms to benefit from gaining improved efficiency, expertise, and a competitive advantage through the supplier (Belcourt, 2006; Lam and Chua, 2009; Murray *et al.,* 2009; Hayler, 2015).

2.3.2. Focus on core activities

Excellence cannot be pursued in all areas (Belcourt, 2006). Therefore, as it was noted earlier and what makes the main argument of the transaction cost economics theory, companies can focus on their core competence and outsource secondary functions. With outsourcing of secondary functions, it was reported that firms reduced their administrative tasks by more than half and enlarged their strategic focus by 40% (Oshima *et al.,* 2005).

This theoretical principle is also defended by communication specialists. When asked about the benefits of outsourcing, Person A, Global Client Director in a worldwide localization agency, argues that having most of the company's employees focusing on the core activity, while involving fewer employees as possible on the communication, gives more flexibility to the company. This allows better utilization of its resources. For example, a pharmaceutical company may need to work with a graphic designer for roughly about 30% of the year. Therefore, it does not appear effective to hire such an employee in-house. However, the designer working in a creative agency will be able to work on several accounts, including the pharmaceutical company, while utilizing their time more effectively. This allows firms to focus their employees' time on their main activities and reduce the coordination costs of secondary activities.

2.3.3. Economies of scale

Another fundamental benefit from outsourcing is the cost reduction brought by economies of scale. As vendors focus on producing specific products or services with many clients, they benefit from the scale economy of a large production and are able to propose cheaper products or services than if it was produced at a smaller, in-house scale by their clients (Redondo-Cano and Canet-Giner, 2010). The example of media buying presented above can illustrate this point. The cost for a firm to create its own contact list and to contact each media one by one will be much higher than the cost of a media agency contacting the media for several clients at the same time. Therefore, the B2B markets in which vendors operate become more competitive.

Firms may enjoy additional benefits from outsourcing. One of them concerns the well-being of employees. Due to it streamlining the process and using external workforce, hence involving less internal employees, outsourcing reduces the number of potential issues linked to coordination between employees. Although outsourcing makes the coordination line longer, it also gives the opportunity to firms to put more pressure on their agencies than they could on their own team. It is easier to pressure an agency by reminding the supplier of the contract and KPIs, rather than internal teams. Therefore, with outsourcing, things can get done faster and with less internal frustration. Another benefit from outsourcing is the improvement of employee relationships. By giving clear instructions to focus on core competencies, firms can significantly reduce the risk of employees' level of frustration (Suddaby, 2010). When offshored, which is the activity of outsourcing to a partner working from another country, outsourcing can also be beneficial for firms to work around the clock by enjoying workforces in different time zones.

2.4. Drawbacks of outsourcing

If advantages from outsourcing were not balanced with counterparts, then the decision to "Make or Buy" would have one obvious statement. Outsourcing presents significant disadvantages, which firms need to carefully consider, including but not limited to: loss of control over the activity, increased risks and exposure, and hidden costs.

2.4.1. Control loss

One principal drawback from outsourcing concerns the degree of control, as argued in the Principal-Agent theory (section 2.6). Anderson and Gatignon (1986) defined control as *"the ability to influence systems, methods, and decisions"* (pg. 03). By doing an activity in-house, a firm exercises the highest degree of control possible: it can decide the fund invested in production, the resources it utilizes, the timing of production, etc. Insourcing guarantees a high degree of control (Arnold, 2000). Therefore, outsourcing brings control loss. As presented in the section 2.1, there are different models of outsourcing, each having a different degree of control loss. For example, short-term contracting has less impact over control loss than long-term contracting. According to Barthélemy (2003), *"losing control over the outsourced activity"* (pg.92) is part of the seven deadly sins of outsourcing. This publication introduced the example of a retail firm which decided to outsource its IT services with 5-year contracting terms. The company lost control over the IT costs, which increased by 20%, and ended up terminating the contract 2 years ahead of its terms. Outsourcing can be a drawback when a firm does not actively manage its vendor (Barthélemy, 2003). Therefore, the "Make" decision requires an efficient management control over its vendors to avoid overall control loss on the outsourced activity.

2.4.2. Increased risks

If control loss is already presented as a risk issued from the "Buy" decision, which can partially be avoided by making the "Make" decision, outsourcing exposes firms to various other kind of risks. The first type of risk is confidentiality. Opening up to an external organization to share data, processes, and financial information significantly increases the risk of the firm's information disclosure and exposure. If the partnership with the firm is not respected, a vendor can secretly sell capital information to the firm's competitors. There are of course some contracts, such as non-disclosure agreements (NDAs), which can empower a firm to pursue its vendors and terminate the contract if information is leaked. However, this is costly and must be determined at the start of the collaboration. This risk of losing control over its own information can be detrimental for businesses. Companies deciding to make the "Buy" decision must be careful about the information they share with their suppliers.

Another type of risk covers employees' morale. Outsourcing to an external company can be perceived as a lack of trust from management, believing that outsiders are more competent than their own employees (Babcok, 2004). If miscommunicated, employees can also believe they will be laid off or forced to work with a vendor. In some cases, such rumors have proven to have a drastic impact on the company's performances with employees going on strike (Barthélemy, 2003). Risks can also be attributed towards a product or service which does not match the expectation of the firm (Belcourt, 2006). Vendors do not have access to the firm's needs and customers' expectations other than those shared by the firm itself. If miscommunicated, or left incomplete, the firm can face an outsourcing failure which can have a dramatic impact over its performances. Risks are presented more in detail in the section 2.6 through the arguments of the Principal-Agent theory Once again, there is an ardent need for the firm to spend extra time at the start of the collaboration by clearly and precisely defining its expectations to the detriment of information disclosure.

2.4.3. Hidden costs

One main argument in favor of nonmarket transactions, and therefore against the "Buy" decision, is related to hidden costs. This is addressed by Transaction Costs Analysis which is further explored in the section 2.7.4. When assessing the results of an outsourcing decision, costs are often overlooked and might have an impact on the viability and efficiency of the partnership. Many costs are engaged in working with a supplier and are often not considered, discussed, or quoted. When looking at an outsourcing agreement, several costs can be identified. First of all, the pre-contractual costs are time-consuming and often the costliest as high management is involved, and alignments are needed. Once the collaboration has started, the buyer faces monitoring costs, and, if needed, sanctions to be imposed and renegotiating costs (Barthélemy, 2003; Williamson, 1987). Monitoring costs are considered more and quoted by buyers and sellers. Hidden costs, although roughly anticipated, are hard to evaluate and price. Other types of costs can be opportunity costs. As argued in the Knowledge-Based View Theory (section 2.5), outsourcing is missing the opportunity to develop and maintain knowledge in-house.

There are other drawbacks of outsourcing, such as reduced quality control. An external party will be motivated by different factors than internal employees.

Therefore, these motivations may impact the quality of the product or service produced. Differences in incentives and their impact on the outsourcing activity will be further discussed in the section 2.6 through the Principal-Agent theory.

2.5. The Knowledge-based View Theory: outsourcing perceived through knowledge

The Knowledge-Based View theory (KBV) analyses intrafirm and interfirm relationships through the prism of knowledge opportunity cost. Concretely, the KBV theory is in favor of a balance between insourced and outsourced activities (Afuah, 2001; Harringan and Buchanan, 1984; Kotabe *et al.,* 2012).

On one hand, outsourcing benefits firms as they learn from the knowledge of their outsourced partners, hence, increasing their own set of competences (Reitzig and Wagner, 2010). Firms might also gain access to new technologies via outsourcing (Weigelt, 2009). However, it is not guaranteed that they can integrate that knowledge in-house. It can also be argued that the outsourced relationships of a firm with its many suppliers drives a firm to benefit from the joint problem-solving approach via capability acquisition (Mc Evily and Marcus, 2005). Additionally, if the coordination is centralized in-house, it exposes managers to a network of increased knowledge (Rodan and Galunic, 2004), making it beneficial to the firm's learning. These might qualify as hidden gains from outsourcing.

On the other hand, if a firm outsources to too many suppliers, it faces potential hidden outsourcing costs (Hendry, 1995) by forgetting its prior knowledge and by missing learning opportunities via insourcing. In this case, learning is perceived as a consequent opportunity cost resulting from outsourcing, where keeping capacities in-house would benefit the firm better than outsourcing to an external party. Therefore, in the outsourcing decision, firms must consider which degree of knowledge they want to keep and develop in-house while knowing what are the risks of sharing this knowledge with an external party.

Knowledge has a strategic value for a firm. And similarly, to all valuable resources, knowledge needs to be managed accordingly. Lee (2001) defines knowledge management as *"the process of capturing, storing, sharing, and using knowledge"* (pg. 324) and argues that firms pay more attention to the knowledge they can learn from their partners to develop new competencies. In the KBV theory, firms add knowledge as a capital potential gain or loss from outsourcing. Explicit knowledge can be shared between firms as it is a knowledge that can be expressed. However, tacit knowledge, which is more personal and complex to formalize, cannot be shared via an outsourcing relationship but exclusively via a more intimate relationship, such as apprenticeship (Lee, 2001). For the Knowledge-Based View theory, the outsourcing activity must be evaluated through the learning potential of the partnership.

2.6. The Principal-Agent Theory: outsourcing perceived through interactions and incentives

The Principal-Agent (PA) theory offers to analyze the pay-off of outsourcing through the information asymmetry between the two stakeholders, and their interactions. In an outsourced situation, the PA theory highlights that a supplier, referred to as the Agent, has different goals and motivations than the firm it works for, the Principal. These need to be addressed and carefully considered in the "Make or Buy" decision. The Principal-Agent dilemma arises from an asymmetric information, as the Principal cannot estimate and control that the products or services provided by the Agent are rightfully quoted and essential (Miller, 2005).

2.6.1. Basic Principal-Agent problem

The PA relationship is based on the principle of delegation: there is an exchange of resources between both parties (Braun and Guston, 2003). According to Coleman (1990), outsourcing can be perceived, from the Principal's standpoint, as an "extension of self" (pg. 146). The Principal owns resources, but these are not appropriate to its interests. Therefore, the Principal initiates a relationship with the

Agent in which they exchange resources. In this relationship, the Principal defines, in theory, the framework of the relationship: it is the Principal who requests a specific product or service from the Agent. It is implied that the Principal expects from the Agent to do what he has requested. In return, the Agent undertakes an action on behalf of the Principal.

The PA theory relies on the essential assumption that all parties are self-interested: they all seek to maximize their personal welfare. On one side, the Principal may expect to receive a product or service of very high quality at minimum costs. On the other, the Agent might be willing to sell its product or service at high costs and for the minimum efforts. Therefore, the PA theory observes a misalignment of interests between the Principal and its Agent while proposing to analyze the "Make or Buy" decision through a conflict of interests. The two main risks observed in the PA literature are adverse selection and moral hazard.

2.6.1.1. Adverse selection

Adverse selection problems (or hidden information) are based on asymmetric information between the Principal and the Agent before an agreement is made. Generally, the Principal lacks information that the Agent does not wish to disclose for self-interest reasons. For instance, the Agent might be charging more than the actual price of production. The Agent withholds this information so that its personal welfare can be increased, yet it does not benefit the Principal. For instance, a communication agency may enter a pitch to win a pharmaceutical account while withholding the information that it lacks experience in this industry.

2.6.1.2. Moral hazard

Moral hazard problems (or hidden actions) are based on asymmetric information and conflict of interest between the Principal and the Agent during the agreement. While both parties may have different preferences over the possible actions that can be taken by the Agent, moral hazard problems illustrate a situation in which the Principal cannot control the Agent's actions (Gailmard, 2012).

Therefore, the Principal cannot assess if the actions were taken by the Agent for its own benefit or for the sake of the collaboration. For instance, in a situation in which the Principal outsources the production of a product to an Agent, it may be that the Agent will choose a supplier with whom it has good relationship rather than working with the cheapest or more efficient supplier. This choice made by the Agent on behalf of the Principal benefits best the Agent rather than the Principal.

2.6.2. The triadic relationship in marketing

Sometimes, a Principal shows several simultaneous interests: for instance, receiving a high-quality product or service, and/or receiving a product or service at the lowest cost. This might be the case when the Principal faces internal issues, such as the lack of coordination between its own departments. This is illustrated below in an analysis of the Principal-Agent problem through the interactions of the Principal, represented by its Marketing department and Supply Management (also called Procurement), and the Agent, represented by a communication services supplier. The Agency Triad (Figure 2) illustrates this situation. Internally, the two different departments of the Principal need to align their common goals and performances metrics, while they need to consider the own incentives of the Agent (Tate *et al.,* 2009).

FIGURE 2. THE TRIADIC RELATIONSHIP: SUPPLIER – MARKETING – SUPPLY MANAGEMENT

Source: Tate, Wendy. et al.: An Agency Theory Perspective on The Purchase of Marketing Services. Industrial Marketing Management, (2009) On the Principal's side, the Marketing department has manifested the need to receive communication services from a supplier. The marketing team is interested in receiving great creative ideas, and therefore, will attempt to build a good relationship with the supplier in which they are likely to exchange information. The main goal of the marketing team is to complete the project with receiving a service they are satisfied of. It will evaluate the success of the partnership by examining the influence on sales, marketing, and branding. However, this evaluation cannot be specific as many other internal and external factors can influence these parameters. The supply management team, however, has a different vision and evaluation of the partnership; it is aimed at reducing the price of the partnership. It also focuses on contract compliance and performance information. Supply managers expect quantifiable outcomes, as this is often the cause of misalignments with marketing, due to different performance metrics. Whereas the marketing team wants to spend more money in the campaigns and to add new suppliers, the supply management team is in favor of reducing costs and contracts (Tate *et al.,* 2009).

The Agent, on the other side, provides the requested services for money. It takes actions on behalf of the Principal, within the frame provided by the contract. Its aim is to maximize its profit while still complying with the contract. The Agent is most likely to come up with great creative ideas, which are attractive to the Principal's marketing team, but these ideas are most likely costly, which may create a pushback from the supply management team. Therefore, the two units of the Principal must align their interests to pursue or stop the partnership.

To sum up, the PA theory defends the idea that ownership generates the strongest incentives as it minimizes the effects of PA problem. Companies who keep the activity in-house are less likely to be exposed to the problems of moral hazard and adverse selection. By foreseeing major issues caused by asymmetric information, such as outcomes difficult to monitor and contracts hard to specify, companies, being the Principal, act in their own interest. The triadic relationship becomes an internal dualistic relationship, in which the coordination effort required internally diminishes between the marketing team and the supply management team.

2.7. The Transaction Cost Economics Theory: outsourcing perceived through costs of transactions

The Transaction Cost Economics (TCE) theory offers another perspective to outsourcing; it proposes to look at the costs of making and to deal with managing the relationship. The TCE theory recognizes four main parameters, presented in this section, which have a determinant impact in the "Make or Buy" decision.

The section 2.1 has presented the impact of the degree of control a firm seeks on its "Make or Buy" decision. The approach to this decision following the transaction cost economics logic is the principle that a low level of ownership (hence a low level of control) is the preferred option until recommended otherwise (Williamson, 1987) due to the competitiveness of markets. That is the TCE "default" hypothesis, and it justifies the place that outsourcing occupies in the Transaction Cost Economics theory. The TCE theory wants to explain the companies' organization model and justify firms' relationships by using transactions as the basic unit of analysis. TCE observes that a transaction has several dimensions which influence the ownership decision-making: asset specificity, environment uncertainty, behavior uncertainty, and transaction frequency (Klein, 2005). According to Anderson and Gatignon (1986), a part of the function is also made of free-riding potential. These parameters and the impacts they have over the "Make or Buy" decision will now be analyzed individually.

2.7.1. Asset specificity

Williamson (1985) defines specific assets as *"durable investments that are undertaken in support of particular transactions, the opportunity cost of which investments is much lower in best alternative uses or by alternative users should the original transaction be prematurely terminated."* (pg. 55). In the Transaction Cost Economics theory, asset specificity is the independent variable that has been the most valued as it plays a decisive role in favor of vertical integration. According to Williamson (1991), there are six types of asset specificity:

- human asset specificity, for which human knowledge or human capital is a key component;
- site specificity, for which location plays a role in influencing transportation and inventory costs;
- physical asset specificity, for which equipment (such as machinery) influences the assets production;
- temporal specificity, for which a specific time sequence determines the asset;
- brand-name capital specificity, for which assets are influenced by consumers perceptions;
- dedicated asset specificity, for which a general-purpose asset becomes increasingly specific by the requirement of a very few buyers.

The more specific an asset is, the more information needs to be exchanged and the more specific its production is. Whether it requires a specific knowledge, equipment or location, the production of an asset with high specificity by a supplier is likely to match the requirements of one firm only; the economies of scale are therefore limited for the supplier. On the other hand, low specificity implies that the exchange of information between the buyer and the supplier is low (Arnold, 2000). According to Williamson (1979), when the asset specificity is low, then suppliers are found better off. He described:

> *"Items that are unspecialized among users pose few hazards, since buyers in these circumstances can easily turn to alternative sources, and suppliers can sell output intended for one order to other buyers without difficulty"* (pg. 239)

Outsourcing of the production or distribution of an asset with high specificity might create a potential holdup problem. In this situation, the supplier is asked to invest in specific resources designed for one specific client. Once acquired by the supplier, the buyer can then renegotiate the unit price or service fee, or can terminate the collaboration with the supplier, who will be left with a big investment that can be used only for a specific type of firms or costly to be made suitable for other clients. For instance, in a situation where the client is a pharmaceutical firm and the supplier a communication agency, it may be that the client will negotiate the relationship only to the condition that the supplier will hire some employees with a pharmaceutical education. The supplier may be willing to do so if the collaboration is significant and for long-term. Although this condition can be negotiated in the contract, the supplier still need to hire employees with the required profile before initiating the collaboration. For some reasons, the pharmaceutical firm may not pursue the collaboration or terminate it earlier, leaving the supplier with scarce resources which he may not be able to use for other clients.

With potential holdup problems, suppliers may not be willing to enter the agreement if he is not provided beforehand with strong guarantees preventing the holdup problem from happening. Negotiating these terms before entering the agreement may be time-consuming and costly, hence discouraging the buyer from entering the agreement at all; in-house production seems the easiest answer. Therefore, the TCE school argues that transactions with high asset specificity pushes towards vertical integration. On the other hand, due to their simple nature, low specificity transactions are in favor of external outsourcing.

2.7.2. External and internal uncertainty

Anderson and Gatignon (1986) describe the external uncertainty as *"the volatility (unpredictability) of the firm's environment"* (pg. 14). External uncertainty is also referred to as environment uncertainty. Because the environment is volatile, and therefore unpredictable, firms cannot commit to one type of ownership only. For Williamson (1979), external uncertainty does not affect the outcome of the default hypothesis; namely that non-specific transactions are better outsourced. Transactions of non-specific assets can be done on spot and in a highly competitive market. If the firm's environment evolves, the transaction can be modified accordingly; this is the principle of flexibility. However, the more changes in the transaction, the more possibilities for the supplier to behave opportunistically. Therefore, the combination of high specificity and high uncertainty makes it harder to contract with an external party, and vertical integration presents itself as the best solution.

On the other hand, internal uncertainty concerns the supplier's performance evaluation. Internal uncertainty is also referred to as behavior uncertainty, which was presented through the PA Theory in the section 2.6. When contracting, how can a firm ensure that the supplier produces the expected work? According to Ouchi (1979), organizations have the choice between two effective control ways, which is a consequence of the trade-off between incurred costs before or after contracting (exposed in the previous section). The first way is to search and select a supplier that fits the job. The firm takes the time to select carefully the right supplier, to trust the supplier and ergo minimizes the costs of monitoring. The second way is to quickly select a partner, possibly cheaper, but incur the costs of training and heavily monitor its performances. This second way may frustrate the supplier who feels its self-autonomy reduced, hence affecting the contractual relationship. The costs of both these ways are presented in the section 2.7.4. Regardless, internal uncertainty is a factor more likely to push toward vertical integration, as more control is wanted by the firm to monitor the operations.

In relations to internal uncertainty and monitoring costs is the free-riding potential discussed by Anderson and Gatignon (1986). The free-riding potential issue is related to the firm brand reputation and whether or not a supplier will receive benefits from the transaction without bearing the costs. In the pharmaceutical industry, the phenomenon of free riding is more likely to happen.

2.7.3. Transaction frequency

The frequency at which a transaction occurs is designated by Williamson (1979) as the second most important variable in the transaction function. It can be separated into three categories: one-time transaction, occasional transactions or recurrent transactions. The frequency is determined by the firm activity on the market, this is to say the rate at which a transaction occurs. Does a firm need procurement services on a daily or weekly basis? Or perhaps it requires procurement services for specific occasions? These types of frequency influence the ownership decision. The more frequent an activity, the bigger the economies of scale: the production time and costs decreases as less specific knowledge is required. The knowledge can be maintained in-house and setup costs can be recovered (Widener and Selto, 1999). From this perspective, a high transaction frequency pushes a firm to in-house production. On the other hand, a high frequency transaction may also be favorable to external outsourcing, as the economy of scale and low degree of specificity are auspicious to the "Buy" decision. Therefore, the frequency of a transaction is a guiding element but is not determinant in itself.

2.7.4. Hidden costs

The TCE theory argues that a transaction should be analyzed through the costs it implies; this involves hidden costs. First of all, there are pre-contractual costs: the search cost and contracting cost. Internally, before hiring a supplier, a firm needs to prepare a request for information (RFI), request for proposal (RFP) and/or request for quotation (RFQ). It takes time investment from the management to define which information should be included and to find and select potential suppliers to send it to. The firm then invites potential suppliers for a bid, and therefore, needs to establish a team to evaluate the bids. Going from an RFI venture to a signed contract requires several months, sometimes even years. This search, a pre-operation activity, is time-consuming for management, and therefore, costly. Once a supplier is selected, a contract needs to be negotiated, written, and signed. Contracting costs are often underestimated, as they involve different actors and can be spread in time. An important element to be integrated in the contract regards the evaluation system of the supplier by establishing benchmark levels, such as response time and customer satisfaction ratings (Belcourt, 2006). Once operations start, the firm faces outsourcing vendor management costs, which are related to the costs of monitoring the agreement, monitoring the performances and sanctioning if needed, and renegotiating the contract should new circumstances arise (Barthélemy, 2003). From a TCE standpoint, hidden costs, although they cannot be calculated, must be anticipated and addressed.

In summary, the TCE Theory addresses the "Make or Buy" dilemma as a function with independent variables: the desired level of control, the asset specificity, internal uncertainty, external uncertainty, and transaction frequency, but also hidden costs, are independent variables such as:

$$\boldsymbol{F(outsourcing) = d_c + d_{as} + d_{iu} + d_{eu} + f_t + hc}$$

In which:

d_c = degree of control

d_{as} = degree of asset specificity

d_{iu} = degree of internal specificity

d_{eu} = degree of external specificity

f_t = frequency of the transaction

hc = hidden costs

The parameters in favor of outsourcing are a low degree of asset specificity, a low degree of external uncertainty, and a low to medium degree of frequency. These factors must balance the sum of hidden costs, which are minimum if they are considered and addressed before the agreement.

The first part of this paper has established that when it comes to the operation of various activities, firms need to make the “Make or Buy” decision: dedicating internal resources to the production, management and maintenance of a product or service, or purchasing it to an external party. There are various degrees of outsourcing: it can be internal or external, on spot markets or long-term contracting. Firms are attracted by outsourcing because it presents numerous advantages, among which the possibility to focus on its core competencies and gain a competitive advantage. However, outsourcing comes with a cost and certain risks, such as the decreased control over the activities and the dependency on another company. Therefore, before making the “Make or Buy” decision, firms need to reflect on what matters to them and understand what their core competences and strategies are. Everything cannot be outsourced. Therefore, selecting what to “Buy” is a critical decision. To assist firms in their decision, three theories enable to reflect on the factors that need to be considered. The Knowledge-Based View theory presents the “Make or Buy” decision through the knowledge a firm might acquire or lose control over. The Principal-Agent theory highlights that interests between a buyer and seller are misaligned and are costly to monitor. The Transaction Costs Economic theory demonstrates the factors involved in a transaction and based on the wishes and preferences of a firm, suggests one solution over the other. This paper will now apply the theoretical principles that it has established to the communication activities of pharmaceutical companies.

3. TRANSACTION COST ANALYSIS APPLIED TO COMMUNICATION FOR PHARMACEUTICAL COMPANIES

Now that outsourcing has been presented from a theoretical viewpoint, this paper will focus on the specific outsourcing of communication activities by pharmaceutical companies. It will define the scope of communication activities and analyze it through the TCE theory, and when relevant, complement the analysis with the other two introduced theories.

3.1. Defining communication activities

This section will establish the definition of marketing and then further illustrate the role of communication due to the major differences existing between the two. Marketing can be defined as *"the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large."* (American Marketing Association, 2017). Therefore, communication is a significant part of marketing. The given definition of marketing gives a rather broad frame to marketing, as it suggests marketing includes elements of *"creating",* such as product design and price adoption, *"communicating",* such as advertising and branding, *"delivering",* such as product promotion and retail sales, and of *"exchanging offerings",* such as sales promotions. To understand the nuance between marketing and communication, this paper will now present the definition of marketing-mix and focus on the promotion part.

3.1.1. Marketing-mix and 4Ps Model

To define marketing, professionals have established several concepts. The most common and studied marketing concept is marketing mix. This was first introduced by Borden (1984) when he established a list of all elements related to marketing mix (Appendix I). This exhaustive list has set up the common ground for marketing mix known today as the "4Ps" (Figure 3) which was first introduced by McCarthy (1960).

FIGURE 3. THE 4Ps MODEL

PRODUCT	PRICE
• conception and function • design • packaging	• product price • discounts
PROMOTION	**PLACE**
• advertising (campaigns development) • media distribution • digital promotion • public relations • sales promotion	• distribution • retail sales • logistics • availability

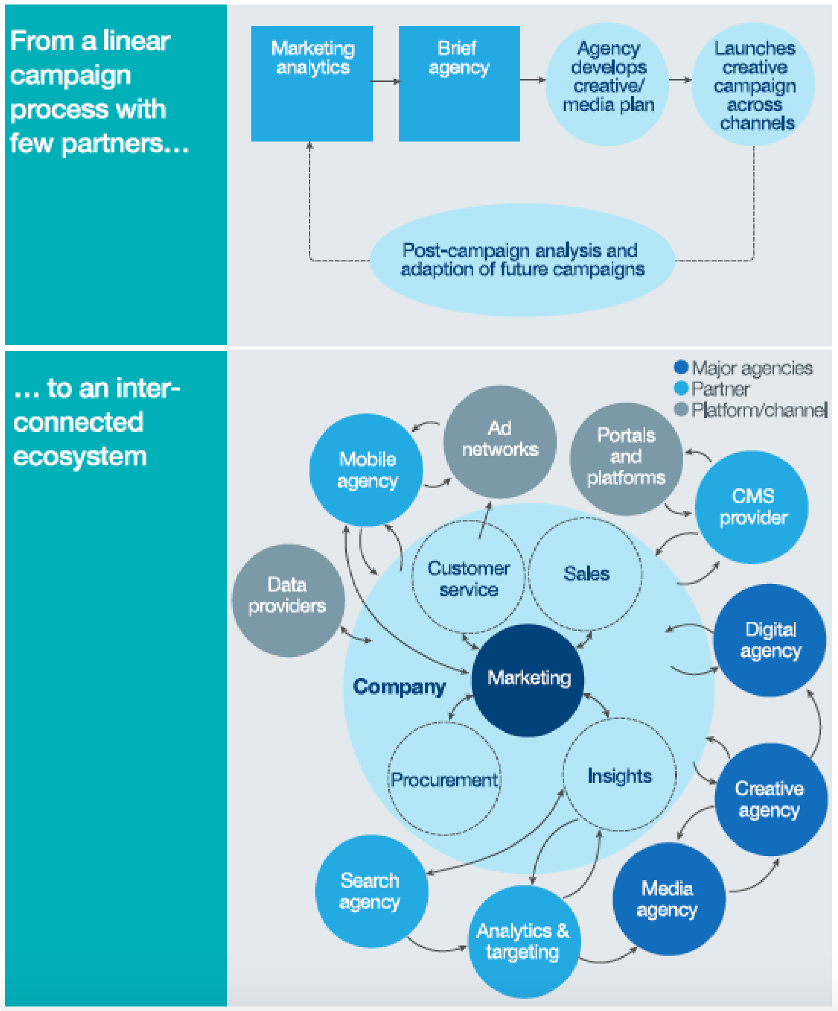
Source: The 4Ps Model, McCarthy (1960).

The 4Ps model explains the marketing-mix by categorizing the four main dimensions of marketing: the Product, which includes the product's function and design, the Price which impacts the firm's margin, the Promotion which influences the product's sale and brand's perception, and the Place which concerns the product's availability and distribution. Therefore, if a company wants to outsource marketing services, several numbers of suppliers might be involved: manufacturing vendors, product designers, strategic consultants, advertising agencies, media agencies, wholesalers, retailers, logistic companies, etc.

3.1.2. Promotion and the "Buy" decision

Communication activities are comprised in the Promotion part of marketing as it includes campaigns creation and localization, digital production, and media activities. These activities are a rather common service for companies, and therefore, the "Make or Buy" decision must be considered. After all, which company, regardless of the industry and of its size, does not communicate on its products or services? Which company does not attempt to communicate to its selected targets? Whether companies invest millions or a few, they need communication services as part of their marketing strategies. Based on the firm's strategy, marketing can either be coordinated and produced in-house by one single person or a full marketing department or can be outsourced to a subsidiary or external agency. As observed and presented in multiple sources, marketing is often outsourced (Quinn, 2000; McGovern and Quelch, 2005; Sharma *et al*., 2009). Due to the evolution of the marketing industry through new technologies and digital communication focuses, the ecosystem of marketing agencies that firms are interacting with is evolving. A 2017 article published by the McKinsey consulting company demonstrated that whereas firms used to receive their marketing and communication services from one supplier, an inter-connected ecosystem (Figure 4) has grown around firms to receive specialized services. In today's environment, the various channels and possibilities to target customers request to closely coordinate each collaboration with specialized agents. Therefore, suppliers are no longer simple inputs in a linear process, but rather partners working hand-in-hand with each other to serve brands and ensure consistency across the created assets.

FIGURE 4. MANAGING THE ECOSYSTEM



Source: Buck, Rapahel; Cvetanovski, Biljana; Harper, Alex; Timelin, Björn: Building A Marketing Organization That Drives Growth Today. (2017), McKinsey

The major agencies, referred to as the creative agency, the digital agency and the media agency, define the scope of communication agencies. With that in mind, this paper will focus on communication activities, namely: campaigns' development (creation and production), digital declination and media strategy. Hence, outsourcing communication implies a partnership with multiple suppliers: creative agencies (also called advertising agencies), decoupling agencies (also called production or localization agencies), digital agencies and media agencies. In the following sections, this thesis will apply the TCE principles to the communication of pharmaceutical companies.

3.2. Degree of specificity of pharmaceutical communication activities

The degree of specificity of communication services is largely determined by the firm's industry and product type. For example, the communication for a pair of shoes is very different from the communication for medicine. In fact, the communication of health and pharmaceutical goods and services is very strict. This section will now examine to what extent the pharmaceutical communication is highly specific and explore the type of specificity it requires.

3.2.1. Reputation of pharmaceutical companies

First of all, pharmaceutical companies endure a bad public reputation. A 2018 study led by Innoplexus AG and Haven Insights have surveyed more than 1,000 U.S. consumers to capture their perception of pharmaceutical companies. It was established that 28.1% have a negative view, and 19.3% a very negative view, of pharmaceutical companies, while only 5.2% have a very positive view of pharmaceutical companies. This study suggest that the reasons of this negative reputation are justified by a perception of unreasonable high prices (77%), a lack of communication about prices' increase (75%), a belief that pharmaceutical companies' main focus is to make money (72%), and the lack of collaboration with the government and insurers (64%). Overall, responders invoke a lack of transparency from pharmaceutical companies. The same panel also explained that it is extremely important or very important that pharmaceutical companies do a better job managing adverse events and public relation (57%). Less than half of the answers think pharmaceutical companies should stop advertising about medications on television and/or social media (41%).

3.2.2. Distribution model: OTC and POM

Furthermore, the communication of pharmaceutical goods and services depends on the product type and its distribution model.

On one side, over the counter (OTC) drugs are drugs which can be distributed in retails and pharmacies. These are medicine that can be purchased by individuals without a prescription from a medical expert, such as Ibuprofen, Paracetamol, coughing syrups, etc. Therefore, the communication of OTC drugs is based on a direct-to-consumer (DTC) advertising model, with the pharmaceutical brands addressing the general public directly. The look-and-feel is important while the key message should not be too technical as it must be understood by all. By its communication process and target, OTC communication has a rather low degree of specificity. The next section (3.2.3) will examine the degree of specificity of OTC communication in light of its legal restrictions.

On the other hand, prescription-only medicines (POM) are distributed by professionals through the prescription of a practitioner. They cannot be purchased in self-service. POM communication should be built exclusively on a business-to-business model and cannot be advertised to the general public. POM communication is aimed at convincing health professionals, such as doctors, hospitals and pharmacies, to recommend their products. Therefore, the messages are very technical, with key arguments, graphs and explanations. The look-and-feel is secondary. POM communication admits a higher degree of specificity than OTC as it requires a specific knowledge, rather technical and scientific.

When addressing the specificities of pharmaceutical communication, the differences between OTC drugs and POM must be considered.

3.2.3. EU Regulation

In the European Union, there exists a strict regulation on the marketing, packaging and advertising of medicinal products for human use (Directive 2001/83/EC). The Directive 2001/83/EC has lastly been amended in 2012 by the Directive 2012/26/EU. The Article 86 defines the scope of *"advertising of medicinal products"* as *"any form of door-to-door information, canvassing activity or inducement designed to promote the prescription, supply, sale or consumption of medicinal products"* (pg. 78). The advertising of medicinal products which have not received a marketing authorization (Art. 87.1) and the advertising to the general public of prescription drugs (Art. 88.1.a) are forbidden. The advertising of medicinal products to the general public is tolerated to the extent that it clearly appears as an advertisement (Art. 89.1.a) and includes the product name as well as information for correct use of the product and expresses an invitation to read the instructions stated on the leaflet and/or packaging (Art. 89.1.b). The Article 90 provides a list of conditions which are not to be contained in the advertising of medicinal products, such as self-sufficiency (Art. 90.a), guaranteed results (Art. 90.b and Art. 90.c), children principally or exclusively directed (Art. 90.e), and alarming or misleading terms (Art. 90.j). On the other hand, the advertising of a medicinal product to persons qualified to prescribe or supply such products must contain information on the product name, product characteristics and the product supply classification (Art. 91.1). The bribing of practitioners in charge of prescribing or supplying medicinal products is strictly forbidden (Art. 94.1), and the distribution of samples is restricted (Art. 96.1). Furthermore, Member States are entitled to ban the advertising of medicinal products without providing further justifications (Art. 88.3). Hence, a drug advertised in Germany might be forbidden in advertisements within Italy.

Therefore, in a general context, communication services may be characterized by a low degree of specificity (as it was presented in section 3.1, communication is a common activity by firm and is commonly outsourced), the communication of pharmaceutical companies might demonstrate a higher degree of specificity, for which the knowledge of the industry, more or less technical depending on the type of drugs, and of the European regulation, is capital. When a company wishes to outsource its advertising of medicine, whether they are OTC drugs or POM, it must brief the agency, on top of the key message and look-and-feel of the advertising material, on strict legal notes which must appear in the footnote. The combination of a bad reputation and of heavy restrictions of the advertising of its OTC drugs and POM may push pharmaceutical companies to be especially careful to their communication and therefore, outsourcing.

3.3. Degree of uncertainty

The TCE theory also argues that the degree of uncertainty, whether internal or external, influences firms in their "Make or Buy" decision. This paper must now examine the volatility of pharmaceutical firms' environment and of communication suppliers.

3.3.1. Evolution of the pharmaceutical industry

The pharmaceutical industry has undergone many changes over the past few decades. Malerba and Orsenigo (2015) observed 4 noticeable eras: The formative stages, from the late 19th century to the World War II; the Golden Age, from the 1940s to the mid-1970s; the biotechnology revolution, from mid-1970s to the end of the 20th century; and what they call today the Winter of Discontent. This evolution implies that the old pharmaceutical days are over and that a new era, with lower profit margins, might request new business models (Hunt *et al.,* 2011). To face environmental difficulties, the pharmaceutical industry has reacted toward consolidation with a series of mergers and acquisitions (Moss, 2007). Pharmaceutical groups become bigger while the organizational model has progressively shifted toward more centralized organizations. By consolidating groups and centralizing the decision making, groups consolidated their investment in research and development (R&D) while looking to beneficiate from economies of scale in their sales and marketing strategy (Moss, 2007). The investment of pharmaceutical groups in marketing and communication activities are presented in Figure 6. Pharmaceutical companies, becoming large consolidated groups, may favor the outsourcing of their communication activities in order to benefit from economies of scale and focus on the core business.

3.3.2. Drugs production and marketing process

Furthermore, the marketing process of a drug, which is timely and costly, stands for an unstable element in a firm's environment. Before a drug can be released on the market, a company must invest in R&D, production, clinical trials, etc. All these steps are costly and are spread over time. It has been established that the average cost to bring a drug to market is on average $895 million (Buckley, 2004). From the start of R&D to the end of clinical trials, there can be between three to six years. This represents a significant investment for a firm, in which period it does not perceive any income from the product in development. Big firms, such as

GSK, would need to market three to seven products a year to cover the costs of R&D and production; a number it does not reach (Horrobin, 2000). After these steps and before marketing a product, a company must fill a patent to protect its intellectual property over the product's formula. The moment during which a drug is marketed under a patent is the most lucrative for firms. Their efforts are limited to the marketing costs while the product is released to the public or for prescription. In 1998, the marketing budget for the European promotion of Clarityn, an allergic rhinitis drug, reached $186 million. As a consequence, it was observed that the year-to-year sales of Shering Plough increased by half a billion dollars, reaching $1.9 billion. The filled-in patent guarantees the prevention of any copy or imitation of the product for a given time, but as soon as it expires, pharmaceutical companies face the competition of generic drugs. Therefore, the environment of a pharmaceutical firm implies a high degree of uncertainty in production, which indirectly impacts communication. Therefore, a high degree of uncertainty in production may push firms to focus on their core activity and outsource their communication activities, which admits a low degree of uncertainty.

3.3.3. Pharmaceutical culture and communication

The cultural environment in the pharmaceutical industry is a significant factor in the "Make or Buy" decision. Because of this timely and costly process that was exposed in previous section (3.3.2), it can be understood that the pharmaceutical industry works on a slow rhythm: employees have studied for several years, a patent's issuance takes up to twenty years, a product's marketing takes another few years, etc. Projects are quoted in millions of euros. Therefore, the organizational culture of pharmaceutical companies is qualified by this slow and expensive aspects. However, communication requires different values: fast and cheap rhythm. Projects take days, weeks, or even months in some cases. Compared to drugs, communication projects are significantly cheaper, quoted in hundreds or thousands of euros. It can be established that the communication culture has opposite values to pharmaceuticals, advocating for fast and cheap values as opposed to low and costly. For employees in the pharmaceutical environment, regardless of their past experiences, it might be complex to be able to manage communication projects.

Consequently, pharmaceutical companies' culture demonstrates conflicting values with the communication sector and doing communication activities in-house would not be beneficial long-term, hence firms may choose to outsource.

3.3.4. Organizational model and internal uncertainty

Moreover, in the "Make or Buy" decision, it is important to analyze the decision-making process: who decides to make or buy a service? Therefore, the organizational model and whether a firm is centralized or localized plays a significant role.

3.3.4.1. Shift towards centralization

With pharmaceutical groups becoming more consolidated, their activities are consequently becoming more centralized. The impact on the decision to outsource by the organizational model of a firm is discussed by Person B. They explain that historically, the centralization of pharmaceutical communication was not possible. When prescription drugs started spreading around the world, there was no global strategy, and laboratories would export the main molecules to produce and market the drugs locally. Therefore, one medicine would be marketed under different names across diverse countries. The centralization of the communication would not be possible then, as the name of the medicine and packaging would be different from one another. Also, regulations are drastically different from one market to another.

Person B witnessed the first effort toward centralization, which was the global rebranding of Merck's flagship painkiller, Neurobion. Person B justifies this shift toward a global strategy by a need to plan better and streamline, because of the pharmaceutical industry decline as well as scandals. Centralization also enables pharmaceutical companies to benefit from economies of scale, with expense cuts via the creation of master assets in English, then localized at a lower price. Streamlining processes enable companies to decrease costs and promote lean marketing, as well as to reorganize the company's organization by identifying the roles which are needed, and those obsolete. As Chief Growth Officer in a worldwide localization agency, Person B understands the organizational model of a firm before it starts centralizing its communication and can track its effects. They explain that outsourcing communication to a centralized ad agency, where the main activity takes place at global or regional level rather than locally, may diminish the number of employees in local marketing teams by 60% to 80%. This represents significant cost decreases since diminishing the teams in each local office may bring down other costs, such as decreasing the electricity bills and size of offices. Such a model is commonly required by the procurement department, who can justify large savings at local levels, and therefore, appeal to a larger number of shareholders.

3.3.4.2. Limits to the centralization of pharmaceutical communication

Although most communication activities can be centralized, such as the creation and localization of advertising assets and media purchases, others request local knowledge. For instance, organizing local events and managing the Customer Relationship Management (CRM) are activities that need to be coordinated at local level. In Person B’s words, a centralization model brought *“global people to be involved on global things only, and local people to be involved on local things only”*. Therefore, centralizing communication means that local communication activities are reduced, but not replaced.

Due to the need for specific knowledge, local activities for POM may be harder to centralize than for OTC drugs. For instance, for a new POM launch, the company needs to target specific doctors, hospitals or pharmacies. This information can be collected locally and needs to be frequently updated; this is hardly manageable centrally. Moreover, as it was developed in section 3.2.3, next to the European regulation, that EU Member States can prohibit the marketing of some products. This information would be shared by local authorities in their native languages, hence justifying the need to manage these regulations locally. Within a pharmaceutical company, local teams, based in different countries, may make different decisions concerning activities remaining at local levels: some might “Make” all activities in-house, others might “Buy” from one or several communication agencies.

Thus, the organizational model of a firm impacts the decision-making of its communication activities. When they can be centralized, activities are taken away from local marketing teams and coordinated at a central level. The “Make or Buy” decision is made by the Central team, which, as per the evidence that will be presented in section 4, often coordinates several global partners. For activities remaining at local levels, the outsourcing decision belongs to local managers and may be different across markets. Overall, although it would be assumed that centralizing communication reduces the number of partners as decisions are made in the center, it may be that it is actually increased due to the increase in decision makers at both the central and local level.

3.3.5. Communication suppliers

It also seems important to analyze the environment of communication suppliers. After all, for firms to make the “Make or Buy” decision, they need to consider who they might buy from. There are so many communication agencies that, as of today, there are no studies that can list all of them in the world, or even in Europe. The worldwide marketing industry has kept on developing and increasing in the past years. The largest communication groups in the world based on their worldwide revenue in 2014 are WPP Group (UK), Omnicom Group (US), Publicis Groupe (FR), Interpublic Group (US), Dentsu (JP) and Havas Groupe (FR). The figure below (Figure 5) demonstrates the growth in revenue between 2008 and 2018, taking into consideration the inflation rate of the 10-year period, of these six advertising groups.

FIGURE 5. COMPARISON OF REVENUE OF THE SIX BIGGEST WORLDWIDE COMMUNICATION GROUPS BETWEEN 2018 AND 2008

(amounts are indicated in millions)	2008 revenue	2018 revenue	Inflation rate (CPI) between 2008 and 2018 (in %)	2008 value with inflation rate 2018 v. 2008	Comparison revenue 2018 v. 2008 (inflation considered)
WPP	£ 7 470.00	£ 15 600.00	29.98%	£ 9 709.51	37.76%
Omnicom	$ 13 560.00	$ 15 290.00	16.63%	$ 15 815.03	-3.43%
Publicis	€ 4 700.00	€ 9 950.00	13.80%	€ 5 348.60	46.25%
IPG	$ 6 962.00	$ 9 700.00	16.63%	$ 8 119.78	16.29%
Dentsu	/	¥ 1 018 512.00	/	/	/
Havas	€ 1 568.00	€ 2 319.00	13.80%	€ 1 784.38	23.05%

Source: total revenue of communication agencies indicated in their respective 2008 and 2018 annual reports.

Note that the data have been kept in local currencies because of the fluctuation rates. The key information of this analysis is the evolution over 10 years.

These numbers translate what seems to be a large market of communication suppliers, exclusively focused on producing advertising, localization, digital, PR and media services for firms, looking to buy these services. The worldwide advertising landscape has been increasing over the past few years, therefore offering more competitive services to firms looking to purchase services from suppliers. Worldwide communication groups enjoy a great reputation from their numerous companies, as well as from their clients' portfolio, some of them including pharmaceutical clients. For instance, in the second edition of its internal journal, DARE!, published in Autumn/Winter 2019, Havas shared the list of its 20 top clients, among which: GSK, Novartis, Pfizer, RB, Roche and Sanofi (Appendix II).

Furthermore, these big companies have developed specific networks dedicated to health communication: WPP Health Practice agencies, Omnicom Health Group, Publicis Health network, IPG and its McCann Health agencies, Dentsu and its Aaron Lloyd Media and Media Health Division, and the Havas Health & You network. These agencies are specialized in working with clients from the medical and healthcare market: pharmaceutical companies, healthcare brands, laboratories, non-profit and governmental organizations, etc. Health agencies are specialized in health communication and are therefore familiar with its specifics, which were presented in section 3.2 as the pharmaceutics' unpopular reputation and strict legal restrictions, among others. Therefore, agencies specialized in health communication might be familiar to the high degree of specificity of the industry, which can be a convincing element for pharmaceutical firms to outsource their communication. By developing a special health department, communication agencies have addressed the high degree of specificity of the pharmaceutical market. Although it is a niche market, the big communication groups are competing with their respective health agencies, which makes it more competitive. This evolution in the offer makes it even more attractive for buyers as it pushes for quality and lower prices.

3.3.6. Principal-Agent problem and internal uncertainty

Aware of the multiple possibilities to outsource their activities to communication suppliers, pharmaceutical firms that decide to make the "Buy" decision must establish during contracting negotiations an evaluation system of their agent. As established above, this enables to align interests of all parties and to diminish the Principal-Agent problem. Although contracting is costly and must be carefully considered, it has been established that ad agencies can expect to lose up to 67% of their clients' portfolio within a 5-year period: the communication industry faces a high volatility (Henke, 1995). Henke (1995) reports that the main reason for companies to switch ad agencies is related to the firm's dissatisfaction of the agency's performance, disappointed by *"poor creative skills and lack of "closeness" to the business"* (pg. 25) as well as *"image weakness of campaigns, poor marketing advice* illustrates a Principal-Agent problem, in situations where the objectives of the company and of the agency are diverse and cannot be aligned, and where the partnerships can hardly be measured. On one side, ad agencies are focused on producing the most creative ideas and working with big budgets to maximize the impact of the client's campaign. On the other hand, pharmaceutical companies have a different conception of creativity than ad agencies; the marketing department of pharmaceutical firms is often made of more educated people who do not always have marketing backgrounds. Therefore, the interests of both parties are initially biased. Furthermore, due to the lack of specific knowledge of the pharmaceutical industry, employees from traditional ad agencies might not always understand the complexity of the pharmaceutical business and might not get the big picture. In an outsourcing relationship with a health-specialized agency, employees from the creative agency are more likely to be more educated about the business of their clients and might better anticipate their expectations.

Furthermore, an important element of the Principal-Agent problem concerns the length of contracting. Communication agencies are looking for long-term contracts to secure partnerships and ensure incomes. However, pharmaceutical companies are rather looking for on-the-spot or short-term contracting to maintain a certain level of control. The usual length of contracting between a client and a communication agency before a new RFI or RFP or invitation to tender is often emitted by the company from 2 to 3 years. This time limitation secures the partnership for a short-term and forces the supplier to challenge himself by focusing on the company's best interests on a regular basis.

3.4. Campaign management and transaction frequency

The frequency at which a company might request communication services depends on its strategy, organizational model, and financial situation. If some companies develop up to four ad campaigns a year, with an ongoing communication effort, others might limit their communication to occasional spontaneous requests. Communication campaigns by pharmaceutical companies may have different focuses: a new product launch, a brand activation, a strategic positioning, a support in fighting specific diseases, or even partnership.

3.4.1. Launch and product campaigns

Companies put together launch campaigns to introduce a new product to the market. They develop advertising assets inviting the targets, either the general public for OTC or health professionals for POM, to discover the features of the new product for the first time. As it was exposed in section 3.3, Horribin (2000) estimates that the number of products launched every year by pharmaceutical companies does not exceed 3 to 7 a year. Therefore, the opportunity to create communication campaigns for new products is very limited; the transaction frequency is significantly low. Besides, the content of launch campaigns is specifically designed for the introduction of new products to the market: their message is adapted for this occasion only, and can air for several months, but cannot be reused for several years. Therefore, a launch campaign implicitly implies that at least another campaign, more general, will be developed later on. The frequency of product campaigns depends on the marketing investment and the strategy of the company: some may develop a new campaign for its key product every year, others refresh previous campaigns every two or three years, and others produce specific assets without developing an entire campaign. The specific knowledge required for product campaigns is rather low and, according to the TCE theory, better off outsourced.

3.4.2. Brand and engagement campaigns

In an effort to offset their bad reputation, pharmaceutical companies count on brand campaigns to connect again with the general public. For instance, Sanofi initiated in 2017 the "Empowering Life" campaign, placing at the center of its communication various individuals. The brand's website (Appendix III) positions Sanofi as a "health journey partner". Its homepage reads:

> *"We at Sanofi, are there beside people in need, as a health journey partner. Many patients are depending on us. We aim to protect, enable and support people facing health challenges, so they can live life to its full potential."* (Sanofi's website, homepage, 08/03/2020).

With this campaign, Sanofi focuses on showing various images of humans in daily or medical situations: Asian, African American, Caucasian, East-Indian, etc. The rebranding of the website is aimed at giving a more human image of Sanofi, which becomes a health partner rather than a simple pharmaceutical company. This campaign was launched internally and externally, then enlarged with paid media on digital channels in the brand's key markets, followed by TV spots in France. The budget for the external communication of the “Empowering Life” campaign represented €3 million for its initial creation and has then been extended to target more markets. The campaign has been ongoing for more than three years. Such a costly and time-consuming project would require huge resources internally, while it seems more advantageous to develop it externally. In fact, such a brand campaign requires little specific knowledge but a significant engagement: an external agency could take care of the planning and broadcasting of the campaign while handling all the sub-suppliers.

In centralized organizations, where there is a coordination of communication activities, the advertising assets might be created at the same time for all markets. Although the campaign is bigger, the transaction has a lower degree of frequency. As presented in section 3.3.3, the organizational model of a firm impacts its decision-making process. By diminishing the number of transactions, the centralization model of communication activities by a firm may favor the “Buy” decision.

This thesis has now applied the principles as presented by the TCE literature, and backed up by the PA theory, to the communication outsourcing of pharmaceutical companies. It has demonstrated that the uncertainty that pharmaceutical companies face in developing and producing the drugs, which are costly and time-consuming, requires their maximum focus on this core business. This is a decisive factor in favor of outsourcing communication. While the communication of pharmaceutical companies admits a higher degree of specificity due to a need for specific knowledge, with a more controlled and regulated communication, the worldwide communication industry has been addressing these specificities by developing specialized branches in health communication in the past decade. Hence, the impact that the required specific knowledge has in the “Make or Buy” decision is minimalized. Furthermore, the competition among communication agencies is allowing pharmaceutical companies to choose their partner. They can choose to contract for a short-term period, which gives them flexibility in their operations: they can choose to contract with another partner or to bring the communication in-house if they are not satisfied. Moreover, the shift to a centralized model has impacted the organization of communication activities, reducing the frequency of transactions. Communication projects require extensive allocation of resources. Therefore, at this point of the paper, based on the theories and their application to the specifics of the industry presented in the previous sections, it is implied that pharmaceutical companies outsource their communication activities to communication agencies.

Hypothesis: due to the need to focus on core activities, a relatively low degree of specific knowledge, a low degree of transaction frequency and a shift toward consolidated pharmaceutical groups requiring streamlined processes, pharmaceutical companies choose to outsource their communication activities.

4. EMPIRICAL ANALYSIS OF OUTSOURCING

This paper started analyzing the reasons for company to either make the “Make” or “Buy” decision and has relied heavily on the TCE theory. In order to test the hypothesis developed in the theory, this paper uses several types of data. In the first place, it relies on interviews of four communication professionals with experience on pharmaceutical accounts. Secondly, it analyzes information from pharmaceutical companies and communication groups’ annual reports to compare and contrast revenues and pharmaceutics’ marketing expenses over a 10-year period. Finally, based on an online analysis, it reveals past or existing collaborations between pharmaceutical companies and ad agencies.

4.1. Marketing expenses of pharmaceutical companies

In order to get a more accurate idea of what communication outsourcing represents for pharmaceutical companies, it is necessary to understand the budget involved, and its evolution over the past years. The table below (Figure 6) compares the marketing expenses of the six studied pharmaceutical companies in 2008 and 2018, corrected for inflation rate over the 10-year period (with the 2008 values adjusted to 2018) in the denominated currency as well as the share of marketing expense as part of the total revenue. Due to fluctuation rate, the local currencies were kept in the analysis, which its main focus is to demonstrate the evolution over years rather than compare the budget of each firm. These two parameters should indicate whether the marketing budget of a company has significantly increased, remained steady or decreased over the past ten years. A significant increase can be the indicator of two evolution: either a growing focus on the marketing sector, or a reorganization in the spending and budget.

FIGURE 6. COMPARISON OF MARKETING EXPENSES OF THE SIX STUDIED PHARMACEUTICAL COMPANIES IN RELATION WITH THEIR REVENUE BETWEEN 2018 AND 2008

	2008			Inflation rate 2018 v. 2008		2018			2018 v. 2008		
Companies	Marketing expense (in million)	Total sales (in million)	Total marketing/ sales expense (in %)	Inflation rate (CPI) between 2008 and 2018 (in %)	2008 marketing expense with inflation rate 2018 v. 2008 (in million)	Marketing expense (in million)	Total sales (in million)	Total marketing/ sales expense (in %)	Difference in marketing expenses (in million)	Difference in marketing expenses (in %)	Comparison total marketing/ sales expense (in %)
Bayer	Other non-operation expenses € 228	€ 32 918	0.69%	13.08%	€ 257.8	Marketing and distribution € 887	€ 39 586	2.24%	€ 629.2	244%	69.09%
Roche	Marketing and distribution CHF 6 696	CHF 45 617	14.68%	0.54%	CHF 6 732.2	Marketing and distribution CHF 10 109	CHF 56 846	17.78%	CHF 3 376.8	50%	17.46%
Novartis	Marketing and sales $ 11 852	$ 41 459	28.59%	16.63%	$ 13 823.0	Selling general and administration $ 16 471	$ 51 900	31.74%	$ 2 649.0	19%	9.92%
Sanofi	Selling ang general expenses € 7 168	€ 27 568	26.00%	13.08%	€ 8 105.6	Selling and general expenses € 9 854	€ 34 463	28.59%	€ 1 748.4	22%	9.06%
GSK	Selling general and administration £ 8 929	£ 24 352	36.67%	29.98%	£ 11 605.9	Selling general and administration £ 11 561	£ 30 821	37.51%	-£ 44.0	-0.39%	2.25%
Merck	Other purchased services/expenses € 2 649	€ 7 558	35.05%	13.08%	€ 2 995.5	Marketing and selling expenses € 4 384	€ 14 836	29.55%	€ 1 388.6	46%	-18.61%

Source: marketing expenses and total sales of the six studied pharmaceutical companies as indicated in their respective 2008 and 2018 annual reports.

Note that the data have been kept in local currencies because of the fluctuation rates. The key information of this analysis is the evolution over 10 years.

Based on the available data, it appears that in the past ten years, there was a general trend toward the increase of marketing expenses. The limit of this overview is that elements of comparison are not even; not all companies publicly disclose their "marketing" expenditures, and they are sometimes included in "other expenses", "administration" or "distribution". Also, the 2008 and 2018 data of a same company are not always the same; this is for instance the case for Bayer. In 2008, the marketing expenses of this German group were denominated as "other non-operation expenses" and reached €228 million, including miscellaneous expenses. In 2018 however, the category name was more precise and became "marketing and distribution" expenses; alone, it reached €887 million: that's a 244% increase and, since the category got more narrowed over time, it can be assumed that Bayer's marketing expenses were only much bigger. Also, the marketing budget as a share of total sales has increased by 69%. It appears that

Bayer has definitely shifted its focus on its marketing communication in the past few years.

In comparison, the British pharmaceutical group GSK seems to have reduced its marketing expenses as a share of the total sales. In 2008, GSK had a "selling general and administration" spending of £8,929 million. With an inflation rate of almost 30% over the past 10 years, this same value would represent £11,606 million in 2018. However, the company's expense in 2018 were of £11,561 million, which represents a slight decrease of -0.39%. At the same time, the company has been growing with an increase of + £8 millions of its total sales; hence the GSK case is interesting as the company seems to have managed to reduce its marketing expense over a decade while increasing its revenue.

The case of Merck is also particularly interesting. In 2008, its "other purchased services/expenses" were close to €2,649 million, and in 2018, a narrower category for "marketing and selling expenses" was 46% higher. On the same timeframe, the company's sales doubled, but its marketing expense as a share of total revenue diminished by more than 18%. Merck's budget for marketing increased, but its sales increased faster. Although the company has drastically grown, Merck has managed to keep its marketing expenses lower than expected. This might suggest that the German company has benefited from massive economies of scale when it comes to its marketing operations.

In parallel, pharmaceutical companies such as Roche, Novartis and Sanofi have absolutely increased their budget for marketing. Overall, marketing expenses are denominated in millions of euros, Swiss francs, American dollars or British pounds, and represents about 30% of the total revenue of a pharmaceutical company.

It can be understood that marketing, and therefore communication, represents nowadays a significant part of the expenses of pharmaceutical companies. This share of budget seems to confirm an original assumption: pharmaceutical companies care about their communication due to the seriousness of the industry. The overall increased marketing budget in the pharmaceutical industry over the past ten years would suggest that the need for communication have dramatically increased and implicitly suggest that in-house production would have brought higher costs.

4.2. Data collection and methodology

Pharmaceutical companies do not disclose the list of the agencies they work with. Therefore, collecting data was not possible on the side of pharmaceutical firms.

4.2.1. Criteria

The collection of data would therefore happen on the suppliers' side. It has been established that pharmaceutical companies need to be specifically careful about their communication due to many scandals and the loss of confidence from the public. This interpretation leads to the assumption that the biggest pharmaceutical firms would outsource their communication activities to the most powerful communication groups, which have been studied in the section 3.3.5: WPP, Omnicom, Publicis, Interpublic, Dentsu and Havas. Because Dentsu is a Japanese group specialized in public relations and working for a significant lower number of European clients than its competitors, it has been excluded from the research field. These 5 communication groups have altogether more than 500 agencies. The search field was narrowed to communication agencies, namely: creative, ad and integrated agencies; digital agencies; localization decoupling and production agencies; and media agencies. The research field has also been limited geographically, with agencies based in the 28 EU countries, Switzerland, and global hubs.

4.2.2. Sources of data

On their websites, many communication agencies share their "client portfolio" and case studies of their works to demonstrate their range of activities. For confidentiality reasons, some agencies disclose only partially their clients;

some others do not. Whether clients' name was disclosed or not, this information was collected. The collected data are not framed in time: they can either represents a past collaboration or a current partnership.

Additionally, the Cannes Lions, which is a worldwide award ceremony for the best communication works, also unveils the collaboration between pharmaceutical companies and communication agencies with the shortlists for its *Health Award*. The *Health Award* is divided into 2 sub-categories: the *Health and Wellness Lions* which celebrates the best pieces of work in the "Consumer Products Promotion", "Health Awareness & Advocacy", "Health Services & Corporate Communications" and "Animal Health", and the *Pharma Lions* which focuses on the "Product or Service Promotion", "Diseases Awareness and Understanding", "Healthcare Professional Engagement", "Patient Engagement" and "Veterinary" categories. In 2019, the shortlist for Health & Wellness Lions counted 120 entries, and the shortlist for Pharma counted 31 entries. The geographical filter narrowed the list to 35 entries for Health & Wellness and 7 entries for Pharma. Then, the companies filter, focusing on the 6 studied companies, narrowed the list further to 2 entries for the *Health & Wellness* sub-category and 3 entries for the *Pharma* sub-category. The collected data from the Cannes Lions website revealed that in 2019: GSK collaborated with Saatchi & Saatchi Lausanne (Switzerland) for 2 campaigns for *Voltaren*, Novartis worked with Publicis Lifebrands London (UK) for its brand *Tasigna*, Sanofi Genzyme Regeneron outsourced its communication for its brand *Dupixent* to Havas Lynx Manchester (UK), and Bayer collaborated with Langland Windsor (UK) for *Smartread*.

4.2.3. Methodology

Data has been collected across 473 websites between October and November 2019. For analysis purpose, they've been grouped and classified in a table, which admits 501 entries. Some agencies sometimes share various works for one company (either for different campaigns or brands) as the number of entries is higher than the number of observed websites. The collected data were categorized based on 4 different outcomes:

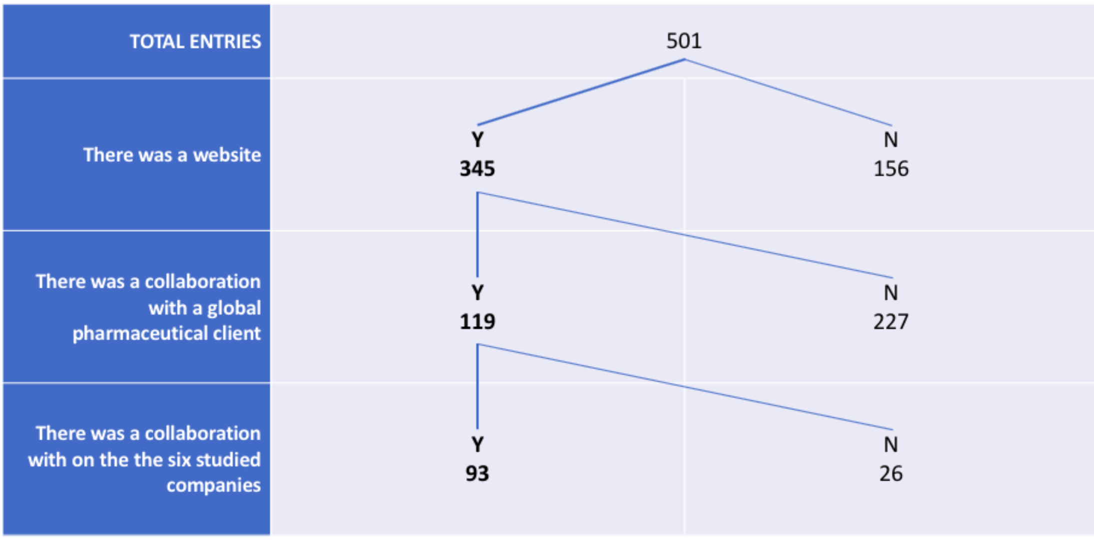
- The agency did not display its Client portfolio;
- The agency Client's portfolio did not contain pharmaceutical companies;
- The agency Client's portfolio contained one or several pharmaceutical companies which are not the 6 studied firms;
- The agency Client's portfolio contained one or several pharmaceutical companies, including one or several studied firms.

4.3. Analysis

4.3.1. Preliminary results

From the working table, the first observations can be grouped in a tree chart (Figure 7):

FIGURE 7. TREE CHART WITH PRELIMINARY RESULTS



- 156 entries: there was no website or no client portfolio available
- 220 entries: the website indicated a Client portfolio in which there was did no global pharmaceutical client
- 119 entries: the website indicated a collaboration with a global pharmaceutical client, either one of the 6 studied companies or others

- 93 entries out of these 119 entries: the website indicated a collaboration with at least one of the six studied companies (Bayer, Roche, Novartis, Sanofi, GSK, Merck).
- 6 entries out of these 93 entries: expressed different work from the same collaboration

On that account, the analysis reveals 87 different collaborations between an ad agency from the 5 studied communication groups and a brand from the 6 studied pharmaceutical groups.

4.3.2. Data type and product type

The collected data were communicated by the communication agencies in two different ways. The most common form of data is the disclosure of the studied companies' logo in the agencies' client portfolio. The second type of data, which reveals more information, are case studies on the work done for the pharmaceutical client. This type of data gives insight on the product and type of communication: a B2B collaboration would reveal the outsourcing of communication for POM while a B2C collaboration would indicate the outsourcing of communication for OTC drugs. Case studies also give away the media type. The data collected from Cannes Lion displays the product name of media type; however, the workpiece is not shared so the product type (POM or OTC) can hardly be established. The type of data classified per brand is presented in the Figure 8.

FIGURE 8. TYPE OF DATA CLASSIFIED PER PHARMACEUTICAL CLIENT

	Logo	Case study B2B	Case study B2C	Cannes Lion	Total entries
Bayer	11	1	8	1	**20**
Roche	4	2	1	0	**7**
Novartis	3	4	1	1	**5**
Sanofi	17	1	7	1	**26**
GSK	10	1	7	1	**18**
Merck	9	1	1	0	**11**
	54	**10**	**24**	**4**	**93**

Source: client portfolio and case studies published on the websites of suppliers (2019)

The table demonstrates a higher number of B2C case studies (24) than B2B (10); i.e. there are more collaborations for OTC drugs than there are for POM. As it was exposed in section 3.2.2, the degree of asset specificity for POM is higher than for OTC drugs, which from a TCE standpoint would justify the outsourcing of OTC communication over the outsourcing of POM communication. The collected data seem to confirm this assumption, although there seem to be exceptions. If Bayer (8 for 1), Sanofi (7 for 1) and GSK (7 for 1) have a number of B2C case studies significantly higher than for B2B, this observation is more balanced for Merck (1 for 1) and reversed for Roche (1 for 2) and Novartis (1 for 4). Considering that most of the data, which are already limited in number, are presented as a logo rather than a case study, no conclusion should be made from this observation.

4.3.3. Pharmaceutical companies' communication partners

The 87 entries can be classified per pharmaceutical brand and communication group. The Figure 10 lists for each pharmaceutical company the name of the agencies it collaborates with, grouped per communication group.

FIGURE 9. AGENCIES FROM FIVE COMMUNICATION GROUPS WORKING FOR SIX PHARMACEUTICAL COMPANIES

	TOTAL	WPP		Publicis		Omnicom		Interpublic		Havas	
	Number of agencies	Number of agencies	Communication agencies	Number of agencies	Communication agencies	Number of agencies	Communication agencies	Number of agencies	Communication agencies	Number of agencies	Communication agencies
Bayer	**20**	**6**	Ogilvy Bulgaria Ogilvy Switzerland Wunderman Thompson Belgium **Wunderman Thompson Health Europe** Wunderman Thompson France KKLB Berlin Germany	**1**	Langland UK	**8**	PKP BBDO Austria Mark BBDO Czech Republic Omnicom Media Germany BBDO Germany DLVBBDO Italy (2) Energy BBDO Poland Tiempo BBDO Spain DDB Spain	**3**	McCann Denmark McCann Health Nordic Denmark McCann Hungary	**2**	Havas Belgium **Hercules Global**

Roche	**7**	**2**	Taivas Finland **Wunderman Thompson Health Europe**	**1**	Langland UK	**1**	TBWA Health UK	**0**	/	**3**	Havas Bulgaria Havas Greece Havas Lynx UK
Novartis	**5**	**2**	Ogilvy Italy **Wunderman Thompson Health Europe**	**1**	Publicis Life Brands UK (5)	**0**	/	**1**	McCann Health Nordic Denmark	**1**	Havas Lynx UK
Sanofi	**26**	**3**	Taevas Ogilvy Estonia VMLY&R Germany **Wunderman Thompson Heath Europe**	**10**	Publicis Czech Republic Zenith Denmark **Prodigious Global** Publicis Hungary Publicis Italy Publicis Poland Publicis Switzerland Langland UK Saatchi & Saatchi Denmark Razorfish Health UK	**1**	**TBWA Corporate Global**	**1**	Air on Air Belgium	**11**	Havas Austria Havas Belgium Havas Denmark Havas Germany Havas Greece Havas Hungary Havas Romania Havas SO UK Havas Just UK Havas Lynx UK **Hercules Global**
GSK	**18**	**3**	Ogilvy Ireland **Wunderman Thompson Health Europe** Wunderman Thompson UK (2)	**6**	Leo Burnett Netherlands Saatchi & Saatchi Germany **Saatchi & Saatchi Global** Saatchi & Saatchi Poland Saatchi & Saatchi Switzerland Leo Burnett Belgium	**4**	TBWA France Integer Germany BBDO Belgium AMV BBDO UK	**1**	McCann Austria	**4**	Havas Czech Republic Havas Greece Havas HKX UK Havas SO UK
Merck	**11**	**2**	Ogilvy France Ogilvy Italy	**4**	Langland UK Saatchi & Saatchi Denmark Saatchi & Saatchi Pro Germany Saatchi & Saatchi Poland	**1**	**TBWA Health Collective Global**	**1**	Weber Shandick Design UK	**3**	Havas Belgium Conran Design Group UK **Hercules Global**
Average	**14,5**	**3**		**3,8**		**2,5**		**1,2**		**4**	

Source: client portfolio and case studies published on the websites of suppliers (2019)

This analysis demonstrates that the 6 studied pharmaceutical firms outsource their European communication activities to an average of 14.5 communication suppliers. What is particularly striking is the wide range: Novartis working with the smallest number of agencies, 5, and Sanofi with the highest, 26. This indicates quite a disparity among firms' choices to outsource and calls for an individual analysis per brand.

4.4. Bayer

4.4.1. Communication partners

According to Figure 6, in 2018, Bayer spent €887 million for the marketing and distribution of its products while its total sales reached €39,586 million; its marketing expenses as a share of its total revenue were about 2.24%. That is significantly lower than any of the five other studied competitors, which spent between 20% and 30% of their revenues on their marketing or selling expenses. In the meantime, it shows a significant increase in marketing spending over the 10-year period.

From the analysis, it can be understood that Bayer works with 20 different communication agencies in Europe, mostly from the Omnicom group (8). It has collaborated with all 5 different communication groups. Most of the agencies are local units, hence suggesting that the partnership is contracted directly by Bayer local marketing and procurement teams: it does not suggest a global coordination of communication activities. Two entries indicate a partnership coordinated at the regional or global scale: with Wunderman Thompson Health Europe and Hercules. Due to the low number of this type of partnerships, it can be assumed these were out-of-scope projects and do not define the way communication activities are coordinated. The number of various local partners indicates that, besides the partnerships that were unveiled in this analysis, Bayer local teams might outsource their communication activities to other agencies which do not belong to the 5 groups from the research. However, this assumption would need to confirm with an analysis of local agencies in each country.

4.4.2. Evidence of B1 brand

When asked to describe its working model with Bayer, the Person A described a very local-oriented model. They explain that Bayer empowers its local markets in the decision-making of communication activities. Each local office has a marketing department of one to five employees, in charge of the communication campaigns' development in their region. The coordination between the central marketing office and the local units is limited as there is no effort of centralization. Therefore, Local Marketing Managers (LMMs) are the decision-makers when it comes to "Make or Buy" their communication materials. For the Person A, considering all the divisions (such as pharmaceutical, healthcare, pet care, agriculture...) on all markets across the world, Bayer contracts with hundreds of communication suppliers. To support this claim, the Person A takes the example of the brand they work for. The brand, which for confidentiality concerns will be referred to as B1, originally belonged to another group, which had a central approach to marketing. When owned by the previous group, the creative campaigns for B1 were developed by a creative agency based in the United States. Then the master assets, developed in English, were shared to the decoupling agency, based in Europe, for localization. Master videos were produced across three continents: between United States, Europe, and India. Two digital agencies based in Europe were coordinating the websites development with the decoupling agency. One media agency based in Europe received the localized assets and distributed them to local channels. Overall, the communication process for B1 involved over ten communication suppliers, and that is for the coverage of one brand only in seventeen European markets. At a bigger scale, for several brands and all regions, the Person A estimates the number of communication partners to be close to several hundreds of agencies. Now that B1 has been acquired by Bayer, Person A witnesses that decisions for communication activities are being progressively delegated to LMMs. Communication campaigns are no longer created by the American ad agency, but let to the appreciation of LMMs, which based on the Person's A current experience, are themselves working with several local agencies. The central creative agency and decoupling agency have been replaced by many local creative and digital agencies, therefore increasing the number of partners B1 outsource its communication to. An educated guess from Person A is that each local unit works with at least two to three local agencies for each category, whether for their campaign's creation or digital assets and website updates and maintenance. One local office in Eastern Europe has confirmed working with more than seven creative agencies.

4.4.3. Decentralization of media activities

Concerning its activities of media buying, Bayer has decided to cut most of its partnerships off with media agencies and to bring its digital media activities in-house. This strategy was presented at the Programmatic I/O conference in New-York in October 2018 by Bayer's Vice President of Digital Strategy and Platforms, Josh Palau. He explained that Bayer, which has been working with GroupM and MediaCom media agencies since 2011, is now aimed at concentrating its digital search and buying activities in-house. It has set-up a two-year transition plan to bring all changes and to develop a digital central team to handle digital strategy planning, analytics, and buying. Bayer's new digital media strategy was aimed at being operational by 2020, and it succeeded. To work through the transition period, Bayer has started in 2019 a new one-year partnership with a programmatic company, MightyHive. In January 2020, the German pharmaceutical company has officially stopped all partnerships with its previous agencies and brought all digital media activities in-house. Bayer keeps outsourcing its offline media communication activities to GroupM. In his 2018 conference speech, Palau explained this new strategy by justifying the lack of in-house knowledge:

> *"We realized that if we really wanted to be leading edge marketers, then we would need more expertise in the building, not only from a strategic level but a tactical level"*

It seems that Bayer justifies its "Make" decision of media activities through a Knowledge-Based View argument as its decision to insource is motivated by the wish to develop and maintain knowledge in-house. Via its previous outsourcing experiences to GroupM and MediaCom since 2011, teams at Bayer have developed for several years a new set of competences, with a better understanding of digital searches and digital media landscape. The one-year collaboration with MightyHive gave the keys to Bayer to master a new platform, therefore acquiring new technologies and hiring new employees with the right set of competences.

When it comes to its communication activities, Bayer's "Make or Buy" decisions are quite interesting. If creative campaigns admit multiple partnerships with various ad and digital agencies from different communication groups, it shows an entirely different strategy when it comes to its digital media strategy by bringing everything in-house. What is particularly striking is that Bayer combines two different organizational models for its communication activities: one local schema for the creative development of its campaigns, in complement to a central model for its digital and offline media strategies. However, these findings do not permit to justify the gap in marketing expenses between Bayer and the rest of its competitors.

4.5. Roche

4.5.1. Communication partners

Over a 10-year period, Roche has absolutely increased its marketing expenses: by 50% comparing the 2018 value and 2008 with adjusted inflation rate, and by 17% as a share of its sales. This suggests that Roche is not managing its marketing expenses in the most efficient way.

From the analysis, it appears that Roche does not outsource its communication activities as widely as its competitors. This research reveals that Roche works with 7 communication agencies in Europe. Since most of these agencies are based in the United Kingdom (UK), this could either suggest that the UK market is outsourcing more than others or that, because the UK is an English-speaking market, there is a central coordination for the creation of master assets. The research shows that the Bulgarian, British, Finnish, and Greek local markets have decided to outsource to agencies from WPP, Publicis, Omnicom and Havas groups. Other markets might outsource to other agencies which do not belong to the 5 studied communication groups. The collected data also highlights that Roche has collaborated with Wunderman Thompson Health Europe, either for a regional project, or it can be assumed it was coordinated by the UK market. There is no record of a collaboration with Interpublic.

4.5.2. Guidelines and evidence of "Make" decision

On its brand website, www.brand.roche.com, Roche publishes the "dos and don'ts" regarding its brand utilization: brand guidelines, brand identity, brand positioning, etc. It seems that Roche promotes rather the "Make" decision as it addresses in-house local managers by the use of "I", "you" and "we" pronouns. Although these guidelines can be shared to local agencies for the creation of communication assets, it also suggests that local markets are allowed to develop the assets in-house, being given instructions by the management on what is recommended and forbidden. On that account, the "Make or Buy" decision belongs to local markets, which are recommended to insource communication activities.

To summarize, Roche has increased its marketing expenses and works with a limited number of partners. There are evidences suggesting an in-house production of communication activities. With the key benefit of outsourcing being to benefit from economies of sales, the example of Roche would suggest that an in-house activity is more costly than outsourcing, and Roche would be better off outsourcing its communication activities more widely.

4.6. Novartis

4.6.1. Communication partners

Between 2008 and 2018, Novartis has absolutely increased its marketing expenses: by 19% comparing the 2018 value and 2008 with adjusted inflation rate, and by 10% as a share of its sales.

From the studied companies, Novartis appears to be the pharmaceutical firm working with the fewer number of communication agencies in Europe. It is recorded that Novartis has worked with 5 agencies from the studied communication groups: 2 local agencies from different markets (Italy and Denmark) and 3 health agencies based in the United Kingdom. This could suggest either a strong activity of the UK local market, or a central coordination from an English-speaking market. Besides, there are various works realized by Publicis Life Brands based in the UK which have been recorded for Novartis: a brand campaign, several B2B campaigns for POMs, a B2C campaign for *Extravia* as well as the shortlisted campaign in the Cannes Lion for *Tasigna*. It seems that Publicis Life Brand is Novartis' agency of record in Europe and might be developing creative content for the entire region.

Furthermore, Novartis being the only non-European pharmaceutical group from the research, communication activities could be coordinated by a Central Team based in the United States, either in-house or by an agency-of-record. A further analysis of the company's oversea communication activities could confirm or deny this assumption.

Similar to the case of Roche, increased marketing expenses and a low number of communication partners suggest that Novartis is not managing its communication activities in the most efficient way and would benefit from increasing its outsourcing of communication activities.

4.7. Sanofi

4.7.1. Communication partners

Sanofi also presents an absolute increase in its marketing expenses: by 22% comparing the 2018 value and 2008 with adjusted inflation rate, and by 9% as a share of its sales. However, on the contrary or Roche and Novartis, Sanofi is the pharmaceutical company which appears to have the most plentiful number of outsourcing partners.

The research has recorded 26 different partnerships, from all communication groups. The biggest collaborations are with agencies from the Havas group (11) and from Publicis (10). Another aspect worth noticing from this research is that Sanofi seems to be working with 4 different global agencies, each from a different communication group: Wunderman Thompson Health Europe by WPP, Prodigious Global by Publicis, TBWA Corporate Global by Omnicom, and Hercules Global by Havas. This finding seems to hide an attempt to establish a central coordination of communication activities: Sanofi might be outsourcing with different global agencies seeking for help to establish its centralized model. This point is defended in the section 4.7.2 below. Arguments from the Agency theory would assert that so many partnerships are not beneficial to the firm, which is exposed to much contracting costs and the principal-agent problem.

4.7.2. Attempt of central coordination

Person C, working in a decoupling agency from the Havas network, has been in charge of the Sanofi account for several years. They witness how the organizational model of the company affects the organization of its communication activities. In 2013, the procurement of Sanofi in charge of Central-Eastern Europe and Middle Eastern markets made an ultimate call toward centralization by opening a tender for the centralization of communication in this region. Person C's agency got the business, expecting to create a few regional campaigns for Sanofi, which would be harmoniously localized in all markets. Instead, because of many pushbacks from local brand managers (LBMs) which refuse to lose control over their communication activities, Sanofi's central team presented the decoupling agency as a "proposed, not imposed" partner. LBMs from the 14 markets in Central-Eastern Europe and Middle East would outsource small work to the agency, and at the first opportunity, could terminate the partnership with the decoupling agency to go back to working with local agencies. The decoupling agency is therefore acting as a kiosk for any small adaptations when local markets need them, while most of the creative work is done by local agencies. This outcome demonstrates that the centralization model wanted by

Sanofi's Central team has not yet succeeded and impacts the communication of the brand, which is costly, unplanned and inconsistent across markets.

4.7.3. Impacts on outsourcing of communication activities

At local level, the number of employees involved in the communication activities of Sanofi's brands is tremendous. Person C notices that since the start of the collaboration, they have been introduced to more than 300 marketing decision makers for 14 markets and other additional members from the central team. On the company's side, it represents considerable costs: having in-house LBMs, each LBMs having knowledge on brand story, promise and guidelines, while most of the communication activities are produced by external partners. The effort toward centralization is justified by the need to cut down costs. Person C suggests that the role of LBMs should be centralized, as the knowledge of a brand does not depend on local specificities. Besides, Sanofi has introduced its first centralized teams for its best-selling brands, such as Lantus, Dupixent, and Lovenox. The most performant LBMs have been selected to join the central team while others have been laid off. This new effort toward centralization is either a test or transitional step, and Person C hopes it will permit to establish a more centralized communication, which in his mind is the most efficient solution as long as the company's organization is flexible enough to evolve in this direction.

On a global scale, historically, Sanofi has entrusted the Havas network for the main part of its communication activities. Person A, who has been in the Havas network for decades at a managerial position, indicates that Sanofi remains the biggest global account of the group. Sanofi represents a yearly revenue of over €100 million while working with numerous Havas agencies both at the central and local scale. Centrally, Havas Paris and Havas Health and You based in New-York City have been the main agencies of record, creating content for both OTC and POM which are distributed to local Havas agencies. Person C's agency collaborates with Havas London, Havas Health and You New-York, and Havas Boston. For some projects, there are so many agencies in the scope that people in the chains of emails are sometimes from 18 different agencies. A few years ago, Publicis took over Sanofi's OTC communication, leaving Havas with the prescription drugs business. This observation confirms the analysis showing a large collaboration with agencies from both Havas and Publicis. In 2017, following Sanofi's purchase of Boehringer brands, Publicis new WPP creative and media agencies entered the network of Sanofi's communication suppliers. Post-purchase, the media budget of Sanofi has been estimated to € 900 million.

Although Sanofi has attempted for many years to centralize its organization, and consequently its marketing and communication department, it has not yet succeeded in cutting costs in an efficient way, nor in streamlining its ways of working. Internal marketing teams are quite significant in size, with many brand managers at both the local and central level. Similarly, Sanofi has increased the number of communication suppliers it works with. If, since in the early 2000s, Havas has long been the group of record, then Sanofi has included in the scope many more agencies from different groups. From a theoretical standpoint, increasing the number of suppliers significantly increases the coordination needed on Sanofi's side, hence increasing the company's coordination costs during the transition period toward centralization, if it ever manages to establish it. Another analysis of Sanofi's communication is whether the group has managed to reduce its supplier costs.

4.8. GSK

4.8.1. Communication partners

When analyzing the evolution of its marketing expenses over a 10-year period, GSK presents an intriguing case. It has slightly decreased its spending by 0.39% comparing the 2018 value and 2008 with adjusted inflation rate, while it has increased its marketing spending as a share of its sales by 2.25%. This observation can partially be justified by the highest inflation rate on the British pound, in comparison to the other studied currencies.

The analysis has recorded 18 communication agencies in Europe working for GSK. The British pharmaceutical company works with agencies from all 5 studied communication groups, although mainly with Publicis agencies (6). Most of them are local agencies which are based in 10 different markets. 5 agencies are based in the UK, which suggests either a strong trend for outsourcing communication activities in the UK market or a centralization of the creation of communication content in an English-speaking market. To support this latest idea, GSK also cooperates with the Saatchi & Saatchi Global agency, which presumes the coordination from a central communication team, based in the United Kingdom. Interviews from communication professionals through communication agencies based in the UK or GSK marketing team could help support this claim.

4.9. Merck

4.9.1. Communication partners

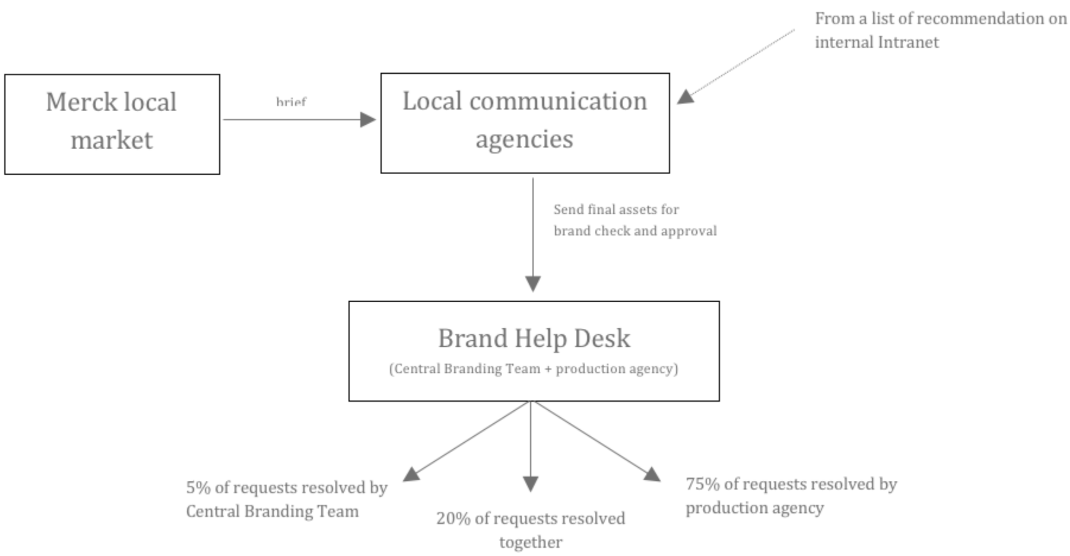
Merck, not to be confused with the American company Merck & Co, is a German pharmaceutical company. Between 2008 and 2018, it has increased its marketing and selling expenses by 46% while its marketing expenses as a share of its total revenue has decreased by 18.61%: either Merck's revenue grew faster than its expenses in marketing, or the company has found an efficient way to save costs.

Based on this paper's research, Merck works with 11 different communication agencies based in Europe, from all 5 studied communication groups. Its main communication partners are local agencies from the Publicis network (4) and from the Havas group (3). The study has revealed that Merck works with local agencies from 7 different markets and 2 central agencies. One of these central agencies acts as Merck's brand helpdesk and is substantiated by Person D's interview. Working for Merck's Central Branding Team, they are in charge of the Merck Brand Helpdesk. As described below in section 4.9.2, it is surprising that this study does not unveil more communication partners since local markets have the freedom to work with diverse local creative agencies. The recommended local agencies might not be from the 5 studies communication groups.

4.9.2. The task-sharing model

The outsourcing relationship between Merck and Person D's agency is referred to as a "task-sharing relationship", where the Central Branding Team and the agency are working together to monitor the marketing assets created from various agencies. This outsourcing is schematized in the figure below (Figure 7).

FIGURE 10. THE TASK-SHARING MODEL FOR BRANDING BETWEEN MERCK AND A PRODUCTION AGENCY



Source: the task-sharing model as described by Person D

There is no centralization of the communication as such: there is no effort from a central team to create and develop content at the global level. On the other hand, the central team plays the roles of both adviser and approver. The Central Branding Team shares with local markets a list of local agencies they are recommended to work with. If local markets would like to cooperate with other agencies, the Central Branding Team needs to give its approval on the collaboration. Once a communication asset is created, the local creative agencies need to send it to the Brand Help Desk for approval. The Brand Help Desk, which is made of both the Central Branding Team and the production agency working together, makes sure that the locally created assets are compliant with the brand guidelines. Person D affirms that the production agency addresses 75% of the requests on its own while the Central Team approves or rejects 5% of the assets. Together, they set up a meeting twice a week to resolve the remaining 20%. If a local agency shares too often the assets which are not brand compliant, the Brand Help Desk can oblige the local market to terminate the partnership with the agency.

This task-sharing model is particularly interesting to examine from a TCE viewpoint. On one hand, Merck entrusts its local marketing teams to remain in power of its communication campaigns' creation and development. The number of local outsourcing partners is not limited, so the choice of outsourcing remains in LBMs' control. On the other, Merck wishes to make sure that its brands are correctly advertised, and therefore put together a Central Branding Team, made of 2 central brand managers. The partnership with the global production agency is justified from an asset specificity standpoint. Once the brand guidelines are shared and understood, approving assets have a low specificity as brand guidelines need to be purely applied. Therefore, for Merck, it does not make much sense to establish an in-house central team of a dozen of employees to approve the assets. Outsourcing to an agency is justified by TCE, with a minimal in-house team of two employees who can make the final call in the most complex cases. This observation adds up the low internal uncertainty of the firm. Because local markets remain in power of their communication and have the choice to select their own communication partners, it is very unlikely that the brand helpdesk workflow will be subject to change, except if bigger changes, such as a new organizational model, would be introduced.

If Merck's brand helpdesk can be justified from a TCE perspective, it is however worth noting that Merck does not benefit from the cost savings and economies of scale of a central production of its marketing assets. Each local market contracts with one or several creative agencies: at the group scale, the costs of contracting and of coordination must be extremely high, both for the Brand Helpdesk and for the local agencies. The communication is not harmonized across all markets even though brand guidelines are assuredly respected and best practices are not shared across markets. What if an ad developed in Germany could be localized and "stolen with pride" for the British market? This model is the one that Sanofi has attempted to establish, unsuccessfully until today.

This paper has established that all studied pharmaceutical firms outsource their communication activities to several communication agencies. The shift of the industry has pushed pharmaceutical companies to be more careful about their communication, hence justifying an increased budget for marketing expenses over the past years. When compared to their total revenue, pharmaceutical firms in 2018 invested, on average, 25% into marketing, revealing increasing and significant costs. The various examples of Bayer, Sanofi, and Merck demonstrates distinctive outsourcing partnerships, sometimes widely influenced by the organizational model established in the firms. The question is therefore not to "Make or Buy" communication activities, but rather from how many partners it can be purchased.

4.10. Limits

The limits of this analysis are posed by the methodology of data collection, which are not publicly disclosed. Due to companies not disclosing the list of their communication partners, the data collection has been based on the assumption that pharmaceutical companies would work with agencies from the biggest communication groups. However, firms might work with agencies which do not belong to the selected communication groups. This situation is especially likely for firms which have a local organization model: local managers are not always aware of the biggest communication groups, and local budget might limit communication activities to agencies offering the cheapest services.

Another limit to this analysis lies in the disclosure of information from communication agencies themselves. For instance, 156 of the examined websites did not display Client portfolios: 44 agencies from Publicis; 40 agencies from Interpublic; 39 agencies from WPP; 26 agencies from Omnicom and 7 agencies from Havas. These agencies, although not shared on their website, might also be working with pharmaceutical companies. Furthermore, it can be assumed that, in cases in which the Client portfolio was published, the list of clients might not have been fully published due to the agency's selection or for confidentiality purposes. Despite these limitations, the collected data are based on available information which are publicly disclosed, although other partnerships might be kept confidential. The basis of this analysis is still valid as it has illustrated extensive outsourcing relationships.

Furthermore, the partnership between pharmaceutical groups and communication agencies are not framed in time: it might be that some of the collaborations took place in the past and are now terminated, which would indirectly impact the number of partners. Pharmaceutical firms might have already reviewed their communication strategy and their number of communication suppliers.

4.11. Summary

This research has demonstrated that all studied pharmaceutical companies have made the "Buy" decision by outsourcing their communication activities to various communication agencies in Europe. Roche, which is one of the companies to outsource to the fewer number of agencies, appears to be the only firm to encourage local markets to make the "Make" decision. All other companies reveal a behavior in favor of the "Buy" decision for their communication activities. Novartis, which is the firm with the smallest number of partners registered, admits a central approach to its communication activities, and consequently to its outsourcing model, thus justifying the low number of partners. On the other hand, firms such as Bayer, Sanofi, GSK and Merck, which adopts a local approach to the organization of their marketing and communication departments, faces a higher number of communication partners as the “Make or Buy” decision is let for the decision of local managers, who, based on the analysis, are inclined to the “Buy” decision. This research confirms that the organizational model of a firm impacts the number of its communication suppliers. This indicates that the lack of centralization has high opportunity costs. Since there are many local suppliers which are coordinated by local teams, the coordination costs are very high while there is still a need for in-house communication teams.

5. CONCLUSION

This thesis has reviewed several theories that help explain the decision to outsource. It has applied them to the communication of pharmaceutical companies, and mainly based on TCE principles, it developed the hypothesis that outsourcing should be the choice made by these companies. It has then presented the results of empirics to test whether companies outsource their communication. The findings of this paper reveal that pharmaceutical companies outsource their communication activities to many suppliers.

Based on a transaction costs analysis, it has established that due to the nature of their core business, reputation to the general public, different approaches to OTC drugs and POM, internal uncertainty, changes in the organizational model, corporate culture which differs in values compared to the communication sector, and wide offer on the communication market in Europe, pharmaceutical groups are better off outsourcing their communication activities. The hypothesis of this paper, which is that pharmaceutical firms should outsource in order to focus on their core activities and benefit from the expertise of communication suppliers, has been verified by the empirical analysis pointing out that all studied pharmaceutical groups outsource their communication to several suppliers.

This paper has also established that there is a close relationship between the number of communication suppliers and the organizational model of a company. Within localized models there are many local decision-makers. In centralized models, there are main central decision-makers as well as local decision-makers. Therefore, centralized models are likely to have more outsourcing. It has also been demonstrated that firms should coordinate communication at the central level to reduce the coordination costs and enjoy a streamlined process. However, this is not always verified as the organizational model of pharmaceutical groups face constant changes due to the uncertainty of their external environment. Non-centralized model shift to a centralized model over the years, and then return to a more local approach. Sanofi seems to have understood the opportunity of centralization; however, the implementation of its centralized process appears to be long and costly.

This thesis contributes to examining the pros and cons of outsourcing as identified in the Knowledge-Based View, the Agency and the Transaction costs economics theories, and applying such observations to the outsourcing of communication activities in the pharmaceutical industry in Europe at the start of the 21st century. Although the main result from the presented research, which is that pharmaceutical companies do not make the “Make or Buy” decision but rather “Make and Buy from several suppliers”, it must consider the limitations from the research concerning the limited collected data and the lack of direct information from pharmaceutical companies. Areas for potential future research can be identified as: analyzing the organizational structure of a specific company and its impact of outsourcing partnerships; finding a way to collect more data directly from pharmaceutical companies; and extending the field of research to each local market to have a better understanding of the management of their communication activities.

LIST OF APPENDIXES

APPENDIX I. Borden, Neil: The Concept of The Marketing Mix. Journal of Advertising Research, Vol. 02 (1984), “Elements of marketing-mix”, pg. 09

APPENDIX II. Havas Group: Dare! Let’s Make a Meaningful Difference. *“Top 20 Clients”,* Vol. 02 (Autumn/Winter 2019), pg. 07

APPENDIX III. Sanofi website, welcome page. Retrieved on 08.03.2020 at 04.26pm

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Data collection table
Interviews transcripts

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