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CAUSES OF CUSTOMER RETENTION FAILURE IN THE TELECOMMUNICATION INDUSTRY, A CASE STUDY OF NOKIA.

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Declaration

This is to confirm that this individual project is based on my extensive research and individual findings. Therefore, no part of this work was written by anyone else or submitted for any other purpose. All information provided aligns with the university rules about academic integrity and ethical practice. No source was copied without giving proper credit in the reference list. All data, arguments, and explanations were derived from valid and honest sources.

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Abstract

This study investigates how customer retention affects telecommunications companies worldwide, using Nokia as a case study. It seeks to uncover reasons why customers switch mobile brands. **Chapter 1** provides a comparative, historical, and institutional overview of the mobile phone industry, detailing its aims, scope, objectives, and market significance. **Chapter 2** reviews previous research on issues such as innovation gaps, iOS updates, and leadership failures that lead to CRF. It employs competitive analysis tools, such as Porter's Five Forces and the Innovation Ambition Matrix, to examine how companies such as Apple, Samsung, BlackBerry, and Huawei succeed in a competitive landscape. It also recommends strategic adjustments for Nokia to modify its business ecosystem and develop effective lock-in strategies to reduce customer churn. **Chapter 3** explains data collection methods, combining primary and secondary quantitative approaches and statistical analysis rooted in a positivist philosophy. This involved collecting new survey data as traceable evidence of market trends. **Chapter 4** examines the effects of factors such as competitive analysis, the failure of the Microsoft partnership, slow adaptation to touchscreen technology, and overreliance on Symbian, iOS, and limited models, underscoring the importance of brand trust, loyalty, and innovation. **Chapter 5** discusses limitations such as locating former Nokia users and accessing recent scholarly articles, and offers practical recommendations: building strategic collaborations, targeting specific markets, adopting a software-first approach, leveraging AI for personalisation and predictive support, ensuring a resilient supply chain and sustainable practices, along with strategic leadership, design thinking, and innovation.

Keywords

Customer retention failure (CRF), Competitive analysis, Innovation, Nokia, Churn, Technology, Symbian phone, Android, Operating system upgrade (OS), Partnership with Microsoft, Statistical analysis, Leadership style, Brand trust and loyalty, AI generative, Software, Switching behaviour, Marketing technique, Cost theories

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Element one

Chapter 1: Introduction

1.0 Background History

Mobile phone communication began in the 1940s when forces such as police, military, and emergency services used a two-way radio system operated by a single powerful transmitter, allowing communication within a specific geographic area or limited range. This system operated for a decade, but challenges such as limited coverage and the lack of rapid, uninterrupted message transmission led to the introduction of cellular technology in the United States in the 60s, initiated by Bell Labs. Gaur (2020) explained that the idea was to divide service areas into small cells with higher-frequency reuse, thereby enabling simultaneous end-to-end conversations. This development marked the start of modern mobile networks. In April 1973, Motorola introduced a prototype of the first handheld phone, engineered by Martin Cooper, which weighed 1.1 kg and offered a maximum of 30 minutes of talk time. In 1979, the first-generation analogue cellular networks were launched in Japan, the Nordic countries, and the USA (AMPS). By 1981, devices were large, expensive, and largely immobile, mainly used in cars and homes (Sagotia and Bhalodiya, 2019). These early devices were limited by low capacity, poor voice quality, and inadequate security. The early 1990s saw the emergence of second-generation digital networks (2G), which spread across Europe, Asia, and the Americas. These devices featured text messaging, improved sound quality, smaller handsets, portability, and usability in various locations, making them more accessible and popular among the mass market. Sagotia et al. (2019) noted that by the late 90s, faster data transmission and internet capabilities emerged, enabling email, multimedia messaging, cameras, music, and video, along with web browsing, marking the third-generation evolution. Technological advancements have significantly transformed the world, serving as the foundation of communication and shaping activities such as information searches, commercial transactions, bill payments, shopping, and more (Gaur, 2020). These developments have contributed to an unstable situation in the mobile telecommunications industry, as customer preferences, desires, and expectations remain insatiable, driving global competition. Therefore, mobile companies are responsible for continuously upgrading and

updating their software and hardware processes to meet customer demand (Vasiyani *et al.,* 2025). Nokia was founded on 12 May 1865 in Tampere, Finland, by Fredrik Idestam, a Finnish engineer. The multinational company, which specialised in the production of information technology, consumer electronics, appliances, paper, pulp mill products, tyres, rubber boots, plastics, and chemicals when it first started, later expanded into other industries, including telecommunications and digital transformation, and now has approximately 102,000 employees in 130 countries worldwide. Bhalodiya *et al*. (2019) estimated the company's annual revenue at approximately $23 billion; it subsequently listed its shares on the stock exchange and was ranked 415th among the Fortune Global 500 by revenue. Nokia began manufacturing large-scale telecommunication infrastructure and licensing entirely in the early 1990s; the company produced various mobile phones and accessories and played a significant role in the global infrastructure and telephone industry, assisting and participating in the development of the GSM and LTE standards across nations and paving the way for many companies in the mobile world. In the early 2000s, Nokia produced a significant number of mobile devices, including the Nokia N95, 3310, and 1100, a game changer that attracted the whole world for its unparalleled features, reliability, and durability, with the sole aim of enhancing connectivity among people with affordable prices and accessibility, before the organisation launched the Lumia design phones. Umme *et al* (2023) reported that the company incorporated a video game console and a mobile game, an unsuccessful mission, which contributed to the downfall after many years. In September 2003, the company was said to have acquired Sega. Com, an establishment responsible for data provision, information management, and synchronisation software, promoted device functionality and proficiency (Tanzil and Bobour, 2024). Nokia further improved productivity by merging with Siemens Network Holdings in Espoo, thereby increasing its employee base across nations. The company flourished for decades, attaining a strong brand position and brand recognition, coupled with universal manufacturing and mobile availability. In 2004, the organisation was forward-looking, collaborating with various mobile network operators and retailers, which facilitated widespread network distribution worldwide, helped navigate technological challenges, and enabled consumers to access multiple networks. Such developments, including 4G and 5G, increased the company's strength and financial performance. In fact, it was nearly impossible for competitors to outperform Nokia, as it maintained absolute dominance

both at home and abroad (Cresswell *et al*., 2023). However, due to some internal and external factors (political, economic, sociological, technological, environmental and legal factors which are beyond control, are discussed in detail below, most significantly the emergence of its competitors like Apple and Samsung, launching the iPhone and Android in 2007, which impacted Nokia negatively, resulting in a drastic fall.

Problem statement

1 Lamberg *et al* (2021) mentioned that Nokia's market downfall is traced to a lack of strategic innovation processes, the company's inability to transition from its hardware components to a software-driven ecosystem, backed up by a delay in decision-making and poor management structure. Hence, extensive research into the root causes of the company's failure in customer retention in the mobile sector is necessary.

1.2 Research aims.

- This project aims to investigate the reason for Nokia's customer retention failure in the telecommunications industry.

1.3 Scope and objectives of the research

- To evaluate customers' perception and the factors that contributed to behavioural shift during Nokia's decline.

- To examine why, what, and how customers left Nokia and moved to other brands.

- To suggest a practical recommendation that would help eradicate customer retention failure and facilitate trust and brand loyalty for upcoming mobile phone companies (Lalisan 2025 *et al* ,2025).

Chapter 2: Literature review

2.0 Introduction

Scholars have developed various frameworks and theories to explain why organisations encounter problems, go bankrupt, or cease operations over time. Regarding Nokia's failure, the analysis will utilise Porter's Five Forces model (competitive rivalry, threat of new entrants, bargaining power of suppliers, bargaining power of buyers, and threat of substitutes) and the Innovation Ambition Matrix (core, adjacent, and transformational). These models are appropriate because they offer proven insights into the root causes of Nokia's failures and provide practical recommendations for resolving them. Proper application of these insights can help upcoming mobile companies reduce customer loss, make strategic decisions, and improve overall business management (Brown and Kutz, 2019).

2.1 Theoretical Frameworks Explaining Nokia's CCRF

2.2 Porter's Five Forces Model

A strategic tool that helps business leaders analyse market competition, identify emerging forces influencing market dynamics, make informed resource management decisions, evaluate industry profitability, and explore long-term opportunities within a competitive landscape (Kilson and Doz, 2018).

1. Competitive Rivalry

After Nokia dominated the mobile phone industry in the early 2000s and was perceived as the most recognised brand with the most extensive customer base, it believed it held total control until Apple and Samsung entered the market in 2007. Both companies aggressively challenged Nokia with the launch of the iPhone, which featured iOS, and Samsung offered OEM systems with diverse applications, user-friendly features, and rapid product cycles. This significantly competed with Nokia's hardware and differentiated its products through rival software ecosystems. Customers seeking cutting-edge UX and extensive app options quickly shifted to Apple and Samsung, leaving Nokia's outdated Symbian and Windows systems behind (Haftor, Climent, and Kallmuenzer, 2025).

2. Threats from Substitutes

As markets evolved and consumer demand increased, customers increasingly preferred iPhone and Android devices for their seamless user experience, diverse device options, cloud connectivity, digital software, storage, and web services. Nokia's Symbian, coupled with its Ovi Store, could not match the variety and quality of applications and mobile experiences offered by substitutes (iOS and Android), reducing Nokia's appeal and market share and incentivising customers to switch (Tushman and Vuori, 2024).

3. Bargaining Power of Buyers

Customer satisfaction and interest heavily influence purchasing power. Buyers faced low switching costs when choosing Samsung Android devices or iPhones, which offered upgraded software, alternatives, and choices, making it easy to switch from Nokia. Carrier relationships further eased defections. Nokia's delayed move to Windows in 2011, despite being necessary earlier, worsened customer churn due to failed system update strategies (Haftor, Climent, and Kallmuenzer, 2025).

3. Bargaining Power of Suppliers

The success of mobile companies depends heavily on suppliers providing the latest software upgrades, key components, and developer ecosystems. In 2006, Nokia's Symbian lacked crucial applications and updates, prompting a decision to partner with Microsoft Windows—a strategic error that contributed to its decline. This partnership limited Nokia's device attractiveness, as customers preferred the ecosystems of Android and iOS, which offered more features and a richer ecosystem (Tushman and Vuori, 2024).

4. Threats of New Entrants

The rapid rise of Apple exposed the weaknesses of Android's lower-end devices and iOS's limitations. Apple expanded quickly by leveraging its open ecosystem and launching a wide array of devices, from the iPhone 7 series to the 17 Pro Max, alongside Samsung Galaxy models that offer extensive storage, frequent updates, and competitive pricing. Nokia struggled to maintain its status and was unable to compete with the latest software innovations introduced by these new entrants (Tushman and Vuori, 2024).

2.3 Figure 1. Porter's Five Forces Framework

(Lalisan, Badrudduza and Suk Yee, 2025).

2.4 Key point

Treats of new Entrants (**Strong**)

Competitive Rivalry (**Medium**)

Bargaining Power of Suppliers (**Weak**)

Threats of Substitutes (**Medium)**

Bargaining Power of Buyers (**Weak)**

2.5 Overview of Nokia's competitive landscape

However, Nokia, having dominated the mobile revenue stream and contributed immensely to establishing itself as a pioneer in the early 2000s by offering simplicity and friendliness in the mobile world, especially with the manufacturing of the 3310 model, which gained widespread attention, must be scrutinised alongside its competitors' performances over the years before its decline. Brands such as Xiaomi, Blackberry, Huawei, and Motorola have been prominent and vibrant organisations for over two decades, while Samsung and Apple have made a massive and remarkable impact in the mobile world, as they continue to set innovative measures, income generation streams and universal recognition as declared by (Alenezi, Al-Dhmour, and Al-Alawi, 2025). Companies such as Motorola and BlackBerry later experienced

declines due to economic, political, and technological factors. However, companies such as Huawei and Xiaomi flourished in Asia and emerging markets, capturing larger market shares in the telecommunications sector. Exploring the trajectories of these rivals could help analyse the challenges faced, opportunities missed and provide strategic solutions to regain relevance in the future.

Samsung

The company held and continues to hold the top position in Android phones, with a market share of about 20.1%, equivalent to approximately $234 billion as of June 2025. Its organisational excellence is attributed to its extensive portfolio, which spans entry-level models to high-end flagship devices, including the Galaxy X series and the foldable Galaxy Z lineups. This reflects the impact of constant innovation, scaling, leadership, and global expansion on the company (Kang, 2024).

Apple

A close competitor to Samsung, Apple reportedly held a global market share of 23% and reported total revenue of $394 billion recently. It dominated the mobile phone market, topped sales charts, and kept consumers locked into its ecosystem through the iPhone Pro and Pro Max models, along with regular iOS upgrades that went beyond hardware components. Apple strategically integrated its ecosystem, iCloud, Apple Pay, and the App Store, which significantly contributed to its sustained success (Haftor, Climent, and Kallmuenzer, 2025).

Motorola

Although Motorola's presence in the phone market has waned, it still accounts for approximately 1.5% of global market share. The company has experienced a decline in market presence. However, it continues to deliver positive results in North America and India by focusing on affordable, long-lasting batteries and durable 5G smartphones and employing competitive pricing strategies.

Blackberry

As a pioneer of the Symbian phone, with its distinctive product design and keypad introduced in 2006, the company's abrupt decline reflects a shift within the telecommunications industry. BlackBerry shifted from manufacturing licensed-

branded mobile phones in 2020 to investing in software, cybersecurity solutions, and IT services, marking a complete transformation from its initial brand recognition in the 2000s (Kornelakisa, A., and Petrakaki, 2024).

Huawei

Huawei's growth was primarily in China, despite challenges in foreign markets, with revenue of $95 billion as of 2024. This resilience was supported by strong local demand, ongoing investments, and research and development efforts, resulting in annual shipments of about 26.6 million smartphones in Asia. The company combined affordability with distinctive features, thereby paving the way for its brand internationally, particularly in markets with high price sensitivity. Nokia's competitive portfolio demonstrates that the company's failure was not solely due to neglecting customer needs. Need but lacked entirely in modern trends (Kang, 2024).

2.6 Figure 2. Nokia vs Competitors from (2001-2007)

Year	Nokia	Samsung	Apple	Motorola	BlackBerry
2001	139.7	45.2	0.0	67.6	0.5
2002	152.0	54.5	0.0	72.0	0.8
2003	180.7	65.4	0.0	81.6	1.2
2004	207.0	86.2	0.0	98.3	1.8
2005	265.6	103.8	0.0	144.9	4.3
2006	347.5	118.0	0.0	209.2	6.5
2007	435.5	154.5	2.3	164.3	9.8

(Muhammad, Zaheer, Ahmed and Mazhar, 2025

Key insight

- Nokia remained undefeated in the future phone market, outselling its three competitors combined in the early years of operation
- Samsung's approach in the mid-2000s predicted possible dominance in the years to come.
- Motorola and BlackBerry showed early signs of vulnerability in 2003

- Samsung and Apple were ready for the next phase of competition.
- Apple's venture in 2007 marked the turning point, although it had lower sales volumes compared to Nokia
- The smartphone revolution affected BlackBerry and Motorola significantly, despite holding their positions firmly in the industry.

2.7 Innovation Ambition Matrix

A matrix developed by Geoff Tuff and Bansi Nagji is specifically designed to help business organisations craft their innovation strategies. This tool categorises initiatives by the degree of product newness to the market, guiding companies to define, research, ideate, resolve problems, and implement solutions. Its purpose is to help manage risk, optimise resource allocation, and achieve both short-term and long-term objectives (Tanzil, Aya Bergen and Bobur, 2024).

2.8 The root cause of Nokia's retention failure using the Innovation Ambition matrix

Core innovation failure

Haftor, Climent, and Kallmuenzer (2025) suggested that Nokia's software developers prioritise consistent performance and stability over transitioning existing products to existing customers, thereby making it more desirable for buyers to repeat purchases. Rather than delivering a more sophisticated mobile phone experience, the company's software integration issues slowed its firmware updates, increasing compatibility friction in a monopolistic-competitive market. The lack of responsiveness to evolving customer needs negatively affected the company, as mobile operators expected virtualised, open RAN-ready, and cloud-native solutions; therefore, Nokia's inconsistent leadership in these technologies put it behind its competitors.

Adjacent Innovation Failures

While other mobile companies like Sony Ericsson and Huawei had already introduced new products and services to meet customer demands by adopting NFV, SDN, CLOUD RAN, and OPEN RAN- cloud-based and software-driven technologies- Nokia failed to expand its product line, re-architect its strategy, and clung to its Symbian feature (Fatima, 2024).

Transformational Innovation Matrix

Nokia's inability to pursue transformational development through investments in software and hardware infrastructure hampered its progress. The company struggled to introduce and expand new mobile technologies to attract entirely new customers or markets, resulting in declines in brand relevance, partnerships, and the operator ecosystem. As a result, it lost standing with emerging developers seeking vendors with comprehensive end-to-end consumer and network solutions. Although recognised for its role in setting the 5G network standard, Nokia lagged in commercialising these innovations due to Huawei's rise in the late 90s, slow market perception, and failure to position itself as an AI network with fully automated operations- a vision neither early on nor later effectively communicated (Tushman and Vuori, 2024).

Figure 3. Innovation Ambition Matrix of Nokia

Core	Inability to meet up with the smartphone paradigm shift	Lack of strategic leadership impact in emerging technologies	Delayed deployment cycle promoted churn, caused by a lack of organisational flexibility and siloed R&D
Adjacent	Operators' transition ability felt constrained due to the slow shift to cloud-native and software-driven programmes.	Unreliable ecosystem partnership	Strategic diversification is hindered by internal fragmentation and weaknesses in execution.

Transformational	Poor network performance and a decline in network quality	Slow response to market needs and wants.	Wrong decision-making by top executives and poor innovation initiatives strategies

(Alenezi, Al-Dhmour , and Al-Alawi , 2025).

Nokia began to lose relevance in 2007 due to missed opportunities in software development and ecosystems, internal obstacles, ineffective management, and gaps in innovation. It demonstrated that the company missed out on considerable value that could have been leveraged for effective system upgrades. Instead, they wasted significant time focusing on features and Symbian phones, which relied on a slow, cumbersome keypad technology and hardware platform that provided a poor user experience. The market had already shifted by the time Nokia realised the importance of touch screens. Apple and Samsung were already dominant in the market, with smartphones featuring touchscreens and diverse app ecosystems that were expanding rapidly across continents. Consequently, complacency and an inability to adapt to a changing environment adversely affected the company, resulting in a significant setback (Kang, 2024).

Literature review summary statement

The theories stated above (Porter's Five Forces and the Innovation Ambition Matrix) are tools used to analyse the external and internal environments, both frameworks which revealed Nokia's competitive position and innovation gaps. However, had these forces been implemented, they could have saved Nokia; their absence led to its downfall.

3.0 Chapter 3: Research Methodology

3.1 Introduction

This research employs a positivist quantitative methodology. It provides measurable data and clarifies the main factors influencing Nokia’s customer churn, including

market-level factors, products, organisational structure, and the ecosystem. These methods effectively reveal all aspects that contributed to the company's steady decline. Statistical analysis indicates that expression and information are limited across various media, such as questionnaires, company reports/reviews, and surveys. This approach enables a deep examination of customer decisions, culture, and market dynamics, as well as the sharing of individual experiences regarding what, how, and why buyers stopped using Nokia (Tikkanen et al., 2021).

3.2 Objectives of using quantitative methodological analysis

1. Evidence-Based Insight & Measurement of Each Cause's Magnitude

This approach enables researchers to achieve numeric accuracy and minimise bias by collecting factual, evidence-based data on when and how Nokia lost customers. Instead of speculating, such as blaming leadership or lack of innovation or iOS upgrades, a quantitative survey provides statistical proof. It also helps identify how factors such as application ecosystem size, product pricing, and operating system influence customer churn and Nokia's market-share decline. This method highlights the most impactful factors and offers solutions to address these issues (Tikkanen H and Lamberg, 2021).

2. Statistical Hypothesis Testing

Quantitative methods facilitate hypothesis testing and experimentation. Researchers can analyse the causes of Nokia's sales decline and customer churn, and determine when and why retention failed, by examining longitudinal data at weekly, monthly, quarterly, semi-annual, annual, or two-year intervals. This analysis helps establish the timeline and underlying reasons for the decline, enabling fact-based conclusions.

3.3 Figure 4. Benefits of researching Nokia's downfall using a Quantitative methodology approach

Purpose	Eliminate uncertainty, rely on statistical evidence
Measure magnitude	Quantifies factors which mattered most
Detect trending	Real when retention decline accelerates or emerges

Thesis Testing	Confirms or rejects assumed causes
Comparability	Evaluates Nokia vs. competitors or regions
Power prediction	Models' causal relationships and future risk
Generalizability	Makes research applicable beyond Nokia
Integration	Encourages mixed-method conclusions
Strategic Usage	Protects practical policies regarding retention
Credibility/ reliance	Facilitate trust in research outcomes/results.

(Haftor, D.M, Climent, 2025).

3:4 Data collection process

3.3 Methods of data collection

This research will examine both primary and secondary data collection processes as it enables obtaining information from individuals who previously used Nokia phones, through questionnaires, reports, journals and academic books (Adeline *et al* 2025).

Primary data

- This involves the collection of data through questionnaires targeted towards individuals who used Nokia in the past and the reasons why they shifted to other brands.
- Collect reviews/ survey responses from individuals' experiences.

3.7 Secondary data

Market reviews, organisational reports, and analyses presented by scholars and writers for statistical analyses of past market conditions, which help explain why Nokia failed.

Nokia’s financial reports, directly obtained from the company’s website, will be analysed to evaluate organisational performance over the years and to identify potential causes of customer churn.

Scholarly articles, journals, academic books, and media reports will be consulted to gather theoretical insights and methods that guide business management, strategy formulation, and measures. to ensure customer retention and reduce churn.

3.8 Sampling strategy

Purposive sampling will be employed.

This will involve constructing a questionnaire suitable for former Nokia users and recruiting 40-50 participants to collect statistical data necessary to evaluate the root causes of the company's failure.

3.9 Questionnaire

Customer Overall Experience with Nokia

Age:10-20, 20- 30, 30-40, 40-50, 50-60

Gender: male/female

Occupation

skilled, unskilled

Educational level

High school, undergraduate, graduate, post-graduate, master's, PhD

Have you used Nokia before?

yes/no

What initially attracted you to buying a Nokia phone?

durability, price, design, brand reputation, battery life, ease of use

For how long did you use Nokia phones before switching?

□ 1 year □ 1–3 years □ 4–6 years □ 7+ years

What type of Nokia phone did you use last?

□ Basic feature phone □ Symbian smartphone □ Lumia (Windows Phone) □ Other

How often did you replace or upgrade your phone when using Nokia?

□ 1 year □ 1–2 years □ 2–3 years □ 3 years

What features did you like most about your Nokia phone? (Select up to 5)

□ Durability/build quality
□ Battery life
□ Camera
□ Design/look
□ Ease of use
□ Price/value
□ Reliability
□ Other: _____

What features made you stop using Nokia? (Select up to 7)

□ Operating system (too slow/outdated)
□ Limited apps
□ Poor internet/browser experience
□ Touchscreen issues
□ Lack of updates/support
□ Poor design
□ Price too high
□ Customer service
□ Other: _____

What brand did you switch to after Nokia?

□ Apple (iPhone) □ Samsung □ Huawei □ LG □ Sony □ Motorola □ Other (specify) _____

3.10 Figure 5. Statistical analysis of the Nokia fall

No of participant (50)	Number of participants who are interested in the device (50)	Number of participants who used the device (50)	Number of participants who no longer find interest in the device (50)	Number of participants who discontinued use (50)	Number of participants who switched to other brands (50)
2000-2002	50	50	0	0	0
2002-2004	48	46	3	1	0
2004-2008	25	15	5	3	2
2008-2010	5	5	3	30	7
2010-2012	0	0	10	30	10

Downfall %

- 2000-2002 - 0% fall
- 2002-2004 -10% fall
- 2004-2006 - 25% fall

2006-2008 - 50% fall
2008-2010- 90% fall
2010- 2012-100% fall

Table analysis

- Based on the questionnaire administered to 50 Nokia phone users from 2000 to 2012, as presented in the table above, the following analysis can be drawn.
- Nokia had strong customer relationships, brand recognition, and trust, with higher market sales from 2000 to 2004, as all 50 participants expressed interest in the device and purchased it.

- The company experienced a slight decline in sales between 2004 and 2006, with customer interest dropping from 50 to 48 due to various factors. Although this appears negative, it could have been managed effectively if it had been adequately investigated and addressed.
- Between 2006 and 2008, the company experienced a sharp decline, with customer interest and user base falling from 50 to 25, resulting in approximately a 50% reduction in market share. This situation called for immediate action by management. However, the organisation failed to implement strategic recovery measures, marking the beginning of a significant decline in customer retention in the mobile phone market.
- From 2008 to 2010, Nokia had already lost 90% of its customer base. By this point, the company struggled to resolve the issues, as most customers had lost interest and stopped using their phones due to outdated iOS and other factors. The brand sought to transition to devices with more advanced features. By 2010-2012, customers had migrated to other brands, such as the iPhone and Samsung, which offered superior device features and a better user experience, leading to the brand's absence from the mobile phone market to date.

4.0 Chapter 4: Results

4.1 Findings based on Porter's Five Forces Analysis

A study by Sagotia and Bhalodiya (2019) found that Nokia was slow to upgrade its products. As pioneers in the mobile phone industry, Nokia first launched the Symbian Series 60 phones in 2002 but waited until 2011 to introduce Windows Phone, rather than launching it sooner or shortly after Symbian's release. Over time, the Symbian series faced maintenance issues and leadership challenges, causing the brand to lose its market position, which explains its delayed response to market changes (Kilson and Doz, 2018). This delay gave Apple the chance to quickly release the first iPhone on January 9, 2007, a touchscreen and app-based, highly upgraded IOS device, revolutionising the smartphone industry and redefining what a smartphone could be. Nokia refused to respond to the iPhone and shifting consumer preferences; a few years later, Symbian became outdated, and consumers shifted away from iOS and Android, opting instead for more sophisticated, pocket-sized' minicomputers'

over Nokia's feature phones with cumbersome browsers. Lalisan et al. (2025) argued that there are more reasons as to why Nokia lost its presence, which is more than just slow growth, but also due to the deal it signed with Microsoft and its digital collaboration efforts in the 2000s aimed at creating a better Windows experience, which ultimately failed to meet expectations. This was due to dysfunctional applications and software issues that hurt the company's long-term prospects. Ating et al. (2025) noted that Nokia was overly focused on Windows Phone and insufficiently invested in Android. In contrast, Samsung, which entered the market a few years after Nokia, studied the industry, relied heavily on Android and its own OS, and became dominant. Samsung benefited from the Android platform through its own proprietary OS development.

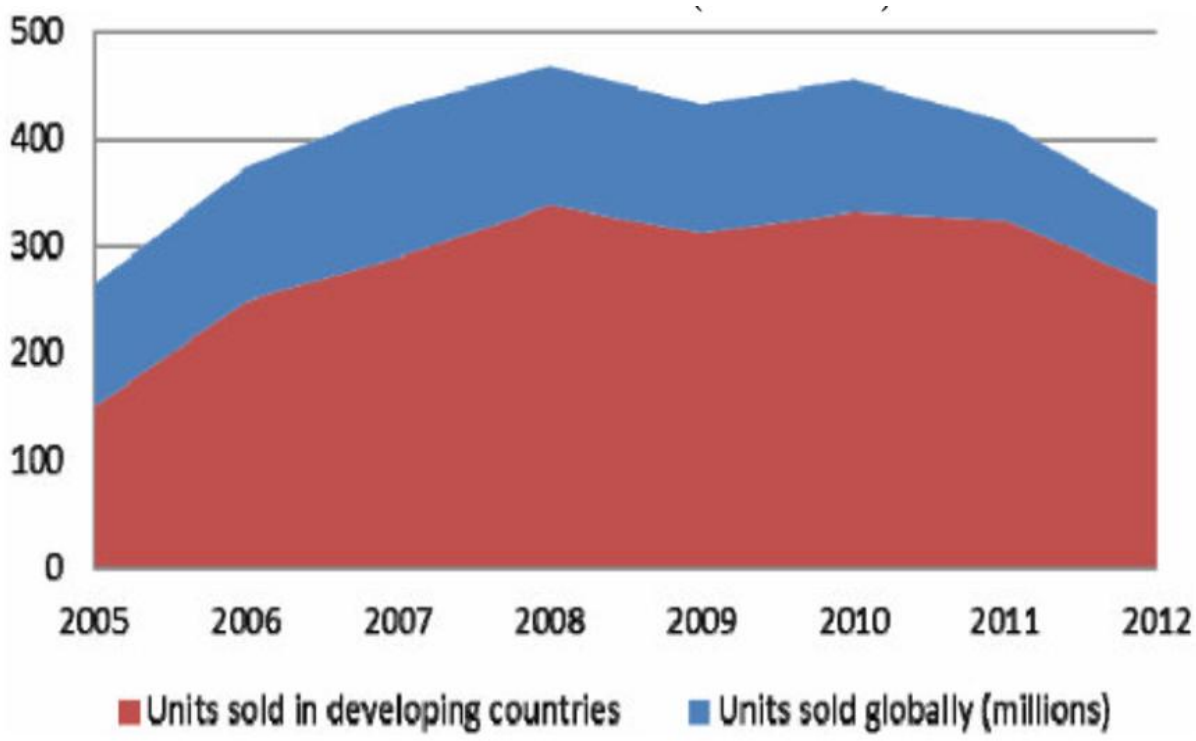
4.2 Research using the Innovation Ambition Matrix

Badrudduza et al. (2025) observed that although Nokia is recognised as the traditional maker of brick and candy bar phones with a legacy in the telecom industry, it failed to infuse its branding with excitement and to adopt effective, innovative strategies. Consumers in developed countries often perceive Nokia as old-fashioned and from a different technological era, especially when it comes to play. In contrast, today's generation is attracted to brands with the most modern and shiny operating systems (Solanki and Vidani 2025). Apple's branding under the iPhone name is memorable and effective at building anticipation, thereby increasing consumer demand. Samsung closely mirrored this strategy, leveraging it to wow consumers with its high-end Galaxy S Android flagship series. Each year, customers expect a new, redesigned Samsung phone. Suk Yee and Ating (2025) argued that Nokia's failure was not due to a lack of innovation but rather to its focus on the wrong technological advancements. While companies such as Samsung and Apple prioritised iOS upgrades, Nokia advanced by improving battery life for durability rather than expanding smartphone applications. This failure to anticipate and meet consumer needs led to its decline. Furthermore, Nokia's prolonged dominance in the mobile phone market, with little competition, kept the company complacent, reducing its motivation to innovate. This complacency ultimately contributed to its exit from the market (Stradowski and Madeyski, 2022).

A graphical representation of Nokia’s performances in most developed countries, from 2005 to 2012, without any significant response to revive this, which contributed

immensely to the downfall of the company in the telecom industry (Stradowski and Madeyski, 2022)

4.3 Figure 5. Graphical representation of units of phones sold from 2005 to 2012.

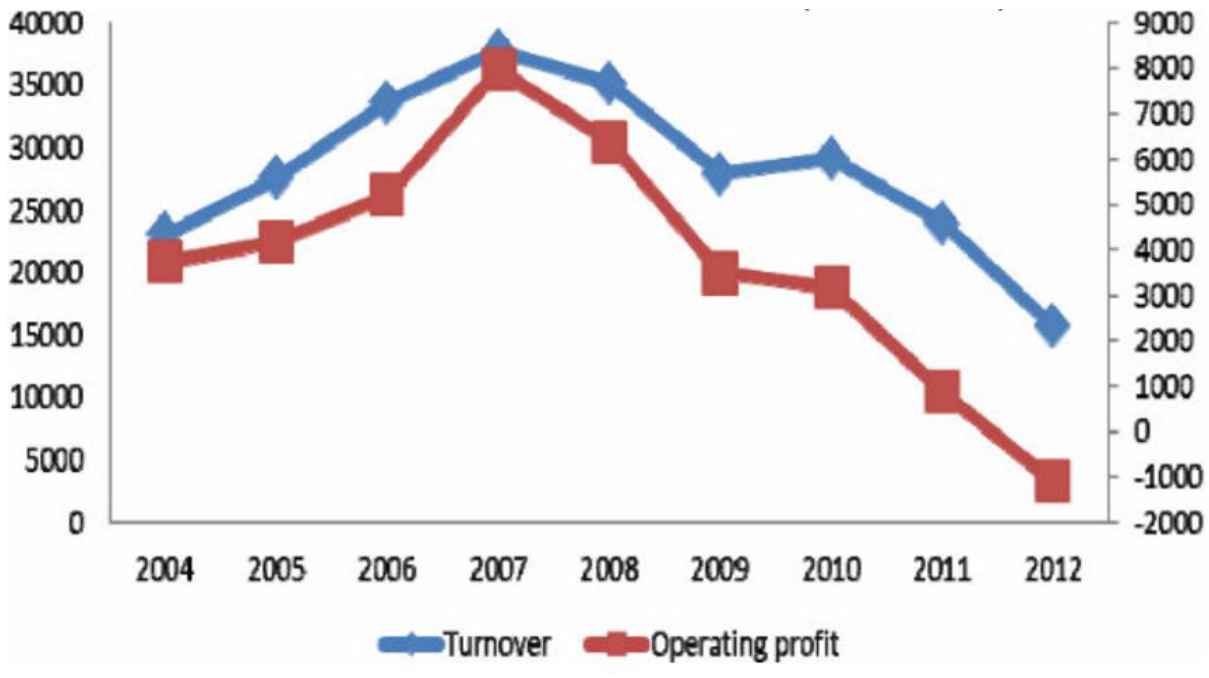


Chaturvedi (2019)

Nokia's performance was strong in America and European countries, with sales increasing from 0 to 300 million units in the early years of 2005-2007 and globally rising from 250 to 500 million units subsequently (Madeyski et al 2022). The company experienced a sharp decline in sales in 2008, with decreases in developed countries from 300 to 250 million and from 500 to 450 million units. These declines marked the beginning of the company's decline due to the lack of OS upgrades and continued reliance on outdated Symbian systems, which led to the loss of its customer base. Chaturvedi (2019) argued that the company collapsed following Apple's introduction of the iPhone in 2007, which set a new standard for handsets with advanced features and greater accessibility. Samsung's Windows minicomputers forced Nokia out of the market. Furthermore, insufficient market or

media presence and a lack of collaboration with leading marketing agencies contributed to the company's downfall.

4.4 Figure 6. Financial analysis of Nokia's turnover from 2004 to 2012.



(Lalisan, Badrudduza, and Suk Yee, 2025)

The financial situation of Nokia is a problem associated with indecisive and lack of strong characteristics and visionary leadership necessary to guide, inspire and efficiently manage the resources and initiate strategic reaction after before and after apple released iPhone in 2007 resulted to reduction in revenue and profit realisation from 1000 million euros in 2004 to 30000 million euros, before its declined in 2007 to 2012 as disclosed above (Lalisan, Badrudduza, and Suk Yee 2025).

4.5 Observations

- According to the analysis given by different authors and researchers stated above, it is deduced that Nokia had a strong brand recognition characterised by a significant share of engagement in the early 2000s, which was the best opportunity and competitive advantage they had over other companies; these would have kept them in control in the telecommunication industry for life if properly utilised.

- From all indications, Nokia's downfall occurred because of poor leadership style and total incompetence by top executives in the decision-making process and setting strategic policies that would take the company to the next level.
- Lack of innovative measures and software upgrade from Symbian to IOS technology that moves with the current market trends, and partnership with Microsoft in 2011, which was a wrong development, affected the organisation at that time.

5.0 Discussions

The organisational ability to retain its customers over time depends on its capacity to deliver value continuously. Businesses that fail to create value tend to fall behind the industry, as unstable market dynamics can influence corporate decisions. In the telecommunications sector, this underscores the importance of innovation, market competition, and rapid shifts in customer expectations driven by technological advances and market trends. Below are some reasons customers might choose not to stay with a company. (Chaturvedi et al 2019).

5.1 Technological Adoption Failure

Crowther *et al* (2018) explained that one primary reason why customers may choose to refuse a company's products in the mobile industry is attributed to brands' misalignment with current technological advancement, poor marketing strategies, and design thinking processes, which are determined by a few factors listed below to help strengthen and increase customer retention.

Slow response to touchscreen technology

The level of trust or belief that a mobile phone user develops in a product or service regarding its performance, durability, and overall experience influences their next decision after using it. A customer grew tired of Nokia Symbian and wanted a new experience, but Nokia failed to meet expectations because the device's functionality was limited. Buyers gave Nokia ample time to address its device technology before they began seeking a substitute (Adeline et al., 2025).

Over-reliance on Symbian OS

The perception that a person's belief in a product's ease of use and accessibility encourages customers to repurchase. That is, buyers would prefer to purchase phones with diverse applications and enhanced iOS features rather than older devices with outdated operating systems. Apple introduced the iPhone 4 in 2007, which thrilled the market with its app features and attracted attention, while Nokia was promoting its N97, touted as a flagship in 2009 and considered a weakness of Symbian (Bhatti, 2020).

2. Poor execution of the Microsoft partnership.

Customers' reactions to a product before and after patronage are important because they shape their decision to repeat the experience. A device's usefulness and the number of positive customer experiences generated on social media help to boost sales, as many young adults are initially influenced by what they see and hear before ordering a product or service. Nokia's customer attitude toward its devices turned entirely negative in 2011, during its partnership with Microsoft, whereas customers increasingly sought strong computing technology, connectivity, and entertainment (Zaheer, Ahmed, and Mazhar, 2025).

3. Leadership and change management problem

A key advantage that every organisation has is complete control over its internal affairs, leadership, and management structure. This control is fundamental and a hallmark of successful organisations, whose vision encompasses forecasting, planning, and strategy formulation to adapt to market changes and address internal and external challenges, particularly in a dynamic environment. When Nokia faced decline, its leaders failed to make strategic decisions that could have helped revive the company. The company's poor leadership in addressing problems led to persistent setbacks, culminating in an uncontrollable situation. The internal environment was weak and lacked proactivity, particularly in areas like communication, critical thinking initiatives, and Teamwork. It is the responsibility of top executives to foster open communication and create an environment that encourages employees to share ideas and suggestions- actions that could significantly contribute to change, foster a positive organisational culture, and ensure

overall business success. The absence of such efforts adversely affected the company and contributed to its decline.

4. Customer Lifetime Value

This denotes the total revenue generated by a company from its customers during its operations. For instance, customers on long-term contracts are more likely to benefit and be treated justly by companies than those on shorter contracts, as they are influential and powerful in the mobile industry. A well-structured customer relationship management (CRM) system is most suitable, as it provides companies with a database and statistical analysis tools. By using this portfolio, Nokia could have avoided exiting the market and gained insights into its most valued and most subscribed customers. and long-term customer, location, product, preference, priority, like, and dislike data at regular intervals, which provide a basis for forecasting the future and making strategic decisions through feedback, comments, and reviews (Adams et al., 2014).

5. Relationship Marketing Switching Cost

This theory stipulates the advantages of trust, loyalty and customer relationship building between a company and its customer. The introduction of these psychological strategies by mobile organisations helps to discourage customers from moving to other brands. When Nokia held absolute dominance in the telecommunications sector, numerous community and ambassadorship programmes operated in underdeveloped and developing countries. Advertising through these channels is a strategic way to continuously create awareness, keep products in people's minds, and a SMART method to understand customer opinions, preferences, and current market trends (Stradowski, and Madeyski, 2022).

6. Expectation confirmation

Organisational investment in appropriate raw materials for production improves device performance. For example, a mobile phone with outstanding features, long battery life, a unique camera, and high-quality video attracts buyers compared with a lower-functioning device. Although Nokia offered customers long-lasting battery life, standard performance, and durability in its Symbian-based hardware, churn in software upgrades eroded consumer satisfaction, which extends beyond physical features. Customers demand a well-blended, more advanced technological

operating system with enhancements in camera and video capabilities, storage space, accessibility, security, and special functions that captivate the user and create lasting memories (Bobur et al 2024).

7. Brand loyalty and switching behaviour

Brand loyalty is a key determinant of buyers' intentions and switching attitudes. When a buyer develops a strong belief in and trust in a company, it is almost impossible to abandon its products for other brands, as this is strongly influenced by long-term loyalty. This element is facilitated by push factors, namely negative information currently disseminated in the media about an organisation, such as poor services or outdated features (Ojala *et al*., 2021). The **pull factor** is the positive factor currently under investigation for a product or service. However, the **mooring factor** categorises some behavioural elements, such as Customer experience and satisfaction, device cost, Pricing methods and perceived value. The absence of customer engagement, personalisation, and Payment challenges, as well as changes in customers' wants and preferences, directly contribute to consumers' loss of trust and loyalty to companies. Unfortunately, Nokia's failure in technological innovation, system upgrades, weak leadership, and slow response to market trends quickly spread across media outlets. These failures eroded customers' trust in the brand, as users no longer believed the company would provide them with the latest, high-quality experiences in its devices; hence the shift to Apple and Samsung, which offered an entirely different phone technology that met expectations (Vasiyani, Solanki and Vidani, 2025).

6.0 Impacts of Customer Retention Failures on Mobile Industry Dynamics

A tool designed to assist companies in setting strategic objectives, goal orientation, innovation, and change management processes, it recognises market changes, leverages its strengths to explore opportunities, and competes effectively while evolving in a rapidly changing environment. This helps them achieve organisational aims and objectives. The process requires organisational ability to quickly adapt to shifts in politics, economics, society, technology, law, and environmental factors (Saunders *et al.,* 2023). Ongoing transformation and renewal, such as realigning internal capabilities- like expanding storage spaces, upgrading to 5 G networks,

integrating foldable devices, and implementing AI generative algorithms- are vital, especially as customer preferences shift with changing circumstances. This makes it challenging for firms to survive or maintain their market position. Continuously applying these tactics in business operations can reduce customer loss, enhance sustainability and efficiency, improve management, and ensure overall business success, supported by their proven effectiveness according to various analysts (Vidani *et al* 2025).

6.1 Negative impacts

6.2 Loss of Market and revenue due to a lack of brand trust

When organisations lose customers to competitors, this significantly affects their income gap, as customers who remain with organisations for an extended period contribute substantially to their lifetime value, leading to a rapid decline in market share due to customer switching. Brands.

Innovation

A company's inability to initiate innovative and developmental programmes put businesses behind, as customers prefer diverse products and services. Nokia's failure to introduce and incorporate trending styles, designs, and functions into its mobile phones made the devices less appealing, resulting in the loss of existing customers and difficulty attracting new ones, which ultimately led to its business failure (Lewis *et al* 2023).

Weak after-sales service

When buyers purchase products, providing after-sales care- such as insurance, warranties, device repair options, discounts, or price reductions- is essential. The lack of this in Nokia's business practices ultimately harmed its operations.

Poor user experiences: Consumers value their satisfaction after purchasing a product; this, in turn, influences their likelihood of repurchasing. Good customer service enhances this experience, while poor experiences- like those Nokia's customers faced, which contributed to its liquidation (Daqqaq *et al* 2023)- diminish customer loyalty.

Rise in customer acquisition costs:

- Organisational continuous reduction in customers leads to constant advertising and promotions to create awareness and attract new clients, making customer acquisition more difficult.
- Ecosystem weaknesses: Reduced customer patronage weakens the organisational ecosystem. Phone companies depend on services such as iOS, App Store development, accessibility features, music, media, cloud services, and payment options.
- Innovation paralysis and strategic misalignment
  Efforts to recover lost customers can divert mobile companies from their long-term strategies, leading to a focus on trends rather than innovation and design thinking. This affects product-market fit, social proof, user feedback, and community engagement (Thornhill, 2019).

  Reduced investor confidence
- Customer retention failures indicate long-term business instability and affect key metrics like: -
- Average revenue per user: Total sales revenue from each customer over a specific period (daily, monthly, quarterly, yearly), including payments through cash, bank transfer, or other methods.
- Customer lifetime value: An estimate of a customer's worth, aimed at retaining clients and generating additional income from existing or new customers.
- Finding the causes of customer fallout can influence decision-making, management changes, and industry growth in several ways (Lancaster et al 2018)

6.3 Positive impacts on decision-making

- Enables data-driven, informed decisions by providing insights into customer churn reasons. • Reduces guesswork and minimises poor decision risks. • Facilitates more effective resource allocation. • Supports real-time decisions and signals KPI declines (lancaster et al 2018). Management strategy

improvements: • Helps identify management failures in areas like interface design and application compatibility.

- Promotes better customer lifecycle management across different demographic groups.
- Enhances loyalty, personalisation, post-sale engagement, and loyalty programs (Chaturvedi *et al*, 2019).
- Industry development

6.4 Benefits

- Fosters market stability and competitiveness; resolving retention issues stabilises the industry and encourages new entrepreneurs.
- • Advances technological progress through exposure to tools like AI- AI-generated, analytical, and predictive technologies.
- • Promotes benchmarking and standardisation of retention practices across mobile firms (Bhalodiya et al 2018).

7.0 Chapter 5 Conclusions, Recommendations and Limitations

7.1 Overall conclusions

This study aimed to examine why customer retention failures occur in telecommunications companies, with a specific focus on Nokia. Its objectives included understanding customers' perceptions of the company and the reasons behind changes in behaviour over time. Chapter 2 reviews factors that can lead to customer loss, including competitive rivalry, supplier bargaining power, threats from substitutes and new entrants, and a lack of innovative techniques. The survey showed that customers reacted negatively to Nokia's absence of innovation and diminished competitive influence, despite its long-standing dominance in the mobile industry. Customers desired highly advanced devices that offer convenience and comfort in daily life. This directly addresses the research questions about what, why, and how customers switch brands, indicating that the company can improve its leadership and innovation and build substantial competitive advantages. Achieving this requires visible technological advancements in iOS features and performance on mobile phones. The report aligns with previous research by Oever and Becker

(2024) and emphasises the importance of innovation and the impact of competition on organisations. It also enhances understanding by focusing on an established global brand. The findings provide clear insights into how CCRF could be eliminated, avoided, or managed to ensure long-term market dominance and sustainability.

7.2 Practical recommendation

The adoption of modern trends like AI generative technologies by telecommunication companies serves not only as an enabler but also as a form of transformation, driven by the various pressures from phone users who depend on these services for real-time connectivity, ultra-low latency, IOS upgrades, and optimal device performance (Mather 2025). The deployment of AI-driven telecom operations is occurring alongside the transition from 5G to 6G networks. Integrating modern trends and AI algorithms into handsets has proven to be a seamless process, effectively addressing recent challenges, including infrastructure readiness and transparency. Issues include algorithmic bias, data privacy, regulatory compliance, and the delivery of hyper-personalised user experiences, proactive service, and real-time chatbots for mobile phone companies. Continuous use of these advanced tools is crucial, as they can influence the company's productivity and, over time, lead to network churn or liquidation. The following are recommended modern trends that Nokia or mobile companies can use to address retention issues (Salman and Himel, 2025).

Internal:

IT and Software Engineering Department

Software first cycle to improve the product's value

- Nokia should first ensure a commitment to updates for 5-10 years, focusing more on enhancing its software and providing continuous platform updates across security, apps, clouds, and features. This is crucial because customers who enjoy a better phone experience are more likely to remain loyal and make repeat purchases, thereby fostering trust.
- Implementing a dual-track operating system strategy that supports both its own OS and an Authorised Android build during the transition will help retain customers within the Nokia ecosystem rather than relying solely on an external OS. Additionally, Nokia should develop an ecosystem that

encourages subscription services and offers exceptional customer experience by establishing proactive teams capable of providing 24/7 door-to-door repairs, assistance, and device maintenance worldwide. Customers appreciate sellers who prioritise quick, reliable service (Dutt, Gupta and Tewari, 2025).

Innovation Department

AI personalisation, device automation and robotic service

Massive investment in well-documented application SDKs and attractive platforms for foreign developers will enhance revenue, boost marketing efforts, and facilitate porting of applications from iOS or Android for Nokia and other emerging mobile companies.

- Additionally, developing an AI-powered robotic support assistant capable of attending to customer needs around the clock can improve customer service.
- Building a robust API-based suite of services- such as cloud, music, sync, mapping, video, and applications- by Nokia can help lock users into the company's value
- ecosystem. Incorporating AI-driven personification and automation features into devices will enhance user experience and enable predictive maintenance, ensuring proper device operation.
- Nokia should also prioritise rapid UX improvements to foster deeper service integration and build greater trust
  (Salman and Himel, 2025).
- Investment in AI demand forecasting tools aims to recommend the latest products and services to customers, communicate market trends to suppliers, and incorporate lean production metrics into suppliers' scorecards. Additionally, the company should design mobile phones with a focus on repairability, including modular hardware and software parts. This approach supports trade expansion, promotes refurbishment opportunities, and highlights the brand's carbon footprint

- **7.3 Figure 7. AI applications in modern telecommunication systems.**

Domain	AI Use Case	Benefits	Technology Used
Network Operations	Traffic prediction, fault detection	Reduced downtime, optimized throughput	ML, Deep Learning
Customer Engagement	Chatbots, sentiment analysis	Faster resolution, personalized UX	NLP, LLMs
Fraud Management	Real-time anomaly detection	Revenue assurance, security	Anomaly Detection Models
Infrastructure Planning	AI-driven demand forecasts	CAPEX optimization	Predictive Analytics
Marketing & Retention	Churn prediction, offer targeting	Customer loyalty, increased ARPU	Clustering, Decision Trees

(Salman and Himel, 2025).)

Human Resource Department

Strategic decision making

- Appoint higher-skilled initiatives who would research the latest market trends, IOS updates demanded by customers, conduct market surveys, plan, and initiate change into the company's activities.
- Change overall management structure, replace unqualified employees with a more experienced and qualified staff, most importantly, the innovative managers and leaders, to promote better and strategic decision-making that will move the company to the next level. Having poor decision-makers in the company negatively affects its growth and development, and vice versa.

External:

Build strategic collaboration & selective market focus.

- Partnerships that include shared incentives, such as data bundles, advertising, financing, and exclusive content, help promote device upgrades and increase ARPU. Loyalty and ambassador programs, supported by seamless credit upgrades, device backups, and media contacts, serve as a barrier to switching.

- Improving market segmentation in regions where the company initially dominated- focusing on local service usage and developer language programs- can boost market relevance.
- During all system updates, effective communication channels should be used to ensure transparency and awareness, especially when shifting the OS strategy, to prevent device shutdowns or customer churn during sudden announcements.
- Management must monitor which services- apps or hardware- customers are most attached to. Low lock-in to apps or services enables early warnings of potential risks, enabling proactive measures to prevent churn.
- Nokia should regularly assess developer interest in its platforms and adopt strategies to attract modern developers. The organisation must also verify that distribution partners remain aligned with its incentives to avoid creating substitute platforms or needing to renegotiate with locked-in companies in the event of service failures (Haftor, Climent, Kallmuenzer, 2025).
- Ensure a better relationship with its raw material source, maintain a healthy supply chain with suppliers to promote easy, constant access to resources when and however needed, to avoid going out of materials.

7.4 Research Limitations

This study employed both primary and secondary data sources. Primary data were collected through a questionnaire distributed to Nokia users, consisting of individuals born in the 1950s, 60s, 70s, and 80s- representing Generation X, Baby Boomers, and Traditionalists. Secondary data were drawn from academic articles, company reports, and market studies. The findings are thus based on recent user responses, authors' interpretations, and reports. However, while data from previous users provides valuable insights, they lack depth regarding emotional experiences, as most participants could recall only fragments of their interactions with the brand. These memories could have been better analysed within the Gen Z cohort, given the widespread use of technologies such as AI and social media today. There is also a risk of bias, mainly because much of the data comes from Nokia's own publications, which may emphasise strengths and conceal weaknesses. In contrast, industry journals and articles might reflect business interests. Additionally, the research was

constrained by time, relying on data available through 2015, which was subsequently updated to reflect more recent years, acknowledging Nokia's status as an older brand in a rapidly evolving technological landscape. Despite these limitations, the study highlights how a company's relevance depends on continuous innovation and the competitive landscape. Its value lies in understanding customer attitudes toward innovation and market trends.

Element 2

Gibbs Reflection cycle

Using the Gibbs Reflection cycle

Description

Studying this topic provided valuable insights into the origins of communication in antiquity and practical lessons on the factors that lead to customer failures in the telecommunications industry. It specifically highlighted Nokia's decline in customer loyalty and trust, resulting in a significant drop from the early 90s to the 2000s. Despite being a global leader for decades, the company lost customers to competitors like Apple and Samsung. The analysis identified the reasons for churning as slow adaptation to technological changes, weaknesses in the ecosystem, poor strategic decision-making, poor leadership, and increased competitive pressure, all of which contribute to the erosion of customer loyalty.

Feelings

Nokia's collapse personally surprises yet seems inevitable given the rapid shift in consumer preferences—from feature phones to Symbian, and later to smartphones with diverse apps, ecosystems, and advanced operating systems. This research has taught me that no company can fully control market dynamics or predict future trends, regardless of its market position. It also highlights how quickly a dominant brand can become irrelevant if it underestimates the importance of innovation, new-entrant threats, buyer and supplier power, and product substitutes in a highly competitive, technology-driven market. Additionally, it underscores the significance of emotional and value-driven customer loyalty, as consumers tend to remain loyal to brands that consistently meet or exceed their expectations, desires, and satisfaction.

Evaluation

I would like to identify both positive and negative impacts which contributed to Nokia churn

Positive impacts

- During this research, I found that Nokia's significant investment in high-quality hardware components allowed it to maintain a competitive edge for longer

than its rivals, ensuring reliable and durable device performance. Its extensive global recognition and distribution network, both locally and internationally, persisted for many years despite the influence of competitors during Nokia's decline. Even after losing market relevance, some loyal customers remained with Nokia because they valued the familiarity of the Symbian interface and the durability of its devices.

Negative

Over the years, I observed that more buyers viewed Nokia's products as outdated and felt unable to upgrade or transform their devices into smartphones, prompting them to switch to other brands.

The lack of a robust ecosystem, delayed iOS updates, outdated applications, and limited device functionality led to problems, frustration, and diminished perceived value among customers.

Nokia's slow innovation, relaxed approach, and competitive pressures bred distrust and a sense of unreliability, pushing consumers toward more innovative, design-focused mobile companies.

The period from 2000 to 2008 marked a disconnect between customer desires- such as the latest OS software, touch screen devices, unlimited app access, and security controls- and Nokia's offerings, primarily the Symbian phone.

Analysis

Nokia's problem could be traced to several strategic and operational issues. Below is a breakdown of the churn analysis.

Failure to adapt to market trends or transition

From 2005 to 2011, I noticed a shift in the industry from feature phones to smartphones, as customer expectations rapidly changed. Nokia remained committed to Symbian phones, whereas rivals such as Apple and Samsung moved towards software-focused devices. Consumers preferred these alternatives for their appeal and ease of use, thereby reducing Nokia's market share.

The software and ecosystem

I noticed that customers often follow trends and technological progress, showing greater interest in brands that offer the latest smartphones, comfort, satisfaction, regular software updates, and seamless device integration. In contrast, Nokia's devices were perceived as outdated and unappealing due to a lack of compelling applications, leading to user dissatisfaction and abandonment.

Strategic missteps

In this research, I found that Nokia's late-2000s partnership with Microsoft failed, leaving the company regretful because its devices were unable to compete in functionality and performance. The company also underestimated the significance of touchscreen smartphones and of integrating UI design into its products. These issues discouraged users, leading them to shift to Android and iOS phones.

Poor decision-making by Nokia's leaders, which undermined the company's position, contributed to its major setbacks.

Decline in brand relevance

Although Nokia offered durability and reliability in its phone features, buyers wanted

sleek design

Innovation

Software upgrade

Integration with digital services

Poor customer experience

A company's ability to retain customers largely relies on consistency and positive reviews driven by customer experience. Nokia’s fragmented device lineup, infrequent software updates, and weak ecosystem persisted for an extended period, causing customer fatigue. As a result, customers shifted towards devices that offered better experiences and greater satisfaction.

competitive pressure

Samsung offered flexibility, innovation, improved software, diverse options, and a range of price points across its Android devices. At the same time, Apple introduced more sophisticated, reliable, and compelling iOS-powered devices supported by a robust ecosystem. The competition from these two brands put Nokia in a difficult position and challenged the company's market position.

Conclusion

I believe that customer retention is essential for every business. In the mobile phone sector, success depends not just on advanced hardware and tradition but also on customer-focused innovation, ongoing ecosystem improvements, strategic flexibility, and the ability to anticipate and adapt. Nokia's failure resulted from a misunderstanding of customer needs during a key industry shift.

Action plan or my change proposal

Based on my research, I recommend the following to Nokia and emerging mobile phone companies to avoid a similar situation.

- Prioritise customer-driven innovation
- Strong investment in the ecosystem
- Maintain strategic agility
- Strengthen developer relationships
- Ensure close monitoring of competitors
- Deliver a constant user experience
- Promote brand modernity
- Strategic leadership

On a personal level, this study has enhanced my academic, analytical, research, and writing abilities. It has supported my professional growth and personal development across all areas by strengthening my critical thinking and evaluation skills. Through this reflection, I realised the importance of bookkeeping and accounting, as dealing with figures and numbers was essential to ensure transparency during major downturns. With the knowledge and understanding I have gained from this project, I am confident it will prepare me for future challenges. Challenges relating to problem-solving in the workplace as an employee or business owner

Element 3

Poster

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CAUSES OF CUSTOMER RENTENTION FAILURE IN THE TELECOMMUNICATION INDUSTRY, A CASE STUDY OF NOKIA

Introduction

History of mobile phone communication is traced to the 1940s, with the forces. This went on for a while before mobile companies such as Nokia discovered new ways of communication in the 1950s as user began to face challenges with the old way of communication. Nokia started manufacturing large-scale telecommunication infrastructure and licensing fully in the early 1990s, the company produced various mobile phones and accessories and played a significant role in the global development and telephone industry, assisting and participating in the development of the GSM and LTE in regions (Oever and Becker, 2024).

Research objectives

1. To carefully evaluate customers perception and the factors leading to behavioural shift during Nokia's decline.

2.To explore why, what and how customers left Nokia for other brands.

3. To suggest a practical recommendation that would eradicate customer retention failure and promote brand loyalty for other mobile phone companies

Methodology

This research employs a positivist quantitative methodology. t offers measurable data and clarifies the main factors nfluencing Nokia's customer churn, including market level, products, organisational structure, and ecosystem.

These methods effectively reveal all aspects that contributed o the company's steady decline Through statistical analysis

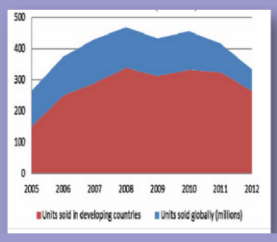
(Oever and Becker, 2024)

Methods of Data collection

- Primary data
Through a questionnaire targeting Nokia old user

- Secondary data
Through company reports, journal articles, market survey

graphical survey



Graphical analysis of Nokia sales reduction in countries indicating market fall between 2005-20012

Practical Recommendation

1. Invest heavily in AI driven analytical tools to help improve device personalisation and selective support

2. Strategic partnership with eco system developers

3. Improve customer service experiences by setting up teams or machine that is available 24/7 assist with repair, replacement and update customers devices.

3 Offer competitive and transparent pricing strategy to customer

4. Build reliable supply chain, design and sustainability programmes to ensure availability of device accessories to users without delays

5. Ensure continuous innovation of software upgrading on a regular basis to improve products value

(Mather, 2025)

Results

Nokia churned due to a lack of strategic leadership management to move the company to the next level. The company started well in the 90s with strong brand recognition, market dominance, and a customer-based network. Over time, customers' preferences changed as market trends became unstable. Nokia failed to respond to the customer; this was when iPhone and Samsung emerged in the market with iOS and Android software upgrades, offering consumers more sophisticated, pocket-sized 'minicomputers' compared to Nokia's Symbian feature phones, which had cumbersome browsers, a lack of application updates, the latest software, and a poor ecosystem. Customers found competitors' devices useful and left Nokia.
(Stradowski and Madeyski , 2022).

Conclusion

The bedrock of any functional organisation depends on its ability to continuously innovate new products and service, partnership market developers, incorporate customer driven services into its business operation. Nokia failed in these aspect hence why the company lost relevance and brand recognition over the years.

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APPLICATION FOR ETHICAL APPROVAL

RESEARCH STUDENTS This form is to be completed by the student within **SIX** months for full-time students and **TWELVE** months for part time students, after the commencement of the research degree or following progression to Part Two of your course. Once complete, submit this form via the ***MyTSD Doctoral College Portal*** at (https://mytsd.uwtsd.ac.uk). This document is also available in Welsh.
RESEARCH STAFF ONLY All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk , with the title 'Ethical Approval' followed by your name.
STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.

In order for research to result in benefit and minimise risk of harm, it must be conducted ethically. A researcher may not be covered by the University's insurance if ethical approval has not been obtained prior to commencement.

The University follows the OECD Frascati manual definition of **research activity**: "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications". As such this covers activities undertaken by members of staff, postgraduate research students, and both taught postgraduate and undergraduate students working on dissertations/projects.

The individual undertaking the research activity is known as the "principal researcher".

Ethical approval is not required for routine audits, performance reviews, quality assurance studies, testing within normal educational requirements, and literary or artistic criticism.

Please read the notes for guidance before completing ALL sections of the form.

This form must be completed and approved prior to undertaking any research activity.
Please see Checklist for details of process for different categories of application.

SECTION A: About You (Principal Researcher)

1	Full Name:		MICHEAL ENITAN OLADIMEJI			
2	Tick all boxes that apply:		Member of staff:	☐	Honorary research fellow:	☐
	Undergraduate Student	☒	Taught Postgraduate Student	☐	Postgraduate Research Student	☐

3	Institute/Academic Discipline/Centre:	IICL
4	Campus:	LONDON CAMPUS
5	E-mail address:	2227274@student.uwtsd.ac.uk
6	Contact Telephone Number:	07928465004
	For students:	
7	Student Number:	2227274
8	Programme of Study:	BA (Hons) Business Management
9	Director of Studies/Supervisor:	Mohammad Rahman

SECTION B: Approval for Research Activity

1	Has the research activity received approval in principle? (please check the Guidance Notes as to the appropriate approval process for different levels of research by different categories of individual)	**YES**	☒	**NO**	☐
				Date	
2	If Yes, please indicate source of approval (and date where known): ***Approval in principle must be obtained from the relevant source prior to seeking ethical approval***	Research Degrees Committee	☐		
		Institute Research Committee	☐		
		Other (write in)	☒	**8/11/2025**	

SECTION C: Internal and External Ethical Guidance Materials

	Please list the core ethical guidance documents that have been referred to during the completion of this form (including any discipline-specific codes of research ethics, location-specific codes of research ethics, and also any specific ethical guidance relating to the proposed methodology). Please tick to confirm that your research proposal adheres to these codes and guidelines. You may add rows to this table if needed.	
1	**UWTSD Research Ethics & Integrity Code of Practice**	☒
2	**UWTSD Research Data Management Policy**	☒
3	*[List any other relevant documents here]*	☒

SECTION D: External Collaborative Research Activity

If there are external collaborators then you should gain consent from the contact persons to share their personal data with the university. If there are no external collaborators then leave this section blank and continue to section E.

1	Institution					
2	Contact person name					
3	Contact person e-mail address					
4	Is your research externally funded?		**YES**	☐	**NO**	☐
5	Are you in receipt of a KESS scholarship?		**YES**	☐	**NO**	☐
6	Are you specifically employed to undertake this research in either a paid or voluntary capacity?	Voluntary	**YES**	☐	**NO**	☐
7		Employed	**YES**	☐	**NO**	☐
8	Is the research being undertaken within an existing UWTSD Athrofa Professional Learning Partnership (APLP)?	If YES then the permission question below does not need to be answered.	**YES**	☐	**NO**	☐
9	Has permission to undertake the research has been provided by the partner organisation?	(If YES attach copy) If NO the application cannot continue	**YES**	☐	**NO**	☐

Where research activity is carried out in collaboration with an external organisation

10	Does this organisation have its own ethics approval system?	**YES**	☐	**NO**	☐
	If Yes, please attach a copy of any final approval (or interim approval) from the organisation (this may be a copy of an email if appropriate).				

SECTION E: Details of Research Activity

1	Indicative title:	Causes of customer retention failures in the mobile phone industry, a case study of Nokia

2	Proposed start date:	From 11 of June 2025	Proposed end date:	19 of December 2025

Introduction to the Research (maximum 300 words per section)

Ensure that you write for a <u>Non-Specialist Audience</u> when outlining your response to the points below:

Purpose of Research Activity
Proposed Research Question
Aims of Research Activity
Objectives of Research Activity

Demonstrate, briefly, how **<u>Existing Research</u>** has informed the proposed activity and explain

What the research activity will add to the body of knowledge
How it addresses an area of importance.

3

Purpose of Research Activity

To research the causes of customer retention failures in the mobile phone industry, a case study of Nokia

4

Research Question

1. What are the internal and external factors leading to the reasons why Nokia lost its customer base network in the telecommunications industry?

5

Aims of Research Activity

1. This research aims to investigate extensively the root cause of Nokia customer's retention failure in the telecommunications industry

6

Objectives of Research Activity

1. To carefully evaluate customers perception and the factors leading to behavioural shift during Nokia's decline.
2. To explore why, what and how customers left Nokia for other brands.

	3. To suggest a practical recommendation that would eradicate customer retention failure and promote brand loyalty for other mobile phone companies
	Proposed methods (maximum 600 words) Provide a brief summary of all the methods that **may** be used in the research activity, making it clear what specific techniques may be used. If methods other than those listed in this section are deemed appropriate later, additional ethical approval for those methods will be needed. You do not need to justify the methods here, but should instead describe how you intend to collect the data necessary for you to complete your project.
7	This research will adopt empiricism quantitative methodology, as it is most suitable methodology for exploration of various medium such as questionnaire, company reports/ reviews and surveys, this allows depth examination of organisational decisions, culture and market dynamics and to collect and share direct individual experiences as to what/how and why buyer stopped using Nokia and switched to other brands such as iPhone and Samsung. (this box should expand as you type)
	Location of research activity Identify all locations where research activity will take place.
8	LONDON UK
	Research activity outside of the UK If research activity will take place overseas, you are responsible for ensuring that local ethical considerations are complied with and that the relevant permissions are sought. Specify any local guidelines (e.g. from local professional associations/learned societies/universities) that exist and whether these involve any ethical stipulations beyond those usual in the UK (provide details of any licenses or permissions required). Also specify whether there are any specific ethical issues raised by the local context in which the research activity is taking place, for example, particular cultural and/or legal sensitivities or vulnerabilities of participants. If you live in the country where you will do the research then please state this.

9	N/A *(this box should expand as you type)*

10	Use of documentation not in the public domain: Are any documents **NOT** publicly available?	**NO**	☐
		YES	☐
11	If Yes, please provide details here of how you will gain access to specific documentation that is not in the public domain and that this is in accordance with the current data protection law of the country in question and that of England and Wales. *(this box should expand as you type)*		

	Does your research relate to one or more of the seven aims of the Well-being of Future Generations (Wales) Act 2015?	**YES**	**NO**
12	A prosperous Wales	☐	☒
13	A resilient Wales	☐	☒
14	A healthier Wales	☐	☒
15	A more equal Wales	☐	☒
16	A Wales of cohesive communities	☐	☒
17	A Wales of vibrant culture and thriving Welsh language	☐	☒
18	A globally responsible Wales	☐	☒
19	If YES to any of the above, please give details:		
	(this box should expand as you type)		

SECTION F: Scope of Research Activity

	Will the research activity include:	**YES**	**NO**
1	Use of a questionnaire or similar research instrument?	☒	☐
2	Use of interviews?	☐	☒
3	Use of focus groups?	☒	☐
4	Use of participant diaries?	☒	☐
5	Use of video or audio recording?	☐	☒

6	Use of computer-generated log files?	☒	☐
7	Participant observation with their knowledge?	☒	☐
8	Participant observation without their knowledge?	☐	☒
9	Access to personal or confidential information without the participants' specific consent?	☐	☒
10	Administration of any questions, test stimuli, presentation that may be experienced as physically, mentally or emotionally harmful / offensive?	☐	☒
11	Performance of any acts which may cause embarrassment or affect self-esteem?	☐	☒
12	Investigation of participants involved in illegal activities?	☐	☒
13	Use of procedures that involve deception?	☐	☒
14	Administration of any substance, agent or placebo?	☐	☒
15	Working with live vertebrate animals?	☐	☒
16	Procedures that may have a negative impact on the environment?	☐	☒
17	Other primary data collection methods. Please indicate the type of data collection method(s) below.	☒	☐
	Details of any other primary data collection method: (this box should expand as you type)		

If NO to every question, then the research activity is (ethically) low risk and **may** be exempt from **some** of the following sections (please refer to Guidance Notes).

If YES to any question, then no research activity should be undertaken until full ethical approval has been obtained.

SECTION G: Intended Participants

If there are no participants then do not complete this section, but go directly to section H.

	Who are the intended participants:	**YES**	**NO**
1	Students or staff at the University?	☒	☐
2	Adults (over the age of 18 and competent to give consent)?	☒	☐
3	Vulnerable adults?	☐	☒
4	Children and Young People under the age of 18? (Consent from Parent, Carer or Guardian will be required)	☐	☒
5	Prisoners?	☐	☒
6	Young offenders?	☐	☒

7	Those who could be considered to have a particularly dependent relationship with the investigator or a gatekeeper?	☐	☒
8	People engaged in illegal activities?	☐	☒
9	Others. Please indicate the participants below, and specifically any group who may be unable to give consent.	☒	☐
	Details of any other participant groups: People who have general experiences about mobile phones		

	Participant numbers and source Provide an estimate of the expected number of participants. How will you identify participants and how will they be recruited?	
10	How many participants are expected?	Between 30-50 *(this box should expand as you type)*
11	Who will the participants be?	Nokia users
12	How will you identify the participants?	I will target individuals who have used Nokia phones in the past and are able to share their experiences while using it and give reasons why they stopped using it and moved to other brands. *(this box should expand as you type)*

	Information for participants:	**YES**	**NO**	**N/A**
13	Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	☒	☐	☐
14	Will you tell participants that their participation is voluntary?	☒	☐	☐
15	Will you obtain written consent for participation?	☒	☐	☐
16	Will you explain to participants that refusal to participate in the research will not affect their treatment or education (if relevant)?	☒	☐	☐
17	If the research is observational, will you ask participants for their consent to being observed?	☐	☒	☐
18	Will you tell participants that they may withdraw from the research at any time and for any reason?	☒	☐	☐
19	With questionnaires, will you give participants the option of omitting questions they do not want to answer?	☒	☐	☐
20	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	☒	☐	☐
21	Will you debrief participants at the end of their participation, in a way appropriate to the type of research undertaken?	☒	☐	☐
22	If NO to any of above questions, please give an explanation			

	(this box should expand as you type)

	Information for participants:	**YES**	**NO**	**N/A**
24	Will participants be paid?	☐	☒	☐
25	Is specialist electrical or other equipment to be used with participants?	☐	☒	☐
26	Are there any financial or other interests to the investigator or University arising from this study?	☐	☒	☐
27	Will the research activity involve deliberately misleading participants in any way, or the partial or full concealment of the specific study aims?	☐	☒	☐
28	If YES to any question, please provide full details			
	(this box should expand as you type)			

SECTION H: Anticipated Risks

	Outline any anticipated risks that may adversely affect any of the participants, the researchers and/or the University, and the steps that will be taken to address them. If you have completed a full risk assessment (for example as required by a laboratory, or external research collaborator) you may append that to this form.		
1	Full risk assessment completed and appended?	Yes	☒
		No	☐
2	**Risks to participants** For example: sector-specific health & safety, emotional distress, financial disclosure, physical harm, transfer of personal data, sensitive organisational information		
	Risk to participants: Fear of judgment Confidential business information. Risk of being identified.	*How you will mitigate the risk to participants:* I recognize that participants may feel emotional discomfort discussing their company's sustainability practices. To address this, I will reassure them that they can skip questions or withdraw at any time. I will also ensure interviews are respectful to avoid fear of judgment. To protect confidentiality, I will anonymize data and use pseudonyms. Sensitive business information will be securely	

	Concern that their responses may be misinterpreted	stored. Lastly, I will explain how responses will be used and allow participants to review their transcript to prevent misinterpretation. *(this box should expand as you type)*
3	If research activity may include sensitive, embarrassing or upsetting topics (e.g. sexual activity, drug use) or issues likely to disclose information requiring further action (e.g. criminal activity), give details of the procedures to deal with these issues, including any support/advice (e.g. helpline numbers) to be offered to participants. Note that where applicable, consent procedures should make it clear that if something potentially or actually illegal is discovered during a project, it may need to be disclosed to the proper authorities	
	N/A *(this box should expand as you type)*	
4	**Risks to the investigator** For example: personal health & safety, physical harm, emotional distress, risk of accusation of harm/impropriety, conflict of interest	
	Risk to the investigator: 1. Personal health and safety when traveling or meeting unfamiliar individuals. 2. Physical harm during travel or face-to-face interactions. 3. Risk of accusation of harm or impropriety by participants. 4. Potential conflict of interest if the investigator has a personal or professional stake in the topic. *(this box should expand as you type)*	*How you will mitigate the risk to the investigator:* To mitigate risks, I will conduct questionnaire in safe, professional settings and inform a trusted contact of the details. I will manage emotional distress by maintaining a balanced schedule and seeking supervision if needed. Clear communication with participants will ensure no accusations of impropriety, and I will disclose any potential conflicts of interest to maintain objectivity. his box should expand as you type *(this box should expand as you type)*
5	**University/institutional risks**	

	For example: adverse publicity, financial loss, data protection	
	Risk to the University: 1. Reputational Damage 2. Financial Loss 3. Face legal implications *(this box should expand as you type)*	*How you will mitigate the risk to the University:* To mitigate risks to the University, I will ensure that all research follows ethical guidelines and university protocols to prevent any reputational damage. I will obtain ethical approval before data collection and handle all data with strict confidentiality to safeguard the University's credibility. To avoid financial loss, I will keep the study within the allocated budget and resources. Additionally, I will comply with all legal requirements, such as data protection laws, and seek legal advice, if necessary, to minimize any potential legal implications. *(this box should expand as you type)*
6	**Environmental risks** For example: accidental spillage of pollutants, damage to local ecosystems	
	Risk to the environment: N/A *(this box should expand as you type)*	*How you will mitigate the risk to environment:* N/A *(this box should expand as you type)*

	Disclosure and Barring Service			
	If the research activity involves children or vulnerable adults, a Disclosure and Barring Service (DBS) certificate must be obtained before any contact with such participants.	**YES**	**NO**	**N/A**
7	Does your research require you to hold a current DBS Certificate?	☐	☒	☐
8	If YES, please give the certificate number. If the certificate number is not available please write “Pending”; in this case any ethical approval will be subject to providing the appropriate certificate number.			

SECTION I: Feedback, Consent and Confidentiality

1	**Feedback** What de-briefing and feedback will be provided to participants, how will this be done and when?
	Participants will be provided with a summary of the research findings at the end of the study. This feedback will include an overview of the study's purpose, key outcomes, and how their participation contributed to the research. The feedback will be delivered either verbally (if applicable) or via email, depending on the format of the research. Participants will also have the opportunity to ask questions or request further clarification at this stage. This debriefing will occur immediately after data collection is complete or at the conclusion of their involvement in the study. *(this box should expand as you type)*
2	**Informed consent** Describe the arrangements to inform potential participants, before providing consent, of what is involved in participating. Describe the arrangements for participants to provide full consent before data collection begins. If gaining consent in this way is inappropriate, explain how consent will be obtained and recorded in accordance with prevailing data protection legislation.
	Participants will receive a detailed information sheet prior to taking part in the research. This document will outline the purpose of the study, what participation involves, any potential risks or benefits, how their data will be used and stored, and their right to withdraw at any time without penalty. Participants will be given time to review this information and ask questions before providing consent. Consent will be documented through a signed consent form (for in-person research) or an electronic consent form (for online research), in compliance with current data protection legislation No data collection will begin until informed consent has been properly obtained and recorded *(this box should expand as you type)*
3	**Confidentiality / Anonymity** Set out how anonymity of participants and confidentiality will be ensured in any outputs. If anonymity is not being offered, explain why this is the case.
	1. Participant's actual name will not be used anywhere 2. I will keep participants' identities anonymous by using pseudonyms and removing any identifying information from the study results. All data will be stored securely, and only I will have access to it. Participants' personal details will not be shared in any reports. If I need to include any identifying information, I will ask for their permission first. If full anonymity isn't possible, I will let participants know in advance and ask for their consent.

	(this box should expand as you type)

SECTION J: Data Protection and Storage

	Does the research activity involve personal data (as defined by the General Data Protection Regulation 2016 "GDPR" and the Data Protection Act 2018 "DPA")?	**YES**	
1	***"Personal data"*** *means any information relating to an identified or identifiable natural person ('data subject'). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person. Any video or audio recordings of participants is considered to be personal data.*	☐	x
	If YES, provide a description of the data and explain why this data needs to be collected:		
2	*(this box should expand as you type)*		
	Does it involve special category data (as defined by the GDPR)?	**YES**	
3	***"Special category data"*** *means sensitive personal data consisting of information as to the data subjects –* *(a) racial or ethnic origin,* *(b) political opinions,* *(c) religious beliefs or other beliefs of a similar nature,* *(d) membership of a trade union (within the meaning of the Trade Union and Labour Relations (Consolidation) Act 1992),* *(e) physical or mental health or condition,* *(f) sexual life,* *(g) genetics,* *(h) biometric data (as used for ID purposes),*	☐	
	If YES, provide a description of the special category data and explain why this data needs to be co		
4	*(this box should expand as you type)*		

	Will data from the research activity (collected data, drafts of the thesis, or materials for publication) be stored in any of the following ways?	**YES**	**NO**
5	Manual files (i.e. in paper form)?	☐	☒
6	University computers?	☐	☒
7	Private company computers?	☐	☒

8	Home or other personal computers?	☒	☐
9	Laptop computers/ CDs/ Portable disk-drives/ memory sticks?	☒	☐
10	“Cloud” storage or websites?	☒	☐
11	Other – specify:	☐	☒
12	For all stored data, explain the measures in place to ensure the security of the data collected, data confidentiality, including details of backup procedures, password protection, encryption, anonymisation and pseudonymisation:		
	1. **Anonymization**: I will use pseudonyms and remove identifying details from all data. 2. **Secure Storage**: I will store data on encrypted devices, with access limited to me. 3. **Confidentiality**: Any third parties will sign confidentiality agreements. 4. **Data Sharing**: I will only share data with authorized individuals, like my supervisor. 5. **Data Disposal**: After the study, I will securely delete or destroy all personal data. *(this box should expand as you type)*		

	Data Protection		
	Will the research activity involve any of the following activities:	**YES**	**NO**
13	Electronic transfer of data in any form?	☒	☐
14	Sharing of data with others at the University outside of the immediate research team?	☐	☒
15	Sharing of data with other organisations?	☐	☒
16	Export of data outside the UK or importing of data from outside the UK?	☐	☒
17	Use of personal addresses, postcodes, faxes, emails or telephone numbers?	☐	☒
18	Publication of data that might allow identification of individuals?	☐	☒
19	Use of data management system?	☒	☐
20	Data archiving?	☐	☒
21	If YES to any question, please provide full details, explaining how this will be conducted in accordance with the GDPR and Data Protection Act (2018) (and any international equivalents, where appropriate):		
	Electronic Transfer of Data: I will use secure, encrypted methods for transferring data, ensuring it's only shared with authorized individuals. **Use of Personal Emails**: I will use personal email accounts for research communication. **Use of Data Management System**: I will store data on a secure, encrypted system with controlled access. *(this box should expand as you type)*		
22	List all who will have access to the data generated by the research activity:		

	The researcher and the supervisor *(this box should expand as you type)*		
23	List who will have control of, and act as custodian(s) for, data generated by the research activity:		
	The researcher *(this box should expand as you type)*		
24	Give details of data storage arrangements, including security measures in place to protect the data, where data will be stored, how long for, and in what form. Will data be archived – if so how and if not why not.		
	I will securely store data using encryption to protect it. Access will be restricted to authorized users through strong authentication. I will store the data on both on-site servers and cloud services like AWS or Google Cloud. I will keep the data for as long as needed, based on legal requirements, and securely delete or anonymize it once it's no longer required. *(this box should expand as you type)*		
25	Please indicate if your data will be stored in the UWTSD Research Data Repository (see https://researchdata.uwtsd.ac.uk/). If so please explain. (*Most relevant to academic staff)*		
	NO *(this box should expand as you type)*		
26	Confirm that you have read the UWTSD guidance on data management (see https://www.uwtsd.ac.uk/library/research-data-management/)	**YES**	☒
27	Confirm that you are aware that you need to keep all data until after your research has completed or the end of your funding	**YES**	☒

SECTION K: Declaration

	The information which I have provided is correct and complete to the best of my knowledge. I have attempted to identify any risks and issues related to the research activity and acknowledge my obligations and the rights of the participants. In submitting this application I hereby confirm that I undertake to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice which is published on the website: https://www.uwtsd.ac.uk/research/research-ethics/		
1	**Signature of applicant:**	Micheal Enitan Oladimeji	**Date:** 18/10/2025

For STUDENT Submissions:

2	Director of Studies/Supervisor:	Mohammad Rahman	**Date:18/10/25**
3	Signature:	Mohammad Rahman	

For STAFF Submissions:

4	Academic Director/ Assistant Dean:		**Date:**
5	Signature:		

Checklist: Please complete the checklist below to ensure that you have completed the form according to the guidelines and attached any required documentation:

☒	I have read the guidance notes supplied before completing the form.
☒	I have completed **ALL RELEVANT** sections of the form in full.
☒	I confirm that the research activity has received approval in principle
☒	I have attached a copy of final/interim approval from external organisation (**where appropriate**)
☒	I have attached a full risk assessment (where appropriate) ONLY *TICK IF YOU HAVE **ATTACHED A FULL RISK ASSESSMENT***
☒	I understand that it is my responsibility to ensure that the above-named research activity will meet the University's Research Ethics and Integrity Code of Practice.
☒	I understand that before commencing data collection all documents aimed at respondents (including information sheets, consent forms, questionnaires, interview schedules etc.) must be confirmed by the DoS/Supervisor, module tutor or Academic Director.

RESEARCH STUDENTS ONLY Once complete, submit this form via the **MyTSD Doctoral College Portal** at (https://mytsd.uwtsd.ac.uk).
RESEARCH STAFF ONLY All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk , with the title 'Ethical Approval' followed by your name.
STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.

Appendices

Appendix A ……Cover page

Appendix B……Acknowledgement

Appendix C……Declaration

Appendix D……Abstract

Appendix E……...Table of Contents

Appendix F……...Element I report 9000 words

Appendix G…… Element II Reflection 500 words

Appendix H…… Elements III Poster 500 words

Appendix I……List of References

Appendix J……...Ethical Form Attachment