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Philip Morris International - Designing a Smoke-Free Future?

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The following thesis is using all information available until the 30th September 2018. Any changes concerning product introductions or financial figures after this reference date are not taken into account.

II. Acknowledgments

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III. Abstract

In this work project, we present the case report "Philip Morris International - Designing a Smoke-Future" which is designed to be used in strategy courses both at the master level and executive classes. Furthermore, the second part of the thesis introduces a case analysis which assesses mentioned report with respect to the disruptiveness of IQOS on the cigarette industry. It is concluded, that PMI's bold move to cannibalize their own business enables the company to not only respond to the challenges the cigarette industry is facing by committing to healthier alternatives but also to establish entry barriers for subsequent innovations.

Keywords: "IQOS", "Philip Morris International", "Disruptive Innovation", "Industry Analysis"

Introduction

This work project presents the case study "Philip Morris International - Designing a Smoke-Future" which is designed to be taught in strategic courses at both the master and executive level (M.Sc.; MBA). The case contains information about the current state of the cigarette industry, the company structure of Philip Morris International and the newly introduced device IQOS.

Hereafter, a teaching note analyzing the report will be presented. In this, the (a) cigarette industry as well as the (b) company structure and competitive advantages of PMI are examined to (c) test the disruptiveness of PMI's electronic smoking device IQOS on the cigarette industry. To achieve this, several frameworks and a new taxonomy of disruptive innovations based on the current state of research are applied.

By doing so, it is concluded that PMI's change of vision statement and the focus on less harmful devices enables the company to shift its competitive advantages into the new business segment of cigarette substitute products. Through this, the enterprise might be able to establish its device as the standard in the industry by using its already established distribution network to build entry barriers for potential future competitors. This process could potentially be defeated by the company's financial dependence on the traditional cigarette industry.

The case study was written based on publicly available information such as industry reports of the cigarette industry, previous case studies and financial reports of the leading cigarette producers. For the application of the frameworks, a literature review with a focus on articles of the Harvard Business Review, Sloan Management Review, and Journal of Management was performed.

Case Report

1. Philip Morris International

Philip Morris International (PMI) is a multinational cigarette manufacturer with its headquarter in New York City (U.S.A) (PMI, 2018(a)). The company offers a diverse portfolio of smoking products with a focus on internationally distributed cigarette brands (*see Appendix 1 for an excerpt of PMI's product portfolio*) (PMI, 2018(b)). PMI's main source of income is their flagship brand "Marlboro", which is the best-selling cigarette label around the globe (Forbes, 2018(a)).

Since 2008, PMI has been independent of its former parent company Altria and responsible for the commercialization of the enterprise's offerings outside the United States and Canada. Currently, the corporation is employing a workforce of 81.000 people and able to provide its products in over 180 countries (PMI, 2018(a)). In the year 2017, PMI generated a total revenue of 78.1 Billion USD including excise taxes (*Appendix 2*) and had a world market share of approximately 15% excluding North America (27% excluding China and NA) (Marketline, 2018). With its new mission statement "*Creating a smoke-free future*", which was publicized in 2014, the company is supposedly making a drastic shift away from its core business of selling ordinary cigarettes and towards promoting healthier smoking devices. The leading role in this development plays "IQOS", PMI's 2014 launched tobacco-heating system that is using the so-called "Heat not Burn" (HnB) technology (PMI, 2018(c)).

1.2 History of Philip Morris International

In the midst of the 18th century, the first Philip Morris shop was opened in London's Bond Street selling tobacco and ready to smoke cigarettes. Due to its increasing international popularity, PM founded its first American department in 1902. One of the first steps the new international branch

undertook was the creation of the cigarette brand Marlboro, which turned out to be a paramount activity for the cooperation's future success.

During the following decades, Philip Morris further expanded its business into various countries. While doing so, the enterprise introduced new and acquired existing cigarette brands to enhance their product portfolio. The success of PM was primarily due to Marlboro, which represents the world's best-selling cigarette brand since 1970 (excluding the Chinese market).

As a reaction to the rising health concerns of the general public regarding smoking cigarettes, PM decided to change its name into "Altria Group" since the name Philip Morris was strongly connoted with tobacco (NYT, 2001; Smith et al., 2003). To better cope with the diverse characteristics of different markets and the continuously increasing product portfolio, Altria spun-off its international department Philip Morris International (PMI) in 2008. The task of the now independent company PMI is to handle the business outside North America while Altria remains the selling rights for any products within the American spectrum. PMI currently owns 6 out of the 15 best-selling cigarette brands worldwide and is present in every accessible market in the world (PMI, 2018(d)).

1.3 Marketing Activities PMI

PMI lays a great effort on their marketing and sales activities. For its premium brand Marlboro, which is still one of the most influential labels on teenagers (PRN, 2018), it focusses on communicating the values of a luxurious lifestyle and an excellent product quality through several marketing measures (Dewhirst, 2017). The main channels to achieve this are prominent sponsorships (such as Marlboro in the Formula 1), partnerships with celebrities, appearances in several facets of the pop culture and the creation of the "Marlboro Man", who was an advertisement icon in the 20th century occurring in several tobacco campaigns. Furthermore, the

enterprise aims to be present at festivals and sports events where they distribute samples of their products (Hafez et al., 2005) (*Appendix 3*).

Especially retailers are highly competitive in the cigarette industry. PMI follows a tripartite approach including distribution through (1) independent dealers, (2) national wholesalers and (3) partners that remain exclusive selling rights in a geographically limited area. With their partners and national wholesalers, PMI has conducted privileged contracts securing them a premium in-store presentation (e.g. Store-in-Store concepts and promotional billboards in front of cashiers) in return for regular price discounts on their products (CSN, 2007). These contracts are mainly concluded with petrol stations and convenience stores, which represent the largest cigarette dealers in the main markets (Marketline, 2018).

1.4 Investment Focus PMI

Other focal points of Philip Morris' strategy are the development of new reduced-risk smoking devices, the improvement of their current offerings and the optimization of its manufacturing process. Compared to their competitors, PMI spends a perceivable larger amount on research and development activities in order to support their claim to be an innovative force. By this, the company is employing industry experts regarding smoking substitutes and already acquired a number of patents regarding new technologies (*Appendix 4*). The development of their new device IQOS alone cost the company around 3.5 Billion USD (PMI, 2018(e)).

Over the last ten years, the enterprise has also committed itself to improve its own value chain by focusing on vertical integration options and the advancement of the manufacturing process. To secure a high-quality supply, PMI has exclusive contracts with thousands of tobacco farmers, accounting for 88% of raw material used in 2017. These contracts force the farmers to only deliver their leaves to PMI at fixed price rates. Furthermore, the company built new factories around

strategically important locations that are specifically designed for the production of their reduced-risk devices and enable an in-house storage of tobacco leaves. These plants have superior manufacturing facilities that operate at lower costs. (PMI, 2018(c)).

2. The Cigarette Industry

Cigarettes are a segment of the tobacco industry which is comprised of several products such as cigarillos, cigars, smoking tobacco and, since recently, electronic smoking devices (Pampel, 2009). With 92.8% of the market value, cigarettes are by far the largest section of the industry and thus the most auspicious one (Marketline, 2018). Due to its significant importance, the succeeding report will specifically focalize on the challenges the cigarette industry is facing in order to keep the information lucid.

2.1 State of the Market

The consumption of cigarette products is a global phenomenon that is especially pronounced on the Asian continent. The Chinese market alone accounts for 40.2% of all smokers, making it the largest consumer region. Europe represents the second biggest market with 29.8% market share followed by North America (16.6%) (*Appendix 5*). The domination of the eastern hemisphere is expected to further enhance since the value of the Asian market is forecasted to grow by 2.7% p.a., while the western market is predicted to develop with an annual growth rate of 2.1% (Marketline, 2018).

The absolute number of cigarettes consumed worldwide in 2017 totaled 5.4 trillion sticks and is expected to fall by 1.86% p.a. over the next 5 years. Especially in developed countries, the rate of smoking is decreasing significantly. Contradicting to this, the total market size is showing an upward trend throughout the last decade. In 2017, the market had a value of 785 Billion USD and is prognosticated to grow by 2.6% p.a. until 2022 (*see Appendix 6 for an illustration of the*

forecasted developments). The price for a single cigarette is constantly increasing at an accelerating speed (*see Appendix 7*) (Euromonitor, 2018(a); Marketline, 2018; Euromonitor 2018(b); WHO, 2017).

2.2 Competitive Environment

Although hundreds of small and geographically confined cigarette brands exist, the cigarette market is characterized by an oligopoly structure in which four companies are possessing 77% of the global market share (Euromonitor 2018(c); Bialous et al., 2012). With a global market share of 42.6% in 2017, the government-owned Chinese National Tobacco Cooperation (CNTC) occupies the market leadership. Their enormous share is created by their virtual monopoly in China (97.3%) (Euromonitor 2018(c); PMI, 2018(f)) which is secured by the Chinese prohibition of cigarette imports.

The remainder of the market is shared by Philip Morris International (PMI) (14.2% market share), British American Tobacco (BAT) (11.8%) and Japan Tobacco Inc. (JTI) (8.4%). Each player offers a portfolio of internationally distributed cigarette brands which are fiercely competing in several submarkets for similar target groups. In *Appendix 8*, one can see an exemplary comparison of brands from the three companies within the dimensions age and price. It can be observed, that the companies shifted their marketing activities towards a younger audience during the last years (Nargis et al., 2013). PMI can be considered a trendsetter in this respect. The launch of the brand "Marlboro Gold" (formerly "Marlboro Light") constitutes one of the first efficient marketing initiatives for a young audience in the recent past (Cummings et al., 2002).

Philip Morris International is the market leader in the western hemisphere (Western & Eastern Europe) which includes some of the largest cigarette markets such as Germany, France, Turkey, and Russia. Additionally, the autonomous entity Philip Morris US is dominating the North

American market with a share of 40.8%. Japan Tobacco International has taken the second place in European areas, particularly through its brand "Winston", the best-selling product in Eastern Europe. Furthermore, JTI is holding over 50% market share in the Japanese market (JTI, 2017(a)) while having no foot in the Middle Eastern area. With the purchase of Reynolds, who was formerly the biggest competition of PM in North America, BAT was able to gain a strong position in the U.S. market. When it comes to the Asia-Pacific region, all companies have a weak presence, mainly due to the unattainability of the Chinese market. The exact shares can be seen in *Appendix 9* (Euromonitor, 2018 (c)).

All of the above-mentioned entities were able to constantly realize high net-profit margins between 20% and 30% during the last years (when using the net revenue excluding excise taxes and the operating profits). Hereby, it has to be mentioned that PMI's profit dip in 2017 can mainly be attributed to a change in their company structure affecting the way the enterprise accounts for input taxes (*Appendix 2*).

2.3 Customer Analysis

Currently, 1.2 Billion people around the world are permanent cigarette smokers. While the majority of people start smoking when they reach the legal age in their respective country, consumption peaks at the age of 30 and decreases slowly but steadily with successive seniority. (Statista, 2018(a); Qian et al., 2003; Piontek et al., 2016; Blecher et al., 2004).

The motives to start smoking are multifarious. It can clearly be distinguished between two different groups of smokers; one who uses the product to cope with stress and changes in their environment and another group who is seeking for enjoyment and pleasure (McEwen et al., 2008). While the motives might differentiate, the typical cigarette consumer is very brand loyal. It is estimated, that per year only 9-10% of smokers change their cigarette brand. From these changes,

30% are done within brands of the same cigarette cooperation (Wakefield et al., 2002; Siegel et al., 1996).

2.4 Legislation

When it comes to the regulation of tobacco products, governments find themselves in a dilemma. While the health consequences of smoking are known for decades, the tobacco industry employs a substantial number of workers (100 million) (ILO, 2003). Furthermore, the revenues of tobacco taxes are vital for a number of economies (Li, 2012). Contrary this, the effects of smoking on the health care system as well as on the GDP of a country are immense (Hall et al., 2016).

In order to reduce smoking rates while bypassing the economic and social effects of an abrupt ban, governments are pursuing several activities to gradually press tobacco products out of the market. The most apparent measures are increasing taxes and duties (*Appendix 2&7*) (Worldatlas, 2017). Since smokers have shown to have a high elasticity regarding the purchase of cigarettes, price increases evidenced to be successful in decreasing the rate of new consumers. The tax rates on cigarettes are expected to increase sufficiently over the next years (CCV, 2018).

But price is not the only action governments are performing to minimize the number of tobacco consumers. Another main goal is to reduce the public visibility of products. To achieve this, more and more countries are banning advertisements (on TV, Radio, Cinema and Print Media) and sponsorships (Sport and Social Events) of tobacco-related brands. In addition, an increasing amount of governments force companies to print pictorial health warnings on the package of products. First countries such as France introduced "Plain Tobacco Packaging" (PTP) in which all cigarettes are wrapped in a uniform non-appealing design (Vardavas et al., 2017).

It can be observed that during the last years the efforts to reach stricter rules regarding the regulation of cigarettes increased heavily. First countries proclaimed to target years for being

smoke-free (Finland, New Zealand) or banned tobacco in general (Bhutan) (Washington Post, 2011; WHO, 2014). To achieve a unification of regulations on a global scale, already 181 countries have ratified the WHO framework convention on tobacco control (WHO, 2018(a)).

2.5 Trends in the Market

Increasing Health Awareness and Public Education

The image of cigarettes underwent a metamorphose throughout its history. While during the first half of the 20th-century smoking was not associated with negative health consequences and even promoted by pharmacists, consumers attitude towards smoking tobacco products slowly changed with the emergence of first reports suggesting its negative effects on smoker's health. Driven by campaigns of national health organizations and the WHO which focused on the impact of passive smoking, also the general public obtained a defensive stance on smoking in public areas. (Henriksen et al., 2012).

Simultaneously to the better education regarding the disadvantages of smoking, the so-called "Generation Y" is paying more attention to their overall well-being. In this trend, the abstinence of drugs plays a great part. Nowadays, not only 59% of people in developed countries declare themselves in favor of a smoking ban in all public areas, but also 60% of the now smoking population intends to quit. The majority of this group is interested in healthier alternatives to traditional cigarettes (WHO, 2016; O'Connor et al., 2015; Cummings et al., 2014).

Vapor Products

In recent years, so called "Reduced-Risk Products" (RRP) emerged in the market. Reduced-Risk Products are defined as products with less harmful health hazards compared to conventional cigarettes (Henningfield et al., 2016).

By now, the most successful Reduced-Risk-Product are the so called "e-cigarettes". The first electronic smoking device was created by a Chinese pharmacist in 2003 and subsequently distributed by small companies until its breakthrough in 2012. E-cigarettes (also called "Vaporizer") vaporize a nicotine infused liquid which is then inhaled, similar to regular smoking. The devices are characterized by the large quantity of smoke they produce and the diverse flavors that can be added to the liquid. Vaping is estimated to be healthier compared to traditional smoking product due to the fact that no material is actually burned. While by now the biggest market for electronic cigarettes is North America, it is most likely that the innovation will become more popular in other countries during the next years. The price of e-cigarette devices ranges between 20 and 60 USD (Vandrevala et al., 2017; CNN, 2018; Mordor Intelligence, 2018).

3. IQOS

In the year 2014, PMI announced its new vision statement: "Creating a smoke-free future". The Company claims that this concept includes the development of a market for smoke-free tobacco devices and that it targets to stop producing cigarettes. Although PMI developed multiple RRP's, the vision should mainly be achieved with their new product IQOS (PMI, 2018(g)).

3.1 The Introduction of IQOS

IQOS is a Heat-not-Burn (HnB) device which consists of a charger (IQOS charger), an electronic holder (IQOS holder) and a stick called "HEET". A HEET is made from real tobacco and inserted into the electronic holder to be subsequently smoked similar to a cigarette. Instead of conventional ignition, the tobacco stick is heated up to a temperature of 350° C (600° C in a regular cigarette) which supposedly reduces the emission of harmful substances (PMI, 2018(e)). Additionally, IQOS is marketed with the aspiration to release less odor and to produce less smoke while still imitating the sensation of smoking a "real" cigarette.

PMI claims that the conversion rate for IQOS is currently at 70%, meaning that 7 out of 10 current smokers who tried IQOS quit smoking regular cigarettes (PMI, 2018(c)). Since the heated tobacco technology is a new phenomenon of which the long-term health effects are not explicit by now, most of the legal regulations regarding marketing and advertisements that apply on regular cigarettes do not affect HnB devices. Through this, PMI was able to launch first TV-spots featuring IQOS and rushed several commercialization campaigns to increase awareness. Furthermore, heated tobacco is currently taxed at a lower rate than cigarettes. This might change in the near future since first law proposals requesting HnB devices to be taxed similarly to cigarettes have been released (Reuters, 2018).

While IQOS was first launched in Japan and is now available in 34 countries, it is at present not approved in the U.S. due to concerns regarding its effect on consumer health (FDA, 2018). One kit (Holder + Charger) is priced with 100€ (Amazon, 2018) and can be customized in the preferred color of the consumer. HEETS are priced similar to regular cigarettes in the respective country and are branded with the Marlboro label (*Appendix 10*). To further increase public awareness, PMI created so-called "IQOS Boutiques" in which the product can be tested (Vox, 2018).

3.2 Similar Product Offerings

Although the commercial introduction of heated tobacco is rather new, competition is already developing. Besides PMI, also BAT (with their product GLO) and JTI (ploom) launched HnB devices in several countries. GLO was able to reach 4.3% market share (Business Life, 2018) in Japan in 2017 and is representing IQOS biggest competitor. The HnB market is estimated to have a volume of 5 Billion USD with currently 90% of the market value residing in Japan (WHO, 2018(b)). While releasing similar products to IQOS, JTI and BAT did not make the commitment to adjust their business philosophy and to proclaim the long-term termination of their current main business (Bialous et al., 2018).

Likewise, especially e-cigarettes are competing with HnB devices due to their similar claims regarding health hazards for consumers. The market size of the vapor industry is at the moment around 22 Billion USD and expected to grow with two-digit percentages (Vandrevala et al., 2017). While currently, 5.9 million people use IQOS, vapor devices have a consumer circle of 45 million. The U.S. is with 58% market share by far the biggest market for e-cigarettes (BBC, 2018). Similar to HnB machines, no long-term studies exist which prove the promised health benefits (CNN, 2018).

3.3 Outlook IQOS

In Japan, where technological innovations are traditionally fast adopted, IQOS was able to gain a market share of 15% (of all tobacco products) in the first quarter of 2018. While the device was also able to grow in other markets, no figure close to 15% could be achieved. Especially in European countries, the device was by now not able to attain a relevant position in the market (with an average market share of 2-3%). Nevertheless, an upward trend can be observed in every market IQOS was introduced (*Appendix 11*) (PMI, 2018(h)).

As of now, the amount of shipped heat sticks is rather small compared to traditional cigarettes. In 2017, combustible cigarettes made up 95.5% of all units shipped by PMI. With the current developments in the cigarette industry, PMI expects to heavily increase the amount of sold HEETs. (*Appendix 12*) (PMI, 2018(h)). Contrary to this, growth developments of IQOS in Q1 2018 were weaker than expected, especially since older customers in the Japanese market refuse to adopt the innovation. This led to PMI's share drop by 16% and first analysts doubting the lasting success of the device (CNBC, 2018). While at the moment HEETs constitute 4.5% of the shipped volume, their contribution to the total revenue is with 13% to the total revenue of PMI in 2017 much higher (enabled through lower taxation and decreased production costs) (Forbes, 2018(b)).

While PMI is trying to proactively respond to the recent challenges of the cigarette industry with the introduction of IQOS, several uncertainties are surrounding the drastic change of business the company is currently experiencing. It is questionable if IQOS disruptiveness is strong enough to lastingly change the industries structure. In addition, it might it is still uncertain how the device might affect PMI's competitive advantages and if it will enable the company to deal with the challenges the industry is facing. Doubtless is only: Philip Morris International's transformation and the entrance of substitutes will change the competitive structure within the cigarette industry.

Case Analysis

The following analysis will examine whether the cannibalization of the own business and the introduction of IQOS are suitable strategic decisions for PMI to cope with the challenges in the cigarette industry. To achieve this, an analysis of the current market situation of the cigarette industry is performed to understand the intensity of competition. Subsequently, the competitive advantages and the business model of PMI are examined to reveal the company's current market positioning. Lastly, a new taxonomy of the term disruptive innovation will be introduced and applied on IQOS to explore its ability to disrupt the industry.

1. Industry Analysis

1.1 Analysis Cigarette Industry

Although the cigarette industry has with a value of 785 Billion USD a very substantial size, several factors are indicating a slow demise of the business. While the value of the industry is forecasted to increase by 2.6% p.a. over the next years, operators in the market have to face a steep decline in consumption at an accelerating rate. This trend cannot even be stopped by either the enhanced purchasing power in low HDI countries nor the worlds future demographic developments. The short-term growth of the industry is only enabled by the elevated prices that manufacturers are asking for cigarettes which are increasing faster than the respective tobacco taxes. One can see, that in the example of Germany the cigarette prices increased by 35% over the last 10 years, while

the taxes only raised by 23% in the same timespan (*Appendix 6*). Although this might be a swift method to increase gains in the short-term, it cannot be pursued eternally due to the high elasticity of demand.

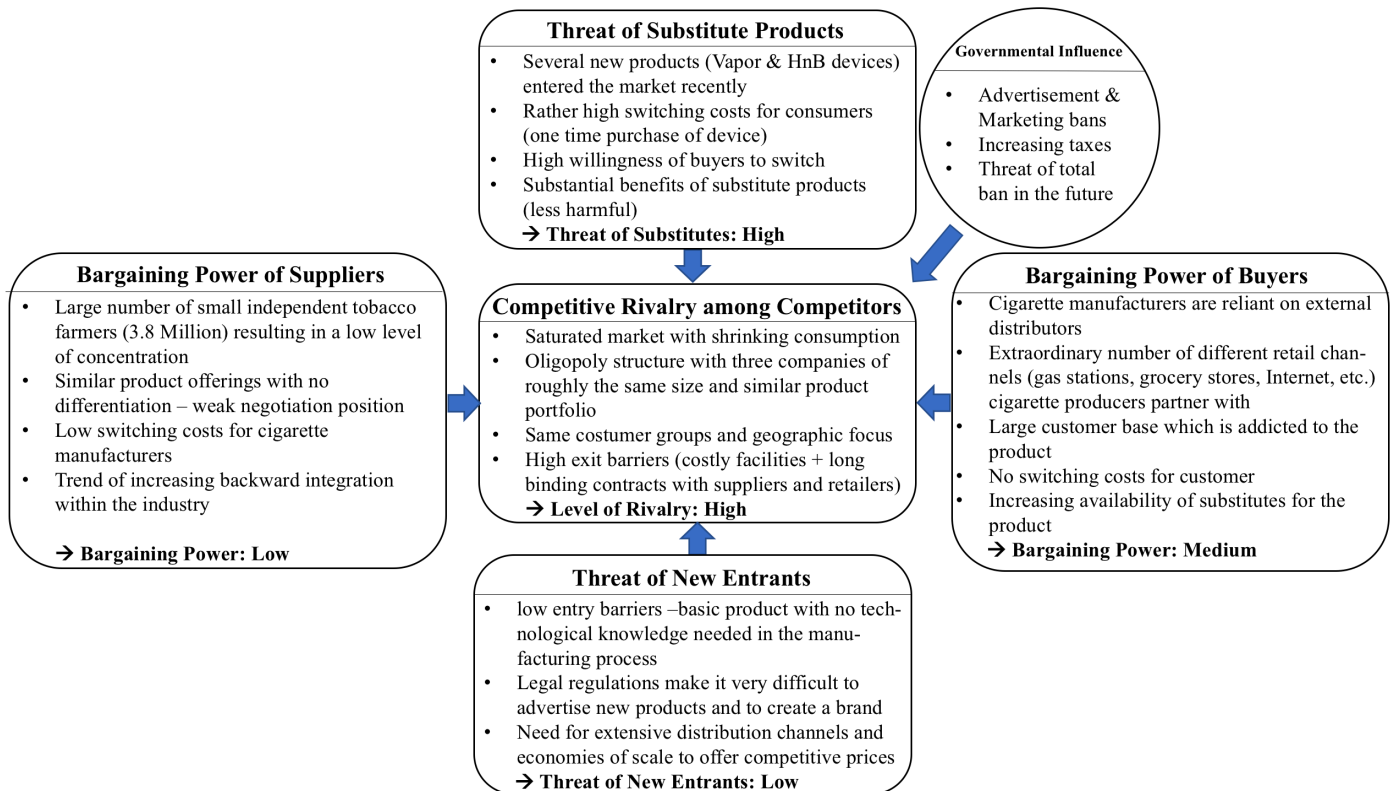
It can clearly be seen that the market is disrupted by two main trends. The decline of cigarette consumption is mainly due to the increased health awareness of the general public who is becoming more and more reserved towards smoking. In addition, an increasing number of active smokers are seeking to quit their habit. This opportunity is used by new products such as e-cigarettes and HnB devices who are targeting especially this group of addicted, but ready to stop smokers with their claim to be less harmful. Furthermore, the market is disrupted by the stricter regulations of tobacco marketing measures by national governments which make it increasingly difficult for the incumbents to advertise their products.

1.2 Intensity of Competition - Porters Five Forces

To understand the impact of the current industry structure on the intensity of competition and to evaluate the profitability and attractiveness of the market, a Porter's five forces analysis on the cigarette industry will be performed. The idea of this framework goes back to Michael Porter (1979), who followed the assumption that four forces (suppliers bargaining power, buyers bargaining power, the threat of substitute products, and the threat of potential new entrants) have an outstanding impact on the nature of competitive interactions among incumbents of an industry (Porter, 1979; Porter 2008).

In the case of the cigarette industry, the intensity of competition is decisively shaped by the high threat of substitute products. With the emergence of several new electronic devices that are cheaply priced (facilitated by lower taxation) and aggressively marketed towards health aware smokers who want to quit, the innovations have been able to create a substantial market size for

their own. This puts enormous pressure on the already fierce competition within the cigarette industry since the already shrinking customer base is further thinned out. While only a small



number of companies is seizing for leadership in the cigarette industry, JTI, PMI, and BAT are comparable in terms of their revenue (*Appendix 2*) and have an eminently similar portfolio in which the differentiation of products is rather small (*Appendix 8*).

Due to the oligopoly structure, the enterprises battle in several submarkets for similar customer groups (*Appendix 9*). The decreasing size of the business is increasing the importance of deterring one’s own customer from shifting to competing companies (since switching costs are low). This ability is impeded by governmental influences such as marketing and advertisement bans or higher taxes which make a differentiated branding more complicated. The bargaining power of suppliers and buyers, and the threat of new entrants, is neglectable in the cigarette industry.

To conclude this, the cigarette industry tends to be characterized by a high-level competition which is a result of the shrinking size of the market and the appearance of several companies of the same size. The competition is further enhanced due to two main developments: (a) the

appearance of substitute products which are subdividing the customer base and (b) governmental regulations that hamper effective marketing activities to counter the new competitors.

2. Company Analysis

2.1 Competitive Advantage PMI

In order to create value in an industry with a high intensity of competition, a company has to develop a competitive advantage (CA). Porter defined two methods for the creation of an ability that allows outperforming competitors. To separate from other enterprises, a company can create an edge through either cost advantages or the offering of unique values (new product features; exceptional branding by altering customer perception). Wright states that a combination of both strategies is possible since an improved product can lead to more demand which has a positive effect on economies of scale (Porter, 1998; Gluck et al., 1980; Christensen et al., 1984; Wright et al., 1994).

Philip Morris International has chosen a hybrid approach which focalizes on (a) a unique branding of its products and (b) a superior procurement of their supply to outperform rival's profits in the declining cigarette industry. PMI is trying to create a CA by constructing unique brand personalities that represent values apart from tobacco through sophisticated branding. The competitive advantage rising from this is a high brand loyalty and willingness to pay since the brands have an exceeding reconcilability and are less associated with their health hazards and more with the from the company infused values (*Appendix 3*).

In order to produce its offerings cheaper than the competition, the company focusses on creating a profound vertically integrated value chain. This includes not only their supplier and retailer relationships but also the self-executed manufacturing process. Through their large customer base which is outstandingly brand loyal, the company has a superior negotiation position with its

partners that enables it to gain higher margins than usual in the industry. Furthermore, the enterprise focuses on manufacturing all of its products in their own modernized facilities.

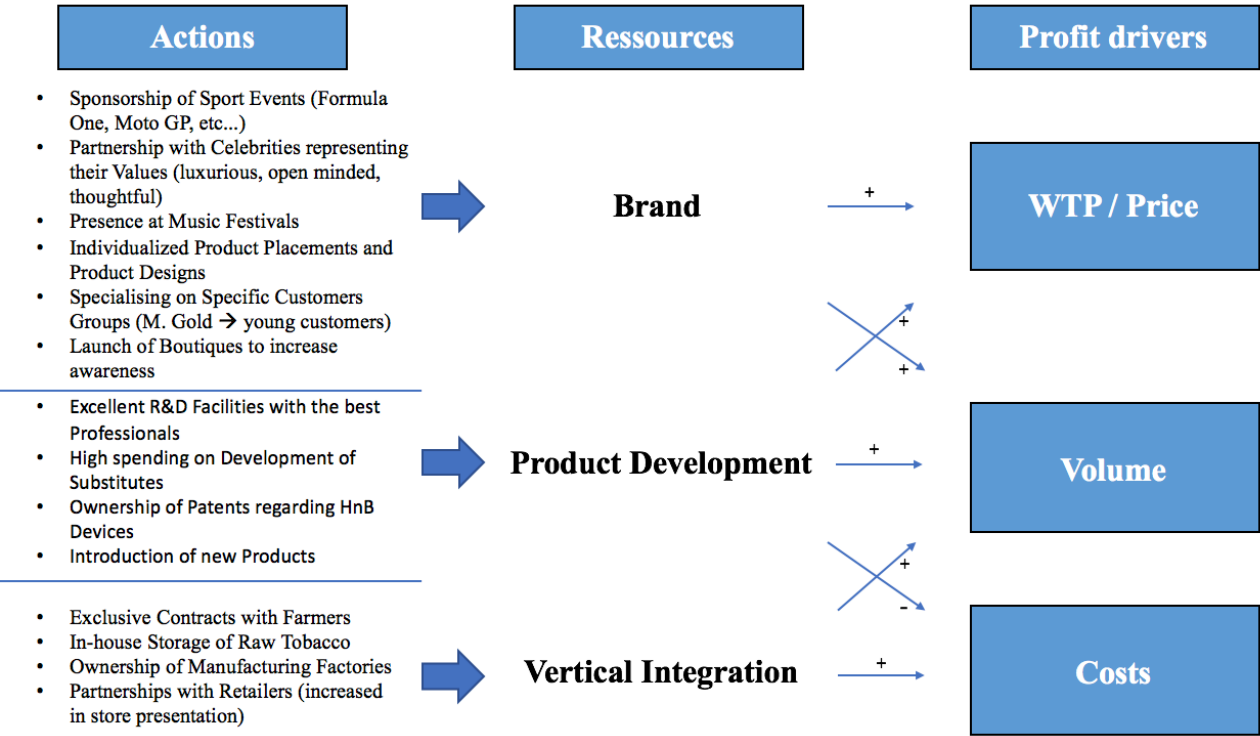
2.2 Philip Morris Business Model

After the positioning of PMI in the industry is characterized, the following paragraph will analyze how the company is organized to deliver those competitive advantages. In order to achieve this, the framework proposed by Professor Karel Cool in the teaching note of the case study "Under Armour and the Sports Apparel and Footwear Industry in 2008" is used. The model assesses the unique resources and capabilities a company possesses. To get a better understanding of what lies behind those resources, the actions and investments a company is making to achieve those capabilities are analyzed. Ultimately, the impact of those resources on the profit drivers (a) price, (b) volume, and (c) cost are displayed. The business model of PMI is built around three main resources: various valuable brands with a unique and luxurious personality, sophisticated product developments and a vertically integrated value chain.

To achieve a strong position of its brands, PMI uses an extensive amount of different marketing measures that are aiming to increase the loyalty of existing customers and the brand awareness of the general public. These actions are built around celebrity endorsements (focused on young, energetic, cheerful, and brave personalities) and sponsorships of sports teams (focused on successful, exclusive, and established teams such as Ferrari in the Formula One) by which the company is shifting the attention away from the health hazards of its offerings and towards positive and aspiring values. PMI focusses on establishing partnerships with individual persons and organizations on a long-term basis to enable a consistent brand perception and image. Besides that, PMI has exclusive contracts with its largest retailers that enable a premium in-store representation (store in store concepts) to increase the general awareness regarding its products.

In addition, the company operates several individual brands, each of which is aimed at a specific customer group to enable a specialized marketing approach (so is Marlboro Gold targeting young customer, Marlboro Menthol women, Chesterfield price aware consumer, etc.). Through customized designs and product placements that actively address the targeted group, the brands achieve unique labeling that results in a customer base with a high willingness to pay and excessive brand loyalty. This allows the enterprise to avoid price sacrifices in the form of discounts to target different customer groups. Furthermore, PMI is strengthening the brand awareness among potential new customers through the opening of product boutiques in city centers (in which products can be tested) and appearances at music and sports events.

In addition, Philip Morris is heavily focusing on the development of new and the improvement of already launched products. By spending a substantial amount of their budget on R&D (*Appendix 4*) combined with the employment of technological experts regarding electronic smoking devices, PMI was able to not only develop and launch innovative products such as IQOS but also to acquire several patents regarding HnB and vapor devices. To stay ahead of the competitive curve, the corporation constructed new research facilities that are specifically targeting the development of alternative products (such as 2017 in Milan).



Lastly, as mentioned before, PMI focusses on cost reductions along its value chain through its extended vertical integration. Exclusive contracts with suppliers permit PMI to buy their tobacco leaves at a fixed price. Through this and their in-house storage of raw products, PMI is able to reduce costs by controlling its own supply. Additionally, the enterprise produces all of its products in their own manufacturing facilities which are deployed in every large market. Through their large volume of sale, PMI's partnerships with its main retailers enabling a higher profit margin through sales in bulks.

Overall, the extensive branding and depth of offerings enable a higher willingness to pay and also increased sales volume through a risen brand loyalty. While the high spending's on R&D might be increasing the costs at the moment, the product development can clearly be seen as an investment into the future that is promising volume increases and advancements of the company's image. Additionally, the partnerships with suppliers and the use of modernized manufacturing facilities enable the enterprise to reduce its production costs.

2.3 Threats & Challenges to PMI's Business Model

The previously explained business model and the resulting competitive advantages are challenged by three loosely connected developments. Consumers are increasingly health aware and pessimistic towards smoking. Especially the "Generation Y", which is the upcoming target group for tobacco producers, is very reluctant towards traditional cigarettes. Through this, not only the number of consumers is continuously reducing with no end in sight, but also the brand identity of PMI's labels are vanishing. Furthermore, the rising bans of advertisements combined with the requirements to print warnings on cigarette packages severely hurt the company's ability to (re)brand its current products. Almost every traditional channel PMI used to promote its brand is heavily regulated. In addition, the emergence of substitute products in form of e-cigarettes is

accelerating the demise of the industry. The new competitors are already threatening to overtake PMI's shelf-spaces in retail stores since they offer a higher profit margin for distributors.

3. Disruptive Innovations - PMI's Reaction to the Market Challenges

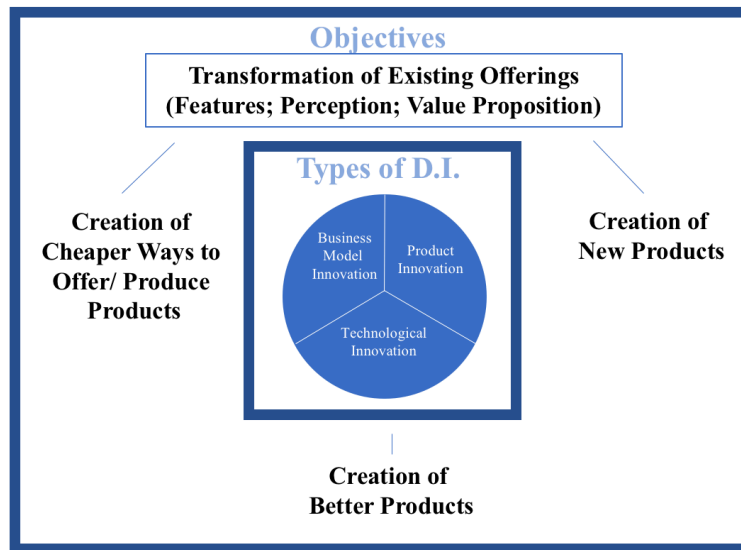
As a reaction to the mentioned challenges of the market, PMI launched the electronic device IQOS and thereto relating changed their vision statement into "Creating a Smoke-Free Future". The following part will first shortly introduce the concept of disruptive innovations and subsequently test IQOS "disruptiveness" on the cigarette industry with a new taxonomy. Based on this, PMI's bold move of cannibalizing its own business is evaluated.

3.1 A Taxonomy of Disruptive Innovations

The theory of disruptive innovations, which was first publicized by Clayton Christensen in 1995, deals with the impact of disrupting technologies on existing markets (Christensen et al., 2018; Christensen et al., 1995). Disruptive innovations are usually performed by small-scale companies and "significantly transforms the demand and needs of an existing market, disrupts its former key players and creates whole new business practices [...] with significant societal impact" (Assink, 2006). Incumbents oftentimes ignore disruptive innovations since they focus on their existing customer base and neglect new emerging needs/preferences due to their anxiety of losing their main business (Christensen et al., 2018).

A disruption of an existing market can either be created through a change of a business model, new to the market product innovations or a technological disruption (Markides, 2006). While these approaches are similar and can intersect, a business-model innovation introduces a fundamental new approach within an industry by changing customer perception of a product without adding new features (e.g. Amazon in the book retailing industry). On the other hand, a product innovation undermines the competencies on which incumbents build their success (e.g.

introduction of the car vs transportation via horses). Lastly, a technological innovation improves product features of an existing product on customer needs that are not satisfied by the current offerings.



Enabler (Strategies to achieve Objectives)

Creation of **Scalable Platforms**, Eliminate **Industry Boundaries**, Sharing **Economies**, Focus on **non Consumer**, Focus on **Digitizing**, Customer **Tailoring & Bondling** to enable **Convenience**, **Enrichment** of Product with Information / Social Content, **Networking** Effects, **Autonomous Business Units & Partnerships**

The objective of a disruptive innovation is to transform the existing offering or services of any industry by either (a) creating new products, (b) improve existing product features that are not respected by incumbents or (c) find a way on how to produce or offer a product cheaper. For all of these objectives, the disruptor needs to change to customer perception not only on the product but also on the industry itself to enable a successful introduction (Dijk et al., 2015).

To achieve a prosperous implementation of named objectives, several enablers (Disruptive Innovation Strategies) are incremental. Hereby it has to be mentioned, that not every enabler has to be performed by an innovator to achieve a disruption of a market, but that a combination of several can increase the disruptive potential of a new offering. To change customers perception of the initial product and the industry, the elimination of industry boundaries, which are constituting what problems/needs an offering solves, has to be achieved to target non-consumers. By this, a new market segment which attracts non-customers can be created (Accenture, 2016).

Through the embedment of the offering in scalable platforms and the focus on digitizing, the user experience and convenience can be advanced (Schmidt et al., 2008). For a successful disruptive innovation, the innovator needs to have an autonomous business unit which is independent of any other industry or customer base. Only by this, a complete focus on the new offering and the specific customer needs can be achieved (Govindarajan et al., 2005). For incumbents who want to explore new opportunities, a cooperation or acquisition of upcoming companies is a possible solution because this allows the gain of knowledge and technologies (Markides et al., 2013). Also, networking effects can be leveraged to implement entry barriers for successive competitors and to make use of scaling effects (Markides, 2006).

3.2 The Disruptiveness of IQOS

After the taxonomy is now defined, it will be used to explain the disruptive potential that the introduction of IQOS represents. IQOS and the HnB technology which facilitates the device can be seen as a new to the market innovation that might radically change the cigarette industry by introducing a device that focusses on the dimension "health". This product dimension was not addressed by traditional cigarettes although requested from its users (since it represents the main reason to quit). Hereby, it has to be mentioned that PMI specifically targets buyers with a high willingness to pay. While traditional cigarettes had a strong focus on a low price point, PMI's charges a premium of 100€ for its product and therefore addresses a specific niche market. The enterprise is focusing on (a) a change of customer perceptions on tobacco products, (b) the use of networking and scaling effects and (c) the focus on non-consumers through the elimination of industry boundaries to enable its disruption.

With its claim to manufacture less harmful devices and their clear statement to stop producing conventional tobacco products in the foreseeable future, PMI is trying to not only change societies view on smoking but also on their own company. By altering consumers perception of tobacco

into a less negative dimension, the enterprise presents itself as a pioneer in saving the world from its own products. IQOS is trying to enrich its device with values that are broadly accepted by the general public with its claim that the device can help smokers to quit cigarettes (with an extraordinary high conversion rate). By this, the company targets to blur the boundaries of the cigarette industry through the addition of a technological (HnB) and pharmaceutical (IQOS as a way to stop smoking) component to the company's portfolio.

Furthermore, it can clearly be seen that IQOS is trying to enlarge the economic pie of the cigarette industry by targeting non-consumer groups. As a result of the possible individualization of the product (through customized components of the holder) and its promotion as an accessory combined with its features of producing less smoke, smell, and health hazards, it targets customers that are young, tech-affine and seeking for a less dangerous and trendy way to smoke. While the creation of a new market is a success in itself, PMI was by now not able to convince established smokers of an older age to use the product. If this trend continuous, the public perception of IQOS will not be as a mean to stop smoking but rather as an alternative which ultimately contradicts the companies vision statement and flounders the enterprise's image.

Concerning electronic smoking devices, networking effects are crucial. PMI is able to leverage its sophisticated distribution system of cigarettes to offer its new product in multifarious locations. Through the high price of a single device, customers switching costs concerning electronic smoking devices are rather high. By being a first mover, the company is trying to introduce its product as the standard of the industry and create entry barriers by raising a critical mass of consumers that are in possession of their device. In this context, PMI's large capital power comes in handy. The company was able to already build manufacturing facilities that are specialized on IQOS. With increasing networking effects and a growing customer base, the company is therefore able to use the scalability of its product.

While most of this indicates a promising fundament for a successful disruption, PMI is still trying to conserve its main competitive advantage, which is its well-known brands. The labeling of HEETs with the Marlboro brand is the companies attempt to convey the label's image on IQOS. While it may be true that customers can associate Marlboro's popular qualities and values with the new device, it also exposes the innovation to the risk of chaining an image of a harmful brand on their innocent product and being connected to traditional smoking.

In addition, the chance to make tobacco socially acceptable again and disrupt the cigarette industry might be imperiled by PMI's decision to neither partner with upcoming companies nor create an autonomous business unit. Although the enterprise chose to center its complete structure around its innovation, it is still financially depended on the market it tries to disrupt. Considering that the Marlboro branding of HEETs could also be seen as a potential way to circumvent advertisement regulations and promote its cigarette brand, it is discussable if the company is still considering its traditional customers despite its new vision statement. While the attention to the old customers might make financial sense in the short-term, it can be an essential disadvantage compared to the competing e-cigarettes that are able to fully concentrate on the new segment.

Overall, although IQOS and PMI do not qualify as a traditional disruptive innovation due to the size of the company and its reliance on the traditional cigarette industry, the device might portray a force being able to disrupt the market by changing customer perception on tobacco products. While the prospect to target young, health aware customers and long-term smokers might sound promising, the company is despite its new vision statement at least partly endangered to lose itself within two industries and forfeit the battle to introduce its device as an industries standard against its new competitors who do not have the burden of an existing customer group.

3.3 PMI's Decision to Cannibalize its own Business

With the introduction of IQOS and the claim to "build[ing] PMI's future on smoke-free products that are a much better choice than cigarette smoking" (PMI, 2018(c)), Philip Morris International made the bold move to cannibalize the business in which it was not only successful for decades, but also is the market leader until now. By this, the company is trying to avoid its personal "Kodak Moment" (Economist, 2013).

Kodak was the dominant market leader in the camera manufacturing business and previously known for its innovative power until it failed to grasp the industries shift towards digitalization. The company was scared to lose its main customer group which was the film industry and denied implementing the new technology. As a result, ascending companies such as Canon stepped in and replaced Kodak's position in the market (Independent, 2012).

Comparisons to this can be drawn to the cigarette industry. The market is situated in a turmoil in which companies have to make incremental decisions about their future. PMI decided to focus proactively on electronic devices to stay ahead of its competition. Considering the current industry trends, this huge bet on the HnB technology seems to be the best guess to stay profitable on the long-run. While the enterprise has to prove that it really abandons its traditional business, it already makes far more extensive commitments than its competitors. The company is trying to combine the swiftness of an emerging company with its large capital power to outdo any competitors.

The real disruptive impact of a new product or technology can only be fully evaluated in the retro-perspective. The true health benefits of electronic tobacco devices and the future legal handling of such is not fully known by now. Still, PMI is not only reacting to the trends in the market but is trying to actively shape its future to avoid the faith that Kodak or Nokia witnessed.

Appendix

1. Product Portfolio PMI

Philip Morris International offers a diverse brand portfolio which build around their premium brands Marlboro (best-selling cigarette brand worldwide) and L&M (3rd best-selling cigarette brand worldwide). In total, 6 out of the 15 most popular cigarette brands worldwide (excluding North America and China) are owned by Philip Morris. Other internationally successful brands of PMI are Chesterfield, Bond Street, and Philip Morris. Besides that, the company also offers a variety of smaller local brands (such as Fortune and Jackpot in the Philippines), smokeless tobacco products (Snus) and since recently the electronic tobacco heating system "IQOS".

Brand/ Product	Description
Marlboro	Founded in 1924, Marlboro is not only the best-selling cigarette brand in the world but also one of the most powerful trademarks. The volume of Marlboro was 291.1 Billion cigarettes outside the US and China in 2013. The Marlboro brand includes several sublabels such as Marlboro Red, Marlboro RED, Marlboro Gold and Marlboro Menthol.
L&M	L&M was first launched in 1885 and developed to one of the most popular cigarette brands in the United States. L&M is known for being the first cigarette brand that introduced build in filters. With 95 Billion units sold outside the U.S. and China in 2013, it is the third best-selling cigarette brand worldwide.
Parliament	Parliament is PMI's 4th best-selling brand and is especially strong in the eastern markets such as Korea, Russia, and Japan. In Russia, IQOS HEETs are labeled with the Parliament brand.
IQOS	Representing Philip Morris healthy alternative to cigarettes, IQOS is the companies new business focus. With development cost of 3.5 Billion USD, IQOS was the most expensive most expensive research project the cigarette industry ever witnessed.
Smokless Tobacco	Since 2009, Philip Morris and the Swedish Match AB created a joint-venture that distributes smokeless tobacco (Snus) outside of Sweden and the United States.

Source: PMI, 2018(b)

2. Financial Performance PMI, BAT & JPI

		2017	2015	2013	2011
Net Revenue (In Mio. USD)*	PMI	29.312	26.794	31.217	31.097
	BAT**	26.044	16.818	17.913	19.764
	JTI****	19.020	20.031	21.336	19.092
Profit (In Mio. USD)	PMI	6.341	7.032	8.850	8.650
	BAT**	48.261***	5.788	7.073	6.023
	JTI****	5.210	5.570	5.763	4.083
Revenue/Profit	PMI	21,6%	26,24%	28,35%	27,8%
	BAT	185%***	33,12%	32,3%	30,4%
	JTI	27,4%	27,8%	27%	21,4%
Earnings per Share (In USD)	PMI	3,88	4,42	5,26	4,85
	BAT**	2342	295	277,3	248,3
	JTI****	219	234.35	235	168
Cigarette and Tobacco Heating Products Retail Volume (In Bil. Sticks)	PMI	798	847	880	915,3
	BAT	686	663	676	705
	JTI	398.5	393.9	435	425
Excise Tobacco Tax	PMI	49.350	47.114	50.339	45.249
	BAT**	37.120	29.056	30.336	29.312
	JTI	45.800	46.180	40.521	33.041

For reasons of simplification, changes in the exchange rates or not taken into account.

* Excluding Excise Taxes

** Exchange rate used 1 Dollar = 1.28 GBP; BAT is also active in the Pharma- and Food industry

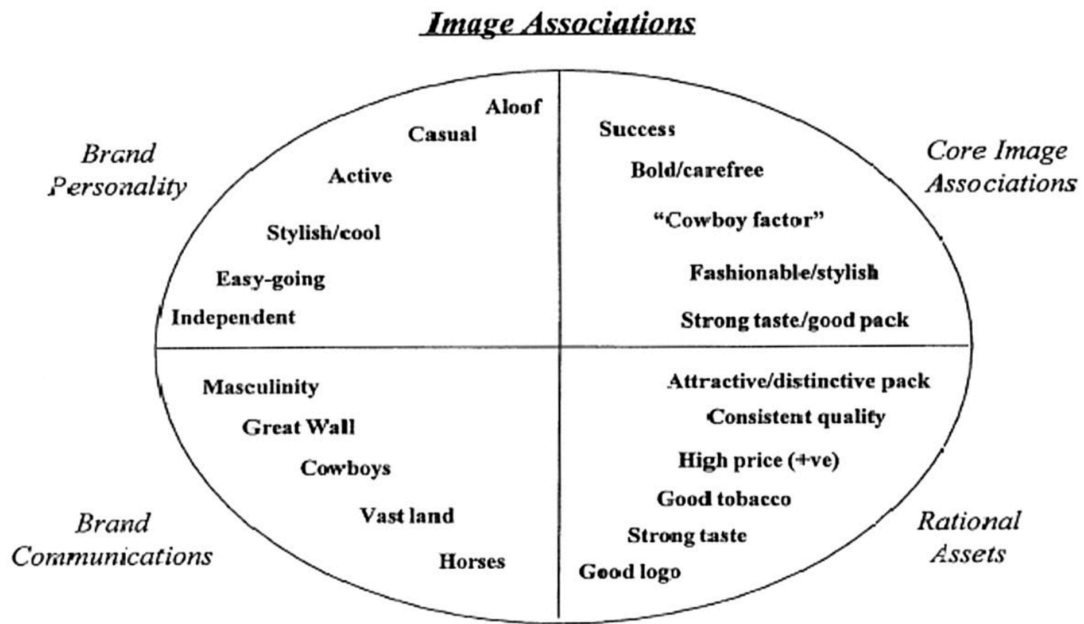
- the tobacco department yields 90% of the total revenue

*** Profit and Revenue altered due to the acquisition of Reynolds American Inc.

**** Exchange rate used 1 Dollar = 0.0089 JPY

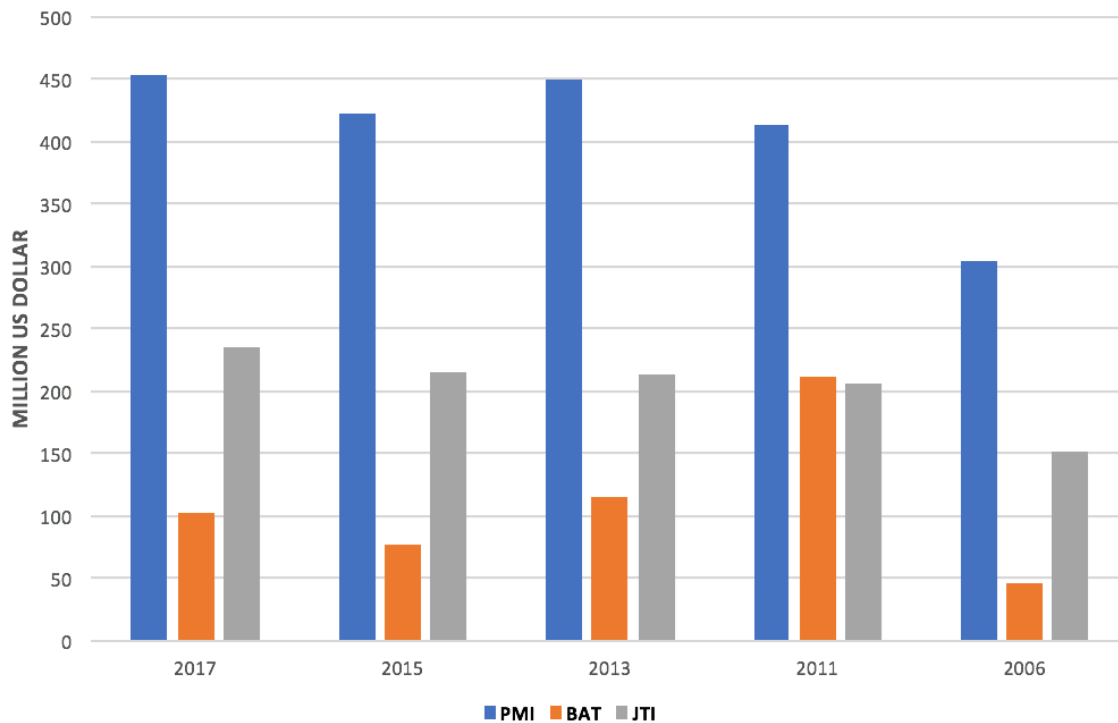
Sources: PMI Annual Report (2017; 2015; 2013; 2011); JPI Annual Report (2017; 2015; 2013; 2011); BAT Annual Report ((2017(a); 2015(a); 2013(a); 2011(a)); BAT Performance Summary (2017(b); 2015(b); 2013(b); 2011(b))

3. Value Framework Marlboro



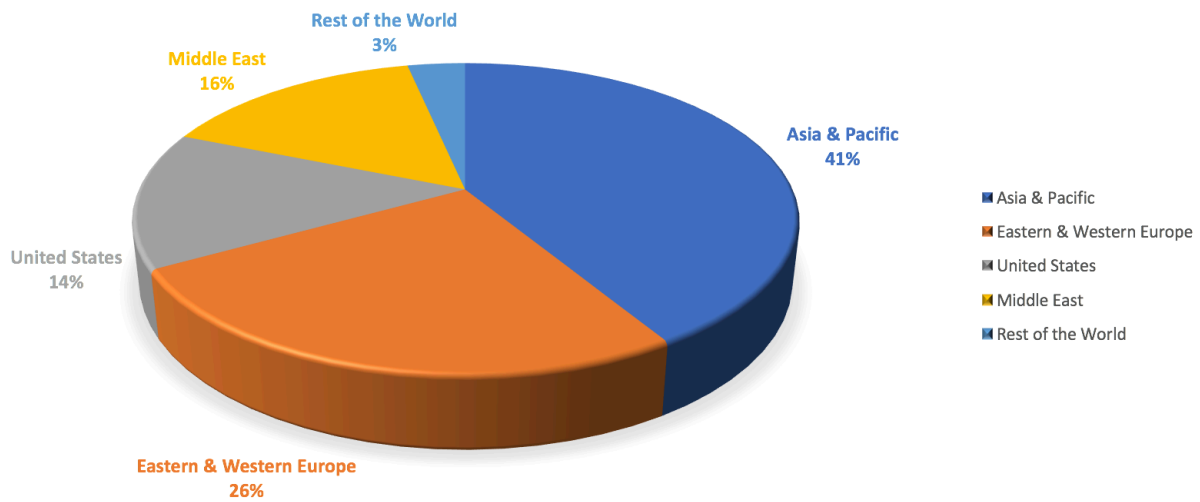
Source: Hafez et al., 2005

4. Marketing Expenditures PMI, BAT and JTI (2006-2017)



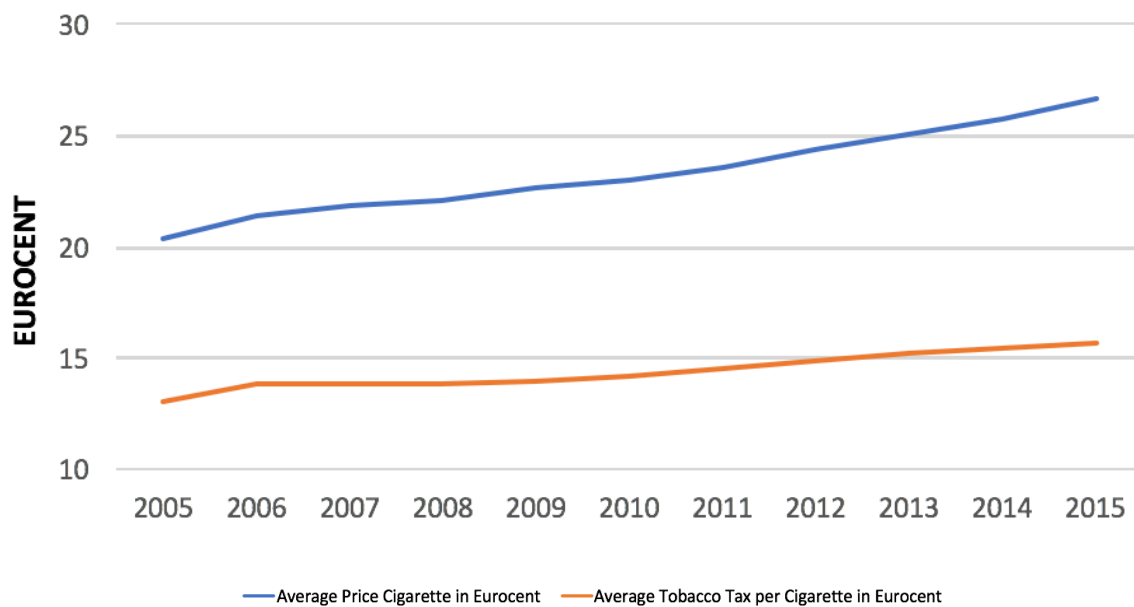
Sources: PMI Annual Report (2017; 2015; 2013; 2011); JTI Annual Report (2017; 2015; 2013; 2011); BAT Annual Report ((2017; 2015; 2013; 2011))

5. Regional Shares of the Cigarette Market



Source: Marketline, 2018

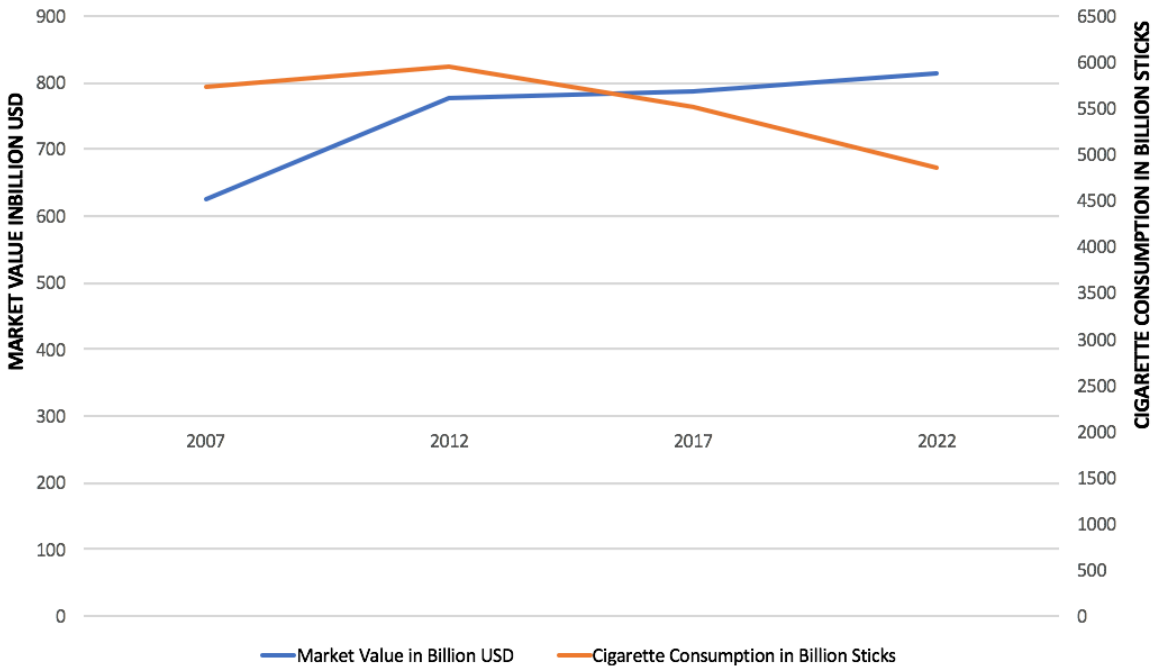
6. Price Development Cigarette Stick vs Tobacco Tax at the Example of Germany¹



Sources: Statista, 2018(a); Viarisio, 2014

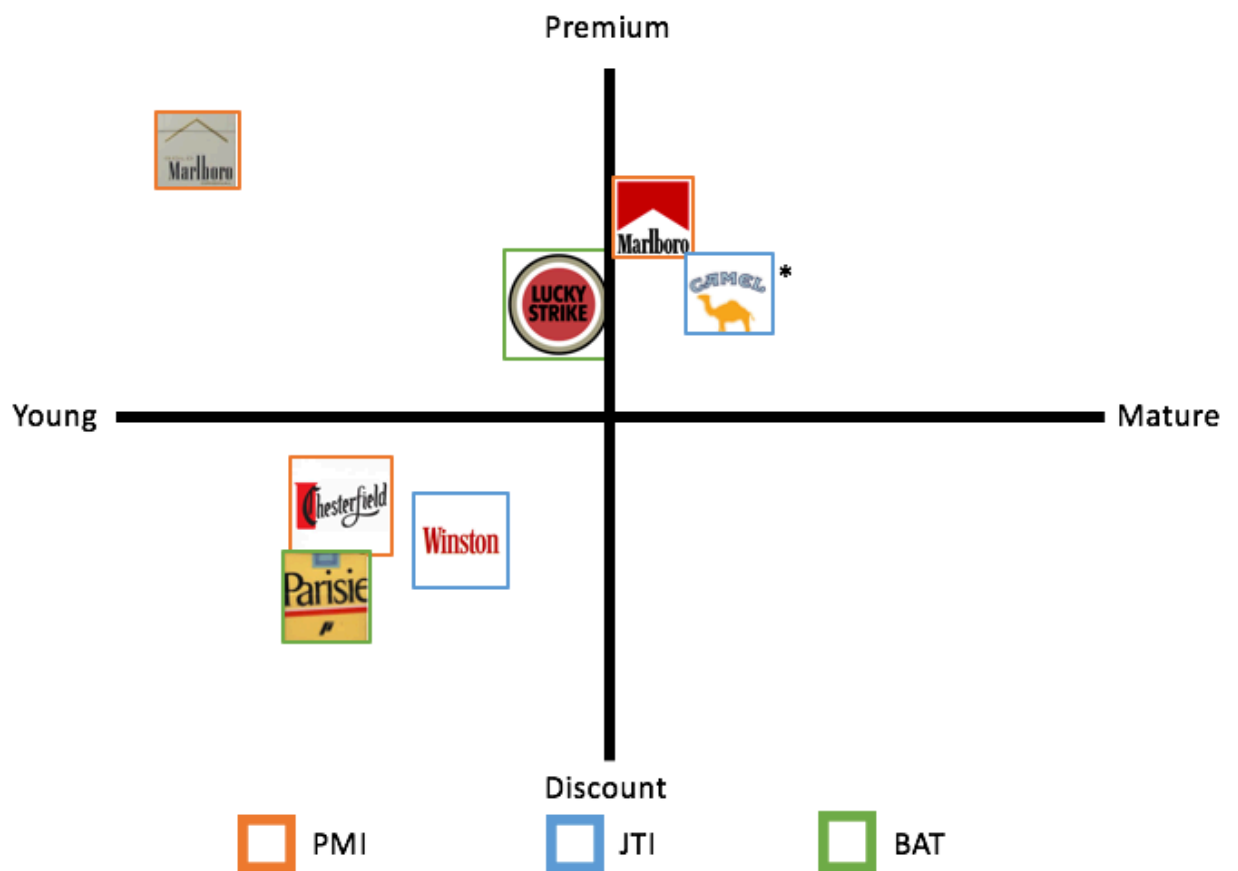
¹ One Country is chosen as an example since tobacco is taxed differently in every country. The German tobacco tax is in a global among the higher ones.

7. Comparison Cigarette Consumption Worldwide vs Market Size Cigarette Industry



Sources: Euromonitor 2018(a); Euromonitor 2018(b)

8. Selective Brand Positioning PMI, JTI and BAT



* Camel belongs to BAT within the United States while being part of JTI in the rest of the world.

Sources: Pollay et al., 2000; Strategic Wordpress, 2016; Nargis et al., 2013; JTI, 2018(b); PMI, 2018(b); BAT, 2018(b)

9. Market Shares of PMI, BAT and JTI in Major Regions

North America			Western Europe		
PM USA*	40,8%	Leading Brand: Marlboro (PM USA)	PMI	38,5%	Leading Brand: Marlboro (PMI)
RAI**	31,9%		JTI	20,6%	
Imperial Tobacco	8,5%		BAT	18,2%	
Eastern Europe			Middle Eastern Area		
PMI	28%	Leading Brand: Winston (JTI)	Eastern Company	15,3%	Leading Brand: Cleopatra (Eastern)
JTI	25,3%		BAT	12,9%	
BAT	23,6%		PMI	12,8%	
Asia Pacific					
CNTC	66,4%	Leading Brand: Shuangxi (CNTC)			
PMI	7%				
BAT	5,5%				

*PM USA is part of the Altria Group and independent of PMI

** Reynolds American Inc. was purchased by BAT in 2017

Sources: Euromonitor, 2018(c), Passport, 2018

10. IQOS Kit with a HEET

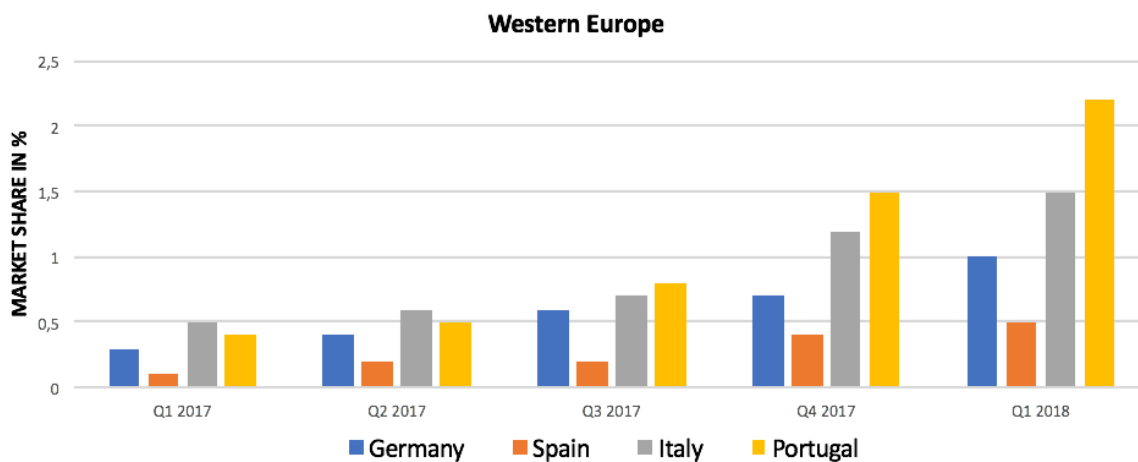
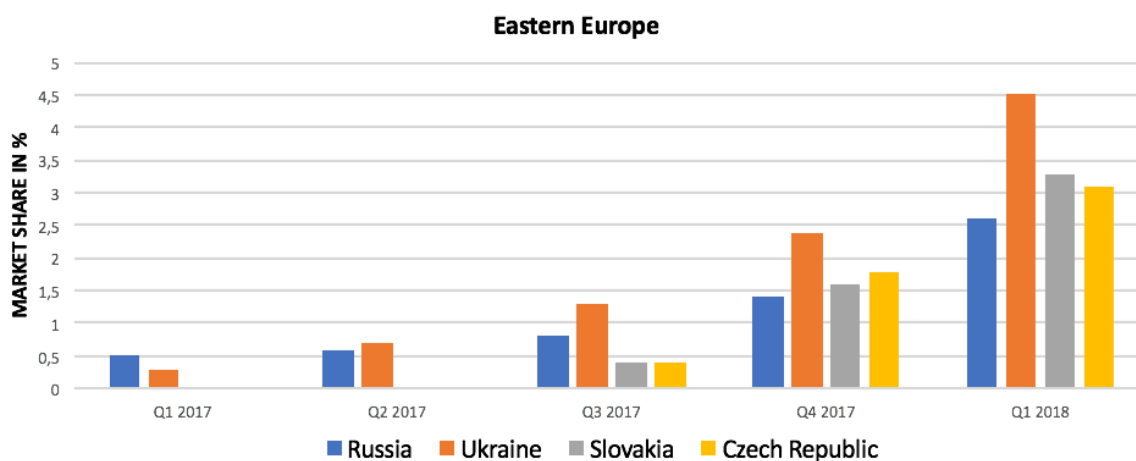
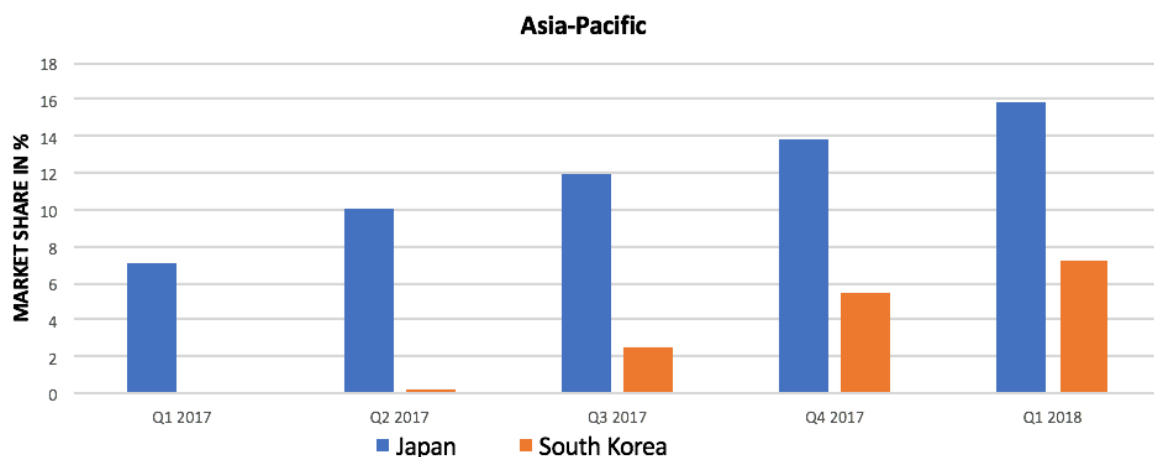


IQOS Charger IQOS Holder HEETstick

HEETS package

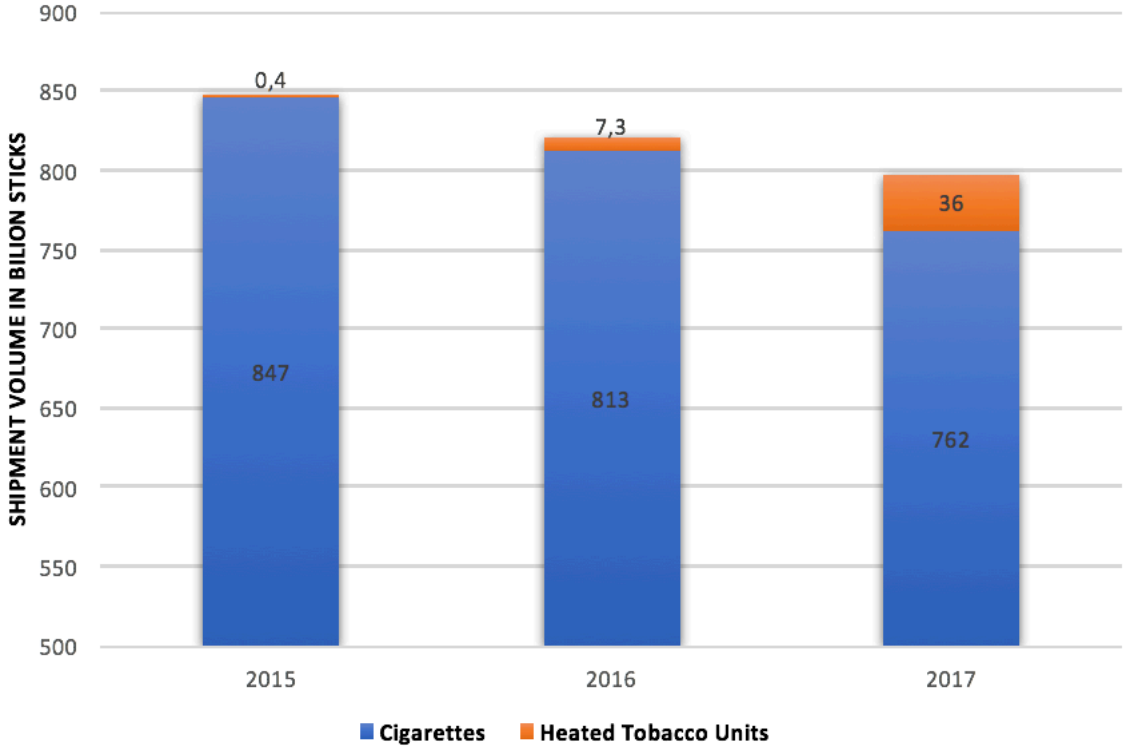
Source: Frankfurter Rundschau, 2018

11. IQOS Share of Cigarette Market in Selected Markets



Source: PMI, 2017; PMI, 2015

**12. Philip Morris International Shipment Volume of Tobacco Units
(2015-2017 in Billion Units)**



Source: PMI, 2017

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