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Strategies of European Telecom Operators in Challenging Environment

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<p>The objective of this thesis is to explore and analyse the strategies of European Telecom operators in challenging environment. By year 2016, the European telecom industry's total revenue had been declining for almost 10 years in a row. This raised a question how some of the leading telecom operators were responding to this challenge in terms of the quality of their strategy in their home markets.</p> <p>In this thesis, Deutsche Telekom, Tele2 and Vodafone were selected for the analysis as they were considered to be significantly different with each other before the actual research project and based in the different countries. The quality of these companies' strategies was analysed based on their product and service portfolio, and marketing, strategy and investor materials using Michael Porter's and STL Partners' strategic frameworks.</p> <p>The results show that all of these analysed companies have good strategies that are in-line with their strategic positioning and product and service portfolios. Based on the analysis, Deutsche Telekom has the best-quality strategy as there seems to be virtually no weaknesses in their approach. Vodafone was a close runner-up with some very small weaknesses. Tele2's strategy also suits its portfolio and strategic positioning but there were small weaknesses in its investor reporting, leading to its third-place ranking in this study.</p> <p>Based on the results of this study, the approach and the combination of the used strategic frameworks used in this study allowed comparing very different types of telecom operators with distinct strategic positioning. Hence, it is likely that the same approach can be used to evaluate the quality of the strategies of any publicly traded company regardless of the industry. This strategy evaluation method can also be used to evaluate companies that are not publicly traded in case the strategy materials are made available for the analysis.</p>	
Keywords	Strategy, Michael Porter, differentiation, overall cost leadership, telecommunication

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1 Introduction

This study examines how some leading European telecom operators try maintain competitive positions in their local markets using different kind of strategies. When this study began, the overall European telecom market had declined almost for 10 years in a row. Hence, there was an obvious question whether these operators would have a good strategy at least in theory. In this study, the quality of the strategy is evaluated based on the combination of each company's:

- Product and service pages visible to customers
- External communication on their webpages such as marketing and ads, and strategy and investor materials

Hence, these telecom operators should have been aware of the challenging market conditions and prepared a good strategy in which the offered products and services, internal operation and external communication match their strategic targets.

In this study only a strategy quality is evaluated on a theoretical level, not based on financial indicators such as revenue or profitability.

The researcher in this thesis works as an analyst at M-Brain Insight Oy which provides companies with outsourced market intelligence services. In this work, market intelligence deals with collecting, editing and analyzing market information for customer organisations of the employer. The deliverables include various presentations and reports on customer markets, competitors and market drivers (regulation, digitalisation of data etc.). Due to the researcher's work experience of more than 10 years at M-Brain and the companies that it has acquired, the focus of this thesis was selected to be on the telecom operators' strategies. This study is mostly based on the pre-COVID-19 telecom market. The coronavirus related implications would require a separate analysis with a different type of analytical methods.

1.1 Business Challenge

This thesis deals with analyzing the strategies of major European telecom operators in a challenging market 2015 onwards. The market size of European telecom services has constantly declined since 2008. In the past seven years its market value has declined at a CAGR rate of 2.2% reaching EUR 240 billion in 2015 (see Figure 1.), according to the European Telecommunications Network Operators' Association figures. (ETNO 2016)

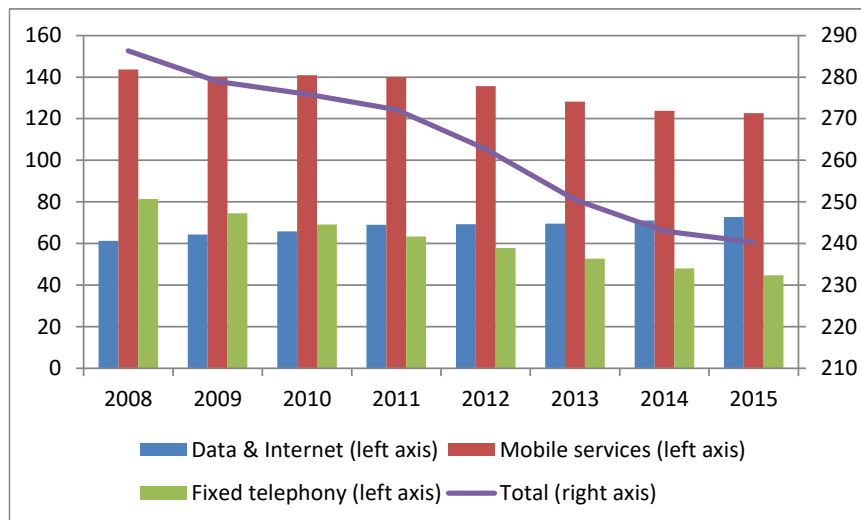


Figure 1. European telecom revenue in EUR billion including Turkey and excluding Georgia, Russia and Ukraine based (ETNO 2016)

Obviously, this has had a major impact on individual telecom operators' profitability as well and necessitates individual operators to re-think their strategy.

1.1.1 Some possible reasons for declining market

Naturally, one of the key reasons for the decline of the telecom operator business is the fact that fixed (analogue) telephony is virtually becoming obsolete in the western world and especially in Europe. These services were typically a very good and profitable business for the telecom operators.

The second reason is the low customer valuation of mobile voice calls and SMS – these services are now challenged by non-telecom players, so-called over-the-top (OTT) companies such as WhatsApp, Facebook, Skype etc. Additionally, the way how mobile phones are used by people has changed considerably in the recent years – calling and messaging is less important nowadays, and you could argue that browsing the Internet and accessing mobile apps is more important to users, at least to the younger

generations in Europe. Many operators have been unable to replace lost mobile voice and SMS revenue with mobile data revenue in many markets.

The third example is the cable online TV services offered by the operators. They are also affected by new OTT competitors such as Netflix, HBO and even the online TV services offered by national TV broadcasters BBC and Yle. These OTT services are a considerable competitor to telecom operators' TV services as they typically provide consumers with a better or cheaper selection of content.

The fourth reason is the online/cloud delivery of IT services which affects all the IT companies in every market as these services can be hosted/provided anywhere in the world. For example, Tata Consultancy can provide these services in India and they can be consumed in Finland without any noticeable delay.

1.1.2 Two typical ways to categorize telecom operator services

Typically, telecom operator services can at least be categorized in two different ways. These two types are briefly described to provide the readers with better understanding of the telecom operator strategies.

Categorization by type of service: This type of categorization of telecom operator services is probably the more traditional one and similar to the one that is presented earlier (Figure 1). This model typically splits the services into three categories "Data & Internet" (including IT services and fixed broadband), "Mobile Services" (including voice, mobile etc.) and "Fixed Telephony" (basically the analogue telephony business on the whole including voice and data).

Categorization by company function: In this model, the services are split into three that include "Consumer Services" (all services offered to consumers), "Corporate Customers" (all services offered to business customers including IT services and connections) and "Operator and Carrier Services" (providing mobile and fixed-line services for the operator's own customers and cooperation with other operators).

1.2 Objective and Outcome

The objective of this thesis is to systematically classify select European telecom operators' competitive strategies, evaluate the robustness of these strategies and draw related company individual and comparative conclusions.

The outcome of this thesis includes three topics:

- classification of operator strategies
- evaluation of strategy robustness
- company individual and comparative conclusions

2 Thesis Plan

The first part of this section provides information on the key phases of this thesis. The second part deals with the descriptions of the way evidence and different data points are collected for analysis in a structured way.

2.1 Key Phases of the Thesis

This part of the study describes the thesis plan and the key phases of the thesis.



Figure 2. Research process of this thesis

The first step of the actual thesis is the search of analytical framework tools from the strategic literature. The second step is the strategy classification using the Michael Porter and STL Partners strategic frameworks. Operator strategies are evaluated in the third phase using a Porter framework. The fourth step compares these operators' strategies with each other. The fifth step provides a short summary of the whole thesis, recommendations for the operators, and an evaluation of thesis project and its output. As shown in Figure 2., steps number 2, 3 and 4 are the data stages of this study. All the

materials collected as evidence in this study are available to any webpage visitor on these companies' websites.

2.2 Data Collection and Data Analysis

The data collection and analysis part of this study includes these telecom operators' strategy pages and investor relations material. Additionally, the company websites' sections dealing with products and services to support the strategy classification. Hence, this part of the thesis process is a personal, written interpretation of these companies' online materials that is supported by relevant illustrations such as companies' images of strategic plans and screenshots of product and service webpages.

2.2.1 Data collection of services and products

The method for collecting and comparing operators' services and products with each other is a set of Excel lists which compare operators with each other.

Consumer customers	Voice and connectivity	Mobile subscriptions
		Fixed broadband (DSL & Internet))
		Landline & fixed-line telephony
	TV, video and content in general	Traditional telecom operator TV subscriptions
		MobileTV
		Satellite TV
		Video on Demand
	Smarthome	Music services
		SmartHome platform and/or devices
	Security	Antivirus software
		Mobile phone insurance
		Backup cloud
	Others	Parental control for surfing
		Device sales
		Own mobile apps
		Home installation services and paid support
		Smartphone sales platform
Corporate customers	Voice and connectivity	Home pages, domains and online store platform
		E-mail and own news site services
	Voice and connectivity	Mobile subscriptions
		Fixed broadband
		Landline & fixed-line telephony
	IoT (Internet of Things)	Dedicated IoT / Machine to Machine (M2M) services
	IT & cloud services	Basic IT services
		Cloud based software such as Microsoft 365
	Conferencing & collaboration	Online conferencing
		Business collaboration
	Healthcare	Healthcare solutions
	Security	End user device security
		Network level security
		Data and e-mail
		Buildings
	Others	Device sales
		Business installation services and paid help
		Mobile device management for enterprises
		Home pages, domains and online store platform

Figure 3. Table structure example for analyzing operators' services and products

The above-mentioned table (Figure 3.) provides a structure to collect and analyze each operator's services and products. These tables also provide simple visualizations of very complex webpages, in terms of extensive portfolios and challenging page navigation, enabling readers to understand how diversified these operators' service and product portfolios are. The main idea of these tables is not to collect every service by name but to list unique items. For example, the mobile subscriptions will not be covered in-detail such by subscription download speed nor voice minutes – it is simply mentioned whether certain service types are available or not.

The services and products are split into two main categories: consumer and corporate customers. The main categories are in turn split into subcategories that ultimately show these operators' diversification level.

The basic service and product template table does not include everything that telecom operators offer on a global level. The template is adapted to the situation what major operators offer in their European markets in general.

As mentioned earlier, telecom operators offer various services that do not deal with consumer and business customers. These other services include carrier services, services that deal with partnerships and global agreements between operators. However, these are not included in this study.

Deutsche Telekom's portfolio is among the most diverse in Europe. Hence, this template is heavily based on the products and services offered by Deutsche Telekom in Germany.

2.2.2 Data collection of certain parts of company strategy material

This part deals collecting strategy related material from these company's reporting such annual and quarterly reports, and other presentations and reports that can be found in a company's investor relations materials. These could include screenshots with the author's summaries and interpretations.

2.2.3 Data collection of operator advertisement

For certain cases it is required to collect operators' advertisement as it provides information on operators pricing strategies. Advertisement will be collected from webpages and online videos.

3 Tools for Strategy Analysis Based on Literature

This section discusses three different strategy analysis tools that are widely used in academic literature in Sections 3.1, 3.2 and 3.3. Section 3.4 explains the reasons why a certain tool is selected for this study.

3.1 Porter's Three Generic Strategies

The first tool that is considered by the strategy classification in this thesis is Three Generic Strategies (Porter 1980). It has been developed by Michael Porter and it assumes that for company there are three potentially successful strategic approached to outperform the competitors in an industry:

- overall cost leadership
- differentiation
- focus.

According to Porter (1980), it is possible for an organization to execute more than one of these three approaches as its primary targets. However, he considers it to be rare as any of these strategies typically demands full commitment and a certain organizational structure. Having multiple strategic approaches in place, a company could dilute its organizational resources too much.

Overall cost leadership

This strategy aims at cost leadership in an industry by implementing some policies that provide efficient-scale facilities. Other ways to achieve cost leadership include cost reductions from experience, cost and overhead control and avoidance of marginal customer accounts. As a result, the companies pursuing this strategy have minimized their research & development, service, sales force and advertising operations. However, implementing this strategy may demand considerable up-front investment in advanced equipment, aggressive pricing and start-up losses. (Porter 1980.)

Differentiation

This strategy aims at creating a product or service that is considered unique industrywide. Typically, differentiation is achieved by a design or brand image. In an ideal situation differentiation is based on multiple dimensions. Sometimes this strategy prevents a company from gaining a high market share as product or service differentiation is commonly based on a perception of exclusivity. As a high level of brand loyalty is typically associated with differentiation, the customers less sensitive to higher prices. This strategy typically makes a cost position impossible because activities related to it are costly due to research, product design, high quality materials, or intensive customer support. (Porter 1980.)

Focus

Unlike the industry-wide low cost and differentiation strategies, the third generic strategy focuses on a certain buyer group, segment of the product line, or geographic market. The focus approach is based on the concept in which a company can achieve its narrow strategic target more effectively (differentiation) or efficiently (low cost). The focus strategy can achieve differentiation or low cost, or both in its narrow target. (Porter 1980.)

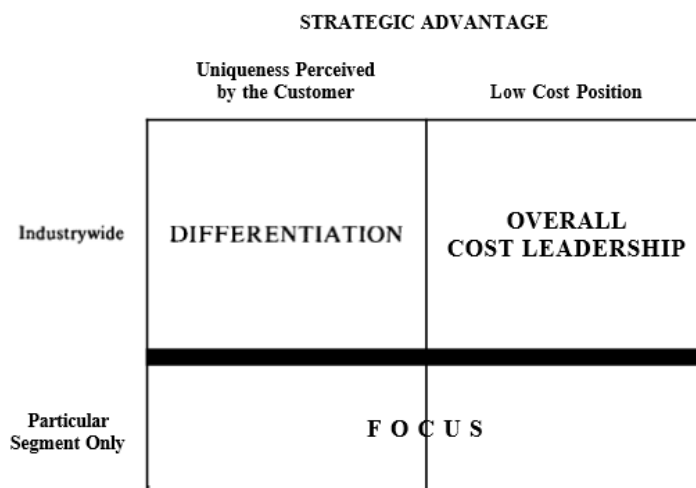


Figure 4. Porter's generic strategies (Porter 1980)

Each of these three strategies may potentially earn above-average returns for its industry for a company. As these three generic strategies differ from each other, they require different resources, skills and organizational arrangements.

Generic Strategy	Commonly required skills and resources	Common Organizational Requirements
Overall Cost Leadership	<ul style="list-style-type: none"> • Sustained capital investment and access to capital • Process engineering skills • Intense supervision of labor • Products designed for ease in manufacture • Low-cost distribution system 	<ul style="list-style-type: none"> • Tight cost control • Frequent, detailed control reports • Structured organization and responsibilities • Incentives based on meeting strict quantitative targets
Differentiation	<ul style="list-style-type: none"> • Strong marketing abilities • Product engineering • Creative flair • Strong capability in basic research • Corporate reputation for quality or technological leadership • Long tradition in the industry or unique combination of skills drawn from other businesses • Strong cooperation from channels 	<ul style="list-style-type: none"> • Strong coordination among functions in R&D, product development, and marketing • Subjective measurement and incentives instead of quantitative measures • Amenities to attract highly skilled labor, scientists, or creative people
Focus	<ul style="list-style-type: none"> • Combination of the above mentioned policies directed at the particular strategic target 	<ul style="list-style-type: none"> • Combination of the above mentioned policies directed at the particular strategic target

Figure 5. Checklist for analyses of operators' services and products (Porter 1980)

These strategies may also need different kinds of leadership, creating very contrasting corporate cultures and atmospheres. (Porter 1980)

Stuck in the Middle

Porter also defines a 'stuck in the middle' situation which occurs when a company does not achieve any of these strategic positions. A company which is stuck in the middle is likely to generate low profits as it does not have a large market share or capital investment, and means to play any of these three strategic approaches. If a company is stuck in the middle, it typically requires time and considerable effort to move into a better strategic position. (Porter 1980)

'Telco 2.0' adaptation of Porter's original model by STL Partners

'Porter and Telco 2.0 competitive strategies' (see Figure 6.) is based on the work of telecom consultancy company STL Partners.

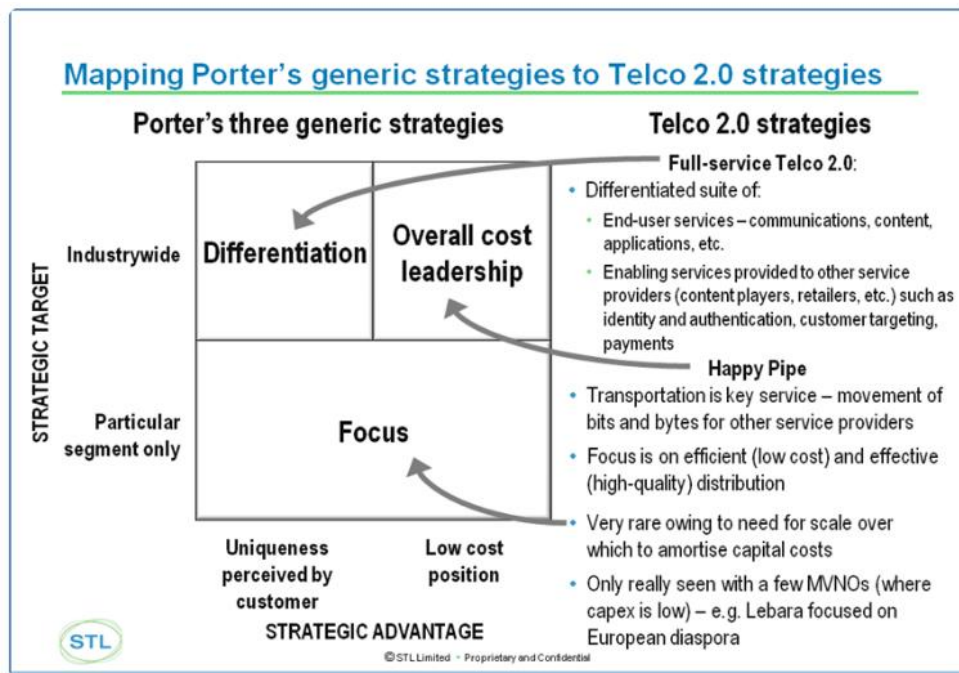


Figure 6. 'Telco 2.0' adaptation of Porter's original model by STL Partners (STL Partners 2016)

This framework does not actually change anything that was included in Porter's original model; it merely adds telecom industry specific guidelines to classify these companies (STL Partners 2016).

3.2 Bowman's Strategy Clock

Bowman's Strategic Clock is a tool framework that is used to plan a product or service's strategic positioning to reach the most competitive position in the market. The clock has two dimensions: price and perceived value. The model was developed by Cliff Bowman and David Faulkner to challenge the concept of Porter's Generic Strategies. (Bowman and Faulkner 1996.)

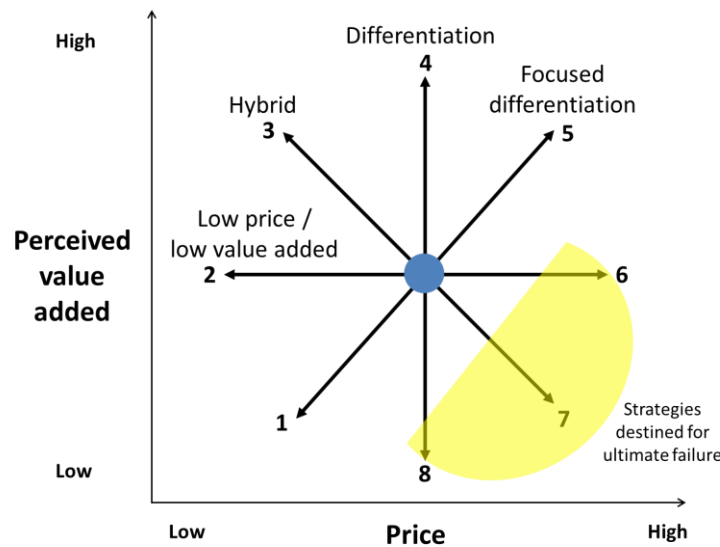


Figure 7. Bowman's Strategy Clock (Bowman and Faulkner 1996)

Like Porter's Three Generic Strategies, cost and differentiation are also factors of competitive advantage in Bowman's Strategy Clock. As shown in Figure 7., the clock contains eight different strategies:

1. Low price and low value added: low prices with very little value and no differentiation
2. Low price: low prices with little value added, so-called 'cost leaders'
3. Hybrid: relatively low prices with some differentiation
4. Differentiation: highest level of perceived added value
5. Focused differentiation: highest prices with high level of perceived added value
6. Risky high margins: high prices with average level of perceived added value
7. Monopoly pricing: high prices with low level of perceived added value. Loss of market share: mid-range or standard prices with low level of perceived added value

Positions 6, 7 and 8 are uncompetitive because their prices are higher than perceived value added. (Bowman and Faulkner 1996).

3.3 Ansoff Matrix

The Ansoff Matrix is strategy development tool that is based on four directions that aim at increasing growth. Igor Ansoff published the first version of the framework in 1957. (Ansoff 1957.)

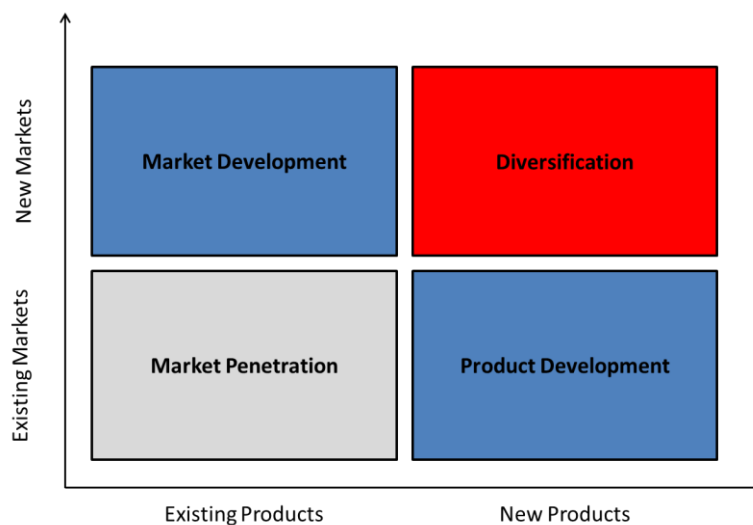


Figure 8. Ansoff Matrix (Johnson 2014)

These four growth-focused approaches for the strategy include:

- **Market Penetration:** A company aims at achieving growth by increasing its market share of existing products or services in existing markets.
- **Market development:** A company aims at achieving growth by selling existing products or services in new markets.
- **Product Development:** A company aims at achieving growth by selling new products or services in existing markets.
- **Diversification:** A company aims at achieving growth by selling new products or services in existing markets. (Johnson 2014).

3.4 Conceptual Framework

This part of the study introduces the chosen strategy classification framework and criteria for strategy quality evaluation. The operator strategies are classified by analyzing the materials, such as product and service pages, and latest marketing and strategy materials, on the operator webpages.

The quality of the strategy is then evaluated by using Porter's three key principles of strategic positioning (Porter 1980). A robust strategy and its high-quality implementation and should be reflected in the company's operational work. For example, an operator should have various types of services and products available to each customer type on its webpages if its strategy materials state that it is the market leader in customer-specific solutions.

Strategy classification tool

STL Partners' adaptation (2016) of the Porter framework (Porter 1980) was chosen for strategy classification in this thesis as the original Porter model (Porter 1980) is widely known and very influential as a strategic framework. Additionally, Porter's Three Generic Strategies (Porter 1980) has likely affected the strategic planning of these companies that are included in this thesis, at least to some extent. The STL Partners version (STL Partners 2016) provides a robust list of typical product and service characteristics of commonly-used telecom strategies.

According to STL Partners (2016), overall cost leadership and differentiation are typical strategies in the telecom industry. However, focus strategies, with a focus on a single segment of the market, is not a common choice in the telecom industry as it can result into lower returns on the high capital investment required by a telecom network deployment compared to Cost Leadership and Differentiation.

Porter strategy	Telco 2.0 strategy	Nature of smartness	Characteristics
Cost Leadership	Happy Pipe	Smart network	<ul style="list-style-type: none"> • Cost efficiency with minimal network, IT and commercial costs • Simple utility offering
Differentiation	Full-service Telco 2.0	Smart services	<ul style="list-style-type: none"> • Technical and commercial flexibility: improve customer experience by integrating network capabilities with own and 3rd-party services and charging either end user or service provider or both

Figure 9. Characteristics of typical Telco 2.0 strategies (STL Partners 2016)

STL Partners (2016) has created a list of characteristics (see Figure 9) that help to classify telecom operator strategies. The consultancy company calls 'Cost Leadership' as 'Happy Pipe' and states that the nature of smartness of this kind of operator is 'smart network' with a cost-efficient network and a simple product portfolio. A telecom operator pursuing differentiation is exploiting a 'Full-service Telco 2.0' strategy in which a company aiming at provision of smart services instead of a smart network. Some main characteristics of a Differentiation strategy in the telecom industry include technical and commercial flexibility, and improved customer experience by integrating network capabilities with own and 3rd-party services. In this study, Porter's classic terms 'Cost Leadership' and 'Differentiation' are used instead STL Partner's 'Telco 2.0' strategy framework.

STL Partners (2016) identified six opportunity types (see Table 4) for telecom operators pursuing differentiation strategy. The opportunity refers to telecom operator solution types in a very generic way.

Opportunity type	Approach	Typical services
Core services / connectivity services	Improving revenues and customer loyalty by better design, analytics, and smart use of data in existing services	Access, Voice and Messaging, Broadband, Standard Wholesale, Generic Enterprise ICT Services (including SaaS)
Vertical industry solutions	Delivery of ICT projects and support to vertical enterprise sectors	Systems Integration, Vertical CEBP solutions, Vertical ICT, Vertical M2M solutions, and Private Cloud
Infrastructure services	Optimizing cost and revenue structures by buying and selling core telco ICT asset capacity	Bitstream ADSL, Unbundled Local Loop, MVNOs, Wholesale Wireless, Network Sharing, Cloud – IaaS
Embedded communications	Enabling wider use of voice, messaging, and data by facilitating access to them and embedding them in new products	Comes with data, Sender pays delivery, Horizontal M2M Platforms, Voice, Messaging and Data APIs for 3rd Parties
3rd-party business enablers	Enabling new telco assets (e.g. customer data) to be leveraged in support of 3rd party business processes	Telco enabled Identity and Authorization, Advertising and Marketing, Payments. APIs to non-core services and assets.
Own-brand OTT services	Building value through Telco-owned online properties and 'Over-the-Top' (OTT) services	Online Media, Enterprise Web Services, Own Brand VOIP services

Figure 10. Typical services by opportunity type in a differentiation strategy (STL Partners 2016)

Each of the six opportunity types is split into 'Approach' (how to provide service or build value) and 'Typical services' (describing some actual examples of services dealing with the opportunity in question).

Evaluation of strategy quality

In this study, the quality of a company's strategy is evaluated by looking at these companies' strategic positioning. According to Michael Porter (Porter 1980), strategic positioning aims at gaining sustainable competitive advantage by maintaining what is unique to a company. This could include operating different activities or operating similar activities in different ways compared to competitors. There are three key principles of strategic positioning:

1. **Strategy is the creation of unique and valuable position, involving a different set of activities.** There are three distinct sources of strategic positioning:

- serving few needs of many customers
- serving broad needs of few customers
- serving broad needs of many customers in a narrow market

2. Strategy requires you to make trade-offs in competing - to choose what not to do.

3. Strategy involves creating "fit" among a company's activities (Porter 1980).

These three key principles are used to evaluate operator strategies.

4 Analysis, Classification and Evaluation of Individual Operator Strategies

This section analyzes, classifies and evaluates the strategies of Deutsche Telekom, Tele2 and Vodafone in their home markets. The analysis and classification are based on each operator's product and service pages, and investor, marketing and strategy content available on their public websites. The evaluations are in turn based on Porter's (1980) and STL Partners' (2016) analytical frameworks.

4.1 Deutsche Telekom

Deutsche Telekom is a Germany-based global telecom operator which provides mobile and fixed-line telecom services to consumer and corporate customers. In this case, the analysis is based on the product and service offering, and other materials on the company's German website, the Healthcare division and its 100%-controlled IT subsidiary T-Systems.

4.1.1 Analysis of Deutsche Telekom products, services, marketing and strategy materials

The German websites are used because they provide the most comprehensive selection of this company's offering based on a preliminary analysis. The German websites (Deutsche Telekom 2018) are used because they provide the most comprehensive selection of this company's offering based on a preliminary analysis.

The German website of this company also deals with the German market and this is an important to understand when analyzing this company as Deutsche Telekom is a telecom operator in very many European countries. Additionally, its business services offered by T-Systems are virtually available everywhere in the world.

Deutsche Telekom's consumer customer products and services

Its consumer customer services offer voice and connectivity in the mobile and fixed broadband segments. It also offers fixed-line telephony voice services to its consumer customers.

Its TV services, include “traditional operator TV services” such as cable TV and IPTV. MobileTV in this case is offered via a special app, not by using any broadcast technology. It also provides Video-on-Demand (VoD) which is basically rental TV programming such a single TV show episode, movie or sport event that can be watched once, live or within a certain period of time. In Germany, Deutsche Telekom also sell satellite TV packages which are delivered using the DTH technology. Satellite TV services are not necessarily seen as very developed and efficient services in the telecom industry which means that many operators don’t offer this kind of services. In terms of music, the German operator is a reseller of certain major music services such as Apple Music and Spotify, and its ‘MagentaMusik 360’ service provides certain customers with access to live concert streams.

Smart home is a general concept in which deals with Internet-connected devices in people’s homes. These devices can also be linked to external services that allow home security, remote control of heating etc. Deutsche Telekom is quite active in the smart home segment as it sells its own Magenta-branded devices and services, and is a founding member of a European smart home device association called QIVICON.

The security services offered by Deutsche Telekom include various combinations Norton software that protect computers, tablet devices and smartphones. In this study mobile phone insurances in different levels called ‘HandyVersicherung’ protect consumers’ mobile devices against theft, burglary and charges incurred using a stolen device.

The category called ‘Other’ among the consumer portfolio includes various types of services and products that are not necessarily related to each other. The first one of them is sales of devices, such smartphones, tablets, surf sticks and smartwatches, via its online site and retail shops. Deutsche Telekom also offers paid call support for technical issues, and personal home help and installation services. Customers can also purchase a homepage service which includes a certain number of Internet domains and web traffic based on the subscription level. This kind of webpage services for consumer customers are not very typical services in today’s telecom industry.

Deutsche Telekom’s corporate customer products and services

Before analyzing Deutsche Telekom’s German webpages for corporate/business customers, it is good to understand that most of the services are likely dealing with

smaller companies such as SME (Small and Medium Enterprises) that don't have hundreds of employees. Additionally, T-Systems typically serves larger corporations with global operations.

Similar to its consumer services, Deutsche Telekom's corporate clients can purchase mobile, fixed broadband connectivity services and landline telephony services.

IoT and M2M services are typically solutions which connect some kind of devices or entire systems to Internet and external systems using a wireless connectivity method. In this study IoT is separated from the basic wireless connectivity services as they typically are more complex solutions demanding intelligent systems for management than basic Internet connections. In some cases, one customer can buy an IoT solution which might have to be integrated to customer software systems and can be made of tens or hundreds of thousands of connected objects. Hence, IoT services are much more complex compared to basic Internet connections. M2M (machine-to-machine) is similar to IoT but M2M is typically a less advanced solutions connection two devices instead of a system encompassing a large number of devices communicating with each other. The key components of Deutsche Telekom's IoT include a data service using a SIM card, and a combination of hardware and software for monitoring of industrial machines.

'IT services separated from basic brand' in this study deal with IT services targeting larger corporate customers that are offered separate from a telecom operator's main brand. In this case, it deals with T-Systems, not Deutsche Telekom's business services. Deutsche Telekom and T-Systems have separate web domains. T-Systems is a very diversified IT company and can virtually offer any imaginable IT service, consultancy or Internet connection to large corporations. 'Cloud based software such as Microsoft 365' in turn refers to cloud-based software offered via the telecom operator brand. In this case, the Deutsche Telekom website offers various cloud solutions via its own open cloud platform called "Telekom Cloud" including Microsoft 365, security, IT platforms and highly complex software solutions such as ERP software SAP and sales/marketing tool Salesforce.

'Online conferencing' deals with business solutions called online conferencing and business collaboration. Deutsche Telekom offers both services. In this case, the operator's online conferencing solutions include Cisco WebEx, an online chat and video chat software solution similar to Skype and telepresence solutions. Telepresence, a

combination software and products that allow remote meeting or conference attendees to meet online on big screens, is not any recent innovation but it is something that not all telecom operators don't offer.

The company's solutions for the healthcare industry is a different website compared to the Deutsche Telekom and T-Systems sites (see Figure 11.). The difference is reflected in a logo, an own brand name of "Telekom Healthcare Solutions" and a slightly-different page navigation interface. Typically, telecom operators' IT service subsidiaries don't necessarily have their own website but simply have healthcare and other industry-specific solutions listed on the IT service pages.

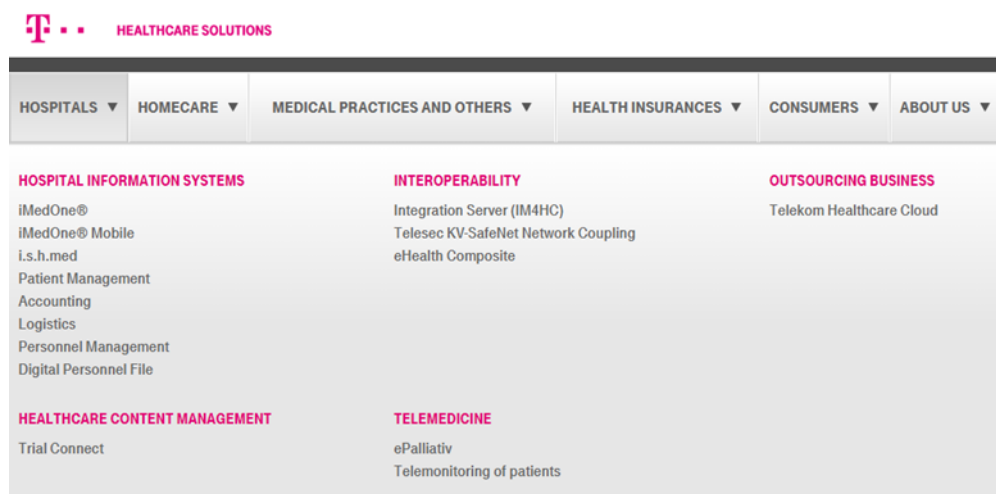


Figure 11. Screenshot of Telekom Healthcare Solutions website (Deutsche Telekom 2018)

Analysis of Deutsche Telekom's marketing communication approach for consumer customer services on customer webpages

When comparing the Deutsche Telekom consumer and corporate customer website with the T-Systems, there's a clear difference in the basic webpage layout between (see Figure 12.). The T-Systems page uses its own brand logo in pink and the Deutsche Telekom -associated website are using their own logo in white on a pink background.



Figure 12. Branding of three websites of Deutsche Telekom (Deutsche Telekom 2018)

Analysis of Tele2 products, services, marketing and strategy materials

For consumer services, the operator doesn't mention that its services are the best too frequently. However, its mobile subscription and TV services pages mention "the best network" and "the best entertainment" (see Figure 13.). However, the reason why a certain service is the best (in Germany) isn't always disclosed or there's no source information to back up their claim. In the telecom industry, companies typically always provide a credible source when they claim in any kind of excellence such as a test or survey result collected by an external party.



Figure 13. Examples of certain "best consumer" service on Deutsche Telekom webpage (Deutsche Telekom 2018)

In some cases, Deutsche Telekom backs up its claims for excellent in certain aspects of consumer business (see Figure 14.). These examples include results of reader surveys, security certifications and speed test results.



Figure 14. Screenshots supporting Deutsche Telekom's "best" services (Deutsche Telekom 2018)

Hence, it is clear that Deutsche Telekom wants position itself as a high-quality service provider in the consumer customer segment.

Analysis of Deutsche Telekom's marketing communication approach for corporate customer services on customer webpages

Similar to consumer customer services, the business customer webpages also try to show that its services are the "best of its kind" or "perfect for certain use cases" (see Figure 15).



Figure 15. Deutsche Telekom highlights quality of its corporate customer services (Deutsche Telekom 2018)

However, it seems like that in case of the business customer services, Deutsche Telekom provides less unbiased proof why its services are “best” or “perfect” for certain use.

Analysis of Deutsche Telekom’s investor materials

This part of the study is based on Deutsche Telekom’s Capital Markets Day 2018. Events called “Capital Markets Day”, “Investor Day” etc. are events that large publicly-traded companies typically organize on an annual basis although they are typically re-quired to do so by local law. These events provide insight on companies’ execution of their long-term strategic targets and new strategic targets. Typically, top executives present these materials to investors and other interest groups. These events and associated materials contain additional materials compared with basic investor reporting that can be heavily focused on financials figures and analyses companies’ current business environment. These additional materials typically deal with less tangible plans and ambitions for future and might also contain some financial information on the business functions that are not typically reported separately, such new business ventures that are part of a larger unit or division of the company, in basic investor reporting.

Many telecom operators organize these investor events and materials every year. However, not all operators organize these events every year.

In Deutsche Telekom’s case the latest materials were published in May 2018 (Deutsche Telekom 2018) and are used to analyze how the company currently describes itself to its investors.

Deutsche Telekom’s Capital Markets Day 2018 presentation states that it “leads in customer experience” and it’s continuously becoming better. There are some measurable KPIs that could be exploited in the measurement of customer experience such “a decreased level of no-shows” (see Figure 16.). However, the proofs that Deutsche Telekom provides are highly subjective as they are not measured against direct competitors or benchmark companies in other industries.

WE LEAD IN CUSTOMER EXPERIENCE AND IMPROVE CONTINUOUSLY

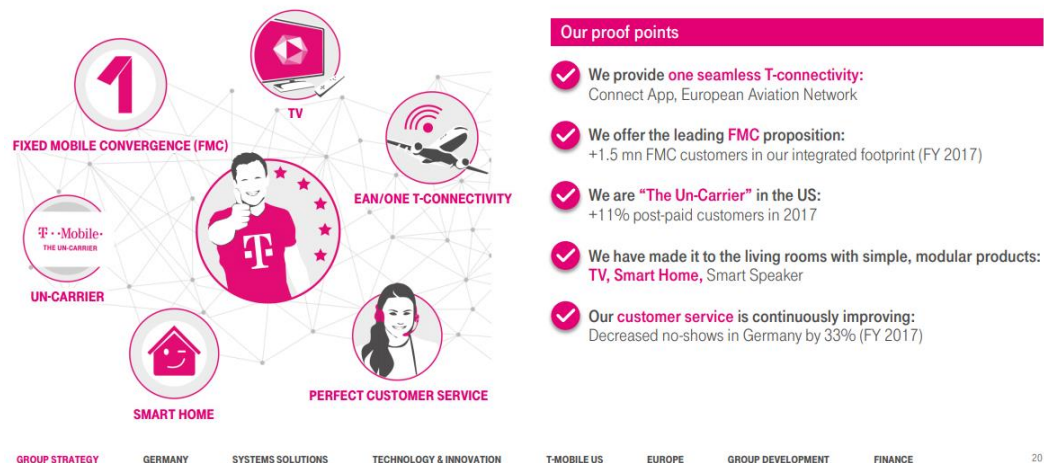


Figure 16. Deutsche Telekom highlights quality of mobile network (Deutsche Telekom 2018)

Analysis of Vodafone products, services, marketing and strategy materials

Additionally, there are proofs and terms that are at least partly something that the company has selected by itself and might not even be used by other telecom operators such as:

- **"one seamless T-connectivity"** deals with Deutsche Telekom's "Connect App", an app that allows an automatic selection between the best available network options (2G, 3G, 4G and WiFi) in Germany provided, by Deutsche Telekom and its partner Wi-Fi operator FON. However, there currently are no "truly seamless" connectivity solutions available in anywhere in the world.
- **FMC** (Fixed to Mobile Convergence) is an actually industry term. However, it would be very difficult to compare this to other telecom operators as there is no fixed way to calculate what is an FMC data point, user, subscriber or a business customer.
- There is also a claim that the company **"has made itself into people's home"**. This likely refers to their launch of its own smart speaker for the German market. However, it is probable that this kind of products will be adopted slowly, thus having very little impact on the customers on the short term.

Deutsche Telekom claims being a content aggregator with smart investments (see Figure 17.). However, most of the proofs are again really hard to analyze from an external point of views as there are very few indicators that could be linked to the actual levels of revenue or profitability:

- **TDG is the only growing TV operator:** Telekom Deutschland GmbH (TDG), a subsidiary of Deutsche Telekom, has grown its subscriber base by 260,000 in 2017 as its major competitors Unitymedia, Tele Columbus and Vodafone lost market share that year. Additionally, there is a bold prediction that TDG would increase its market share from 8% in 2017 to 12% in 2012 – this kind of growth could be very hard to achieve in a mature telecom market, such as in Germany, which is also being attacked by non-telecom companies such as Netflix.
- **Best content aggregator:** The first KPI is exclusive series content views of 3.7 million, a figure that could be considered relatively low for an operator with tens of millions (mobile and fixed-line) subscribers in Germany. The second one praises smart content investments with high-customer perception without providing an actual source or an indicator about customer satisfaction.
- **Best user interface:** The set-top-box of Deutsche Telecom has won an award for best image and audio quality, provides some tangible proof of excellence. The second part which claims that voice control, a second screen functionality and a mobile app would be highly differentiated from the competitors' offering could be true but on the long term it is not going to be any major factor.
- **Lead in sports content:** The operator sees that offering Bundesliga Conference and the 3rd Liga matches to subscribers is special but it is likely that the main competitors also offer the same content as exclusive rights are not mentioned. However, the exclusive rights to sell domestic BBL (Bundesliga Basketball) and ice hockey content to its customer could be a differentiation factor.
- **New target audience:** The first bullet point sees potential in “young audience” but it might a challenging target group if the medium is traditional TV services. The “housing industry”, which likely targets winning more contracts with housing associations and similar players handling TV and broadband contracts on behalf

of larger groups of households at once, is likely to be a challenging field in which typically the lowest offer wins.

1 TV: CONTENT AGGREGATOR WITH SMART INVESTMENTS

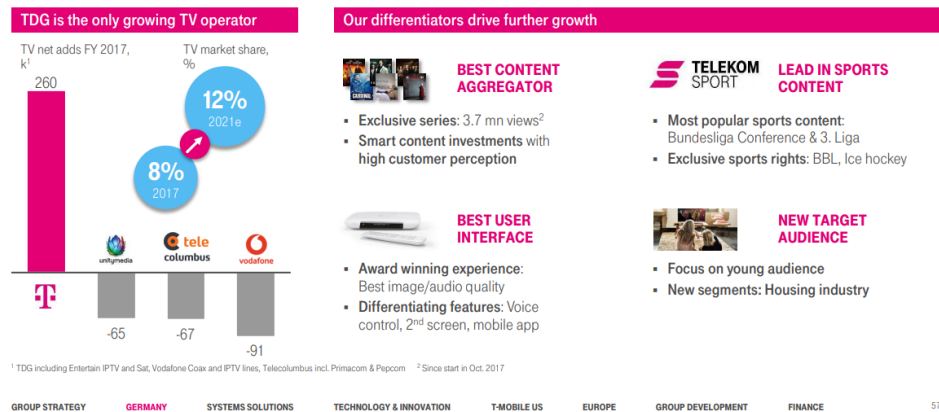


Figure 17. Deutsche Telekom's "smart content investments" in Germany (Deutsche Telekom 2018)

Thus, quite a few of these proofs of smart content-related investments are not objective. Additionally, the figure about subscriber growth and exclusive series views only deal with year 2017, not a longer period.

Deutsche Telekom says it leads in technology in the German telecommunication market (see Figure 18.). However, its evidence: fiber rollout, cooperation & co-invest models, development of mobile network coverage and quality are something that all telecom operators constantly doing.

3 LEAD IN TECHNOLOGY

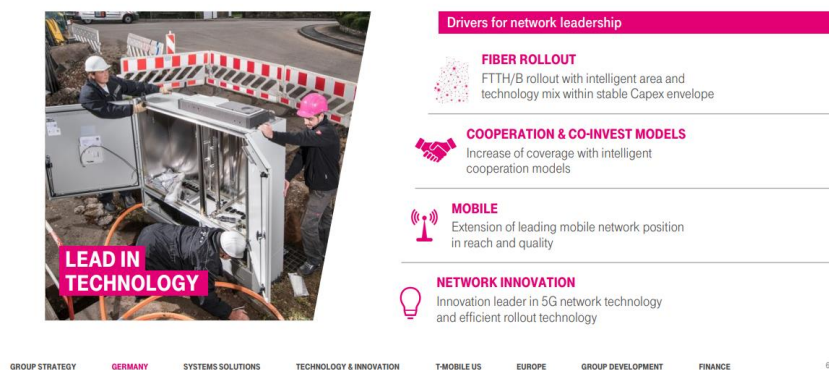


Figure 18. Deutsche Telekom claims lead in technology (Deutsche Telekom 2018)

“Network innovation” on the other hand can provide an advanced level of quality but it can typically be achieved very locally in the beginning. When any technology is deployed in any larger area or market, it is unlikely to be something new.

Operational excellence (see Figure 19) is a topic that is clearly an important one to Deutsche Telekom as it measured using four KPI to measure and develop operational excellence: Self-Service, Reliability, Service Quality and Product Quality. These KPIs are collected by using an SMS-based customer survey. Additionally, the company has set clear 2021 target levels for Reliability and Service Quality. These target levels are also communicated in the investor materials to highlight the overall quality of customer-facing services and products.



Figure 19. Deutsche Telekom KPIs for service process development (Deutsche Telekom 2018)

The Capital Markets Day 2018 presentation provides a detailed classification of its corporate customer IT service portfolio (see Figure 20), the T-Systems one, based on its new strategy. In this classification, the company splits its services into:

- ‘**TC Core**’ containing traditional connectivity services
- ‘**Classic IT**’ dealing with more traditional IT services
- ‘**Growth Portfolios**’ with newer types of solutions or reshaped bundling of services

Some of these classifications are also marked as ‘New’ or ‘Reshaped’, showing whether a certain type of solution has existed in T-Systems’ portfolio in the previous strategy. This

kind of a clear classification is quite advanced for a telecom operator as the operators don't typically provide such a clear view of their IT service strategy.

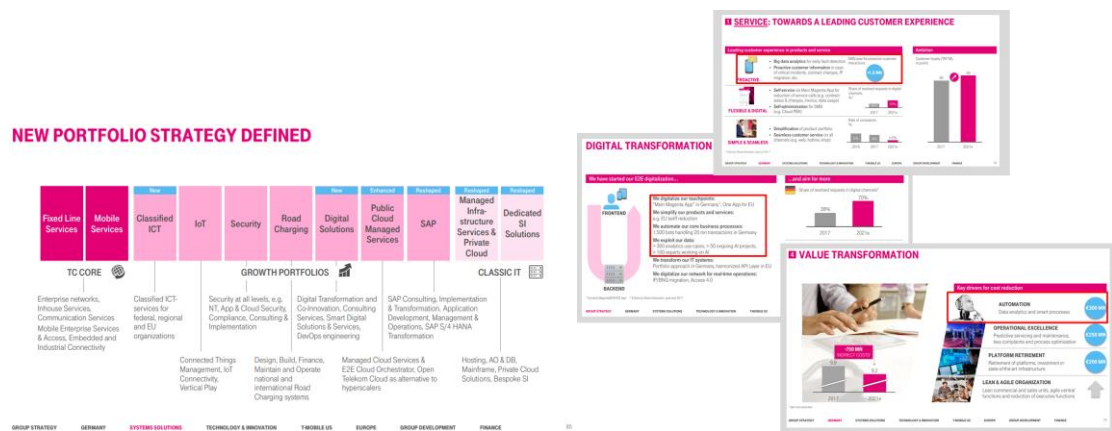


Figure 20. T-Systems' new portfolio strategy and highlighting use of analytics (Deutsche Telekom 2018)

Analytics and automation among the key drivers of customer experiences at Deutsche Telekom (see Figure 20.). Deutsche Telekom's investor materials state that the use of analytics and automation are important to its strategy on a group on level and Germany.

The operator clearly highlights that automation and analytics are used to improve customer facing services in a proactive way such as sending to automated messages to customers in case of critical incidents and contract changes.

Analysis of Deutsche Telekom marketing materials

In this case, there are no clear marketing type of materials that Deutsche Telekom provides directly on its websites nor links to online ads, such as links to YouTube video clips. Hence, marketing materials of Deutsche Telekom are not analyzed in this study which is focused on the telecom operators' general webpages and investor materials.

4.2 Classification of Deutsche Telekom Strategy

Classification of Deutsche Telekom's strategy is based on the analysis of its consumer and corporate customer services, and its latest capital markets day presentation. As explained earlier, Deutsche Telekom's marketing materials are not used in the classification process. Based on the preliminary analysis of its websites, it seems like

Deutsche Telekom is exploiting a differentiation strategy based on the large number of products and services offered to each customer segment and its strategy materials.

The first part of classification is based on Porter's original model. It is done by analyzing Deutsche Telekom's investor materials as Porter's basic model is not focused on the telecom industry but is a generic one. Hence, the study is comparing the list of 'Commonly required skills and resources' and 'Common organization requirements' to Deutsche Telekom's capital markets day materials.

4.2.1 Classification using Porter's original model

Porter's 'Commonly required skills and resources' checklist for a differentiation strategy includes:

- **Strong marketing abilities** (yes): As stated earlier, marketing materials of Deutsche Telekom are not analysed in this study as no general location or link to its marketing content is available on the company's websites. However, if its corporate communication approach is considered a similar topic to market, the company is very focused on it as its capital markets day reporting is very detailed and visually appealing. Additionally, the presentation deck contains 237 slides which is a high number for any telecom operator or a company from any other industry. This shows that Deutsche Telekom is putting a lot of effort in its investor materials that are focused on the company's general development and strategic plans.
- **Product engineering** (yes): Deutsche Telekom is very keen to highlight its new products or product enhancement in its reporting. Examples of this include detailed about its set-top-box and apps.
- **Creative flair** (yes): The company's investor materials are of high quality in terms of quality and quantity. Additionally, it the company is some unique ways to showcase its excellent in services and general operations by using innovative visualizations of topics in addition to basic industry telecom KPIs such revenue indicators, profitability and subscriber bases.

- **Strong capability in basic research** (yes): The capital markets day presentation contains many comments which show that company is researching new technologies internally and with partner companies. Most of these proofs are presented in the 'Technology and Innovation' section of the presentation. A major share of them deals with developments in mobile and fixed network technologies that it is using in its markets.
- **Corporate reputation for quality or technological leadership** (yes): There many occasions in which the company is highlight its best services, such the best mobile network coverage, set-top-box interface, business collaboration software and service security in its German customer webpages. Additionally, the investor materials focus heavily on high quality of its network services.
- **Long tradition in the industry or unique combination of skills drawn from other businesses** (yes): Deutsche Telekom is a large and very established company in Europe. However, the company doesn't concentrate on its long history in its investor materials. In turns, it wants show that has been hiring employees that make it a smarter company, such as people working with analytics and AI.
- **Strong cooperation from channels** (yes): Deutsche Telekom's investor materials show how focused the company is to provide an omni-channel customer journey via online, phone hotline and retail outlets.

The 'Common organizational requirements' list for a differentiation strategy includes:

- **Strong coordination among functions in R&D, product development and marketing** (not possible to assess using desk research): Due to the lack of easily measurable marketing content on the company's key websites, the role of marketing is slightly difficult assess. However, the communication part of Deutsche Telekom has made a good job of packaging a good looking and easily understandable R&D and product development slides in the most recent capital markets day presentation.
- **Subjective measurement and incentives instead of quantitative measures** (yes): Deutsche Telekom service-specific pages contain claims in which are

backed up by tangible results such surveys. However, there are cases in which the company says it is the best of its kind in Germany without providing any evidence.

- **Amenities to attract highly skilled labor, scientists or creative people** (yes): The company is not very focused on how good it is attracting skilled employees. However, its corporate responsibility examples such as continuous human rights due diligence in more 100 of its units. Deutsche Telekom also states that as part of its social engagement program it is currently employing about 340 refugees.

4.2.2 Classification using STL Partner's adaption

As discussed earlier, there are clear indications that Deutsche Telekom's selected strategy is differentiation. Thus, STL Partners' list of typical services among the telecom companies exploiting a differentiation strategy is used:

- **Core services such as connectivity and basic IT services have better design, exploit analytics and data** (yes): Deutsche Telekom's investor materials and service pages emphasize their award-winning user interfaces and the use analytics and AI in paid services and customer service operations.
- **Vertical industry solutions** (yes): Deutsche Telekom serves quite a few customers industries via its T-Systems subsidiary. Additionally, the company has a specific subsidiary and with an own website that is focused on the healthcare industry called 'Telekom Healthcare Solutions'. This kind of approach of having a separate subsidiary for a key customer industry is quite unique in the telecom industry.
- **Infrastructure services and their optimization in terms of buying and selling core telecom ICT assets** (yes): The company's investor material contains its recent moves in which it has invested in telecom operations and bought out minority shareholders in its markets outside Germany. In Germany it has divested non-core activities that don't deal with core telecommunication or IT services including divestments of 'Scout24', 'Strato' and 'T-Online'. Other proofs of this kind of differentiation activities in Germany include joint

fiber rollouts with local telecom companies, sale and acquisition of wholesale fiber access.

- **Embedded communications** (yes): As described by STL Partners, this kind of approaches enable a wider use of voice, messaging and data by using them in new services. Deutsche Telekom offers this kind of communication services to its consumer and business customers. In the corporate customer services, the IoT service which combines connectivity and an IoT management solution is a good example of this kind of approach. The consumer-focused “Connect App”, an app that allows an automatic selection between the best available network options including the Wi-Fi network of partner company FON, is another good example of embedded communications.
- **3rd-party business enablers** (yes): Authorization, advertising, marketing, payments and APIs to non-core services are mentioned as examples of this kind of service enablement. There are developments like these in the most recent investor presentation that linked to national companies’ (NatCos) applications and platforms using APIs. However, in Deutsche Telekom’s case these national companies are its telecom subsidiaries in its non-German markets in Europe, not external partner companies. Using any telecom operator’s customer data in 3rd-party services would be difficult in Germany in which consumers have always been very conscious about their privacy. Additionally, the recent GDPR legislation has made the exploitation of telecom subscriber data by 3rd-party companies much more difficult. Authorization/authentication support by using telecom services is something that is supported by most telecom operators including Deutsche Telekom although this kind solutions are not mentioned in the latest capital markets day presentation or its consumer and corporate customer websites.
- **Own-brand OTT services** (yes): Deutsche Telekom provides OTT services such as ‘MagentaTV’, an app for mobile viewing of TV content and ‘MagentaMusic’, an app for live concert streams. ‘Magenta’ itself is a word that the operator uses to brand its consumer services in Germany.

4.2.3 Summary of classification of Deutsche Telekom strategy

Based on the analysis of Deutsche Telekom's services for consumer and corporate customers, its strategy is differentiation. The summary table shows that both the consumer and corporate customer portfolios are very diverse, and even contain some services that most of its peers are unlikely to offer such as MobileTV-based services (see Figure 21). There are tangible proofs of the use of a differentiation strategy also in the analyses of its investor presentation and services using the checklists of The Porter's Generic Strategies and STL Partners' adaptation of the Porter model.

Customer group	Service group	Service category	Yes/No
Consumer customers	Voice and connectivity	Mobile subscriptions	Yes
		Fixed broadband (DSL & Internet)	Yes
		Landline & fixed-line telephony	Yes
	TV, video and content in general	Traditional telecom operator TV subscriptions	Yes
		MobileTV	Yes
		Satellite TV	Yes
		Video on Demand	Yes
		Music services	Yes
	Smarthome	SmartHome platform and/or devices	Yes
	Security	Antivirus software	Yes
		Mobile phone insurance	Yes
	Others	Device sales	Yes
		Own mobile apps	Yes
		Home installation services and paid support	Yes
		Home pages, domains and online store platform	Yes
		Mobile subscriptions	Yes
Corporate customers	Voice and connectivity	Fixed broadband	Yes
		Landline & fixed-line telephony	Yes
		IoT (Internet of Things)	Yes
	IT & cloud services	Dedicated IoT / Machine to Machine (M2M) services	Yes
		IT services separated from basic brand	Yes
	Conferencing & collaboration	Cloud based software such as Microsoft 365	Yes
		Online conferencing	Yes
	Healthcare	Business collaboration	Yes
		Healthcare solutions	Yes
	Security	End user device security	Yes
		Network level security	Yes
		Data and e-mail	Yes
		Buildings	Yes
		Device sales	Yes
	Others	Business installation services and paid help	Yes
		Mobile device management for enterprises	Yes
		Home pages, domains and online store platform	Yes

Figure 21. Summary of Deutsche Telekom's products and services available in Germany

Additionally, Deutsche Telekom meets 15 of 16 characteristics [on these three checklists of Porter and STL Partners] of a differentiation strategy in the telecommunication industry.

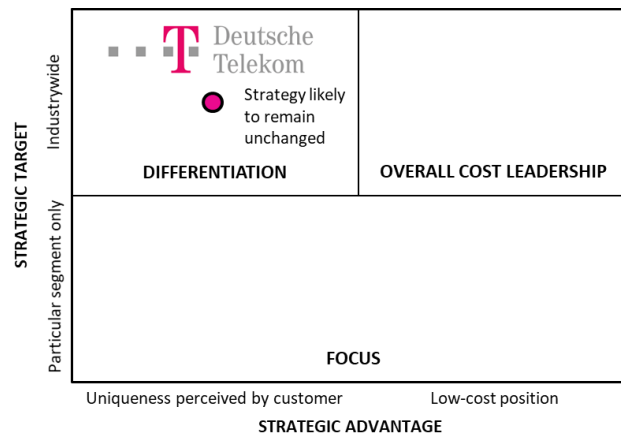


Figure 22. Deutsche Telekom's strategy using STL Partners' model

Based on the analysis, Deutsche Telekom's strategy is differentiation and it is unlikely the company is planning to do any considerable changes to its strategy in near future.

4.3 Evaluation of Deutsche Telekom Strategy Quality

In this part of the study, the operator's strategy is analyzed by using Michael Porter's three key principles of strategic positioning. These three principles of strategy are compared to findings and analysis in this study in terms of service webpages and investor material.

4.3.1 A source of strategic positioning: 'serving broad needs of many customers in a narrow market'

In this case (assuming that Deutsche Telekom is exploiting a differentiation strategy), a narrow market is the operator's clear focus on core telecom services, services close to core telecom services requiring connectivity services such as TV and IoT services and IT services. The analysis of its consumer and corporate customer services confirms that both of these portfolios are very broad. Additionally, the investor presentation does indicate that the company would be planning to drastically cut parts of its broad product and service portfolios. The investor materials state "Simplification of product portfolio" as one of its targets for the German market but this most likely deals with a plan to reduce the number of subscriptions, not a plan to divest any major operations and businesses in Germany. Based on its Key Messages' (see Figure 23.) about the German market, Deutsche Telekom seems to actually target further growth in Germany as it plans to lead

in customer experience, business productivity, and in mobile and fixed technologies. The only major plan to cut something is a decrease in basic operational costs by driven by automation, consolidation of management functions, flexible IT architecture and agile development skills. Hence, in operational terms it is clear that Deutsche Telekom is not planning to become less diversified in terms of the number of end-user services in its domestic market.

KEY MESSAGES

- | | |
|---|---|
| <p>01 MARKET WITH STABLE GROWTH
The German telecommunications market has returned to stable growth and Telekom is uniquely positioned within this market</p> | <p>05 LEAD IN TECHNOLOGY – MOBILE
Leveraging our backhaul capacity and unprecedented site expansion while increasing speed and capacity with massive MIMO, SD-RAN technology and enable innovative 5G services</p> |
| <p>02 LEAD IN CUSTOMER EXPERIENCE
Our stable top-line growth focuses on four key drivers: Expanding our converged household penetration, continuing more for more and multi-brand approach in mobile, leveraging our improved broadband networks and TV proposition, and continued low churn through best-in-class service</p> | <p>06 VALUE TRANSFORMATION
Indirect cost reduction of €750 mn by 2021 through automation, operational excellence, and retirement. Improvements supported by consolidating management functions, flexible IT-architecture and investing into agile development skills</p> |
| <p>03 LEAD IN BUSINESS PRODUCTIVITY
"Mittelstandsinitiative 2.0" will further contribute to our strong growth momentum in the B2B market with secure ICT solutions</p> | <p>07 FINANCIAL OUTLOOK
Continue our growth path of > 1% in revenue, +2–2.5% in adj. EBITDA and +4–5% in cash contribution with stable Cash Capex and Special factors (Cash)</p> |
| <p>04 LEAD IN TECHNOLOGY – FIXED
Finalizing our super-vectoring rollout and then reallocating our high budget towards fiber will yield strong broadband growth while addressing political concerns. Our proposed co-investment will ensure a fair risk reward</p> | |

Figure 23. Key messages by Deutsche Telekom concerning German market (Deutsche Telekom 2018)

4.3.2 A strategy requires you to make ‘trade-offs’ in competing – to choose what not to do

There is not a lot of evidence that state what Deutsche Telekom doesn't plan to do in recent investor materials. The only parts that mentions something like this are divestments of non-core assets that don't deal with non-core activities. Additionally, the divestments of these non-core assets were already completed in earlier calendar years. Another topic which shows Deutsche Telekom's clear focus on a certain topic is its plan to continue targeting the 'premium' segment which is a high-value consumer customer group for mobile services in Germany in terms of revenue and the number of SIM cards (see Figure 24.).

1 MOBILE: RELEVANT MARKET SEGMENTS ADDRESSED

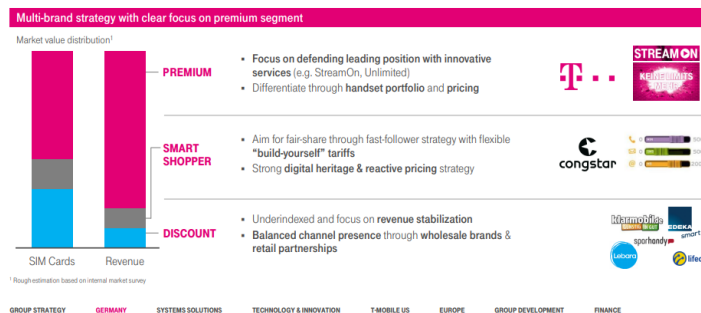


Figure 24. Deutsche Telekom targets 'premium' mobile customers in consumer segment (Deutsche Telekom 2018)

4.3.3 A strategy involves creating "fit" among a company's activities

As shown by the analysis in this study, Deutsche Telekom's services are very diversified in the consumer and corporate customer segments. The company currently plans to develop these customer group's portfolios. There are no plans to make the portfolios less diversified but to decrease the number of very similar options such as offering less speed options for broadband services. The company has also divested some non-core assets in the past as they don't deal with telecom or IT services. Its investor presentation also highlights the fact that it has a pool of high-end technology development people that enable operational excellence, product and service development.

4.3.4 Summary of evaluation

Despite the operator's investor and strategy materials do not directly state that it has chosen a differentiation strategy, Deutsche Telekom is exploiting that strategy based on the analysis of its products and services.

In terms of 'strategic positioning', Deutsche Telekom's differentiation strategy seems to be robust as the Deutsche Telekom has positioned itself clearly into the telecom sector businesses adjacent to it. Additionally, their telecom and adjacent industry portfolios are very broad.

The operator is also planning to divest non-core activities (including the media industry ones) in additions to this kind businesses that were already sold earlier. The company's

strategy is also putting more focus on the premium segment of the consumer customers in Germany as they are seen more attractive in terms of revenue generation. Hence, Deutsche Telekom's strategy clearly includes 'trade-offs' that intended to improve its operational focus on the telecom industry and increased levels of revenue generation.

The company is also creating a 'strategic fit' among its activities by developing its consumer and corporate customer portfolios. Deutsche Telekom sees itself as a player which is able to attract the best possible employees to operate the company and develop internal processes and customer-facing solutions.

Hence, based on the secondary research of the Deutsche Telekom website materials, the company seems to have a high-quality approach to its differentiation strategy.

4.4 Tele2

Tele2 is a Sweden-based telecom operator which provides mobile and fixed-line telecom services to consumer and corporate customers in certain European countries. In this case, the analysis is based on the product and service offering and other materials on its Swedish website. Strategy-related materials are collected from the company's investor pages in English. It is also worth noting that this study only covers Tele2 Sweden's website in terms of product and service analysis, excluding Com Hem which was merged into Tele2 in November 2018.

Tele2 is not an incumbent operator in Sweden, meaning that it is not a former telecom monopoly company set up by the local government. This is quite important to understand as incumbents typically have the best fixed-line network coverage and largest IT service portfolios due to government requirements and longer operational history.

4.4.1 Analysis of Tele2 products, services, marketing and strategy materials

Sweden is the home market of Tele2. Hence, it can be assumed that the Swedish website provides the best possible source to analyze Tele2's product and service portfolio (Tele2 2019).

Tele2's consumer customer products and services

In Sweden, Tele2 offers basic mobile voice, SMS and data services for its consumer customers. Its services also cover fixed broadband and fixed-line telephony (Hemtelefoni via telejacket).

In terms of non-connectivity services, Tele2's offering is very limited. For example, the company doesn't have its own brand TV services available. The lack of traditional tele-com operator TV services results likely from the sale of its cable TV network to Telenor. Tele2 resells Viaplay and HBO Nordic VoD (Video on Demand) services to its customers. Additionally, Spotify's music service, Nextory's audio and electronic books, and Readly's magazine app subscriptions are available via Tele2.

Tele2 Sweden doesn't sell smart home products to its customers.

In the security segment, a mobile phone insurance and security software are available to the Swedish consumer customers.

Tele2 Sweden sells various kinds of devices, such as mobile phones, tablets, routers, modems and accessories to consumers. The operator also offers three apps for the Swedish market. However, two entertainment-category apps are not showcased on the website in an easy way. These two entertainment apps are only easy to discover on the two major app store (non-Tele2) sites. The third app which deals with management of a customer subscription (Mitt Tele2) is easier to discover on the main Swedish site than the other two apps. Tele2 doesn't offer paid home installation services nor advanced phone support on technical questions. The company also have any consumer services dealing with home pages, domains nor online store platforms.

Tele2's corporate customer products and services

Tele2 Sweden offers all the basic connectivity solutions in the fields of mobile communication, fixed broadband and fixed telephony. In Tele2's case its mobile solution portfolio also includes IoT services with a recommendation for potential customers to user this type of service in certain types of industries.

The operator has listed certain types of basic IT services on its 'Tele2 Companies' (Tele2 Företag) page including solutions dealing with datacenters, service desk and consultancy. However, there is a very limited amount of information on this type of solutions on the Tele2 website and almost nothing about them in the company's investor materials. Hence, it is likely that Tele2 Sweden's basic IT service portfolio is limited or the importance of this type of services is low compared to the core telecom-based services. Tele2 also resells Microsoft 365 to its business customers in Sweden.

The company also has videoconferencing solutions that can be used on mobile and desktop devices. Tele2 also offers some tools that could be described as 'business collaboration' as part of its 'Unified Communications' products because they improve co-working, and file sharing between colleagues and different businesses.

Tele2 doesn't offer any healthcare industry specific solutions in Sweden. However, for its IoT services, the company sees the healthcare industry as one of the industries that could benefit from the use of IoT monitoring without disclosing any specific details.

In terms of security solutions, offer security software Android devices, firewall and DDoS solutions for the network-level security. Based on the Tele2 Sweden website, there seems to be no dedicated software solutions available for business data and e-mails. There is also no available solution dealing with physical security of buildings and premises.

In the Others category of services, Tele2 sells and leases mobile devices to its business customers. It is also worth noting that its mobile solutions support enterprise mobility management that enable larger customer organizations' IT departments to control users' mobile devices. However, the operator doesn't offer paid equipment installation and support services dealing. There are no solutions dealing with home pages, domains and online store platforms on its business customer webpages.

Analysis of Tele2 marketing communication approach for consumer customer services on customer webpages

Tele2 Sweden consumer customer webpages' service pages are very simple and don't highlight 'high-quality', 'speed' or 'customer satisfaction'. They are simply focused on the price and volumes, such as mobile data package sizes (see Figure 25).

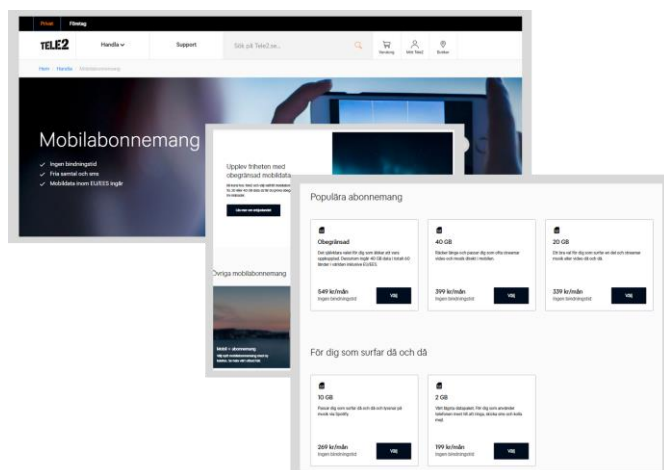


Figure 25. Tele2's consumer customer webpages are very simple (Tele2 2019)

The consumer customer pages are very simple and clear regardless of the type of the service in question. The service page structure is always the same: first they include the conditions and prices in a very simple format, and the latter part contains general information on the benefits and practical applications of the service choice.

Between 2006 and 2016, Tele2 was using 'Frank the Sheep' in their advertising (Resume 2016). Tele2 introduced Frank to reposition the company as the low-price leader in Sweden.



Figure 26. 'Frank the Sheep' character used in Tele2 advertising (Tele2 2019)

According to Forsman & Bodenfors, Swedish advertising agency, the fictional 'Frank the Sheep' character was to be "Fun and easy to remember" (see Figure 26.) and it was

used as Swedes commonly pronounce 'cheap' and 'sheep' very similarly (Forsman & Bodefors 2019). There were several Frank and 'cheap'-themed ads by Tele2 that were popular and generated a lot of discussion on Swedish blogs. The Frank adds were especially focused on the Swedish consumer customer segment.

However, excluding the comments about campaign prices, the consumer customer pages no longer mention 'cheap' or 'low prices' in relation to its services.

Analysis of Tele2's marketing communication approach for corporate customer services on customer webpages

The service pages for Tele2's corporate customers bear similarities to the consumer customer ones as they are very much focused on highlighting the key details and prices of the services.



Figure 27. Tele2 webpages for corporate customers are also very simple (Tele2 2019)

The corporate customer webpages are very similar in design compared to the consumer ones. The services are grouped by service type and device sales are split by device manufacturer for both customer types.

Analysis of Tele2's investor materials

Tele2 has recently published capital markets day reports. Hence, the analysis of the investor materials is based on 'Tele2 Annual Report' 2018 and 'Interim Report Q3 2019' (Tele2 2019). The lack of an annual capital markets day or investor day materials does not necessary mean anything in the telecom industry – this type of non-regulated publications is not produced by every large telecom operator on a yearly basis.

As discussed earlier in the Tele2 analysis, the company has recently tried position itself as a low-cost telecom services provider. However, there are indications in the 2018 annual report that the company is trying to create a slightly different image for itself.

The Baltic Sea region, and Sweden in particular, represents the most important part of our company due to its size and potential. To increase transparency, and to make it easier for the market to track our progress, we have introduced a new segment structure, separating Sweden into a consumer and a business segment. These two segments have different dynamics and require different strategies.

In the Sweden Consumer segment the main focus is on driving Fixed Mobile Convergence (FMC) through the more-for-more strategy, with an aim to increase customer satisfaction. We expect this to result in revenue synergies having a positive effect on adjusted EBITDA of SEK 450 million annually, to be reached in the next five years. We have already started executing on this by offering benefits to existing customers who have both mobile and fixed services, and by launching Com Hem mobile. With these first offers in the market we can now fine-tune the strategy over time and learn how to drive FMC in a profitable way, reduce churn and drive ASPU through higher customer satisfaction. This will build a strong and resilient consumer business in Sweden that can grow faster than the market.

Figure 28. Tele2 has a 'more-for-more' strategy in Sweden (Tele2 2019)

Figure 28. is a screenshot of the first part of the 2018 annual report in which the group President and CEO Anders Nilsson explains his key takeaways. There is a clear statement in which Mr. Nilsson says that the company's focus is to drive Fixed Mobile Convergence (FMC) in the Sweden Consumer segment through a more-for-more strategy. A more-for-more strategy aims at customer higher prices which Tele2 tries to achieve by improving customer satisfaction.



Figure 29. Tele2 describes itself as a full-service operator in the consumer segment (Tele2 2019)

In the review of its Swedish consumer business in the 2018 annual report (see Figure 29), Tele2 claims to have become a full-service provider of mobile, fixed and digital entertainment due to the acquisition of Com Hem.

Sweden Business		2018	2017	Growth
SEK million				
Revenue		6,417	6,425	0%
of which end-user service revenue		3,979	4,103	-3%
Adjusted EBITDA		1,373	1,383	-1%

2018 in brief
 Tele2 continued with its strategy to be a challenger with a broad service offering, following the acquisition of TDC at the end of 2016.
 During the year, Tele2 won significant new and extended contracts with customers in both the private and the public sector, such as ICA, Siemens, PostNord, Lantmännen, Handelsbanken and the cities of Gothenburg and Uppsala.
 At the end of the year, the overall end-user service revenue showed signs of stabilization despite continued price competition. The mobile business returned to growth fueled by an 8 percent increase in the number of mobile RGUs, reflecting continued strong customer momentum, whereas the price erosion in the legacy fixed segment put a drag on the total end user service development.

2019
 Tele2 aims to continue the positive momentum in mobile customer intake in the business segment and monetize mobile data through unlimited data offers. The business is going through a period of restructuring in order to focus on higher margin, network-based ICT services, with an aim to make structural cost savings and improve revenue growth trends.

Figure 30. Tele2 claims being a challenger in the business segment (Tele2 2019)

On the corporate customer front, Tele2 Sweden claims to have a broad service offering (see Figure 30) despite being a challenger in the market. However, in the telecom, IT and other industries, the challengers do not typically have a broad service portfolio, but they are likely focused on some niche in their industries. Another interesting thing in the review of 'Business Sweden' is the lack illustration or commentary of different types of services. The review is very focused on the typical connectivity type of services, such as mobile subscriptions.

The main operational highlights of Tele2's Interim Report Q3 2019 (see Figure 27) and Annual Report 2018, highlight the same targets including the more-for-more strategy in the Sweden Consumer segment and the lack of the commentary of non-connectivity services in Sweden Business [Sweden B2B].

Tele2 is becoming a true integrated challenger

Win Swedish household through FMC	<ul style="list-style-type: none"> Increasing penetration of FMC bundle benefits, now reaching 141k FMC-customers Mobile pricing as a new growth driver – first step taken with frontbook adjustment Executing more-for-more strategy with Tele2 rebranding, family offer and new data buckets
Sweden B2B turnaround	<ul style="list-style-type: none"> Work in progress as market price pressure continues LE: focus on private sector, take high-margin contracts and cut cost SME: take market share, reduce churn, improve mobile offering and leverage FMC
Build on the momentum in the Baltics	<ul style="list-style-type: none"> Sustained momentum with 10% growth in end-user service revenue and 6% in underlying EBITDA excluding IFRS 16
Cost transformation	<ul style="list-style-type: none"> Continued delivery on cost synergies with an impact of SEK 150m in Q3 (SEK 300m YTD) Annualized run-rate of SEK 650m at the end of Q3 2019 Year-end target raised to run-rate of SEK 750m

Figure 31. Operational highlights of Tele2 in Q3/2019 (Tele2 2019)

These operational highlights include a newer topic of rebranding in the Swedish consumer segment. This deals with the company target of “establish Tele2 as a premium brand for the household”.

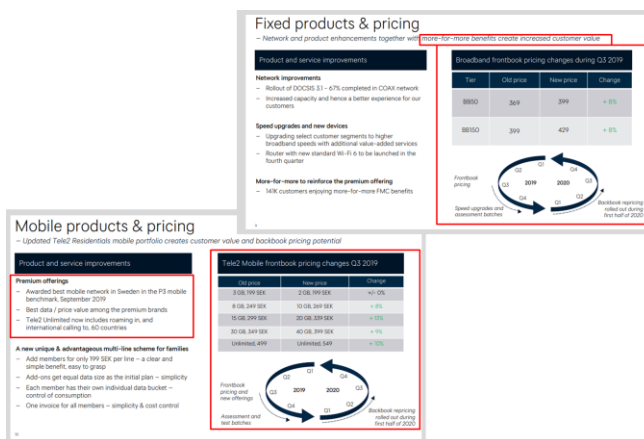


Figure 32. Sweden Consumer highlights 'premium offering' and increased prices (Tele2 2019)

As seen in Figure 32, Tele2 Sweden shows how it has recently increased prices for its fixed and mobile consumer prices. The Q3/2019 presentation also highlights how the operator reviews its pricing strategy based on quarterly speed tests, enabling it to increase prices after successful tests. This part of the presentation also mentions its premium offering which has the “best data / price value among the premium brands”. The ‘more-for-more’ strategic plan is also mentioned once again.

Sweden Business slides are considerably different compared to the consumer ones as they are focused on the challenging market conditions and there are virtually no plans to increase corporate customer prices (see Figure 33). There is nothing about the “diverse

portfolio” that was mentioned in Annual Report 2018 that was published earlier in 2019. All Sweden Business KPIs and highlights deal with connectivity types of services, and do not include IT or other more diversified services [for a telecom operator].

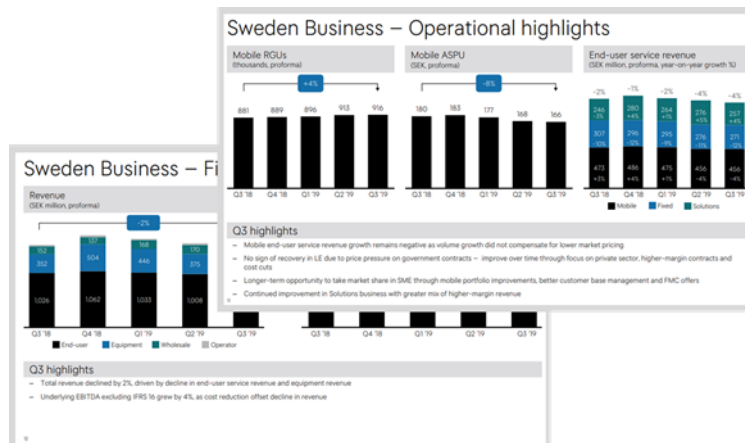


Figure 33. Sweden Business highlights connectivity services (Tele2 2019)

Additionally, Tele2’s Q3 Interim Report 2019 emphasizes the company’s “excellent Radio Access Network’ in Sweden (see Figure 34). This quite interesting as network excellence is usually is associated with mobile operators that are exploiting a differentiation strategy in the telecom industry.

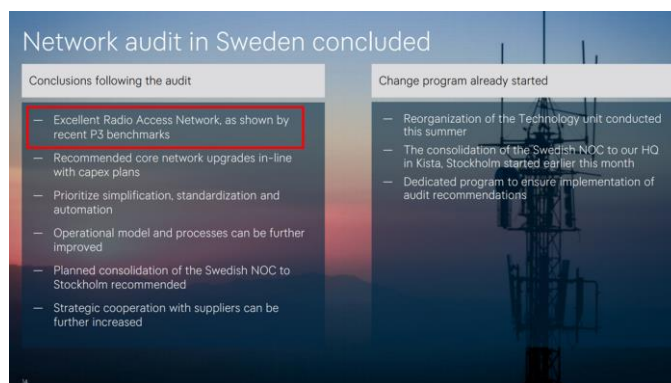


Figure 34. Results of Tele2 Sweden’s mobile network audit (Tele2 2019)

The Tele2 group is very focused on keeping its costs down including its capital expenditure (Capex) (see Figure 31). Tele2 claims its Capex has a low capital intensity compared to the telecom industry in general.

Growth and cost initiatives drive cash flow

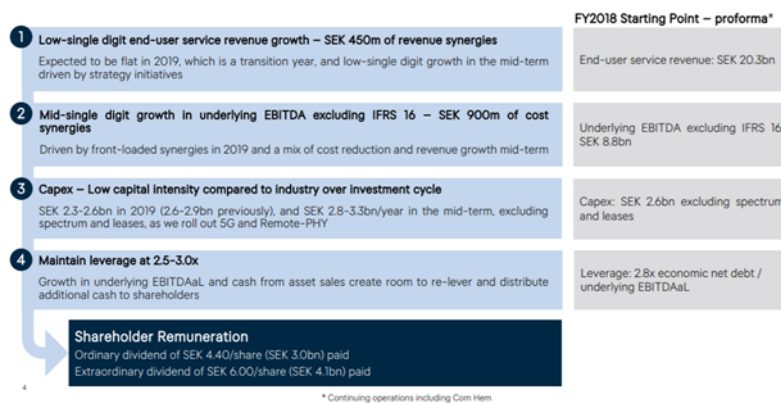


Figure 35. Tele2 heavily focused on avoiding costs (Tele2 2019)

The difference between the investor materials of Tele2 and Deutsche Telekom is considerable. Tele2 provides very little information on its plans to implement the key parts of its strategy such as ‘more-for-more’ in the consumer customer segment. Deutsche Telekom’s interim reports and investor day materials are very detailed for each of its key markets, and there are tangible examples how strategic changes will be implemented. For example, Tele2 Annual Report 2019 has 93 pages in total of which only three pages contain some information on its strategy, operations and targets.

4.5 Classification of Tele2 Strategy

Classification of Tele2’s strategy is based on the analysis of its consumer and corporate customer services and latest investor materials. Tele2 has a very limited portfolio in Sweden and there are many indications on the its customer-facing website that highlight its low prices. Additionally, the company indicates in its strategy pages that it “aims to be the most cost-efficient operator in the industry (see Figure 36). Based on these preliminary findings, it can be assumed that Tele2 strategy in Sweden is ‘overall cost leadership’.

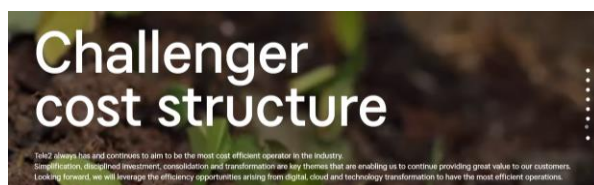


Figure 36. Tele2 highlights its cost structure (Tele2 2019)

Additional evidence of the 'overall cost leadership' strategy include its simplified offering especially in the mobile services for the consumer customers and the lack of news dealing with non-connectivity services for the corporate customer segment.

4.5.1 Classification using Porter's original

The 'Commonly required skills and resources' list for an overall cost leadership strategy includes:

- **Sustained capital investment and access to capital** (yes): Tele2 recent interim materials emphasize that it has a low capital intensity for capital expenditures compared to its industry peers.
- **Process engineering skills** (yes): There is not too much about process and engineering related information available in recent investor materials. However, the operator is planning to further improve its operational model and processes in operation of its Swedish mobile network.
- **Intense supervision of labor** (yes): There is virtually nothing about the supervision of the labor in the operator's reporting.
- **Products designed for ease in manufacture** (not possible to assess): In this case the services offered by Tele2 are very clearly and simply shown on the consumer and corporate customer webpages. The services of Tele2 are likely easy to sell for its sales people and easy to purchase for potential buyers due their simplified structure.
- **Low-cost distribution system** (yes): In the telecom, this could mean using the online sales channel extensively or an efficiently run network. In case of the network argument, it can be that Tele2 Sweden is planning to prioritize simplification, standardization and automation – this could at least be a way to a low-cost mobile network. However, Tele2 materials do not really have any direct notes addressing this topic.

The 'Common organizational requirements' list for an overall cost leadership strategy includes:

Tight cost control (yes): There is clearly a tight cost control policy which affects every part of the Tele2 group. The word 'cost' can almost be seen on every page or slide of Tele2 investor material.

Frequent, detailed control reports (yes): Tele2's control reports (part of investor reporting) are not exceptionally detailed compared to other telecom operators. However, its control reports are much more detailed than its other kind of reporting such as product development, customer success stories, and non-financial and non-operational KPIs.

Structured organization and responsibilities (not possible to assess): It is not possible to evaluate Tele2's organization and responsibilities based on the company's website. However, structure and management-wise it has a typical structure for a telecom operator.

Incentives based on meeting strict quantitative targets (not possible to assess): Based on the analysis of its investor material, Tele2 does not have special incentive schemes for management (excluding top executives) or employees.

4.5.2 Classification using STL Partner's adaptation

Based on the Tele2 target of always the most cost-efficient and the Porter descriptions, the company's strategy is overall cost leadership. According to STL Partners, there are two viable strategies in the telecom industry: differentiation and overall cost leadership. The typical characteristics of the differentiation strategy in the telecom industry are used to confirm that Tele2's strategic choice is overall cost leadership. Hence, if typical characteristics of telecom differentiation are not visible in Tele2 materials, it is seen as an indication of the use of 'overall cost leadership'.

- **Core services such as connectivity and basic IT services have better design, exploit analytics and data** (no): Excluding the consumer video services, Tele2's services are clearly focused on connectivity and lack consumer-end smart features such as analytics. The IT services offered by Tele2 are very simply based on their description pages. Additionally, the share of IT services as part of Tele2 revenue or general operations is likely to be small as there is not a lot of information on them in the company's investor reporting.

- **Vertical industry solutions** (no): Tele2 corporate customer webpages lack customer-industry-specific solutions and all the solution pages are made for a generic type of customer.
- **Infrastructure services and their optimization in terms of buying and selling core telecom ICT assets** (yes): Tele2 has recently acquired a major company in Com Hem. Additionally, the company has had a mobile network sharing partnership with another Nordic operator Telenor since 2009. Hence, based on this part of the checklist Tele2 could have a differentiation strategy.
- **Embedded communications** (no): Tele2 has a very limited number of services that enable a wider use of voice, messaging and data if the basic videoconferencing solutions are excluded. The basic corporate customer pages do not also showcase solutions which would make customer systems smarter with the integration of connectivity and analytics into them. There are also no examples of any advanced use of embedded communications among its consumer customer services.
- **3rd-party business enablers** (no): The webpages and recent investor reporting of Tele2 Sweden do not mention that 3rd-party business enablers such as authorization, advertising, marketing, payments or APIs could be linked to its basic services.
- **Own-brand OTT services** (no): Tele2 Sweden does not have any OTT services on its own brand webpages. However, Com Hem, which will be merged into the Tele2 group and brand at some point, has one OTT service. This OTT service is called 'Com Hem Play' which is a consumer mobile app for TV content.

4.5.3 Summary of classification of Tele2 strategy

The pre-analysis hypothesis for the strategy of Tele2 was 'overall cost leadership'. The actual analysis of Tele2's website and investor materials clearly validate this hypothesis as the company frequently highlights its low prices and operational efficiency. Additionally, the operator has used marketing strategies including the 'Frank the Sheep' which portrayed an image about low-cost or cheap services. Tele2-branded consumer

and corporate customer portfolios in Sweden are not very diverse (Figure 37) which showing typical characteristics of an overall cost leadership strategy.

Customer group	Service group	Service category	Yes/No
Consumer customers	Voice and connectivity	Mobile subscriptions	Yes
		Fixed broadband (DSL & Internet)	Yes
		Landline & fixed line telephony	Yes
	TV, video and content in general	Traditional telecom operator TV subscriptions	No
		Mobile TV	No
		Satellite TV	No
		Video on Demand	Yes
		Music services	Yes
	SmartHome	SmartHome platform and/or devices	No
	Security	Anti-virus software	Yes
		Mobile phone insurance	Yes
	Others	Device sales	Yes
		Own mobile apps	Yes
		Home installation services and paid support	No
		Home pages, domains and online store platform	No
Corporate customers	Voice and connectivity	Mobile subscriptions	Yes
		Fixed broadband	Yes
		Landline & fixed line telephony	Yes
	IoT (Internet of Things)	Dedicated IoT / Machine to Machine (M2M) services	Yes
	IT & cloud services	IT services separated from basic brand	Yes, but likely lesser extent
		Cloud based software such as Microsoft 365	Yes
	Conferencing & collaboration	Online conferencing	Yes
	Healthcare	Business collaboration	Yes, but likely lesser extent
	Security	Healthcare solutions	No
		End user device security	Yes
		Network level security	Yes
		Data and e-mail	No
		Buildings	No
	Others	Device sales	Yes
		Business installation services and paid help	No
		Mobile device management for enterprises	Yes
		Home pages, domains and online store platform	No

Figure 37. Summary of Tele2's products and services available in Sweden

While comparing 'Porter's list of commonly required skills and resources in terms of overall cost leadership' to Tele2 materials, it is not possible to conclusively confirm whether Tele2 is exploiting this strategy. However, if Tele2 materials are compared to STL Partners' list of typical characteristics of telecom differentiation, it can be stated that there are almost similarities. Hence, this confirms the use of the 'overall cost leadership' strategy.

Launching the next phase of business transformation

With a more focused geographical footprint and the Com Hem integration completed we can now run Tele2 in a more efficient way. We changed the organizational structure to better reflect the current asset portfolio and strategy, shrinking the group structure and setting Tele2 up as a flatter organization.

With all this progress we have completed phase one of the Tele2 transformation, turning Tele2 into an integrated operator. This enables us to begin the next phase which starts with our new vision to become the smartest telco in the world, creating a society of unlimited possibilities. For us this means radical simplification and customer focus. It means doing things simpler within a flat and fast organization, always with a focus on simplification and delivering value for our customers. Everyone should have a clear mandate and accountability, within a fact-based and performance-driven operation. This mindset allows us to quickly adapt to the world around us, and continuously modernize our operations. It also means working with distinctly positioned leading brands, providing our customers with smart combined offerings for mobile connectivity, broadband, and next generation TV and play services, covering the entire household and being an outstanding partner to businesses and the public sector.

In future the integration of Com Hem's fixed-line operations enables Tele2 to become a more diversified telecom operator.

In the past, the focus has been considerably more on consumers. In future, leading brands, businesses and the public sector could become a more important customer group.

Figure 38 Details about Tele2's near future plans in terms of strategy (Tele2 2019)

However, it looks like that Tele2 might be trying to move towards ‘differentiation’ as its top management has stated their ‘more-for-more strategy’ which aims at customer higher prices which Tele2 could achieve by improving customer satisfaction (see Figure 38). Additionally, the operator seems to try increasing its revenue from business customers, especially in the SME segment, according to its annual report for year 2019 (Tele2 2020).

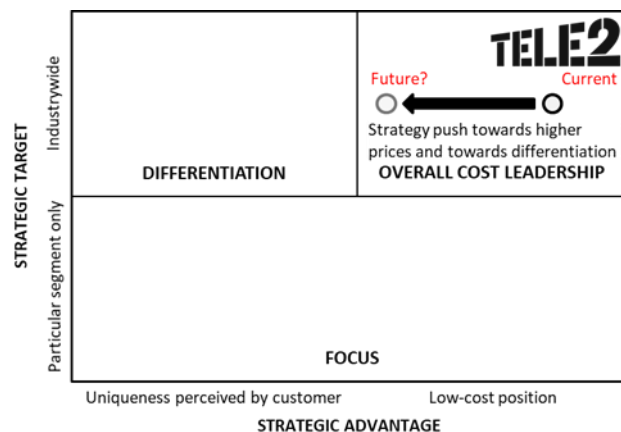


Figure 39. Tele2's strategy using STL Partners' model

Figure 39. shows that Tele2's current strategic positioning is overall cost leadership. However, based on some top management targets, the telecom operator is trying to increase prices by improving customer service etc. This could also mean that Tele2 could be taking further steps towards differentiation but it is likely to remain in the overall cost leadership classification in near future.

4.6 Evaluation of Tele2 Strategy Quality

This section evaluates the quality of Tele2's strategy in Sweden. The evaluation is done by using materials on its Swedish webpages and investor content, and comparing them to Michael Porter's sources of strategic positioning.

4.6.1 A source of strategic positioning: 'serving few needs of many customers'

Most telecom of operators, such as Deutsche Telekom, exploit a differentiation strategy serving broad needs of many customers in a narrow market by providing customers with

a full range of telecom services. However, Tele2's currently is very focused on provision connectivity products to consumers which is likely to be its clearly-largest customer target group. They also serve businesses but this customer group's importance is probably much less significant at the moment compared to the consumer segment. Hence, Tele2's strategic positioning is 'serving few needs of many customers' in which these few needs are basic telecom connectivity services and sales of mobile devices.

4.6.2 A strategy requires you to make 'trade-offs' in competing - to choose what not to do

As discussed earlier, Tele2 reporting is heavily focused on reporting KPIs. Hence, investor materials provide a very limited view on the company's strategic decisions including the areas in which it doesn't plan to compete.



Figure 40. Tele2 management commentary on the Swedish B2B strategy (Tele2 2020)

Figure 40. contains one of the very rare comments in which Tele2 is making statements on what are the key focus areas for it. In this case, Tele2 has announced that it has separated its SME and Enterprise units to gain 'more efficient and focused setup'. The operator has also commented it sees more potential in the SME segment. Although these comments do not directly say Tele2 is not focusing on the Enterprise customers, it can be at least seen as an indication of having more focus on the SME segment. Having more focus on the SME customers is likely a good strategic choice for Tele2 as this customer group's telecom needs deal mostly on connectivity services in which Tele2 is a relatively strong player. Enterprise services bought from a telecom operator typically include basic IT, cloud, security, integration and consultancy services in which Tele2 is not traditionally very strong. One of thing that does not necessarily sound very logical in its investor communication includes talk about price increase targets [its More-for-more strategy] in Sweden and then also talking about front-book price adjustments [discounts for new customers]. However, Tele2 investor materials are not completely in line with

what is shown to the customers on its webpages. Additionally, some of top management comments in comparison to Tele2's current service and customer portfolio provide mixed signals.

4.6.3 A strategy involves creating fit among the company's activities

In terms of creating a fit that helps Tele2 implement and continue its strategy, there's also very limited evidence available in the company's general website and investor materials. However, being cost-efficient, slimming down overhead and creating a flatter organization are among the topics that have been found in the recent investor materials, such as annual reports and investor materials. These initiatives of making operations more efficient have dealt especially about the Swedish market.

OUR VISION	Smartest telco in the world creating a society of unlimited possibilities				
Internal Control Integrated Framework	Control Environment	Risk Assessment	Information & Communication	Control Activities	Monitoring
	<ul style="list-style-type: none"> – Assigned responsibilities – The Tele2 Way – Tele2's Code of Conduct 	<ul style="list-style-type: none"> – Strategic risks, – Operational risks – Financial and Reporting risks – Compliance risks 	<ul style="list-style-type: none"> – Policies & Procedures – Trainings – IT tools 	<ul style="list-style-type: none"> – Process controls – Period-end closing activities – IT General Controls 	<ul style="list-style-type: none"> – Management review – Central Functions – Internal Audit
OUR VALUES	Fearless	Open	Cost-Efficient	Reliable	Flexible

Figure 41. Tele2 Vision and Values (Tele 2020)

As we can see in Figure 41, the Tele2 Values include being 'cost-efficient'. There is no clear definition what is 'cost-efficient' but it could possibly be seen as providing 'low-cost' services to customers and having an efficient organization which is becoming more efficient every year due to digitalization etc.

Tele2 Sweden is definitely good at providing affordable and fast [as per independent mobile network speed tests] telecom connectivity services in Sweden. However, there's almost no tangible evidence showing that internal operations are becoming more efficient. One way to look at the efficiency at Tele2 is compare the number of employees by year.

FTEs by category	2016	2017	2018	2019
Sweden	2147	2624	2864	3092
Change y/y in %		22 %	9 %	8 %
Group in total*	4792	4565	4405	4583
Change y/y in %		-5 %	-4 %	4 %
Managers in total group, %	13 %	13 %	12 %	N/A

**continuing operations*

Figure 42. Tele2 employee numbers from recent annual reports (Tele2 2017, 2018 and 2019)

Figure 42. contains select employee figures collected from recent annual reports (Tele2 2018, 2019 and 2020). This table includes the total number of employees by year for Sweden, Tele2's Group's continuing operations and the share of managers within the group. Please make a note that these figures exclude discontinued operations such as divestments dealing with Russia, Croatia, the Netherlands and Kazakhstan. The acquired Com Hem's business, which was acquired in early 2018, is included in the figures as of 2018 as the transaction was completed in the second half of 2018.

None of three figures the dealing with the number of employees do not support Tele2's continuous messages about making the organization more efficient or flat. Excluding year 2018 in which Com Hem was acquired, the Tele2 organization does not seem be becoming slimmer or at least remaining at the previous years' levels as the number of employees has been increasing as of 2016 and the share of manager employees is virtually unchanged.

4.6.4 Summary of evaluation

Tele2's customer-facing webpages provide a clear picture of cost-efficient telecom services that are very clearly focused on connectivity services. These facts make it clear that Tele2 has chosen 'overall cost leadership' as its strategy.

However, Tele2 investor materials are not completely in line with what is shown to the customers on its webpages. Additionally, some of top management comments in comparison to Tele2's current service and customer portfolio provide mixed signals.

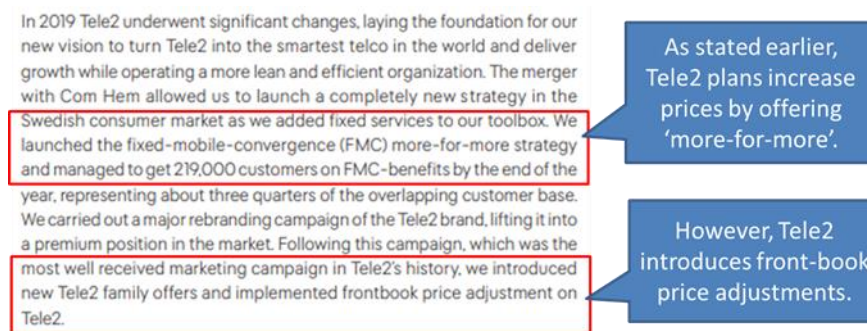


Figure 43. Tele2 Group CEO comments on future plans (Tele2 2020)

In Figure 43., there are comments by Tele2 Group CEO Anders Nilsson in which he confirms to:

1. continue to keep the organization 'lean and efficient'
2. aim to increase general prices by offering fixed-mobile convergence services as part of their 'more-for-more' strategy
3. to introduce front-book price adjustments, meaning special discounts to new customers.

If Tele2 is really planning to successfully increase prices which in this case likely mean ARPU (average revenue per user), the idea offering special discounts to new customers doesn't necessarily work too well as it could just add more pressure into general market prices. Front-book price adjustments also sound very similar to basic low-cost play that Tele2 has been doing from the very beginning and does not correlate well with Tele2's possible ambitions to gradually move towards 'differentiation' from 'overall cost leadership'.

As the quality of a strategy in this study is evaluated based on the comparison of customer webpages and investor reporting, it can be said that Tele2's strategy is not robust. Tele2 has positioned itself into an overall cost leadership category but the investor materials do not fully support that as top management talks about prices increases and new customer discounts almost in the same sentence. In terms of making trade-offs in which areas not to compete, Tele2 is not clearly stating these areas for Sweden. However, focusing more on the Swedish SME segment compared to enterprise customers can be seen as making at least a partial trade-off. The final element

in the Tele2 analysis was checking whether the company has been able to create strategic fits in its activities. Tele2 has managed to create one key fit in operations by providing fast mobile network speeds. However, there is a key fit that Tele2 seems to be unable to create based on the number of employees as the FTE (full-time equivalent) number has been steadily increasing since 2016 in Sweden and in the Tele2 Group overall. Additionally, the share of manager employees is virtually flat between 2016 and 2019. Minor declines or even flat developments in these numbers would show that the telecom operator with an overall cost leadership strategy has been successful in making operations slimmer due to new technology introductions or working more efficiently for some other reasons. This inability to make internal operations more efficient can be seen as a slightly negative result in this analysis as Tele2 has been talking about a more efficient organization for a while.

In brief, Tele2 has an overall cost strategy in which focuses on provision of cost-efficient telecom products and services to consumer and business customers, thus serving few needs of many customer as defined by Porter. Affordable prices and efficient operations are clearly communicated to end-customers as the strategy of the choice mandates. Additionally, there are indications prices are kept low, operations are efficient, and the mobile network is fast and efficient to operate. Porter's most of the commonly required skills and organization requirements for this kind of strategy are also met in terms of communication in customer-facing and investor materials. However, Tele2 could be said to challenges to meet one of the criteria used in this analysis to evaluate the robustness of the strategy as strategy involves creating fit among a company's activities. Tele2 could be seen having difficulties to maintain operations efficient because their Swedish organization has been growing in terms of the number of employees excluding the mergers and acquisitions, and divestments. Other weaker signals include the mixed messages from top executives stating that there's a need for price increases and discounts almost at the same time, and they are planning diversify the company's portfolio in Sweden.

Hence, it can be said that Tele2's strategy is robust for a large part of the analyzed criteria. However, based on some contradicting messages in their investor materials, Tele's strategy is not robust on the overall level.

4.7 Vodafone

Vodafone provides mobile and fixed-line telecom services to consumer and corporate customers in many European countries. The company is based in the UK. The analysis is based on the product and service offering and other materials on its UK website. Strategy-related materials are collected from its investor relations content.

4.7.1 Analysis of Vodafone products, services, marketing and strategy materials

Similar to Deutsche Telekom and Tele2, Vodafone's headquarters country, the UK, is used for the analysis of Vodafone.

Vodafone's consumer customer products and services

In the UK, Vodafone's consumer services include mobile voice, SMS and data services for its consumer customers. Vodafone also offers fixed broadband connections. Based on the company's investor materials, it also has fixed-line telephony [voice] customers in the UK but there is not a special service page for this type of services that can be accessed using the basic website navigation layout for consumer customers (see Figure 44). The reason for not including a dedicated fixed-voice service page could mean that Vodafone is not actively trying to attract new customers for this legacy service called 'Vodafone Home Phone'.

TV & fixed line voice

		TV customers (thousands)							
		Q1 18/19	Q2 18/19	Q3 18/19	Q4 18/19	Q1 19/20	Q2 19/20	Q3 19/20	Q4 19/20
Europe									
Germany		7 660	7 630	7 611	7 581	7 543	13 712	13 639	13 578
Italy		64	78	95	115	126	174	208	235
UK		-	-	-	-	-	-	-	-
Spain		1 328	1 262	1 275	1 311	1 287	1 307	1 363	1 404
Portugal		585	579	596	614	628	646	664	679
Other Europe		119	128	138	142	147	2 279	2 291	2 387
Total		9 736	9 677	9 715	9 763	9 731	18 118	18 165	18 283
Memo: Other businesses									
Netherlands: VodafoneZiggo		3 928	3 919	3 903	3 885	3 883	3 874	3 870	3 864

		Fixed line voice customers (thousands)							
		Q1 18/19	Q2 18/19	Q3 18/19	Q4 18/19	Q1 19/20	Q2 19/20	Q3 19/20	Q4 19/20
Europe									
Germany		6 688	6 741	6 802	6 875	6 882	10 344	10 411	10 471
Italy		2 769	2 815	2 880	2 958	2 974	2 984	3 010	3 029
UK		435	479	525	575	606	667	687	751
Spain		3 370	3 282	3 247	3 187	3 118	3 065	3 011	2 960
Portugal		665	679	697	717	732	750	766	744
Other Europe		1 068	1 066	1 075	1 085	1 267	1 967	1 982	1 988
Total		14 995	15 062	15 226	15 397	15 579	19 777	19 867	19 943

Figure 44. Screenshot from Vodafone's 'TV & fixed line voice' subscriber figures (Vodafone 2020)

In terms of TV, video and content, it is quite interesting to see that Vodafone UK's selection of these services is very limited. It does not offer traditional telecom operator TV services via the fixed-line delivery method. The lack of these services is confirmed by the UK subscriber data and Vodafone top management comments stating that it does not plan to launch its own Vodafone-branded TV services until it has managed to develop its fixed network in the country to its target level (Vodafone and Digital TV Europe 2020). Vodafone UK does not offer TV content via a MobileTV or satellite delivery. Video on demand content is available based on YouTube Premium, NOW TV Entertainment Pass and Amazon Prime Video which are available as add-ons and bundles for mobile services. Additionally, streaming music service Spotify is available to Vodafone UK mobile subscriptions.

'V-Home by Vodafone' is the company's smart home platform. In the UK, Vodafone's smart home platform only includes one service called 'Safety Starter Kit' which provides home security based on cameras, sensors and sirens. 'Vodafone Secure Net' in turn provides antivirus security for mobile devices and computers. Additionally, Vodafone customers can also insure their mobile devices in case of loss, theft, damage and breakdown.

Vodafone UK also sells all kinds of mobile devices and smart watches to consumer customers. In addition to a basic customer service app, the telecom operator only offers one own app called 'DreamLab' to its customers. DreamLab enables researchers to utilize smartphones for virtual supercomputing capacity in cancer and COVID-19 research.

Vodafone UK does not provide its consumer customer with dedicated paid support and broadband/TV installation services and products dealing with home pages, domains and online store platform.

Vodafone's corporate customer products and services

Unsurprisingly Vodafone UK business' offering includes mobile and basic broadband services. It also provides its business customers with fixed-line voice services.

Vodafone is in the low-end price category in consumer and business broadband products based on their own website and there seems to be a clear price difference between

Vodafone and its UK peers (see Figure 45). In terms of consumer broadband pricing, Vodafone and Sky are the cheapest providers. Hence, it is quite interesting to see that Vodafone seems to have very different strategies at least in consumer and business broadband pricing. The different consumer and business pricing strategies could result from different market strategies or market positions.

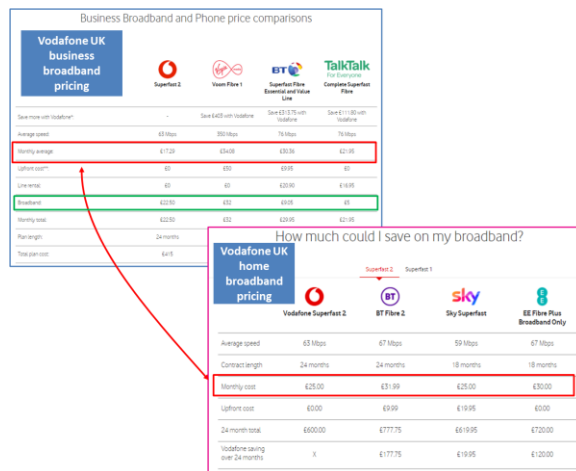


Figure 45. Vodafone UK's home and business broadband pricing (Vodafone 2020)

Please note that the 'Average fee' is used to compare actual broadband pricing. Nominally, BT's business broadband is cheapest at £9.05 compared to Vodafone's £17.29 a month. However, BT's also charges a mandatory monthly line rental fee of £20.90, making it clearly more expensive than Vodafone's monthly fee [=monthly average].

Vodafone UK offers a number of IoT solutions for its business customers. These include COVID-19 heat detection camera, asset tracking, M2M, smart sensors, smart buildings and connected security cameras.

Compared to Deutsche Telekom's German operations Vodafone UK's IT service portfolio for businesses is quite limited. However, it is considerably broader than Tele2 Sweden's list of services. Vodafone's IT and business services in general are available to all company sizes but there seems to be more focus on the public/government sector as that vertical has its own UK website. There is also a global Vodafone's IT services site for multinationals but it is not focused on the UK. Vodafone also offers basic cloud services including Microsoft 365 in the UK.

Vodafone 'One Net' bundles include tools for business collaboration based on Cisco WebEx. Vodafone's portfolio includes various video conferencing tools based on Cisco and Polycom products and its own VMR (Virtual Meeting Room) product.

As already stated earlier, Vodafone UK has a dedicated website for public sector IT which includes 'Health' as one of the six focus verticals. Compared to Deutsche Telekom's healthcare portfolio which contains devices, databases, cloud and telemonitoring solutions, Vodafone's offering based on basic connectivity products such as IoT and mobile subscriptions is very simplified (Figure 46).



Figure 46. Vodafone's Health offering mostly based on connectivity solutions (Vodafone 2020)

Vodafone offers its UK business customers with a Trend Micro security product which provides security for laptops, desktops, mobile devices and servers), web browsing, e-mail and cloud collaboration services. The operator also provides security services that deal with wider-level cybersecurity threats such as corporate networks and cloud platforms. Vodafone's IoT portfolio has 'Smart Wireless Camera' which provides physical security and surveillance with a focus on outdoor environments.

The other types of service that Vodafone UK offers to its business customer includes sales of mobile handsets, tablets and routers. There are also mobile device management services ranging from ones from device manufacturers, such as Apple and BlackBerry, to Vodafone's own services including Vodafone Secure Device Manager and Vodafone Secure Net. Vodafone's own service platform called 'Vodafone Business Marketplace' allows purchasing and renewing domains. However, there does not seem to be online store or homepage platforms for UK companies although Vodafone India offers 'Webbuddy' online store platform. Vodafone UK in turn provides UK small business with practical guides and background information on how to set up webpages and do search

engine optimization (SEO) but it does not seem to have these kinds of service available in the UK. Examples of these instructions can be seen in below Figure 47. Hence, the Vodafone offering for SME websites and online stores is much more limited compared to Deutsche Telekom's portfolio in Germany.



Figure 47. Examples of Vodafone UK's guides to for SMEs to set up websites and optimize website performance (Vodafone 2020)

Vodafone does not offer paid broadband installation and setup services for business customers. They also don't have a dedicated paid customer service dealing with IT and broadband setup issues.

Analysis of Vodafone marketing communication approach for consumer customer services on customer webpages

Vodafone UK's consumer customer website does not comment on quality, speed or 'customer satisfaction' topics. However, the company claims having the best mobile network in the UK (see figure 47).

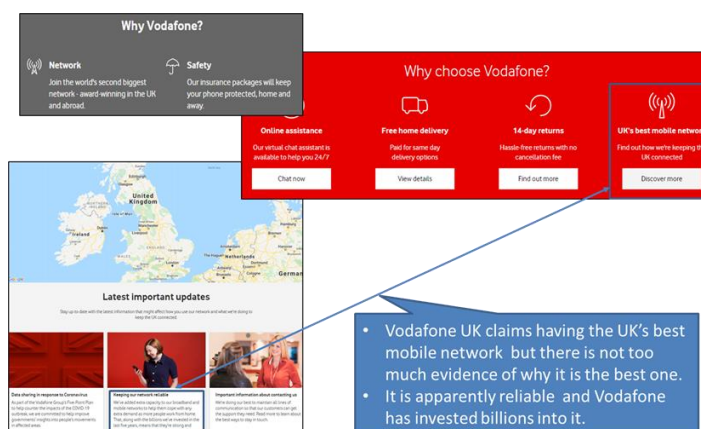


Figure 48. Vodafone claims having the best mobile network in the UK (Vodafone 2020)

Vodafone UK claims it has the best mobile network in the UK. However, there is not much tangible evidence why it is the best one in the country. According to Vodafone it has invested billions [of British pounds] into it and it is reliable.

Vodafone's claim about the best mobile network seems to be based on an independent 5G speed test in London performed by an external company called Umlaut. In this test Vodafone has the fastest download and upload speeds compared to its UK peers Everything Everywhere (EE), Three (3) and O2 (see Figure 48). However, it is important to acknowledge that this test only deals with London, not the entire UK.

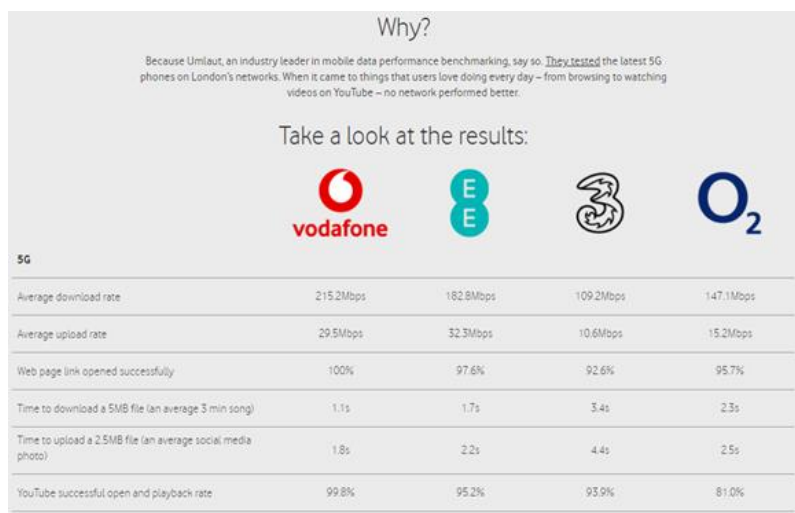


Figure 49. Umlaut's 5G speed test in London presented by Vodafone (Vodafone 2020)

In addition to fast 5G speeds, there is only one other positioning statement on the consumer customer pages. Vodafone UK has placed two comparison tables about broadband speeds on its pages. These two tables position Vodafone as the cheaper provider of consumer broadband services in the UK compared to its main competitors BT, EE and TalkTalk (see Figure 49). In the Superfast 2 option Vodafone is a joint price leader with Sky.

How much could I save on my broadband?

	Superfast 2	Superfast 1		
	Vodafone Superfast 2	BT Fibre 2	Sky Superfast	EE Fibre Plus Broadband Only
Average speed	63 Mbps	67 Mbps	59 Mbps	67 Mbps
Contract length	24 months	24 months	18 months	18 months
Monthly cost	£25.00	£31.99	£25.00	£30.00
Upfront cost	£0.00	£9.99		
24 month total	£600.00	£777.75		
Vodafone saving over 24 months	X	£177.75		

How much could I save on my broadband?

	Superfast 2	Superfast 1		
	Vodafone Superfast 1	BT Fibre Essential	TalkTalk for Everyone TalkTalk Fast Fibre	EE Fibre Broadband Only
Average speed	35 Mbps	36 Mbps	38 Mbps	36 Mbps
Contract length	24 months	24 months	18 months	18 months
Monthly cost	£23.00	£26.99	£24.00	£28.00
Upfront cost	£0.00	£19.99	£0.00	£0.00
24 month total	£552.00	£649.75	£576.00	£672.00
Vodafone saving over 24 months	X	£115.75	£24.00	£120.00

Figure 50. Vodafone's consumer broadband pricing comparison tables (Vodafone 2020)

Hence, Vodafone's main strengths in the UK consumer segment include: the reliability of the mobile network, 5G speeds [in London] and affordable broadband speeds.

Analysis of Vodafone's marketing communication approach for corporate customer services on customer webpages

Similar to the company's consumer site, there is a limited number of tangible proofs why businesses should do business with Vodafone UK. Some of them include 'Unlimited data', 'Best network for roaming' and 'VeryMe Rewards' (see Figure 51). Of these arguments 'Unlimited data' is not something unique as mobile operators now typically offer unlimited mobile data subscriptions. The claim about the best roaming options is valid at least in the UK and Europe as Vodafone has operations in many European countries and has probably been able to negotiate good roaming terms in non-Vodafone countries due to its large size.

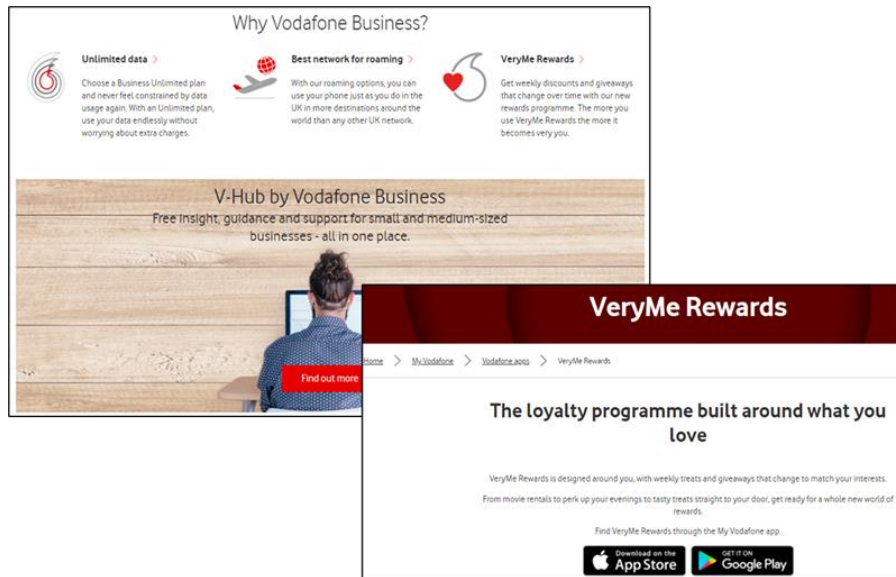


Figure 51. Arguments of 'Why Vodafone Business' and 'VeryMe Rewards' (Vodafone 2020)

Additionally, the 'VeryMe Rewards' program is interesting and not very typical among telecom services for corporate customers. This reward program is offered via the Vodafone UK's customer service app and rewards include free mobile data etc.

Another interesting concept that Vodafone has created for smaller businesses is 'V-Hub' in which advises companies about 'remote working', 'digital security' and 'digital enablement' with practical guides step by step. Although Vodafone offers certain solutions for each of these three topics, it does not offer a full spectrum of products/services for any of these topics. However, it is a great way to position itself as a specialist in these topics.

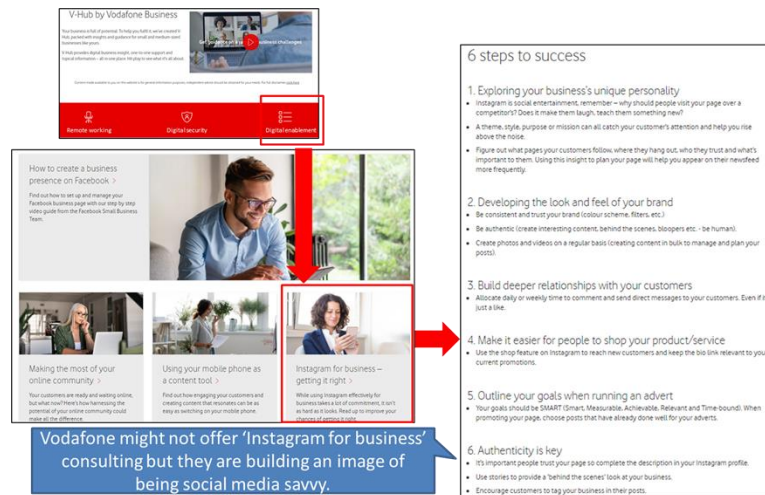


Figure 52. An example of Vodafone Instagram instructions for businesses (Vodafone 2020)

Figure 52. shows a 6-step guide how to be a successful business in Instagram part of Vodafone's V-Hub. This kind of guides aim to position Vodafone UK as an expert and a trusted partner from whom it is safe to by adjacent services as they business challenges very well.

Vodafone does not particularly highlight it but its average business broadband's monthly fee is clearly cheaper than its local competitors in the UK (Figure 53). However, this low-price example could be based on carefully selected products in the comparison or it could be a time when Vodafone is trying gain market share in the business broadband segment.

Business Broadband and Phone price comparisons

	Superfast 2	Voon Fibre 1	Superfast Fibre Essential and Value Line	TalkTalk For Everyone Complete Superfast Fibre
Save more with Vodafone*	-	Save £403 with Vodafone	Save £315.75 with Vodafone	Save £111.80 with Vodafone
Average speed	45 Mbps	350 Mbps	76 Mbps	76 Mbps
Monthly average	£17.29	£34.08	£30.36	£21.95
Vodafone cost**	60	60	69.95	60
Line rental	60	60	£20.00	£16.95
Broadband	£22.50	£32	£9.05	£5
Monthly total	£22.50	£32	£29.95	£21.95
Plan length	24 months	24 months	24 months	24 months
Total plan cost	£415	£818	£728.75	£526.80

Figure 53. Vodafone's business broadband pricing compared to its UK peers (Vodafone 2020)

Hence, based on the analysis of consumer and corporate customer websites of Vodafone, the operator is trying to position itself as a player with a fast mobile network,

affordable broadband options and experience in helping customers with digitalization. There are considerable differences in how Vodafone portrays its mobile and fixed services – mobile services are reliable, fast and widely available globally due to the roaming coverage and the main argument for the broadband seems to be the low price.

Analysis of Vodafone's investor materials

Slightly surprisingly Vodafone's investor materials, such as annual and quarterly reports, and presentations do not provide a lot of UK-specific information on its operations and strategy. Vodafone's investor communication seems to be mostly general and focused on wider geographies such as Europe and Africa (see Figure 54).

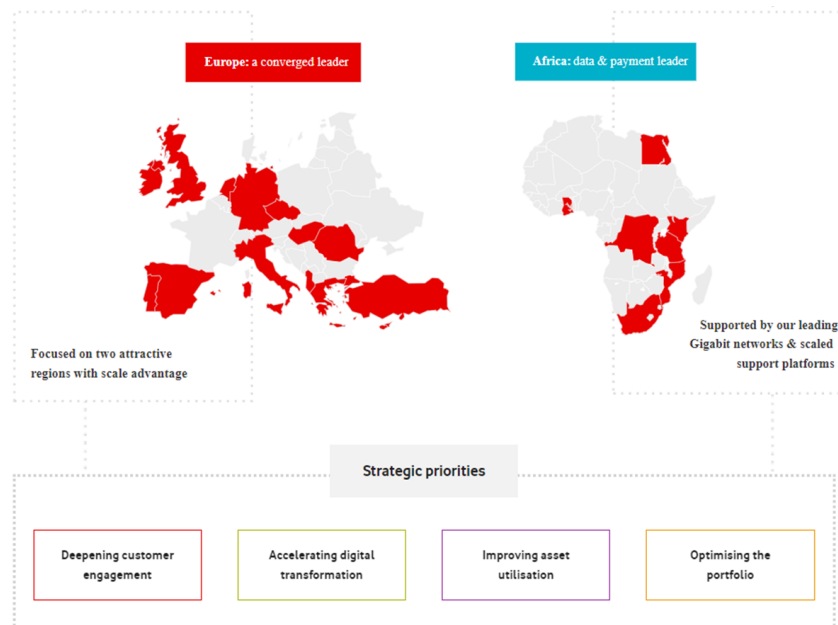


Figure 54. Vodafone's strategic priorities as part of its 'Our Strategy' webpages (Vodafone 2020)

As we can see in Figure 54 Vodafone Group's 'Strategic priorities' include:

- **Deepening customer engagement:** According to Vodafone, it aims to improve loyalty and grow revenue in its three major customer segments worldwide: Europe Consumer, Africa Consumer and Vodafone Business. Increased engagement can be boosted by network quality, enhanced customer segmentation and simplifying their customer lives through converged offerings. These methods sound a little more like a differentiation strategy than an overall cost leadership one.

- **Accelerating digital transformation:** Vodafone states it hopes to transform its operating model to capture the benefits of digital technologies by being 'Digital First'. Examples of ways to achieve this include 'always-on' digital marketing, AI chatbots and a shift towards a more digitally-focused channel mix. Being 'Digital First' could enable Vodafone to cut down its operating expenses by more than GBP 1 billion in the period between 2021 and 2023. 'Digital transformation' seems to be targeted more at decreasing Vodafone's operational costs than benefiting its customers in terms of better services etc. Probably all telecom operators hope decrease their costs with the help of digitalization. However, these arguments easier to link to an overall cost leadership strategy than a differentiation approach.
- **Improving asset utilization:** The operator states that the efficient use of its mobile and fixed networks is essential to success. Vodafone especially highlights the network mobile sharing agreements in rural areas with other operators as a way to reduce the environmental impact and generate significant cost savings (see Figure 53). Highlighting network operation cost savings over the network quality in the strategy materials can be seen as a characteristic of an overall cost leadership strategy.
- **Optimising the portfolio:** The part of Vodafone's strategy only deals with the company's decision to operationally separate the Europe tower [=structures that are used to host mobile radio network equipment] business. Separating the tower businesses is quite common in the telecom industry and goals of them include monetization of these assets by selling them to financial investors or listing them on separately from the parent company on a stock exchanges, or cooperation with other mobile operators in terms of network sharing agreements. All types of mobile operators are doing these kinds of moves in larger countries. Hence, it is impossible to state that only operators with an overall cost leadership strategy are separating their tower businesses. However, this is a move that highlights an efficient use of networks resources and operations related to them is more closely related to overall cost leadership strategies than to differentiation ones. Additionally, Vodafone states that this kind of portfolio simplification will generate savings of €4 billion in 2020.

To deliver a leading customer experience, it is essential that we're able to utilise our leading Gigabit networks in the most efficient way.

As we employ significant capital resources across both our fixed line and mobile communications infrastructure, we're committed to continuously improving returns on this capital by improving the way we utilise these valuable assets.

We're securing capital-smart infrastructure partnerships.

These network sharing agreements support improved mobile coverage in rural areas, reduce our environmental impact, increase the pace of 5G network deployment and generate significant cost savings. Explore our infographic below to see our progress by market.

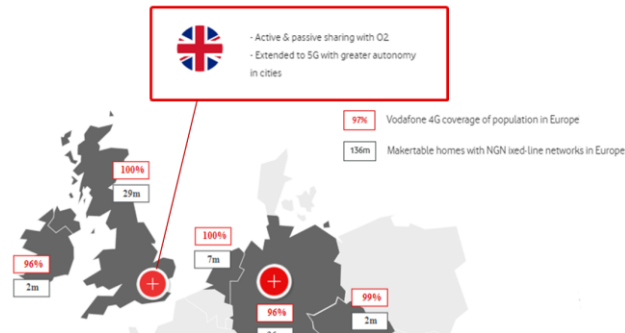


Figure 55. 'Improving asset utilization' as cornerstone of Vodafone's strategy (Vodafone 2020)

Figure 55 provides a typical example of Vodafone's approach to present its strategy, there is no clear focus on one country but the strategy is presented at the same time for all similar markets, such as Vodafone's European markets.

What the Board did this year

Board activities are structured to develop the Group's strategy and to enable the Board to support executive management on the delivery of it within a transparent governance framework. The table below sets out the key areas of focus for the Board's activities and topics discussed during the year.

Strategy

To provide entrepreneurial leadership

5G auctions in Germany, Hungary and Czech Republic

The Board, in balancing the capital demands of the business, considered the appropriate resource to be made available for these core assets and set acceptable thresholds for auction cost.

[Read more about 5G spectrum auctions on pages 254 to 257](#)

European towers

The decision to create Europe's largest tower business followed a period of intensive review and consideration by the Board, supporting our strategy to improve asset utilisation and also explore monetisation opportunities for our tower assets.

[Read more about our European towers on page 24](#)

Focus on two scaled platforms – Europe and Africa

As part of our revised strategy to focus on core markets, the Board regularly received information from the responsible Executive Committee members to understand in greater depth the risks and opportunities to set strategies for the growth of core markets and for the management and divestment of non-core markets.

[Read more about our investments on page 25](#)

Network sharing

The Board reviewed a number of network sharing arrangements across our major European markets.

[Read more about our network sharing on page 24](#)

Internet of Things

The Board considered customer needs when reviewing strategies for the development of V by Vodafone products and network operations to support the growing demand for Internet of Things (IoT).

[Read more about our work on IoT on page 8](#)

There is almost nothing country-specific, excluding the 5G frequency auctions, in the segment in which Vodafone's board discusses the main strategic topics.

Figure 56. 'What the Board did this year' in terms of strategy in Vodafone's Annual Report 2019 (Vodafone 2020)

The above figure (Figure 56) provides an example of the operator's non-country-specific strategy reporting. The board discussed the upcoming 5G auctions in Germany, Hungary and Czech Republic, tower business separation, geographic focus areas [Europe and Africa], network sharing and IoT services. The most country specific item of these is the 5G auctions part but the timing of the auctions does not depend on the telecom operators as they decided by each country's telecom regulator. Hence, there is little what Vodafone can do in terms of strategy in these auctions apart from their maximum bid prices.

Vodafone UK: Digital First

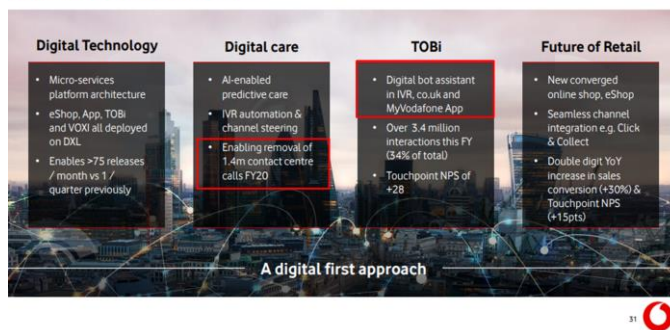


Figure 57. 'Vodafone UK: Digital First' approach (Vodafone 2019)

As discussed earlier in this study Vodafone Group's Digital First approach is very focused on cutting down customer service costs in addition to potentially improving customer service experience for end-users. In one of the rare figures about the UK market, excluding non-financial and non-standard-KPI figures, Figure 57 shows how Vodafone UK's 'Digital First' approach is developing. There are no figures how much these Digital First moves will save but it is quite evident based on the four pillars, especially 'Digital care' and 'ToBi', could create considerable cost savings.

4.8 Classification of Vodafone Strategy

Classification of Tele2's strategy is based on the analysis of its consumer and corporate customer services and latest investor materials. In comparison to Tele2 in Sweden and Deutsche Telekom in Germany, Vodafone UK's portfolio of products and services can be said to be between these operators. Vodafone's portfolio is not as broad as Deutsche Telekom's, and some typical telecom services such as own TV services for consumer customers and industry-specific IT and connectivity solutions are very limited. Compared to Tele2, Vodafone's business customer offering is clearly broader and it has a slightly more advanced consumer portfolio.

Vodafone's customer-facing pages have very notable broadband pricing comparison for the consumer and business customers. Additionally, there is evidence in investor reporting and strategy that considerably highlight efficient operations as part of the Vodafone group's global operational model.

Hence, it can be assumed that Vodafone is exploiting a differentiation strategy in the UK but there are also some elements of an overall cost leadership strategy.

4.8.1 Classification using Porter's original

Porter's 'Commonly required skills and resources' checklist for a differentiation strategy includes:

- **Strong marketing abilities** (yes): Vodafone does not seem to have as strong of an emphasis on marketing on their customer websites and investor materials compared to Deutsche Telekom. However, Vodafone materials for customer and investor materials are noticeably more visual compared to Tele2's investor materials that are very text- and figure-heavy. In terms of customer-facing webpages there are not very considerably differences although Tele2's product pages might a bit more simplified. Hence, it can be said that Vodafone has strong marketing abilities.
- **Product engineering** (yes): Vodafone investor and strategy materials have information on their new platforms, such as TOBi, and targets dealing with digitalization of their operations.
- **Creative flair** (no): Based on Vodafone's customer, investor and strategy materials, it can be said that Vodafone does not have a lot of creative flair in its content. Vodafone seems to be virtually at the same level as Tele2 in this criterium.
- **Strong capability in basic research** (yes): Based on the customer-facing pages and investor materials, Vodafone seems to be active development of products and services internally and with some external partners. However, Vodafone might have less focus on research compared to Deutsche Telekom, or the UK operator is not so open about its development.

- **Corporate reputation for quality or technological leadership** (yes): There is not a lot of UK-related information or measurable data about the quality of Vodafone UK. However, its corporate customers have the highest NPS (Net Promoter Score) in the telecom industry and the same figure for consumers is also improving (see Figure 58). Hence, it can be said the UK company is known for quality. Another piece of evidence supporting this quality argument is the fact that its 4G speeds are available everywhere in the UK [100% coverage] – this a good achievement compared to Vodafone's operations in other European countries as not all of them have 100% coverage for 4G speeds.

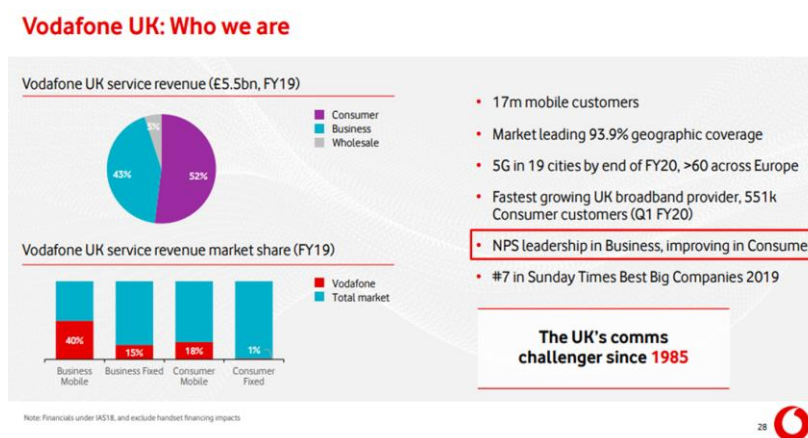


Figure 58. Vodafone has the most satisfied business customers in the UK's telecom industry (Vodafone 2019)

- **Long tradition in the industry or unique combination of skills drawn from other businesses** (yes): Vodafone has a relatively long history in the UK as it became a challenger of the country's incumbent operator BT by making the country's first mobile phone call in 1985 and launching the first mobile network later during the same year. Hence, its UK history page portrays the company has a mobile pioneer and innovator.
- **Strong cooperation from channels** (yes): Vodafone UK seems to be active all channels including the partner-owned shops selling Vodafone products and services. However, the operator's 'Digital First' strategy aims to shift the focus more towards digital sales channels.

The 'Common organizational requirements' list for a differentiation strategy includes:

- **Strong coordination among functions in R&D, product development and marketing** (not possible to assess using desk research): The materials that were analyzed and collected in this study do not provide evidence of strong cooperation in these units or the lack of cooperation in them. Hence, it is not possible to answer to this question.
- **Subjective measurement and incentives instead of quantitative measures** (yes): Vodafone claims to be 'a converged leader' in all its European markets including the UK. As converged in the telecom industry means a combination of wireless and fixed-line network without any industry-specific definition. Hence, it is a vague claim to be a 'a converged leader' without providing evidence. Additionally, Vodafone UK's fixed-line offering is limited, and it is not a market leader in this segment in terms of revenue or market share.
- **Amenities to attract highly skilled labor, scientists or creative people** (yes): Vodafone uses a specific mobile app to attract young people to Vodafone. Additionally, the company employees and board can participate in different kinds of trainings in 2019 included digital marketing, e-commerce, coding, big data and analytics.

4.8.2 Classification using STL Partner's adaptation

- **Core services such as connectivity and basic IT services have better design, exploit analytics and data** (yes): Vodafone is trying to make the use and acquisition of its services and products user-friendly, smart and efficient with the help of digitalization. It hopes to achieve these goals with the help of online marketing, analytics, chatbots and other technical means.
- **Vertical industry solutions** (yes): 'Public sector' is Vodafone UK's only customer industry which has dedicated offerings the following sub-industries: 'central government', 'local government', 'defence', 'police and fire', 'health' and 'education'.
- **Infrastructure services and their optimization in terms of buying and selling core telecom ICT assets** (yes): Vodafone has announced it will spin

out its tower European business, including the UK towers, via an IPO. This major move will enable the company to considerably decrease its debt on a group level.

- **Embedded communications** (yes, but limited): In addition to mobile device management solutions, Vodafone UK does not offer many other solutions in this category. Additionally, the telecom operator seems to be interested in development of some analytics dealing with its connectivity services but these not available as commercial services on its website.
- **3rd-party business enablers** (yes): On the group level, the company offers APIs to third parties on the Vodafone's APIs (<https://apix.developer.vodafone.com/>) website. In the UK, Vodafone and other mobile operators provide their customers with a Mobile Connect-based service that enables customers to use their mobile phone contract information for authorization/proving their identity.
- **Own-brand OTT services** (no): Vodafone UK does not offer OTT TV (over-the-top), an online TV service platform, or any basic telecom operator TV service in its home market. However, the situation is completely different in Germany in which Vodafone is a major player in the TV entertaining market.

4.8.3 Summary of classification of Vodafone strategy

The hypothesis for Vodafone UK's strategy was 'differentiation' with elements of 'overall cost leadership'. The actual analysis seems to validate the hypothesis. The operator has a relatively extensive portfolio (see Figure 57) its headquarters country but it is clearly not as extensive as Deutsche Telekom's German operations. However, traditional telecom TV services, which are very typical telecom operator services, is missing Vodafone UK's consumer customer portfolio is TV services.

Elements of an overall cost leadership strategy on the group level include continuous comments of efficient telecom networks and targets of using digitalization to considerably cut costs. The company's UK webpages for consumer and business customers include examples of broadband pricing in the UK market which portray Vodafone as the most affordably large telecom players.

Customer group	Service group	Service category	Yes/No
Consumer customers	Voice and connectivity	Mobile subscriptions	Yes
		Fixed broadband (DSL & Internet))	Yes
		Landline & fixed-line telephony	Yes
	TV, video and content in general	Traditional telecom operator TV subscriptions	No
		MobileTV	No
		Satellite TV	No
		Video on Demand	Yes
		Music services	Yes
	Smarthome	SmartHome platform and/or devices	Yes
	Security	Antivirus software	Yes
		Mobile phone insurance	Yes
	Others	Device sales	Yes
		Own mobile apps	Yes
		Home installation services and paid support	No
		Home pages, domains and online store platform	No
Corporate customers	Voice and connectivity	Mobile subscriptions	Yes
		Fixed broadband	Yes
		Landline & fixed-line telephony	Yes
	IoT (Internet of Things)	Dedicated IoT / Machine to Machine (M2M) services	Yes
	IT & cloud services	IT services separated from basic brand	Yes
		Cloud based software such as Microsoft 365	Yes
	Conferencing & collaboration	Online conferencing	Yes
		Business collaboration	Yes
	Healthcare	Healthcare solutions	Yes, but limited
	Security	End user device security	Yes
		Network level security	Yes, but limited
		Data and e-mail	Yes
	Others	Buildings	Yes
		Device sales	Yes
		Business installation services and paid help	No
		Mobile device management for enterprises	Yes
		Home pages, domains and online store platform	Yes, but limited

Figure 59. Summary of Vodafone products and services available in UK

Vodafone UK seems to be somehow between Deutsche Telekom Germany, which operates a very clear differentiation strategy, and Tele2 Sweden, which has a limited but affordable customer portfolio. Excluding efficient telecom networks, Vodafone's investor materials do not provide very practical information on its approach to provide cost-efficient products and services to end-customers.

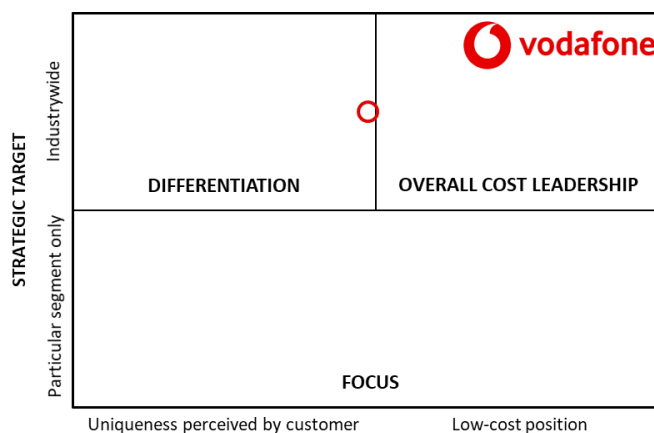


Figure 60. Vodafone's strategy using STL Partners' model

Figure 60 shows that Vodafone's current strategic positioning in the UK is mostly based on differentiation with notable elements of overall cost leadership. Based on the recent

investor materials, it's unlikely that the operator planning to do any major changes to its strategic position in near future.

4.9 Evaluation of Vodafone Strategy Quality

4.9.1 A source of strategic positioning: 'serving few needs of many customers'

Similar to Deutsche Telekom Germany, Vodafone UK mostly exploits a differentiation strategy with some elements of an overall cost leadership strategy, serving broad needs of many customers in a narrow market by providing customers with a full range of telecom services. However, in comparison to the Germany based operator, Vodafone UK's offering is even more focused connectivity services, serving even fewer customer needs. Vodafone's investor and strategy materials are also in-line with the current product and service portfolio, and the importance of offering affordable connectivity products (especially in the fixed broadband segment). Hence, the quality of Vodafone's strategic positioning in the UK seems to be good.

4.9.2 A strategy requires you to make 'trade-offs' in competing - to choose what not to do

Vodafone's current operational model in the UK seems to include two major trade-offs. The first one deals with the lack of consumer TV services which are offered by most of the telecom operators with a differentiation strategy. However, the company's executives have stated that they first plan to make their fixed broadband position stronger in the country before rolling out TV services in an over-the-top TV market. This likely means that Vodafone sees it difficult to compete with the likes of Netflix and other online TV platforms in comparison to their prices and content catalogs. Not competing in the UK's TV market is a significant trade-off as it offers TV services in other Vodafone markets including Germany and Italy. The second type of trade-off would be the very limited selection of software solutions for its target customer segments in the UK public sector including 'Central government', 'local government', 'defence', 'police and fire', 'health' and 'education'. The solutions for these key customer groups are mostly connectivity products, not IT solutions or software integrator services. The lack of these dedicated IT solutions is likely to be a clear strategic decision by Vodafone.

Hence, Vodafone UK's management has clearly estimated their strengths and made two considerable trade-offs concerning products and solutions which are frequently offered by major telecom operators exploiting a differentiation strategy.

4.9.3 A strategy involves creating fit among a company's activities

Based on the beginning of Vodafone Group's strategy pages, the telecom operator's key targets include (see Figure 61):

- **Being a convergent [having fixed and mobile products and services] operator.**
 - Vodafone operates a fixed and mobile network in the UK, and seems to be quite ambitious about growth of its fixed network growth in the UK based on the way the operator highlights its affordable broadband on the its consumer and business customer pages. Hence, it can be said that Vodafone does this according to its strategy.
- **Being efficient in its operation enabled by digital platforms for customer processes, network operation including mobile network sharing partnerships.**
 - The operator has launched a group-wide initiative to increase the level of digital customer-facing processes from marketing to actual sales. In one of the rare recent investor materials dealing with the UK market, the operator has disclosed its current and future target levels for customers' digital shopping and service journey. Vodafone's ToBI chatbot was likely among the first successful ones in the telecom industry. So, Vodafone has been able to create another fit among its business activities.
- **Maintaining a simplified portfolio.**
 - Vodafone UK's portfolio is not the simplest one in the telecom world but is a simplified compared to many other telecom operators exploiting differentiation strategies. When browsing through Vodafone UK's consumer and business customer pages, it can be seen that connectivity

products play the most important role and the number of other types of products is limited. However, the number of different options for consumer customer mobile subscriptions is still high but this seems to be typical as Vodafone's UK competitors also have a lot of different mobile subscriptions for consumers. Hence, it can be said that Vodafone has been quite successful in simplifying its UK portfolio.

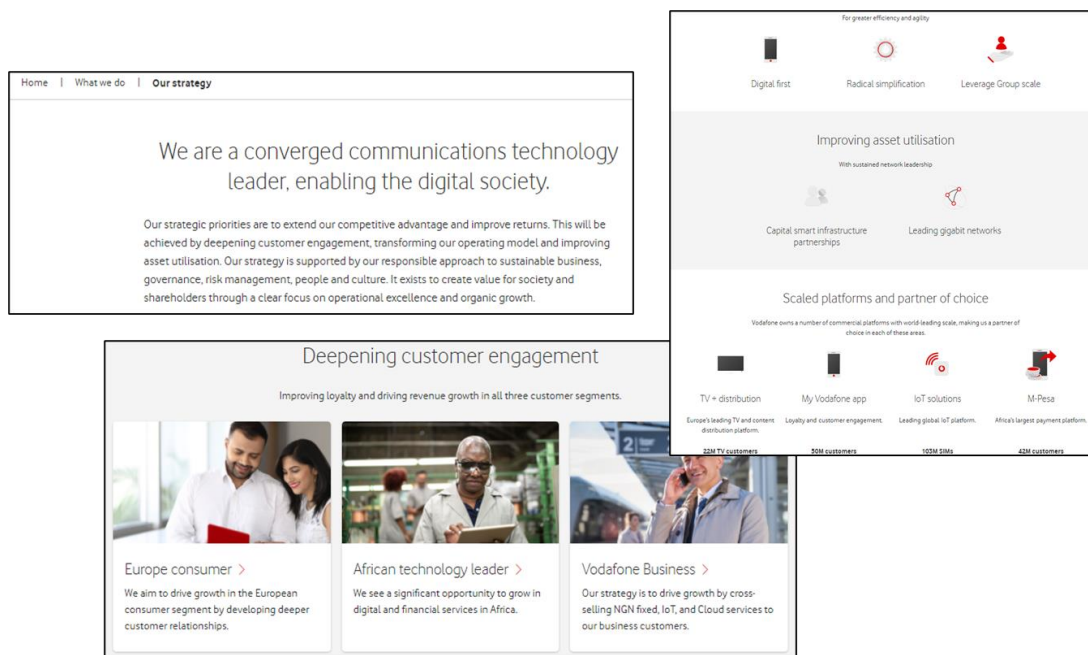


Figure 61. Beginning of Vodafone's group-level strategy pages highlight convergence and efficient operations (Vodafone 2020)

In brief, it can be said that Vodafone UK doing well in terms of creating fits among its activities for two [=convergence and efficiency] of these three criteria. The company does almost as well in the third category of simplification but the high number available consumer mobile subscriptions limit its success.

4.9.4 Summary of evaluation

Vodafone strategy and investor materials portray an image of cost-efficient operation of telecom networks in all of its markets including the UK market. The analysis of the operator's UK portfolio clearly shows that it clearly exploits a differentiation strategy as

the scope and characteristics of products and services are closer to differentiation than overall cost leadership. The use of a differentiation positioning is clearly confirmed by the analysis using the Porter and STL Partners descriptions. However, there are very clear examples of low fixed broadband prices in the UK which Vodafone clearly highlights on the customer pages. Additionally, the rare investor content about the UK targets and strategy highlight more characteristics of an overall cost leadership than differentiation such as new technology is seen to benefit more Vodafone as a company [in terms of significantly lower operational costs] than its customers. On the other hand, Vodafone's claims that its business customers have the highest NPS rating and the same KPI for consumers is improving in the UK – these findings could be interpreted as indications of a differentiation positioning. Vodafone's V-Hub, which helps SMEs in the digital world, could also be seen as a way to portray the company more of a technological expert with a differentiated offering, not as a provider that offers only connectivity services.

When evaluating the quality of Vodafone UK strategic, the operator does well in terms of 'strategic positioning serving few needs of many customers' and 'making trade-offs in competing'. It also does a good job in 'creating fit(s) among its activities' but the complex mobile offering limits its success in this category – this can be seen slightly negative as simplification is one of Vodafone's targets. However, the large number of available mobile subscriptions seems to a UK specific phenomenon as other mobile operators in the country have or have recently had a very complex offering.

Hence, based on the analysis of Vodafone UK products, and general group-level investor and strategy materials, it can be seen that Vodafone does well with its approach of having a strategic positioning that is mostly based on differentiation and partly on overall cost leadership. However, as shown earlier in the classification of the strategy, Vodafone UK's strategy in this study is interpreted to be almost between differentiation and overall cost leadership – this almost creates an undesired 'stuck in the middle' situation. Although Vodafone avoids the stuck in the middle situation as there are no clear focus elements in its strategy, the strategic positioning in the UK could be clearer.

Finally, although financial figures are not accounted in the quality of the overall strategy in this analysis it's worth mentioning that Vodafone could consider providing more strategic information of strategic information on its largest markets.

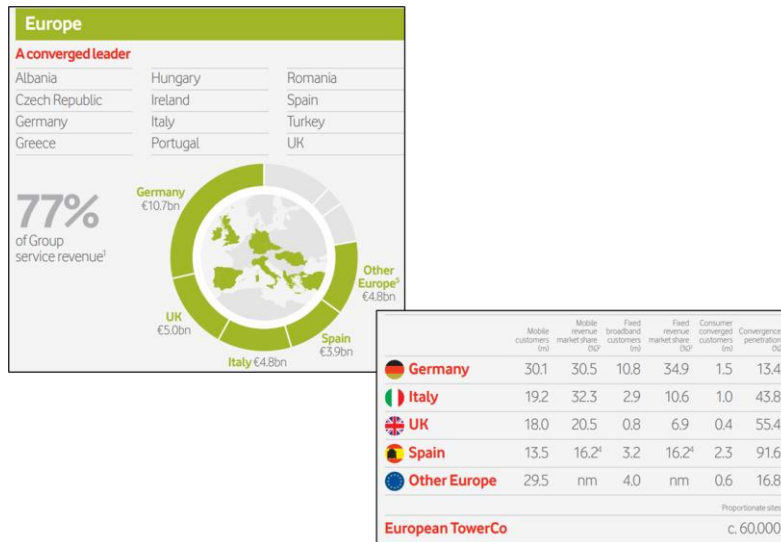


Figure 62. Key European markets for Vodafone (Vodafone 2020)

As Figure 62 shows, Germany, Italy, UK and Spain are clearly its largest European markets in terms of revenue and subscriptions. As mentioned earlier, Vodafone does not provide too much information on its strategy by country. Strategic choices are portrayed mostly on regional [Europe, Africa and others] or general ones. These four European countries are different at least in terms of their telecom markets. Hence, either Vodafone lacks country-specific strategies or does not disclose them to the public or its investors – this can also be seen as a negative factor while assessing Vodafone UK's strategy.

5 Comparison of the Company Strategies with Each Other

This section compares the Deutsche Telekom, Tele2 and Vodafone strategies based on their service and product portfolio, and the Porter and STL Partners framework for the selected strategies. The final part of this section deals with the quality of the strategy.

5.1 Comparison of Deutsche Telekom, Tele2 and Vodafone

5.1.1 Comparison of service and product portfolios

This part of the study compares these operators' product and service portfolios for consumer and business customers in their home markets. A larger number of different types of available products and services does not determine whether a strategy is good. However, any company's portfolio should reflect its strategic positioning and targets.

Customer group	Service group	Service category	Deutsche Telekom	Tele2	Vodafone
Consumer customers	Voice and connectivity	Mobile subscriptions	Yes	Yes	Yes
		Fixed broadband (DSL & Internet))	Yes	Yes	Yes
		Landline & fixed-line telephony	Yes	Yes	Yes
	TV, video and content in general	Traditional telecom operator TV subscriptions	Yes	No	No
		MobileTV	Yes	No	No
		Satellite TV	Yes	No	No
		Video on Demand	Yes	Yes	Yes
		Music services	Yes	Yes	Yes
	Smarthome	SmartHome platform and/or devices	Yes	No	Yes
	Security	Antivirus software	Yes	Yes	Yes
		Mobile phone insurance	Yes	Yes	Yes
	Others	Device sales	Yes	Yes	Yes
		Own mobile apps	Yes	Yes	Yes
		Home installation services and paid support	Yes	No	No
		Home pages, domains and online store platform	Yes	No	No
Corporate customers	Voice and connectivity	Mobile subscriptions	Yes	Yes	Yes
		Fixed broadband	Yes	Yes	Yes
		Landline & fixed-line telephony	Yes	Yes	Yes
	IoT (Internet of Things)	Dedicated IoT / Machine to Machine (M2M) services	Yes	Yes	Yes
	IT & cloud services	IT services separated from basic brand	Yes	Yes, but limited	Yes
		Cloud based software such as Microsoft 365	Yes	Yes	Yes
	Conferencing & collaboration	Online conferencing	Yes	Yes	Yes
		Business collaboration	Yes	Yes, but limited	Yes
	Healthcare	Healthcare solutions	Yes	No	Yes, but limited
	Security	End user device security	Yes	Yes	Yes
		Network level security	Yes	Yes	Yes, but limited
		Data and e-mail	Yes	No	Yes
		Buildings	Yes	No	Yes
	Others	Device sales	Yes	Yes	Yes
		Business installation services and paid help	Yes	No	No
		Mobile device management for enterprises	Yes	Yes	Yes
		Home pages, domains and online store platform	Yes	No	Yes, but limited

Figure 63. Comparison table of Deutsche Telekom, Tele2 and Vodafone portfolios in their home markets

Deutsche Telekom's offering for consumers and businesses is very broad in Germany. It virtually offers all typical types telecom operator services and basic IT services that

larger telecom companies provide to their customers. Additionally, the German company sells satellite TV and MobileTV products [which are not very common products in the telecom industry] to consumers. Hence, based on the portfolio analysis Deutsche Telekom could be exploiting a differentiation strategy in Germany.

Tele2 in turn has a much more streamlined portfolio in Sweden compared to Deutsche Telekom in Germany. The Tele2 brand does not offer basic consumer TV products via fixed-line or cable TV. Other consumer portfolio elements which Tele2 lacks in comparison to Deutsche Telekom include smart home products, home installation services and products related home pages and web stores. In terms of business customer products and services, Tele2 mostly focused on connectivity products, devices sales and security solutions related to devices. In brief, Tele2's simplified connectivity-focused portfolio could be ideal for an overall cost leadership portfolio

Based on the criteria used in this study Vodafone UK's consumer portfolio is quite similar to Tele2 Sweden. However, Vodafone sells smart phone devices to UK consumers. The biggest difference between the Vodafone and Tele2 portfolios in this study are the business customer segments. Vodafone's business offering is much more complex and not so much focused on the connectivity products as Tele2's offering. In comparison to Deutsche Telekom, Vodafone's business offering is slightly less broad, especially in terms of solutions offered to specific customers verticals in their home markets. Hence, Vodafone UK's portfolio seems to be between Deutsche Telekom's broad offering and Tele2's limited one but it is considerably closer to the German operator. Hence, Vodafone UK could be exploiting a strategy which has mostly differentiation elements and some elements of an overall cost leadership strategy.

5.1.2 Comparison of selected strategies using Porter and STL Partners frameworks

This part of the study compares how similar these companies' strategies are to typical characteristics of differentiation and overall cost leadership strategies according to Porter and STL Partners. This part of the of the analysis is based on all collected evidence on these companies' public webpages such as marketing approaches to products and services, investor and strategy materials.

Assumed strategy: differentiation				Assumed strategy: overall cost leadership		
		Deutsche Telekom	Vodafone	Tele2		
Porter's commonly required skills and resources for a differentiation strategy	Strong marketing abilities	Yes	Yes	Porter's commonly required skills and resources for an overall cost leadership strategy	Sustained capital investment and access to capital	Yes
	Product engineering	Yes	Yes		Process engineering skills	Yes
	Creative flair	Yes	No		Intense supervision of labor	Not possible to assess
	Strong capability in basic research	Yes	Yes		Products designed for ease in manufacture	Not possible to assess
	Corporate reputation for quality or technological leadership	Yes	Yes		Low-cost distribution system	Yes
	Long tradition in the industry or unique combination of skills drawn from other businesses	Yes	Yes	Porter's common organizational requirements for an overall cost leadership strategy	Tight cost control	Yes
	Strong cooperation from channels	Yes	Yes		Frequent, detailed control reports	Yes
Porter's common organizational requirements for a differentiation strategy	Strong coordination among functions in R&D, product development and marketing	Not possible to assess	Not possible to assess		Structured organization and responsibilities	Not possible to assess
	Subjective measurement and incentives instead of quantitative measures	Yes	Yes		Incentives based on meeting strict quantitative targets:	Not possible to assess
	Amenities to attract highly skilled labour, scientists or creative people	Yes	Yes			

Figure 64. Comparison table for Porter's commonly required skills and organizational requirements for differentiation and overall cost leadership strategies

The first comparison table contains common commonly required skills and organizational requirements for differentiation and overall cost leadership strategies. Please note that Deutsche Telekom and Vodafone are assumed to have differentiation strategy, and Tele2's choice is an overall cost leadership strategy. The assumption that Deutsche Telekom and Vodafone are exploiting differentiation strategies receives further supporting evidence from Porter's framework as Deutsche Telekom's and Vodafone's skills and organizations meet, 9/10 and 8/10 of these typical characteristics, respectively. However, Tele2 meets only 5/9 typical characteristics of overall cost leadership

strategies. Despite, only meeting a slight majority of these characteristics, this is a considerably piece of supporting evidence as those four elements that cannot be verified based on the available materials mostly deal with industrial manufacturing elements or topics that can only be verified by persons within the organization.

As the Porter framework might not fully confirm these companies' strategies, especially the Tele2 one, a framework developed by telecom consultancy company STL Partners is used.

		Deutsche Telekom	Tele2	Vodafone
STL Partners' list of typical services offered by telcos with a differentiation strategy	Core services such as connectivity and basic IT services have better design, exploit analytics and data	Yes	No	Yes
	Vertical industry solutions	Yes	No	Yes
	Infrastructure services and their optimization in terms of buying and selling core telecom ICT assets	Yes	Yes	Yes
	Embedded communications	Yes	No	Yes
	3rd-party business enablers	Yes	No	No

Figure 65. STL Partners' list of typical products and services offered by telecom operators with differentiation strategies

In the STL Partners' comparison table (see Figure 65.), only differentiation characteristics are used to have a fully comparable comparison and determine whether Tele2 has a lot of elements indicating a use of a telecom differentiation strategy. Deutsche Telekom and Vodafone are again confirmed to exploit differentiation strategies as they meet 5/5 and 4/5 of the typical products and services, respectively. Tele2 only meets 1/5 of the criteria for differentiation strategies and is confirmed to exploit an overall cost leadership strategy.

5.1.3 Comparison of quality of strategies using Porter framework

Of these three companies Deutsche Telekom (very good strategy) has the best-quality strategy in theory based on the criteria used in this study. Vodafone (good strategy) and Tele2 (relatively good strategy) rank the second and third, respectively.

Deutsche Telekom Germany

Deutsche Telekom exploits a differentiation strategy in Germany and serves its customers with an extremely broad portfolio of products and services. Additionally, its investor communication and customer-facing pages are extremely detailed, almost to perfection, and completely in-line with its strategic positioning. Hence, Deutsche Telekom does extremely well in the first category of Porter's sources of strategic positioning.

Deutsche Telekom is clearly focusing on core telecom and IT solutions. It has been divesting other non-core operations and acquiring and building around its core in Germany. All of these moves and future plans are well documented and reasonably explained by Deutsche Telekom's investor material. Hence, it can be said that Deutsche Telekom does very well in making trade-offs in which areas to compete in Germany at least in theory. However, the combination of available telecom and IT solutions in Germany is so broad that it raises questions whether having all of them really make sense for the company.

The most difficult category which to evaluate for Deutsche Telekom in terms of the quality of the strategy is 'creating fits among its activities'. This issue results from the huge number of solutions it offers and the huge volume of investor content. However, there is at least one very clear and important fit for a German operator which is striving for high quality telecom networks and IT solutions – the means to enable this include at least good internal R&D and access to a pool of very skilled employees. As there is nothing in investor materials that would not suggest that there is something in its operation which do not fit its German activities, it can be said that Deutsche Telekom does a good job this category.

Hence, Deutsche Telekom does very well in its theoretical analysis focused on the quality of its German strategy.

Tele2 Sweden

Tele2 exploits an overall cost leadership strategy in Sweden. A majority of its investor materials and its connectivity-driven, simplified portfolio correlate well with its strategic positioning.

There are some relatively mixed comments in its recent investor materials which talk about price increase targets [its More-for-more strategy] in Sweden and then also talking about front-book price adjustments [discounts for new customers]. This could be a difficult combination for a telecom brand operator which is known for cost-efficient connectivity products. However, Tele2 has identified Swedish SMEs as its key target customer group for its business solutions – this is one of the rare trade-offs communicated in its investor materials recently. Increasing focus on SMEs is likely to a good move for Tele2 as SMEs are better suited as its customers as smaller companies are more interested in connectivity products in which Tele2 is a strong player. Due to the lack of more positive evidence and the mixed signals in terms of the Swedish pricing strategy, Tele2 only does a relatively good job in this category.

Tele2 with an overall cost leadership strategy has logically highlighted its ambitions to make its operations more efficient, mainly by implementing new technology, and making its organization flatter. Hence, it could be expected that the number of employees excluding M&As and divestments in Sweden should have gone down at least at some point. However, the Swedish employee levels have constantly been increasing between 2016 and 2019. This development is quite interesting as the similar group-level figures have gone down and the share of manager type of employees in the group has remained flat during the same period. The growing Swedish headcount cannot only be explained by the Com Hem acquisition which was a major deal but only affects year 2018. A considerable part of Tele2 investor reporting deals with highlighting efficient operation of telecom networks in Sweden. However, due to the lack of tangible proofs, excluding financial information, there is very little evidence suggesting that the Swedish operations are actually becoming considerably more efficient and the organization flatter, it can only be said that the operator does a relatively good job in this component of the analysis.

Hence, considering the three evaluation criteria, Tele2 Sweden's strategy is rated 'relatively good' in theory.

Vodafone UK

Vodafone clearly achieves a source of a strategic positioning by serving few needs of many customers by exploiting a differentiation strategy with some elements of an overall cost leadership strategy in the UK. The company's portfolio and all communication on its website are in-line with its positioning.

Of these three operators, Vodafone UK's decision to not compete in certain typical telecom solution groups, such as consumer TV services and IT solutions targeting private companies in certain industry, are considerable trade-offs. Vodafone currently views the UK as a Netflix market [=considerable competition from OTT TV providers such as Netflix and HBO] and might not feel comfortable to compete in this business before it has improved its market position in the fixed broadband segment. The lack of UK-specific IT services for certain industries is quite an interesting decision which is not discussed in recent investor materials.

In terms of creating fits among its activities, Vodafone does a relatively good job as it meets two its strategic targets by being a convergent operator with mobile and fixed products and services and being efficient operationally mostly due to increased use of automation. The third strategic target that Vodafone has set for itself in its markets is 'maintaining a simplified portfolio' in which it does relatively well compared to some telecom operators but a complex portfolio for consumer mobile subscriptions in the UK limits its success in this category.

Additionally, it is worth noting that Vodafone's general investor and strategy communication is focused on the group, not on local Vodafone markets such as the UK. So, there is very little information on UK-specific targets and strategic plans that could be analyzed in this study.

Hence, based on these three criteria, Vodafone UK's strategy is good in theory.

5.2 Summary and Conclusions from the Strategy Comparison

This part briefly summarizes the reasons why all these companies' strategies have a different rating in terms of the quality of the strategy.

Porter's sources of strategic positioning			
	Deutsche Telekom	Tele2	Vodafone
A source of strategic positioning: 'serving few needs of many customers'	Yes	Yes	Yes
A strategy requires you to make 'trade-offs' in competing - to choose what not to do	Yes	Yes, mostly	Yes
A strategy involves creating fit among a company's activities	Yes	Yes, mostly	Yes, mostly
Final rating	Very good strategy	Good strategy	Relatively good strategy

Figure 66. Summary table assessing sources of strategic positioning by operator

Figure 66 provides a summary table of the overall quality assessment. The green color with 'yes' indicates an analysis component in which a company has done well. Yellow in turn indicates that an operator does mostly well in this regard but there are also some elements which are done so well.

Deutsche Telekom clearly does well in all the three evaluation categories which are used to assess the quality of the strategy. Vodafone does well in two of three analyzed elements and Tele2 is rated 'green' only once. It is worth noting that all these companies did so well in the analysis that there was no need to use lower types of ratings for these three analyzed elements.

All of these companies have positioned themselves differently. Deutsche Telekom which has a very clear differentiation strategy supported by its portfolio, marketing and strategic and investor communication.

Vodafone's strategy is mostly based on differentiation but there are some key overall cost leadership elements which include aggressive prices for consumer broadband and considerable cost-efficiency targets supported by increased automation across the organization. There are no clear indications that there would be considerable changes to Vodafone's strategy in near future.

Tele2's current strategy is overall cost leadership based on the way portfolio is portrayed on the customer-facing pages. Additionally, a large majority of common characteristics associated with overall cost leadership are visible in Tele2 operation. Tele2 executives have made some comments in which they are hoping to increase customer prices and increase customer satisfaction, indicating that Tele2 could be taking steps towards differentiation while still staying on the overall cost leadership side of the framework.

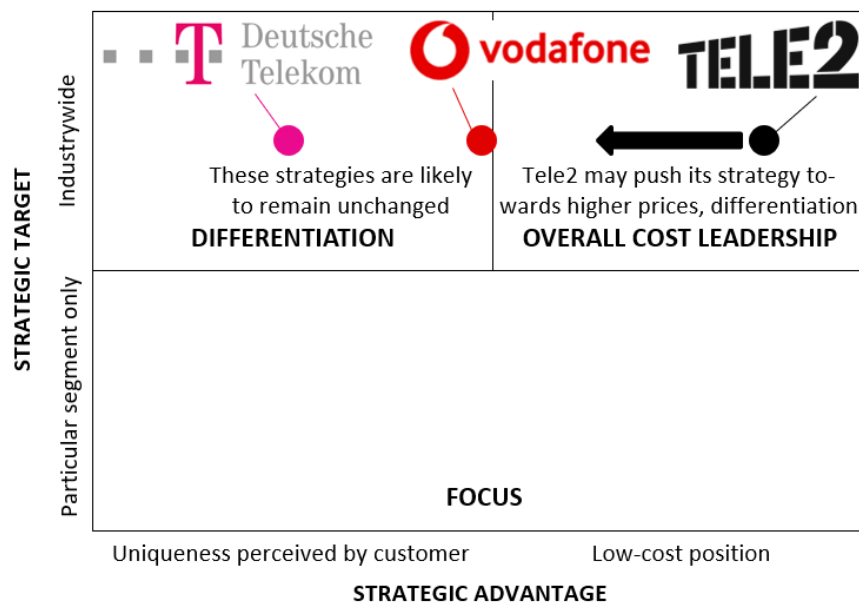


Figure 67. Deutsche Telekom, Vodafone and Tele2 Vodafone's strategy using STL Partners' adaptation of Porter's generic strategies model

Based on its customer webpages and available external communication, Deutsche Telekom clearly meets all three elements of Porter's sources of strategic positioning which are used to determine the quality of the strategy. In term of the quality of the strategy, Vodafone is not far behind Deutsche Telekom as it does well in two of categories and slightly misses doing the same in the third one as well. Tele2 does well only in one of these evaluation criteria and there are some considerable mixed signals in the other two categories, lowering their rating. Hence, Deutsche Telekom is ranked number one with a very good strategy. Despite being the second best with a good

strategy, Vodafone is not far away from Deutsche Telekom in terms of the quality of its strategy. However, Tele2 with its relatively good strategy is not very close to Vodafone's consistent operation of its strategy and communication and is far from the theoretical quality of Deutsche Telekom.

6 Discussion and Conclusions

6.1 Executive Summary of the Thesis

The background of this study is the European telecom market's continuous decline in terms of revenue for almost 10 years in a row up to 2016. The reasons for decline included internal [withing their own telecom industry] and external competition such as Netflix, other OTT TV platforms and innovative IT solution providers. These reasons led to a question whether some of the leading European telecom operators with distinct strategies would have managed to develop strategies that would be good on theoretical levels without focusing on financial performance. Deutsche Telekom, Tele2 and Vodafone were selected for this analysis because these operators were expected to have significantly different strategies and backgrounds with each other before the actual analysis.

Michael Porter's generic strategies and its telecom industry adaptation by telecom consultancy STL Partners are used for the classification of the strategies. Additionally, Porter's sources of strategic positioning are used to evaluate the theoretical quality of the strategies in these operators' home markets. All analyzed materials are collected from these companies' customer-facing pages, and strategy and investor content. During the first phase of analysis, each company's strategy is classified based on the portfolio and marketing approach related to the portfolio in comparison to Porter's and STL Partners list of typical characteristics of differentiation and overall cost leadership strategies. The second part of the actual analysis evaluates each company's strategy in comparison to Porter's key principles of strategic positioning including the position, trade-offs and fits. The third analytical part of the study validates whether each strategy is in-line with the portfolio, externally-communicated strategy plans and targets, Porter and STL characteristics, and Porter's sources of strategic positioning. Porter's frameworks were selected for the key evaluation criteria as they are widely used in practical applications and well-known in strategic literature.

Of these companies' Deutsche Telekom has the best theoretical strategy with almost no weaknesses. Deutsche Telekom's strategy in its home market is differentiation as the analysis of the portfolio and typical characteristics of this strategy in-line with strategic literature. Virtually everything about its German strategy is well documented meeting the quality analysis criteria based on Porter's sources of strategic positioning. Vodafone is a close runner-up with few weaknesses. In Vodafone's case there are no differences in the operation of its strategy which is largely based on differentiation, and Porter and STL Partners literature. However, Vodafone is rated slightly below Deutsche Telekom as it is estimated to not be completely successful in one of its own strategic targets called 'simplification' due to a large number of available consumer mobile subscriptions in the UK. Hence, Vodafone does well in two of the three analyzed criteria. Tele2, which is the only operator in this analysis to exploit an overall cost leadership strategy in its home market, does well in one the analyzed categories and is ranked third in terms of the quality of its strategy. The reasons why Tele2 is not estimated to do well in these two criteria include 'mixed signals about the pricing of connectivity products in Sweden' and inability to 'fully demonstrate success in making Swedish operations and organization more efficient'.

In Deutsche Telekom's and Tele2's cases definitions in strategic literature clearly support the findings that these two companies operate a differentiation and an overall cost leadership strategy, respectively. Vodafone with more differentiation strategy elements and some overall cost leadership ones is slightly less clear but it still meets a majority of differentiation strategy definitions listed by Porter and STL Partners. Additionally, the results based on the Porter's sources of strategic positioning validate that none of these operators have major weaknesses in their strategies in their home markets.

In this study these frameworks and externally-communicated information are used to analyze the quality of telecom operators. However, a similar approach can be used for any publicly traded company regardless of its industry, or a company with a clearly-defined offering and strategic materials made available for analysis.

6.2 Recommendations to operators concerning communicating strategy to stakeholders

This part deals with recommendations that are based on findings in this study. These recommendations do not directly deal with strategy but how these companies communicate about them.

In Deutsche Telekom's case virtually every question that an investor or other stakeholder could image to ask is answered in the investor materials. However, this kind of approach makes presentations and reports extremely long and can make it hard for readers to understand what is really important despite visual, well-made content. Hence, it might make sense to limit the maximum number of slides or pages in these publications to make them more reader-friendly or highlight the most important parts even more.

In Vodafone's case it handles communication about strategy and other ambitions regionally. Hence, there is very little UK-specific information on strategy available in Vodafone investor materials. This makes analyzing Vodafone markets by country very difficult. Vodafone's largest European markets include Germany, Italy, the UK and France, and the smaller ones include Albania and Greece. It is unlikely that Vodafone operates exactly the same strategies in all its European markets as they are very different in size, culture and development of their telecom industries. Hence, it would be beneficial to investors and stakeholders to have more information on different Vodafone markets in addition to the basic financials and KPI figures.

Tele2 is very good at reporting financials and KPIs by country and it has relatively good investor presentations with a good mix of text and visuals. However, its reports are really difficult to read as there is a lot of text and numbers but almost no visuals. More importantly there should also be more information on its strategy and strategy updates in its investor materials that are published either quarterly or annually.

6.3 Evaluation of Thesis and Output

This study provides an evidence-based evaluation of the strategies of Deutsche Telekom, Tele2 and Vodafone on a theoretical level without analyzing the financial performance. Michael Porter's models and a STL Partners adaptation of Porter's generic

strategies provide a credible framework for the analysis of the combination of these companies' general offering and marketing approach, and strategy and general investor materials. Despite this study is focused on the telecom industry, the same approach can be used to analyze the quality of any company's strategy if strategy materials, and product and service brochures are available for analysis.

Despite both Deutsche Telekom and Vodafone exploit a strategy that is the closest to differentiation, the used frameworks and methods enable to pinpoint differences between these two companies. Additionally, while comparing Vodafone to Tele2 [which exploits an overall cost leadership strategy], there are actually considerable similarities that could be more difficult to notice without structured frameworks.

All these companies are classified, evaluated and compared to each other the same way despite they are very different operationally and the way they report to external stakeholders. All data used in this study is based on these companies' customer-facing webpages or investor communication.

The COVID-19 epidemic has considerably affected many industries including the telecom one in 2020. However, as mentioned in the beginning, this study focuses on these three operators' strategies before the coronavirus crisis. The epidemic will undoubtedly force some changes in the telecom market and in operator strategies. Hence, COVID-19 implications to telecom operator strategies should be separately evaluated but they could exploit the same kind of analytical methods as the ones used in this study.

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