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POINT OF VIEW

NEXT WAVE OF TELCO GROWTH: CAPTURING THE REFURBISHED BUNDLE OPPORTUNITY

OVERVIEW

Introduction

Telecommunications (Telco) companies are facing significant challenges, such as increased pressure on their business models. One cause of this development is a decline in smartphone sales over the past few years. There is, however, by contrast, a growth in interest in the refurbished smartphone market. Bundling refurbished smartphones with existing tariffs creates a valuable opportunity for Telcos to differentiate and position themselves as key players in a fast-growing market. This analysis highlights the developments in smartphone sales of refurbished and non-refurbished devices, analyzes the current market positioning of Telcos and other players in the segment, and reveals a commercial strategy for Telcos.

Industry expert, **Prof. Dr. Jens Böcker**, emphasizes the future relevance of refurbished smartphone bundles for Telcos:

"The importance of the topic will increase, as this is a new chance for the industry to leverage incremental revenue streams."

This point of view outlines the potential of refurbished bundle offerings for consumer and business customers, and the steps Telcos need to take in product development, marketing, and sustainability strategies to take advantage of this opportunity.

Telcos' business model is under pressure

The Telco industry is under pressure as traditional revenue streams such as access and service revenues are undergoing a shift. Driven by competition, changing customer preferences, evolving technologies, and regulatory changes, this development requires a strategic realignment to remain competitive and drive further growth.

Access revenues, one of the main pillars of Telcos, are being challenged at various levels. The rise of over-the-top services and new content providers has led to increased competition for consumer attention. This trend has affected Telcos' access revenue streams, pushing them to reconsider their price models and offerings. In addition, the roll-out of wireless and fixed broadband networks fostered a competitive environment that intensified price competition and reduced profit margins. Telcos are challenged to generate revenue growth while developing their

network infrastructure and dealing with the constantly growing demand for data. Connectivity became more of a commodity than a Unique Selling Proposition.

Service revenues are also impacted: the commoditization of voice and messaging services, combined with regulators' moves to lower roaming charges and encourage net neutrality, has put pressure on Telcos' service top and bottom line. Further developments of disruptive technologies, such as Voice-over-Internet-Protocol (VoIP), have also impacted Telcos' service models.

Especially with regard to the existing core business, new approaches for greater differentiation are required. The harmonization of core business and mobile tariffs is causing concerns across the industry and leading to increased competition. Telcos need to differentiate their offerings from competitors as a key to building a strong position in the challenging market. Innovations in mobile services, such as data plans, network quality, and customer experience, will play a role in differentiation.

Dr. Olaf Sieg, Head of Telecommunication at Capgemini Invent, summarizes the as-is situation:

"The Telecommunication industry faces higher cost pressure and the need for transformation of consumer business. Refurbished hardware provides an opportunity to stabilize existing revenue streams and to support ESG targets."

By focusing on differentiators, there is a chance to attract new customers and also retain existing customers, and thus strengthen the position of Telcos in the market.

Declining smartphone sales and related effects

The situation of Telcos is also reflected and influenced by the development of smartphone sales. Over the past decade, the smartphone market has grown strongly. From 2010 to 2015, smartphone sales in Germany increased 2.5-fold[1]. The growing demand for mobile communication devices, technological advancements, the variety of models, and the increased importance of e-commerce contributed to this development. The availability of affordable smartphone models has made the devices accessible to a broad range of customers. Smartphones are no longer limited to communication devices, but have become multifunctional devices in everyday lives, accompanying consumers in various aspects, such as work, productivity, and entertainment.

In 2015, smartphone sales in Germany reached their peak with 26.2 million units. Since then the market has been characterized by a significant decline: compared to 2015, sales in Germany fell by 18% to 21.6 million units in 2022 (see Figure 1)[1]. This trend is currently continuing at an unbroken pace: in the first quarter of 2023, smartphone sales were -13.9%[2] below the prior-year figure. The development can also be observed globally: although the market peaked in 2017, it has since declined by 22%, from 1.566 billion devices sold in 2017 to 1.225 billion devices sold in 2022[3].
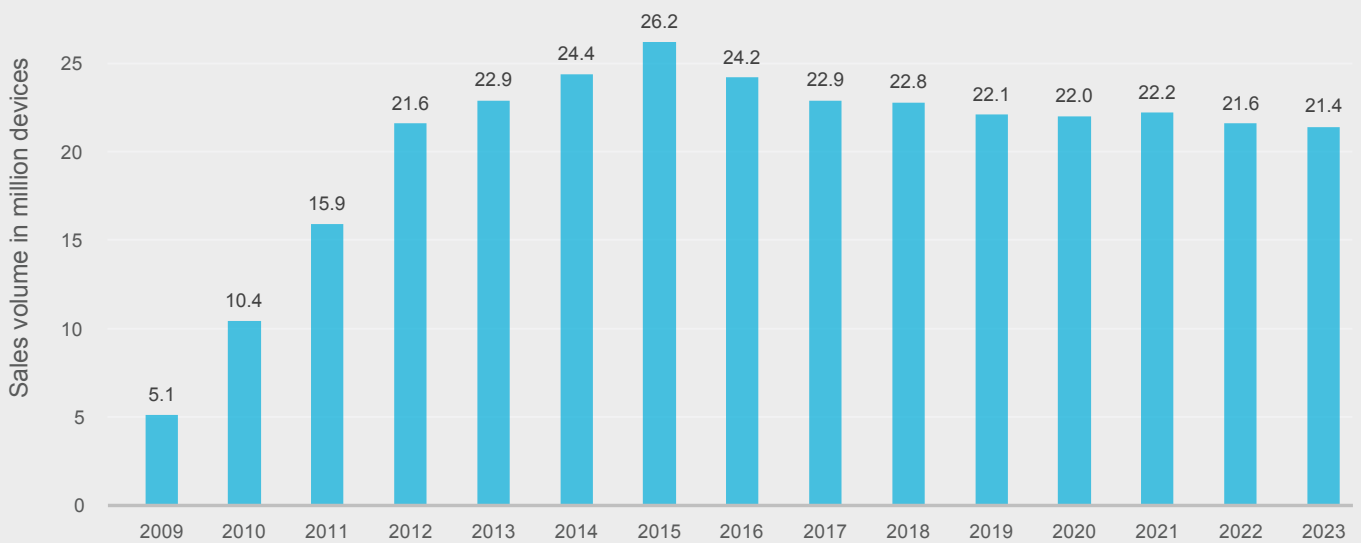

Figure 1: Sales volume of smartphones in Germany from 2009 to 2023[4]

Several factors are driving this trend and leading to a decline in smartphone sales. Recent smartphone models have seen a reduction in the number of critical innovations that encourage customers to upgrade. Incremental improvements in software or hardware, such as smartphone cameras or processors, are no longer key reasons to buy. Customers use their smartphones for a longer period of time before deciding to upgrade. On the one hand, this is due to the fact that the devices are technologically more durable, and on the other hand due to recent price developments. The retail price of smartphones increased by 13.5% year-on-year in the first quarter of 2023[5]. Further economic factors, such as the impact of supply chain challenges or inflation, among others, must also be taken into account. Finally, market saturation has also resulted in a decline of smartphone sales.

This development affects smartphone manufacturers and retailers, as well as Telcos. It is particularly important for them: smartphones are an important lever to sell mobile phone tariffs.

What sustainability has to do with smartphone sales

The telecommunication industry is known for producing a significant environmental footprint, accounting for 2-3% of global power consumption[6] and for 1.5-4% of worldwide Greenhouse Gas (GHG) emissions, whereby a remarkable portion can be attributed to the manufacturing of end-user devices linked to their daily business[7].

The resulting consequences of human-caused climate change, which are becoming increasingly apparent worldwide, are leading to an increase in sustainability awareness in society[8]. Apart from employees, business partners, and expanding government regulations, consumers are also pushing for "greener" products, services, and business practices. This has motivated companies of all industries to address sustainability in their main business and sales strategies. Companies have started to realize that sustainability brings about not only challenges, but also new market opportunities and profit pools.

This is how the economic system of the Circular Economy (CE) is gaining momentum, aiming at closing material loops[9] and extending the lifetime of products and materials. In contrast, our current economic model is linear, following a take-make-waste pattern, whereby products are designed and produced to become waste at the end of their useful life[10].

Considering waste as a resource, the concept of end-of-life should be delayed or, in the best case, replaced by the so called R-strategies: reduce, reuse, repair, refurbish, remanufacture, and recycle[11] (see Figure 2). In the case of Electrical and Electronic Equipment (EEE), waste streams should be considered a valuable source of secondary raw materials and, thus, alternative input for production[12]. Strategies, such as refurbishment, aim at extending the product lifetime by returning a product to good working condition by restoring or replacing components, updating specifications, and improving cosmetic appearance[13]. Looking at smartphones in particular, the extension of the lifetime of all devices worldwide by one year would result in saving up to 21.4 million tons of CO_2 emissions[14].
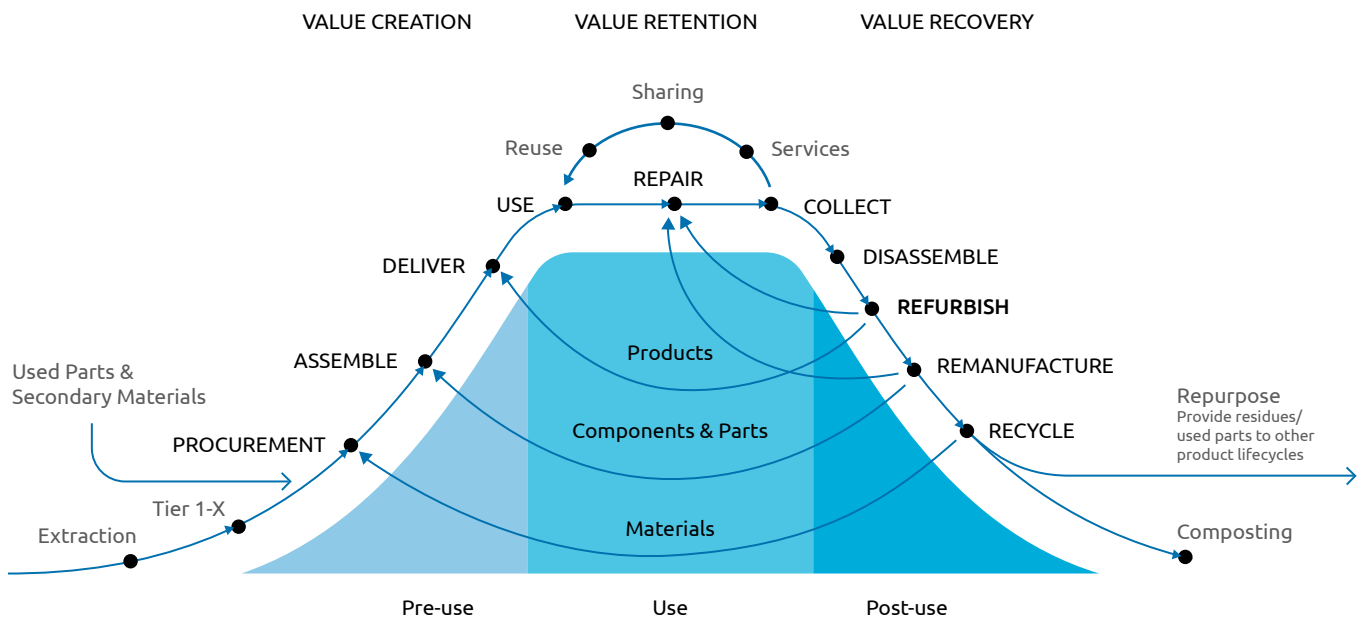

Figure 2: The Circular Value Hill Model (Source: Capgemini Invent visualization based on Achterberg et al. (2016))

Julia Müller, Head of Sustainable Futures at Capgemini Invent, emphasizes the importance of a shift towards a holistic Circular Economy concept, as it makes firms more resilient in regard to price increases, resource dependencies, and supply shortages, as well as leveraging economic potential.

"As the Circular Economy concept pushes forward, we need to align economically with environmentally friendly processes to build truly resilient companies. Being resilient to external shocks is a key success factor in the 21st century. Applying the R-strategy of refurbishment to smartphones in the telecommunication industry is thereby the most promising business case."

Environmental impact of smartphones

As end-user devices linked to the daily business of Telcos, smartphones lead to increasing e-waste amounts at the end of their useful lifetime. Reducing e-waste is thereby of utmost importance, as it is one of the fastest-growing residue streams worldwide[15], of which smartphones hold a share of approximately 10%[16].

Smartphones carry a heavy ecological rucksack of 86 kg[17], representing all the virgin materials used from resource extraction until the use phase, minus the actual weight of the product[18]. During its lifecycle, a single smartphone emits 77.2 kg CO2e, whereby the extraction and processing of materials and the following manufacturing of parts are the most carbon-intensive phases[19].

Besides toxic and hazardous substances, the e-waste of smartphones also contains precious and critical materials such as gold, silver, copper, and palladium. They are precious in terms of their economic value, which is assumed to be more than EUR 1.5 million material value per one million smartphones[20]. And they are critical in terms of the finite nature of virgin resources, whereby six of the key elements found in mobile phones are subject to scarcity in the next 100 years[21].

The rise of the refurbished smartphone market

There is a new observable trend in the smartphone market, as refurbished products[22] are gaining momentum. While growth for the (new) smartphone market has declined since 2019, an average positive growth rate of 5% for refurbished smartphones has been recorded over the last few years[23], with 13% of people in Germany already having bought a refurbished device in the past, and 50% open to doing so in the future[24]. According to forecasts, the global market for refurbished smartphones will continue to grow from USD 50.05 billion in 2022 up to USD 172.09 billion in 2033[25].

This increase in demand indicates a significant change in consumer behavior. For consumers, there are plenty of reasons to buy a refurbished smartphone, such as lower prices, saving resources, and maintaining a sustainable image. Especially due to the recent hike in inflation, discounted prices have become a decisive purchase argument for consumers[26]. Growing interest in refurbished electronics can also be observed through the increase in online search activity over the past years, as searches for new devices are being substituted. Developments over the past five years have shown that in Germany, the iPhone has been searched for more often in combination with the search term "used" than with "new"[27]. Noteworthy is the finding that, even on generic Telco hardware searches (such as "buy smartphone"), ads from refurbished product suppliers are dominating the search engine result pages.

Not surprisingly, younger age groups show a higher affinity with refurbished goods, whereas age groups of 50 years and above lack awareness. The current group of buyers includes young people between 18 and 29 years from urban areas, who care a lot about politics and society, are environmentally conscious, and have a strong sense of social responsibility[28].

Apart from consumer behavior, another noteworthy market development is a change in retail concepts. In the past, second-hand sales were primarily conducted between consumers (C2C) on different platforms. The market is now crowded with new professional vendors offering quality guarantees, certifications, return policies and after-sales services for refurbished smartphones. The most prominent providers are specialized online retailers such as rebuy, asgoodasnew, and Back Market.

However, not only new providers have recognized this market potential, but also OEMs (Original Equipment Manufacturers) such as Apple and Samsung. The Apple iPhone has proven to be a popular choice in the refurbished market, and Apple capitalizes on this by selling refurbished smartphones themselves. The trend of refurbished iPhones is reflected in Apple's market share of 49% in the refurbished market (2022). Apple is followed by Samsung with a market share of 26%[29]. This increasing presence of OEMs in the refurbished market indicates that the market has already become interesting for many participants: consumers, OEMs, and (online) retailers. The market gives indications of further growth as well as opportunities for additional suppliers.

What about Telcos and their stake in the refurbished smartphone market?

It is clear that there is already considerable demand for refurbished smartphones, as well as a maturing market from a supply point of view. Which role do Telcos play in this market? Every Telco offers its own trade-in programs (Vodafone Re-trade[30],Telekom Trade MyMobile[31], 1&1 Trade-In[32], O2 Trade-in[33]), whereby customers can exchange used or old devices for credit, a discount or a new product and tariff at the same operator.

However, the refurbishment of smartphones has not enjoyed great popularity in the product portfolio of Telcos so far. In the German market, only Deutsche Telekom[34] and 1&1[35] launched tariff bundles available with refurbished smartphones. In the UK, Vodafone[36] and O2[37] already operate such offerings and the French mobile network operator Orange[38] rolled out offerings to its markets in Belgium, Spain, France, Luxembourg, Moldova, Poland, Romania, and Slovakia.

Notwithstanding, compared to other participants in the refurbished market such as C2C marketplaces, specialized refurbishment suppliers or retailers, the offers from Telcos have a relatively late market entry and still a small market share[39]. Furthermore, an examination of Google search volume, such as that for Telekom's "ReUse MyMobile" offer, revealed a low level of interest, indicating that only a small number of individuals are actively searching for these bundling offers. This underscores the limited awareness of Telco provided refurbished products in the German market.

Consequently, there is a clear imperative for Telcos to take action to enhance their strategic and market positioning to prevent potential market share losses to competitors in the rapidly expanding and promising refurbishment industry.

In order to derive strategic implications, the strengths and weaknesses associated with non-Telco competitors in the refurbished auction market are assessed. These competitors include platforms such as eBay, specialized refurbishment suppliers and retailers like rebuy and Back Market, OEMs such as Apple and Samsung, as well as other retailers and aggregators like Amazon, Mediamarkt, Saturn, and Idealo (see Figure 3).

The strengths identified in these players revolve around their higher product availability, expansive customer bases, a well-established reputation for trustworthiness and service quality due to their deep expertise, and in the case of second hand platforms such as eBay, the natural fit of refurbishment with their existing business models.

Conversely, the weaknesses observed among these competitors include the absence of bundled offerings, limited awareness among older consumer segments, constrained flexibility in offering significant price discounts, and the presence of intense competitive pricing pressures.

As a result of this competitor analysis, the following strategies are seen as viable to assist Telcos in successfully entering and thriving in the refurbished product market while addressing consumer needs and market dynamics effectively:

Positioning refurbished products strategically:

Telcos should integrate "refurbished" and Circular Economy concepts as an intrinsic part of their company strategy, aligning them seamlessly with their core business model.

Competitive product offerings and quality assurance:

Telcos must ensure that their refurbished products not only meet, but exceed the quality and features offered by competitors. Maintaining a competitive edge in terms of product availability and quality is crucial.

Competitive pricing strategies:

Telcos should adopt competitive pricing strategies to attract cost-conscious consumers. Offering refurbished products at compelling price points can be a key differentiator.

Enhancing customer service knowledge:

Telcos should invest in training and resources to ensure that their customer service departments possess comprehensive knowledge about refurbished products. This empowers them to provide informed assistance to customers.

Leveraging existing customer base:

Telcos should actively engage with their existing customer base through online channels, leveraging first-party data activation to create awareness and interest in refurbished product bundles. This can help retain and upsell to current customers.

Diversifying product offerings:

In addition to smartphones, Telcos should consider expanding their refurbished product portfolio to include items such as smartwatches, tablets, and connectivity options like mobile tariffs and eSIMs. This diversification can serve as a key differentiator.

Leveraging brand awareness:

Telcos possess substantial brand recognition. Leveraging this brand awareness can be advantageous in promoting refurbished products, giving them an edge over specialized suppliers.

Clear positioning against C2C used products:

Telcos should educate consumers about the differences between refurbished products and products from the Consumer-to-consumer (C2C) space, setting special focus on quality, guarantees, and service. Clearly positioning refurbished products as a reliable and high-quality alternative is essential.

	E-commerce Marketplace	Specialized Supplier	OEMs	Other Retailers & Aggregators
	eBay	Rebuy, Swappie, BackMarket	Apple, Samsung	amazon, idealo, Media Markt, Saturn
Competitive strengths (exemplarily)	• Refurbished as "natural fit" for business model • Product availability • Large customer base	• Product availability • High credibility/trust in service and quality, due to strong expertise • Relevant customer base	• Highest trust in quality • Strong service expertise • Building on already existing consumer awareness & fanbase	• High product availability • Large customer base with regular online touchpoints • Price comparison
Competitive weaknesses (exemplarily)	• No bundles • Image: refurbished offered in eBay Restore, besides used products and returns ("B-Ware")	• No bundles • Limited customer base, strong competition • Limited awareness among older customers	• No bundles • Price discounts limited • Comparably low SEA activity	• Credibility: refurbished not usual part of business model • Missing specialization due to large & diverse portfolios • Price pressure/ competition

Figure 3: Non-Telco Competitors in Refurbished Auctions and their competitive Strengths/ Weaknesses (Google competitive analysis (2022)

Telcos need to raise awareness about their trade-in programs

A significant challenge for German Telcos affecting their participation in the refurbished market is an inventory shortage resulting from a lack of customer awareness, among other factors. In order for a circular system to work, enough used smartphones must be traded in so that a corresponding refurbishment offer can be made and a sufficient supply can be ensured.

Looking at aggregated Google search data, it becomes evident that search queries pertaining to trading in a used iPhone, such as "iPhone verkaufen" ("sell iPhone"), have almost been in line with and peaked at the same time as search queries for "refurbished iPhone" over the past 5 years (see Figure 4).

Also, it is notable that while the development of both search queries has been similar over the years, the number of users looking to buy a refurbished smartphone overtook the number of search queries about selling used devices multiple times, and the gap is widening.
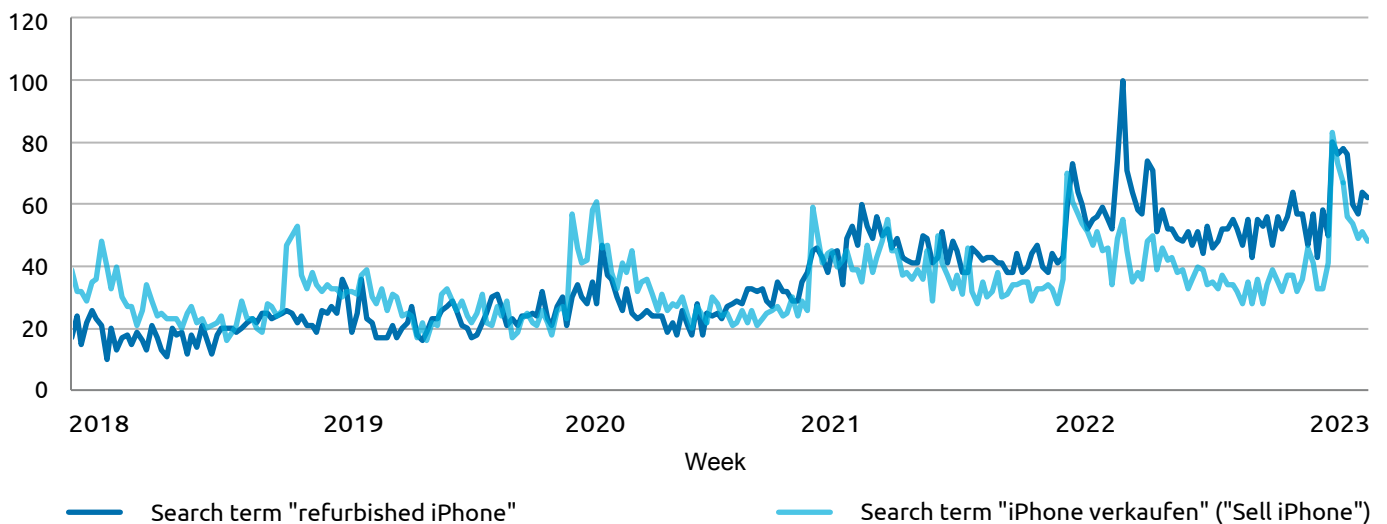

Figure 4: Google Trends Germany, past 5 years

A shortage of refurbished smartphone inventory is the consequence, highlighting the importance of raising awareness about Telco trade-in programs and incentivizing ones own customer base to trade in their used handsets.

Despite refurbishment searches outweighing trade-in searches, there are also other factors creating a shortage of refurbished inventory at Telco companies, including a still very much C2C dominated market, and old smartphones "piling up at home". This

well-documented hoarding behavior stems from factors such as keeping them as spare phones, a lack of knowledge regarding proper disposal, and concerns about data privacy[40].

According to Bitkom, 44% of consumers are still buying their used smartphones from other consumers, 29% from family and friends and, in total, 39% from specialized suppliers or retailers directly.

Only 3% of consumers are currently buying their refurbished smartphones from their mobile operator[41], indicating

a lack of awareness about existing Telco offerings on the consumer side, as well as a lack of refurbished offerings themselves for some Telcos.

When it comes to search interest around trading in used phones, top related search queries around "handy verkaufen" (selling mobile phone) indicate that the majority of searches are generic or associated with a specific supplier, but not Telcos - despite having trade-in programs in place, due to a lack of sufficient promotion (see Figure 5).

Figure 5: Google Trends Germany, top related queries for "handy verkaufen" ("sell smartphone"), past 5 years

This highlights the opportunity for Telcos to promote and dominate this space with corresponding marketing initiatives for their offerings, which in turn would allow them to recuperate and recondition a substantial number of devices, thereby securing the requisite inventory to remain competitive and offer refurbished bundle offerings in the market.

The demand for refurbished products is high, but currently the promoted offerings are mostly hardware dominated, despite customers inevitably needing a connectivity provider with their phone.

Thus, entering and successfully taking part in the refurbishment market becomes particularly interesting for Telcos with a corresponding contract bundle solution, enabling Telcos to design products and offerings for customers with rising expectations for sustainability, but also cost-saving potential.

Refurbished bundles as differentiation opportunity for Telcos

On the one hand, smartphone sales in general are declining - for various reasons, as outlined in the preceeding chapters. On the other hand, smartphones can play an important role as a tool for Telcos to sell mobile phone tariffs — in the consumer as well as business segment.

The development of refurbished hardware and the increased demand, as well as increased sales, play a decisive role. By bundling in tariffs, Telcos have the opportunity to meet the increased demand for refurbished smartphones and, at the same time, build a differentiator for their core business to form additional revenue streams: with tariff sales, in the upsell to higher-value tariffs, or simply in a longer contractual commitment.

With this approach, Capgemini Invent and Google see an opportunity to simultaneously address several factors that support refurbished bundles as a commercial strategy.

The focus is on cost savings for customers, enabling them to continue to purchase top models at low cost. On average, the savings are 33%[42] of the regular new price. The iPhone 13 Pro Max, released in 2021 for an original price of EUR 1,449[43], is currently available from around EUR 800 in very good condition - thus a savings of more than EUR 600. This is a decisive factor against the rising price trend as well as the development of economic factors.

This approach opens up the possibility of offering individualized products for customers based on different tariffs for the consumer and business customer segments. This concept can also be combined with the trade-in programs that already exist in most cases, to build up circulation on the Telco side and retain customers in the Telco's field of operation. From setting up the smartphones to switching to a new refurbished one, the approach can not only be thought of singularly, but also in cooperation with partners: as content and service bundling or extended partnerships.

At the same time, Telcos should use their advantage as trustworthy mobile network operators. Especially in the case of refurbished devices, many still have reservations, some justified and some unjustified, which large Telcos can counter more easily than online providers thanks to their scaling and their hybrid sales network. It is precisely this point that shows the potential: 2/3 of people still have reservations about refurbished devices[44]. This demonstrates the sales potential that still exists on the one hand and the educational task on the other.

On this basis, it is self-evident that Telcos will not only address a niche, but also a broad group in the future. Telcos already have the basis for this today: with their databases, they have sufficient customer information to address and process the needs of their customers.

Ultimately, this is not only a commercial opportunity, but also an opportunity for sustainability: for the Telcos themselves, but also for the end consumer and the business customer.

By using refurbished smartphone packages, telecommunications companies have the opportunity to differentiate themselves in a competitive market while serving a broader range of customer preferences and needs. This approach not only benefits consumers, but is also consistent with sustainability goals and can be a profitable long-term strategy for telecommunications companies and customers. However, successful execution requires the right strategy.

Key aspects of building a refurbished bundle offering

We see a need for Telcos to offer differentiation in their core business to compete successfully in the evolving telecommunications market. This differentiation is based on several important prerequisites to achieve sustainable growth. When Telcos consider integrating refurbished smartphone packages into their product portfolio, they should be aware of the following imperatives:

Embrace new business models and partnerships:

Acquiring innovative business models and forging strategic partnerships is a major priority. This includes exploring opportunities beyond traditional telecommunications services. Beyond core services, there is a strong case for exploring innovative business models and forming strategic partnerships with refurbishment companies and third-party providers. This includes expanding into areas such as recycling, trade-in programs, and special warranty services.

Positioning as an ecosystem enabler:

To drive growth, it is necessary to position oneself as an ecosystem enabler and to establish oneself as a central facilitator in the refurbished business ecosystem. By creating robust platforms and interfaces for certified refurbished devices, there is an opportunity to enable seamless integration with different industries. Telcos are able to play a central role in driving these connected ecosystems for refurbished solutions. This not only adds value, but also enables Telcos to take a substantial share of the refurbished device value chain.

Deliver hyper-personalized omnichannel customer experiences (CX):

In the age of hyperconnectivity, customers expect personalized and consistent experiences across all touchpoints. In the refurbished bundles market, customer expectations
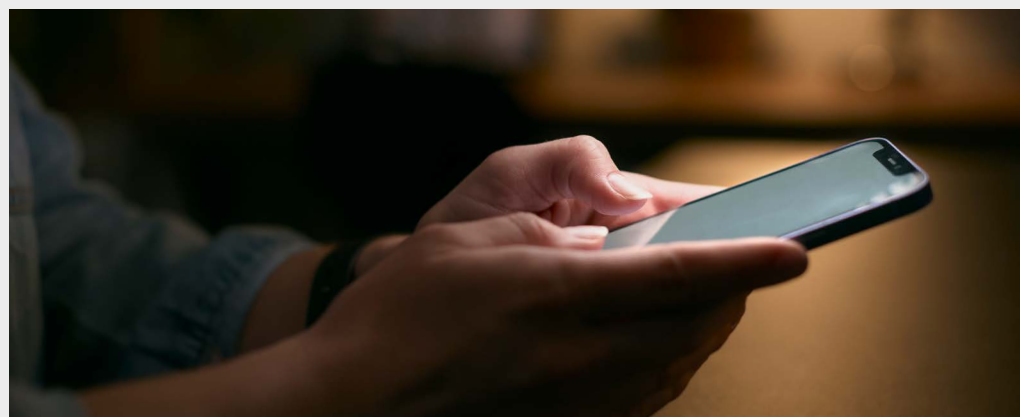
are as high as they have ever been. Customers are demanding not only affordable prices, but also personalized and consistent experiences across all touchpoints. To meet this demand, Telcos must leverage data analytics, Artificial Intelligence (AI), and Machine Learning (ML). Understanding individual customer preferences and behaviors enables Telcos to offer hyper-personalized experiences on refurbished bundles, and recommendations based on an omnichannel approach. This results in improved customer loyalty, reduced churn, and further revenue opportunity.

Refurbished bundle offerings need to be aligned with a Telco's long-term business strategy. This includes potential upsell and cross-sell opportunities. Integrating refurbished bundle offerings requires a comprehensive approach that considers customer needs, quality assurance, sustainability, and operational efficiency. A well-executed strategy can differentiate a Telco in the market, create new revenue streams, and deliver value to customers. Incorporating these strategic imperatives into refurbished bundle offerings is critical for Telcos. By adopting new business models, driving the refurbished device ecosystem, and delivering hyper-personalized omnichannel customer experiences, Telcos will be able to compete in the refurbished device market, but also improve their overall competitiveness in the Telco industry.

Integrating refurbished bundle offerings in Telcos' sustainability strategy

Once Telcos decide to integrate refurbished smartphone packages into their product portfolio, in conjunction with their long-term business strategy, the next step involves integrating them into the company's sustainability strategy.

First and foremost, the introduction of refurbished bundle offerings plays a pivotal role in enhancing the company's reputation and Environmental, Social, and Governance (ESG) rankings. By promoting all activities related to refurbished bundles in their reports, the company can actively improve a wide range of sustainability KPIs. Affected KPIs can include, for instance, a CO2 reduction in Scope 3, a higher percentage of sustainable suppliers, a reduction of virgin material sourcing and the improvement of employment conditions along the up-stream supply chain. As a consequence, the company is able to optimize its ESG rankings. This, in turn, has a well-documented effect of increasing shareholder value of a business [45,46,47]. In order to maximize the positive effect of refurbished bundles on ESG rankings, sustainability reporting experts must analyze the evaluation criteria of ESG rating agencies (such as MSCI, Sustainalytics, or ISS ESG) and refine the KPIs accordingly.

Besides improving a wide spectrum of KPIs, it is also key to quantify the environmental impact of refurbished bundles in depth. In collaboration with engineers and sustainability experts, the company needs to establish reporting and assessment frameworks that incorporate sustainable impact calculations, such as life-cycle analyses. This is a well-recognized method which can determine the exact difference between selling new or refurbished phones in terms of their carbon footprint, energy consumption, and waste generation. Looking at other crucial aspects, Capgemini developed a sophisticated framework, called RACES, that builds on two assessment subjects: 1) resource awareness and 2) Circular Economy strategy. In calculating a resource criticality indicator and executing scenario analyses, RACES empowers companies to optimize their resource management and thereby enhance their long-term resiliency.

Beyond elaborating the KPI framework and the Circular Economy strategy, including the refurbishment cornerstones, companies must propel the operational rollout. This involves not only identifying challenges and best practices, but also optimizing the partner ecosystem which builds on business models entirely new to Telco companies. A holistic reverse-logistic network needs to be installed whilst ensuring efficient take-back schemes, sufficient spare part availability and a robust quality management of recycling and refurbishment processes. One major challenge is creating the optimal balance between in- and outsourcing of end-of-life processes. Sustainability and re-logistic experts address these challenges with partner assessments, proven logistic concepts, and platform-based value chain solutions. The communication strategy also plays an important role, as refurbished bundles need to be marketed without cannibalizing existing offerings, and effective user incentives for product returns need to be put in place. These elements are essential prerequisites for a successful offering of refurbished bundles that provide strategic competitive advantages.

Building an effective marketing strategy to succeed with refurbished bundle offerings

In order to leverage the refurbished bundle opportunity, Telco providers need to devise an effective marketing strategy. Telcos need to consider a holistic approach to their marketing of refurbished bundles, as all aspects need to be considered to achieve a differentiation from other players in the refurbished handset market. This entails the right configuration of product, price, promotion, and place.

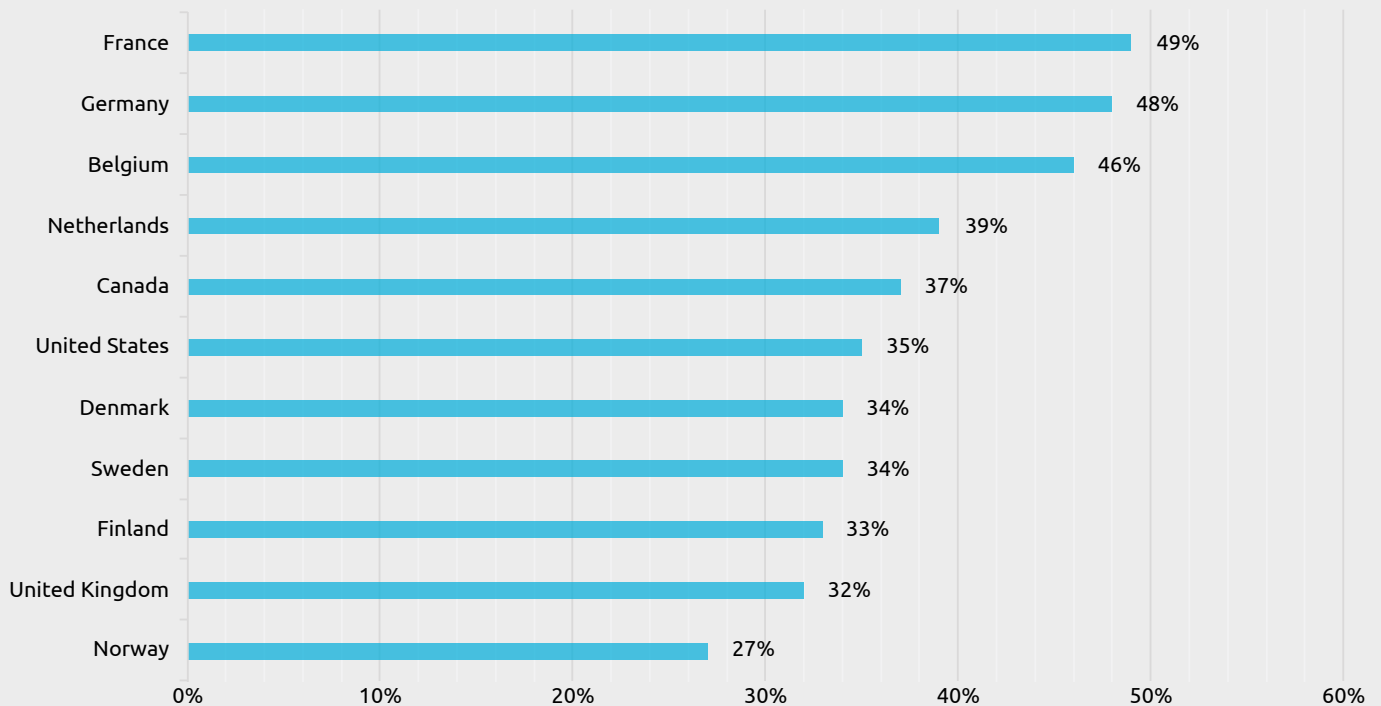**Prof. Dr. Jens Böcker** highlights the digital channel for refurbished bundles:

As previously outlined, Telcos' key differentiation in the market is the ability to bundle a refurbished device with their subscription offering. This allows for a more favorable pricing mechanism, as Telcos are able to offer the bundle as a financing mechanism for the device. When it comes to promotion, Telcos need to tackle every step of the marketing funnel comprising awareness, consideration and conversion.

As **Karin Gerhardy**, Industry Leader Telecommunications at Google Germany, points out, Telcos are not living up to their potential when it comes to the marketing of refurbished offerings.

"We observe that specialized retailers are showing up more prominently with their refurbished offerings on Google's advertising platforms than Telcos, although their ability to offer bundled refurbished devices gives Telcos a significant competitive advantage."

"Sales will become more and more digital. Refurbished products will be bought online - that will definitely be a new standard within the different sales channels."

Country	Percentage
France	49%
Germany	48%
Belgium	46%
Netherlands	39%
Canada	37%
United States	35%
Denmark	34%
Sweden	34%
Finland	33%
United Kingdom	32%
Norway	27%

Figure 6: Internet user in selected countries who regularly/always make purchasing decisions based on environmental impact, June 2022[51]

Building awareness to create an association with refurbished offerings

Telco providers are currently not top of mind for many consumers when it comes to refurbished devices. As previously mentioned, only 3% of refurbished buyers received their handset from a Telco provider, which is likely rooted in a lack of awareness for many potential customers.

To resolve this lack of awareness, younger age groups can be targeted through advertising on social media and YouTube. In Germany, more than 90% of the GenZ audience uses YouTube at least once a month[48].

The awareness gap is especially pronounced for older age groups. About half of the age group 55+ is still entirely unfamiliar with the concept of refurbished consumer electronics[49].

This may represent an opportunity for Telcos to become associated with the concept of refurbished smartphones by putting emphasis on building awareness according to age groups and affinities.

Addressing cohorts of users e.g. on connected TVs can be a key awareness driver for consumer electronics in general, as well as for refurbished offerings.

Influencing consideration for interested target audiences

Refurbished hardware bundles represent a meaningful opportunity to influence consumers in their purchase decision. As refurbishment entails a contribution to sustainability and sustainable business practices, Telcos can leverage marketing activities to shift consumer perception of the respective brand and positively influence their consideration when purchasing. Studies show that almost every second consumer is making purchasing decisions in their daily lives based on sustainability aspects (see Figure 6).

Younger consumers who are already familiar with the concept of refurbished devices and maintain a stronger preference for sustainable choices may be particularly influenced by the marketing of Telcos for refurbished bundle offerings. Respective media strategies can focus on using short form video content e.g. with YouTube Shorts. Video content is especially useful to influence consumers in the consideration phase, as Telcos are able to leverage video advertising for storytelling and educational purposes, enabling potential buyers to learn more about the offerings with further online content.

Conversion: convincing consumers to buy from a Telco

As previously mentioned, price is a significant factor for consumers in deciding to buy refurbished devices. Refurbished handsets from specialized retailers are usually 20-50%[50] cheaper than new devices, which already makes a strong argument. Even more so, Telcos can leverage shopping Ads on Google Search to showcase their bundled offering at a fraction of the price compared to retailers that offer standalone refurbished devices.

Furthermore, the use of first-party data plays an important role in driving conversion, which creates a competitive advantage for Telcos compared to other players in the market for refurbished hardware offerings. As Telcos possess a wealth of user data, they can make use of it in the promotion of refurbished bundles. These data points include information on current device ownership, contract lengths and demographic features. In order to act on this data, Customer Data Platform (CDP) plays a crucial role.

Differentiation for Telcos using a Customer Data Platform

A CDP, e.g. based on Google Cloud Platform, enables Telco marketers to unify customer data from marketing, sales and other channels into a 360-degree customer view. This serves as the foundation for AI-based modeling of customer information in order to deliver personalized customer experiences pertaining to content, targeting, and timing of offers and communication. Potential use cases offer a chance to gain insights e.g. into purchase or churn probability, but of course also into the next best offer.
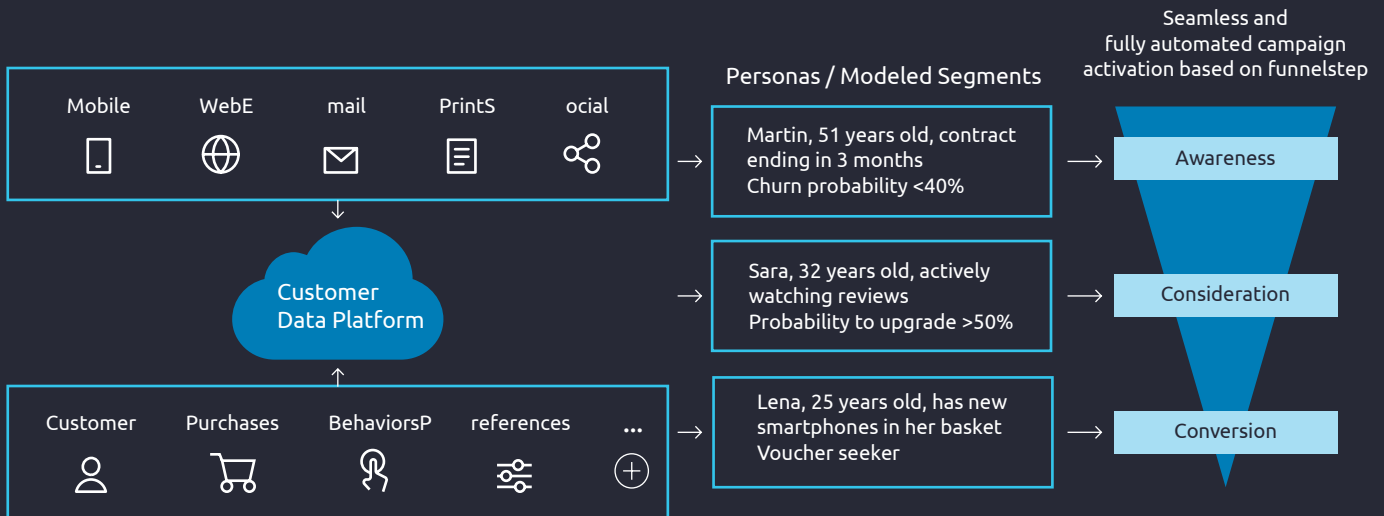
Figure 7: Customer Data Platform & Data driven campaigning based on AI powered audience segmentation

In order to act on these data insights, a Customer Data Platform is an effective instrument as it allows for data-driven campaign activation. For instance, Google Cloud Platform integrates with downstream marketing systems using BigQuery. Using this setup, marketing touchpoints and creatives can be targeted towards certain funnel steps while taking behavioral and motivational characteristics of a specific audience segment into account.

Finally, Telcos have a strong differentiating argument when it comes to determining the place of their refurbished bundle offering. As outlined before, Telcos can build strong omnichannel experiences with the ability to leverage multiple strong channels including, but not limited to, online channels and, in some cases, even physical storefronts. This can be a significant factor in positioning themselves against purely online players.

Conclusion

The Telco industry is facing major challenges as its traditional revenue streams change. These challenges are primarily triggered by factors such as increased competition, changing customer preferences, advancing technologies, and changing regulations. To maintain their competitiveness, Telcos must differentiate themselves by focusing on innovations in mobile services, network quality, and improving the customer experience to attract and retain customers.

In addition, the industry is becoming increasingly aware of its environmental impact, which includes a significant contribution to global electricity consumption, and thus, CO_2 emissions. This increased environmental awareness, paired with customer demands and regulatory changes, is driving the adoption of sustainable practices, including those related to the Circular Economy.

Refurbished products, including smartphones, are gaining momentum in the market with increasing demand and growing sales. Consumers are attracted to refurbished products as they are less expensive, comparatively environmentally friendly, and bring a positive image. The landscape of traditional second-hand sales of used products continues to evolve as professional vendors enter the scene, offering refurbished smartphones with quality guarantees, certifications, return policies, and after-sales services.

Despite the growing demand for refurbished products, Telcos have been relatively hesitant to enter this market. To compete effectively in the rapidly growing market for refurbished products, Telcos need to take strategic initiatives.

The key to success for Telcos in the refurbished market includes:

1. Strategic Positioning:
Integrate refurbished products into the core business strategy.

2. Quality Assurance:
Ensure that refurbished products exceed competitors' quality and feature standards.

3. Competitive Pricing:
Offer competitive pricing to attract cost-conscious consumers.

4. Customer Service Knowledge:
Invest in training and resources for customer service departments to assist customers effectively.

5. Leverage Existing Customer Base:
Engage with existing customers through online channels to create awareness and interest in refurbished products.

6. Diversify Product Offerings:
Consider expanding the refurbished product portfolio to include items like smartwatches, tablets, and connectivity options.

7. Leverage Brand Awareness:
Capitalize on brand recognition to promote refurbished products.

8. Differentiate from C2C Used Products:
Educate consumers about the differences between refurbished and Consumer-to-consumer (C2C) used products, focusing on quality, guarantees, and service.

Offering refurbished smartphone bundles as part of the product portfolio of Telcos provides an opportunity to stand out from the competition and remain competitive in the market. It is in line with sustainability goals and holds the potential for long-term profitability.

To effectively promote refurbished bundle offers, Telcos need to raise awareness, influence customer behavior, and use first-party data to increase conversion rates. The use of social media and targeted advertising increases awareness, while messages focused on sustainability resonate with environmentally conscious consumers. Competitive pricing, tailored offers, and data-driven marketing strategies pave the way for successful conversions.

Telcos are in first place in a growing market for refurbished products. It's an approach that benefits consumers, strengthens the reputation of Telcos, and contributes to long-term sustainability goals.

Get in touch

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GLOSSARY

TERM	DEFINITION
C2C	Consumer-to-Consumer (C2C) represents a business model or transactional relationship where individual consumers engage in direct commerce or transactions with one another, often facilitated through online platforms or marketplaces.
CDP	A Customer Data Platform (CDP) is a centralized and integrated technology solution that collects, organizes, and analyzes customer data from various sources, such as websites, mobile apps, and customer interactions, to create a comprehensive view of each customer, enabling businesses to deliver more personalized and targeted marketing and customer experiences.
CE	Circular Economy (CE) is a model of production and consumption aiming at closing material loops and extending the lifetime of products and materials. The concept involves sharing, leasing, reusing, repairing, refurbishing, and recycling existing materials and products to reduce environmental impact and promote the efficient use of resources, creating a more sustainable and environmentally friendly economic system.
CO_2	Carbon Dioxide (CO_2) is a greenhouse gas naturally present in Earth's atmosphere, but also a byproduct of various human activities, such as the burning of fossil fuels, deforestation, and industrial processes. It plays a significant role in climate change as it contributes to global warming and climate issues when its concentration increases in the atmosphere.
CO_2e	A Carbon Dioxide equivalent (CO_2e) serves as a quantitative metric employed for the purpose of assessing emissions arising from various greenhouse gasses. This metric relies on the concept of global warming potential to standardize emissions by equating quantities of diverse gasses to the corresponding amount of carbon dioxide, based on their equivalent global warming potential.
EEE	Electrical and Electronic Equipment (EEE) refers to devices, appliances, or machinery that have electrical and electronic components.
ESG	Environmental, Social, and Governance (ESG) is a framework used to evaluate and measure the sustainability and ethical impact of a company or organization.

TERM	DEFINITION
E-WASTE	Electronic waste (e-waste) describes any EEE that's been discarded. This could be, for example, devices such as cell phones, smartphones, desktops, computers, computer monitors, laptops, circuit boards, hard drives, etc.
GHG	Greenhouse Gas (GHG) refers to gasses in the Earth's atmosphere that contribute to the greenhouse effect and global warming. Common greenhouse gasses include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O).
OEM	Original Equipment Manufacturer (OEM) refers to a company that produces components or products to be used by another company in their own products or solutions, often under the purchasing company's brand.
REFURBISHED	Refurbished indicates products that were used and have undergone a rigorous repair and restoration process to meet or exceed the original manufacturer's standards, providing a cost-effective alternative to brand-new items. Certified refurbished items have been refurbished and certified by the manufacturer or a reputable third party, assuring quality and warranty.
SCOPE 3	Besides Scope 1 (direct GHG emissions) and Scope 2 (electricity indirect GHG emissions), Scope 3 emissions define other indirect GHG emissions as a consequence of the activities of the company, but occur from sources not owned or controlled by the company. Examples for Scope 3 emissions are the extraction and production of purchased materials, transportation of purchased fuels, and use of sold products and services (GHG Protocol).
TRADE-IN PROGRAM	A service offered for customers to exchange used or old devices for credit, a discount, or a new product.

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