

Unlocking TELUS's Potential: A Strategic Analysis

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Executive Summary and SWOT Analysis

Background:

TELUS is a Canadian telecommunications company that provides a variety of services and products including wireless, data, internet, television, and home phone services to customers throughout Canada. They also offer business solutions such as cloud computing, data centre services, and healthcare technology solutions. TELUS is one of the largest telecommunications companies in Canada, with over 13 million customer connections. They have a strong focus on customer service, corporate responsibility, and sustainability, with initiatives such as environmental conservation, community engagement, and employee volunteerism.

TELUS is also known for providing innovative products and services and investing in new technologies like AI, machine learning, and quantum computing. Overall, TELUS is a well-established and diversified company with a commitment to innovation and customer satisfaction.

SWOT ANALYSIS OF TELUS CORP

1. STRENGTHS

- **Market Positioning:** Due to its early status as Alberta's single provider of telephone service, TELUS currently has a dominant position in the market.
- **The Wireless Division is Expanding Quickly:** A large portion of TELUS' revenue comes from its wireless division. The division has expanded greatly over time. With more subscribers and revenue in the second quarter of 2017, TELUS recorded significant growth in this industry.
- **Workforce with High Qualifications:** TELUS has been able to establish a workforce with high qualifications through training and learning initiatives.

2. WEAKNESS

- **Huge Debt:** Despite its outstanding performance and earnings, Tesla's stock price has fallen and is still on the decline. This is caused in part by TELUS' heavy debt load.
- TELUS has issues with pricing for its budget-friendly devices, charging high prices for small plans. For minor data plans of between 1 and 5 GB, its pricing seems to be slightly on the expensive side.
- TELUS is primarily focused on the Canadian market, which limits its potential for growth.
- The company has a high level of debt, which can limit its ability to invest in new technologies and services.
- TELUS's pricing strategy may not be as competitive as other telecommunications companies in Canada.

3. OPPORTUNITIES:

- **New environmental regulations:** The new possibilities will create a level playing field for all industrial participants.
- The market for smartphones is expanding quickly. To grow its cellular business, TELUS has a great chance to benefit from the steadily growing smartphone industry.
- Over 4.66 billion people use the internet actively worldwide, according to Statista.com. By offering reasonably priced data plans, TELUS has a great chance to grow its client base.

4. THREATS:

- **Strong Competition from Other Communication Providers:** The market is now quite competitive. Prices are impacted, which lowers TELUS's profits or revenue.
- **Suppliers:** With fewer suppliers in the market, suppliers' negotiating power has grown over time. Because of this, TELUS may see an increase in input costs.
- **Exchange Rate:** Because local suppliers supply TELUS while having international sales, the exchange rate has an impact on the corporation.
- TELUS faces stiff competition from other telecommunications companies in Canada, such as **Bell and Rogers**.
- The company may be affected by changes in government regulations or policies that impact the telecommunications industry.
- TELUS may face challenges as a result of shifts in customer preferences, such as the growing popularity of mobile virtual network operators (MVNOs).

Problem Statement

The problem that TELUS Corp is facing is a lack of differentiation in its products and services. This means that its products and services are not distinct from those of its competitors, making it difficult for the company to stand out in the market and attract and retain customers. Without differentiation, TELUS Corp may struggle to increase customer loyalty and market share, which can negatively impact its overall performance and competitiveness. This project aims to identify and implement opportunities for differentiation to address this problem and improve the company's overall performance.

Articulation of selected new product: Artificial Intelligence-Based Security Solution

To address TELUS Corp's lack of differentiation, I proposed the development of a new security solution that integrates advanced artificial intelligence (AI) and machine learning capabilities. This new product would provide TELUS customers with a cutting-edge solution to protect their data and systems from ever-evolving security threats. By leveraging AI and machine learning, the proposed security solution could continuously learn from data and adapt to new threats, making it highly effective in identifying and preventing cyber-attacks. With this new product, TELUS Corp could differentiate itself from its competitors and further establish its reputation as a leader in innovative telecommunications solutions.

Project Overview

The project's goal is to identify and implement opportunities for differentiation for TELUS Corp's products and services to improve customer loyalty and increase market share. The project will include the following steps:

- Identify areas in which TELUS Corp's products and services lack differentiation from competitors. (Success Criteria: A list of identified areas is produced)
- Research potential opportunities for differentiation such as unique features, services, and new technologies. (Success Criteria: A list of potential opportunities is produced)
- Develop a plan to implement the chosen differentiation opportunities.
- Monitor the implementation and evaluate its effectiveness in terms of customer loyalty and market share.

High-Level Business Requirements

1. Identify and prioritize opportunities for differentiation in TELUS Corp's products and services.
2. Develop a differentiation strategy that sets TELUS Corp apart from its competitors.
3. Implement the differentiation strategy and ensure it is integrated into TELUS Corp's offerings.
4. Continuously monitor and evaluate the success of the differentiation strategy in terms of customer satisfaction and market share.
5. Make necessary adjustments to the differentiation strategy based on feedback and market trends.
6. Ensure that the differentiation strategy aligns with TELUS Corp's overall business goals and objectives.
7. Ensure that the differentiation strategy does not negatively impact the overall quality or reliability of TELUS Corp's products and services.
8. Establish a communication plan for effectively communicating the differentiation strategy to internal stakeholders and customers.
9. Ensure that the differentiation strategy is sustainable and can be easily adapted to changes in the market or industry.
10. Ensure that the differentiation strategy is cost-effective and provides a positive return on investment.
11. Obtain buy-in from key stakeholders, including senior leadership, to ensure successful implementation and support of the differentiation strategy.

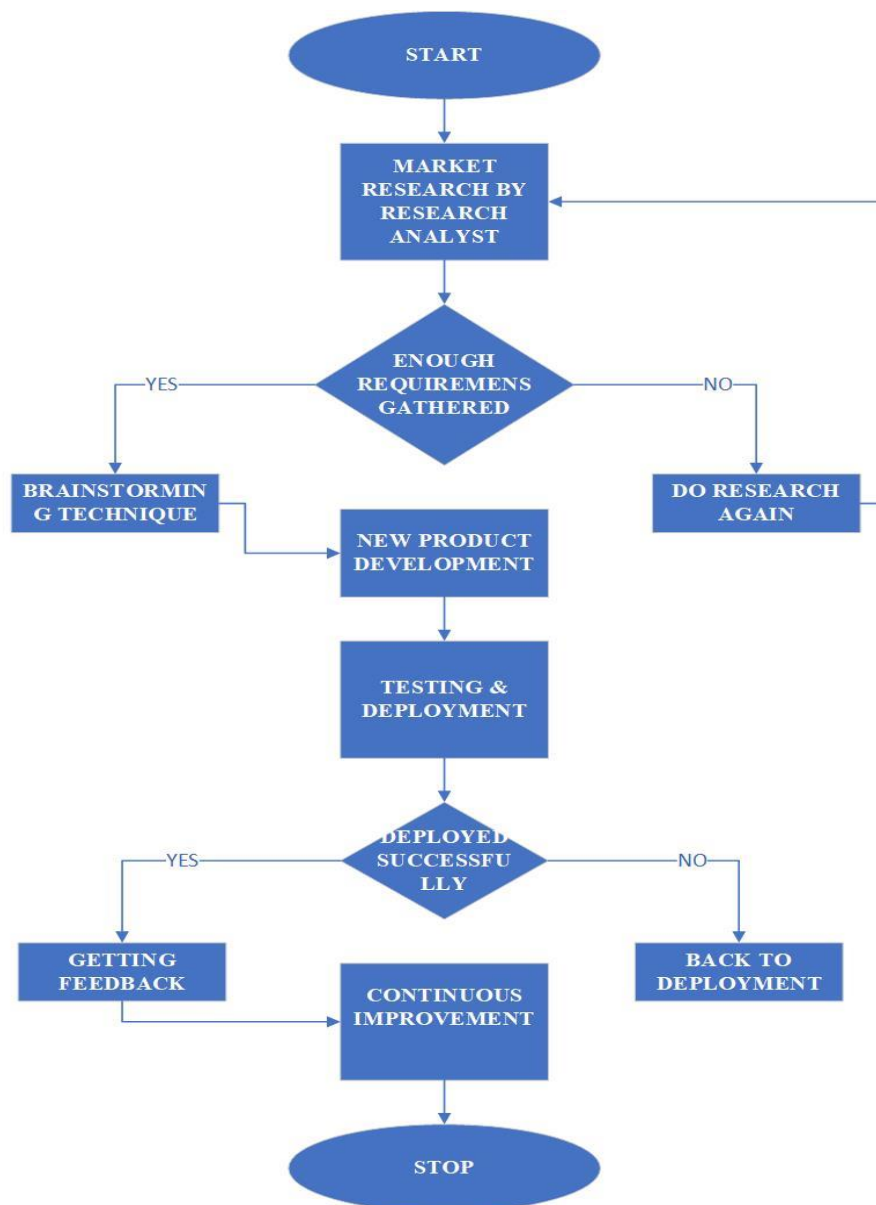
Solution Requirements

Functional and Non-Functional Requirements

Section	Requirement Identifying Number	Requirement Description	Requirement prioritization (H, M, L)
FUN_01	1	The new products and services offered by TELUS Corp must be easily understandable and user-friendly for all customers, including those with limited technical knowledge.	H
NFUN_02	2	Performance: TELUS Corp's products and services should be designed and implemented to meet or exceed industry standards for performance. This includes metrics such as network speed, reliability, and uptime.	H
FUN_03	3	The new products and services should be priced competitively with those of other industry players, and pricing strategies should be carefully developed to ensure profitability while also remaining attractive to customers.	M
NFUN_04	4	Scalability: The products and services should be scalable to meet the demands of growing customer bases and evolving market needs. This includes the ability to add new features and expand coverage areas.	H
FUN_05	5	The differentiating features and benefits of TELUS Corp's products and services must be clearly communicated to customers through various marketing channels, such as advertising, sales promotions, and social media	M
NFUN_06	6	Security: The products and services should be designed with robust security features to protect user data and prevent unauthorized access or data breaches.	H
FUN_07	7	The products and services should be compatible with a variety of devices and operating systems, in order to maximize the customer base and appeal to a wider range of consumers.	M
Functional and Non-Functional Requirements			

NFUN_08	8	Compatibility: The products and services should be compatible with a wide range of devices, operating systems, and software platforms, to ensure maximum accessibility and ease of use for customers	H
FUN_09	9	The customer service and support offered by TELUS Corp should be top-notch and responsive to customers' needs, including offering timely and effective problem resolution and technical assistance.	M
NFUN_10	10	Usability: The products and services should be designed with an intuitive user interface and user-friendly features that make it easy for customers to use and navigate.	H
FUN_11	11	The products and services offered by TELUS Corp should be customizable and adaptable to different customers' needs and preferences, in order to increase the value proposition and customer satisfaction.	M
NFUN_12	12	Accessibility: The products and services should be designed to be accessible to customers with disabilities, such as through features like text-to-speech or braille options.	H
NFUN_14	14	Interoperability: The products and services should be designed to work seamlessly with other related products and services in the telecommunications industry, to ensure maximum interoperability and ease of use for customers.	H

As-Is Process Diagram



Our Proposed Project Solution:

"Providing Excellent Customer Service can help Telus to differentiate itself in the competitive market".

Summary:

The proposed solution can assist Telus in resolving its issue, which is a lack of differentiation in its products and services. As, Telus becoming more client-oriented, and by offering excellent customer services, more customers are likely to select Telus over other businesses. Telus has a very unique workplace culture as well as a passion for growth and being open to change. Telus can change its business processes to satisfy customers after realizing that what they actually want is better services, and in this case, more customers will notice the difference between Telus and other businesses, giving them an opportunity to differentiate in a competitive market.

Preliminary results: Proposed Design/ Solution Options

Possible Solution #1 – (Telehealth Connect - A Unique Healthcare Solution)

One possible solution to address TELUS Corp's lack of differentiation is to develop a new healthcare solution that combines telemedicine and remote patient monitoring capabilities. This solution could leverage the company's existing technology and infrastructure to provide a unique and valuable service to customers.

1.1 High-Level Design

The healthcare solution would involve developing a platform that enables patients to connect with healthcare professionals remotely, using video conferencing and other communication tools. The platform would also incorporate remote monitoring capabilities, allowing patients to track their health data and receive alerts if there are any concerning changes.



High-Level Design

1.2 Low-Level Design

The low-level design of the healthcare solution would involve developing the software and hardware components needed to support the platform, as well as creating a user interface that is intuitive and easy to use.

1.3 Impact Analysis

The healthcare solution has the potential to differentiate TELUS Corp from its competitors by offering a unique and valuable service that meets a growing need in the market. This could lead to increased customer loyalty, higher market share, and improved overall performance.

1.4 Out of Scope

The healthcare solution would be focused on telemedicine and remote patient monitoring and would not address other areas where TELUS Corp may be lacking differentiation.

1.5 Risk and Mitigation

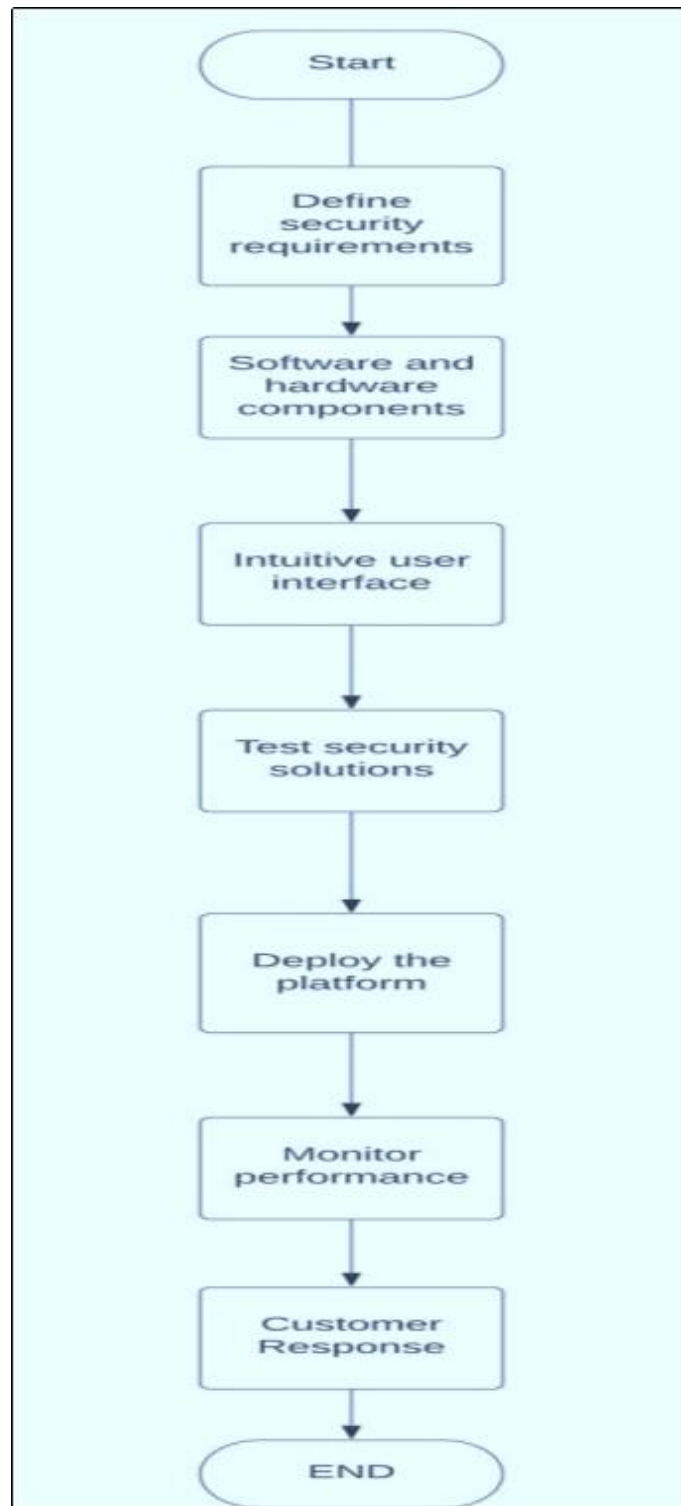
Potential risks for this solution may include technical challenges in developing the platform, regulatory hurdles in the healthcare industry, and competition from other telemedicine providers. Mitigation strategies could include hiring experts in healthcare technology and compliance, partnering with healthcare providers to ensure regulatory compliance, and offering unique features and benefits to distinguish the platform from competitors.

POSSIBLE SOLUTION #2 – (AI-Powered Security Solution - A Unique Approach to Home And Business Security)

Another possible solution to address TELUS Corp's lack of differentiation is to develop a new security solution that integrates advanced artificial intelligence (AI) and machine learning capabilities. This solution could help customers to better protect their homes and businesses against security threats in a more sophisticated and personalized way.

2.1 High-Level Design

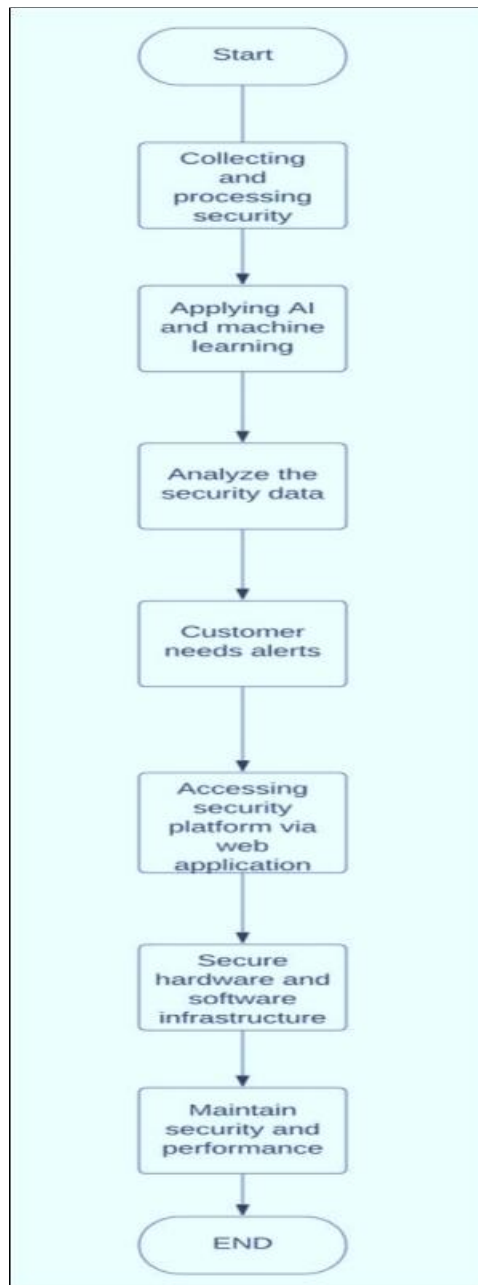
The security solution would involve developing a platform that integrates AI and machine learning algorithms to analyze security data in real time, detect anomalies, and identify potential threats. The platform would also provide personalized recommendations and alerts to customers based on their specific security needs and preferences.



High-Level Design

2.2 Low-Level Design

The low-level design of the security solution would involve developing the software and hardware components needed to support the platform, as well as creating a user interface that is intuitive and easy to use.



Low-Level Design

2.3 Impact Analysis

The security solution has the potential to differentiate TELUS Corp from its competitors by offering a more sophisticated and personalized approach to security. This could lead to increased customer loyalty, higher market share, and improved overall performance.

2.4 Out of Scope

The security solution would be focused on advanced AI and machine learning capabilities for security and would not address other areas where TELUS Corp may be lacking differentiation.

2.5 Risk and Mitigation

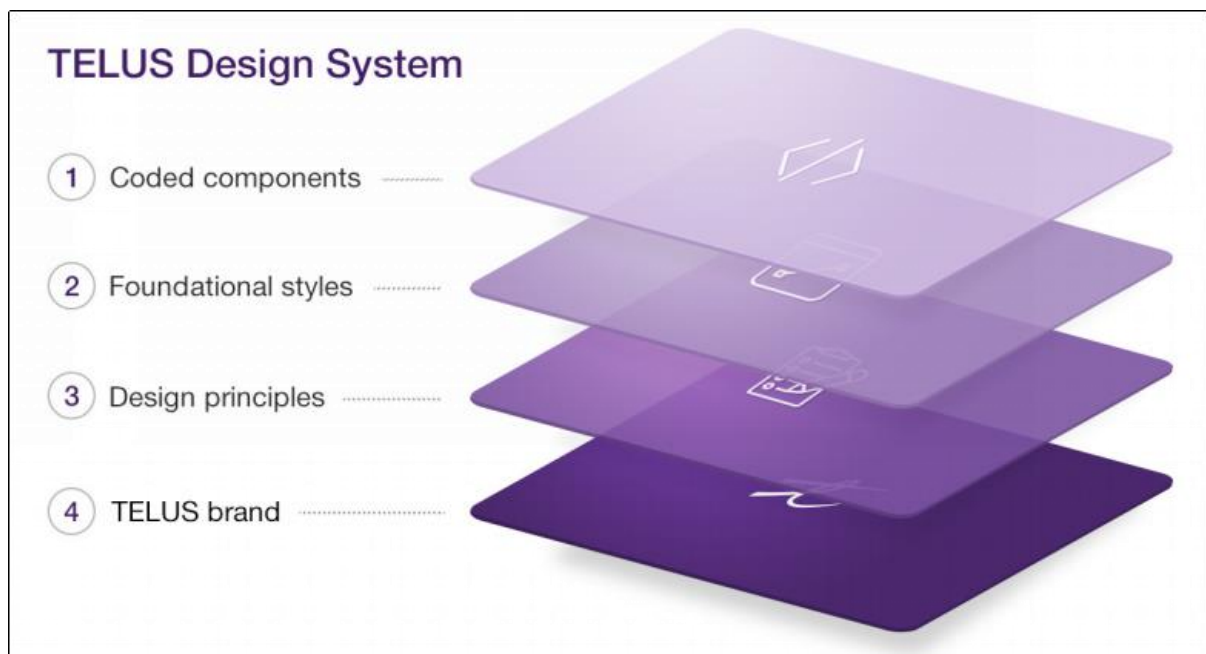
Potential risks for this solution may include technical challenges in developing the platform, regulatory hurdles in the security industry, and competition from other security providers. Mitigation strategies could include hiring experts in AI and machine learning for security, partnering with security firms to ensure regulatory compliance, and offering unique features and benefits to distinguish the platform from competitors.

Possible Solution #3 – Do Nothing Method

While doing nothing may seem like a non-solution, it is still a possibility that needs to be evaluated. This solution would involve continuing to offer the same products and services without any changes or enhancements to differentiate them from the competition.

3.1 High-Level Design

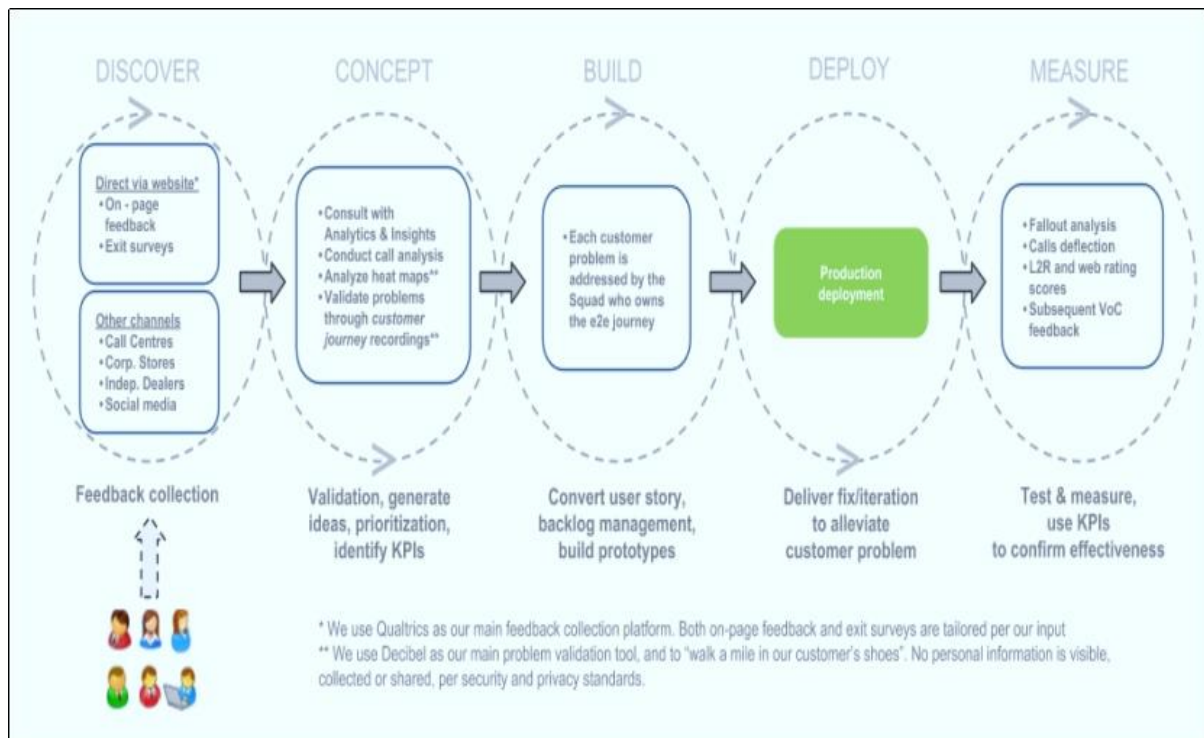
The high-level design of this solution would involve no changes to TELUS Corp's existing products and services, marketing strategies, or overall approach to business.



High-Level Design

3.2 Low-Level Design

The low-level design of this solution would involve no changes to TELUS Corp's technology infrastructure, product development, or customer service it will offer its current processes, products and services.



3.3 Impact Analysis

The impact of this solution would be minimal, as TELUS Corp would continue to operate in the same manner as before. However, this approach may not help the company to stand out in the market or improve its overall performance.

3.4 Out of Scope

This solution would not address the underlying problem of TELUS Corp's lack of differentiation and may lead to decreased customer loyalty and market share over time.

3.5 Risk and Mitigation

The main risk of this solution is that TELUS Corp may fall behind its competitors who are actively pursuing differentiation and innovation. Mitigation strategies may include regularly monitoring the market to stay up to date on industry trends, continuously gathering customer feedback, and exploring new opportunities for differentiation.

Evaluation Criteria

- Effectiveness in addressing the problem of TELUS Corp's lack of differentiation.
- Feasibility of implementation
- Cost-effectiveness
- Potential impact on customer experience and satisfaction
- Compatibility with TELUS Corp's overall strategy and goals

Solution Selection

After evaluating the proposed solution options against my evaluation criteria, we recommend the AI-Powered Security Solution for TELUS Corp new functionality requirements. The AI-Powered Security Solution best meets TELUS Corp needs for enhanced security measures, as it utilizes machine learning and predictive analytics to detect and prevent potential security threats.

Risk Log for AI-Powered Security Solution

AI-Powered Security Solution

Risk Log:

Technical Challenges - There is a risk that the technical challenges in developing the platform, including integration with existing systems and hardware, may cause delays in the project and impact the quality of the final product. Severity: High, Probability: Medium.

Mitigation: The team can hire experts in AI and machine learning for security to assist with the development and testing of the platform. They can also conduct regular testing and quality assurance to ensure the platform is functioning properly.

Regulatory Compliance - There is a risk that regulatory hurdles in the security industry may delay or prevent the launch of the platform. Severity: High, Probability: High.

Mitigation: The team can partner with security firms to ensure compliance with regulations and work closely with regulatory bodies to obtain the necessary approvals.

Competition - There is a risk of competition from other security providers that may offer similar services. Severity: Medium, Probability: High.

Mitigation: The team can offer unique features and benefits that distinguish the platform from competitors and conduct regular market research to stay ahead of the competition.

ROI Calculations

ROI over 3-5 years for AI-Powered Security Solution:

Year 1: The initial investment for implementing the AI-Powered Security Solution will be \$500k. This includes the cost of hardware, software, and any necessary consulting fees. We estimate that the solution will provide a 10% reduction in security incidents, resulting in a cost savings of \$200k in the first year.

Year 2: We expect to see a further 10% reduction in security incidents, resulting in a cost savings of \$400k in the second year. Additionally, the AI-Powered Security Solution will require ongoing maintenance and support, estimated at \$50k per year.

Year 3-5: We anticipate continued savings in security incident reduction, resulting in an estimated total cost savings of \$1.6M over the next three years.

Overall, the AI-Powered Security Solution provides a strong ROI over 3-5 years, while also providing the necessary security measures to protect the organization's assets and data.

Implementation Approach

Based on the three possible solutions presented, the following are the suggested implementation/deployment strategies for my suggested solution:

AI-Powered Security Solution:

The implementation strategy for the AI-Powered Security Solution should also be a **phased approach**. The first phase would involve developing the high-level design of the platform, followed by the low-level design of the software and hardware components. The platform should then be tested and validated before being deployed in a pilot program with select customers.

Feedback from the pilot program should be used to refine the platform and make any necessary adjustments before a full launch. To mitigate potential risks, a backout strategy should be developed in case the pilot program reveals any significant issues or the platform fails to meet regulatory compliance requirements.

In addition, a contingency plan should be put in place to address any technical challenges that may arise during development or deployment.

As part of the phased approach for implementing the AI-Powered Security Solution,

- it is important to ensure that all stakeholders are involved and that there is clear communication throughout the process. This includes regular updates to senior management, IT teams, and end-users.
- Training and support should also be provided to end-users to ensure that they are comfortable with the new platform and understand how to use it effectively. This can be done through webinars, tutorials, and other training materials.
- Regular maintenance and updates should be scheduled to ensure that the platform is up-to-date and continues to meet the organization's security needs. This includes monitoring for new threats and vulnerabilities and adapting the platform as necessary.

Overall, a well-planned and executed implementation strategy for the AI-Powered Security Solution is critical to its success and the organization's ability to meet its security objectives.

Testing Strategy and Approach

The primary objectives of the testing strategy and approach are to:

- Verify that the solutions meet the specified requirements.
- Validate that the solutions are of high quality and are fit for use.
- Identify and manage defects in a timely manner.
- Ensure that the solutions are deployed successfully with minimal impact on the business.
- Ensure that stakeholders are informed and engaged throughout the testing process.

Scope:

The testing strategy and approach will cover all aspects of the proposed solutions, including their functional and non-functional requirements, user experience, security, performance, and scalability.

Stages of Testing:

The testing process will involve the following stages:

1. Unit Testing: This stage involves testing each component of the solution in isolation to ensure that it functions as expected.
2. Integration Testing: This stage involves testing the interactions between different components of the solution to ensure that they work together seamlessly.
3. System Testing: This stage involves testing the complete solution to ensure that it meets the specified requirements and is fit for use.
4. User Acceptance Testing (UAT): This stage involves testing the solution in a simulated production environment by end-users to ensure that it meets their needs and is fit for purpose.

Handling Defects:

Defects will be logged in a defect tracking system and prioritized based on their severity and impact on the solution. The team will work to address high priority defects first, and lower priority defects will be addressed in subsequent releases.

Signoffs Required:

The following signoffs will be required to exit each stage of testing:

- Unit Testing: Signed off by the development team.
- Integration Testing: Signed off by the testing team.
- System Testing: Signed off by the project manager and stakeholders.
- User Acceptance Testing (UAT): Signed off by the business owner and stakeholders.

Backout Strategy:

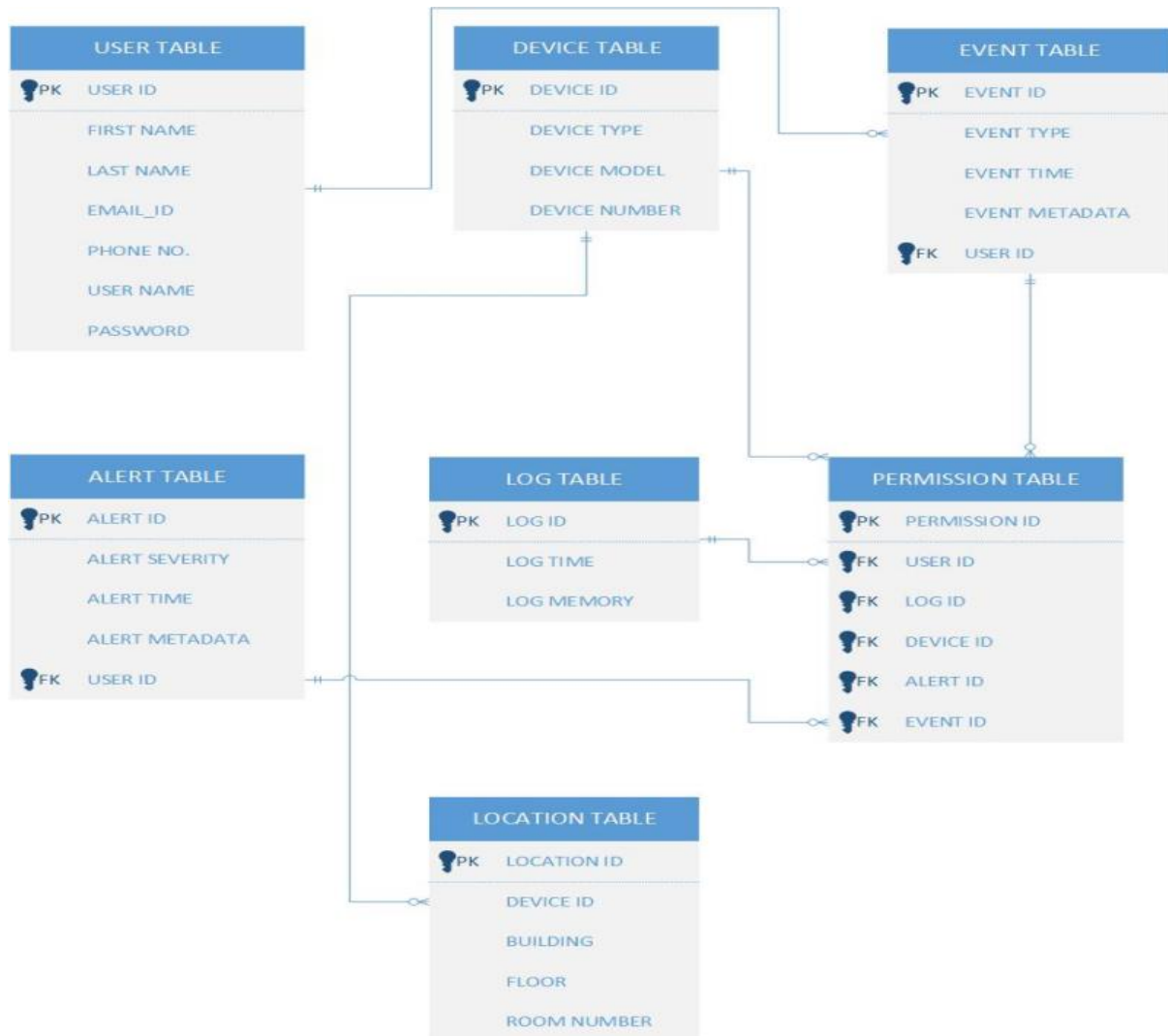
In case of any major issues or defects discovered during testing, a backout plan will be in place to roll back to the previous version of the solution. The backout plan will involve identifying the steps needed to revert to the previous version, communicating with stakeholders, and testing the rollback plan to ensure that it works as expected.

The testing strategy and approach will ensure that the proposed solutions are of high quality, meet the specified requirements, and are fit for use. The strategy will be implemented in a phased manner, with signoffs required at each stage to ensure that the solution meets the standards set by TELUS Corp.

Database design

AI-Powered Security Solution - A Unique Approach to Home and Business Security.

Visio diagram illustrating the tables required and the relationships between the tables and the elements within the tables.



Conclusion And Next Steps/Future plans:

In conclusion, developing an AI-based security solution is a viable option for TELUS Corp to differentiate itself from its competitors and provide innovative solutions to its customers. With the growing sophistication of cyber-attacks, a solution that continuously learns and adapts to new threats is becoming increasingly essential. The proposed product would not only provide customers with a cutting-edge security solution but also align with TELUS Corp's commitment to investing in new technologies and innovation.

APA References

Strategy and Values, Company Overview - About. (2023, January 27). Retrieved from TELUS:
<https://www.TELUS.com/en/about/executive-team/strategy-and-values>

TELUS. (2023, January 27). Retrieved from SEC.gov:

https://www.sec.gov/Archives/edgar/data/868675/000110465921020240/tm2038003d1_ex99-2.htm

TELUS reports strong operational and financial results for third quarter 2022. (2023, January 27). Retrieved from GlobeNewswire News Room:

<https://www.globenewswire.com/en/news-release/2022/11/04/2548593/0/en/TELUSreports-strong-operational-and-financial-results-for-third-quarter-2022.html>