



CONESTOGA

Connect Life and Learning

Assignment – 5

Team	4 – Loblaws (alias used - Loblyst)
Name	Vaishnavi Wadhwa, Janviben Patel, Adhil Muzahir, Ota Adesina, Simran Rattu, Soji Koshy
Student #	8939083, 8898912, 8883484, 8889777, 8902253, 8940087.
Course	Information Technology Business Analysis Capstone Project
Section	08
Professor	Temi Ajaja
Due Date	16-10-2024

Table of Contents

Introduction	3
Business requirements.....	4
Functional Requirements	5
Nonfunctional Requirements.....	7
Acronyms	9
References	10

Introduction

This report details the functional and non-functional requirements for Loblyst Company Ltd.'s e-commerce platform. It highlights the need for PC Optimum integration, secure account access, and efficient checkout and order processes. The non-functional requirements emphasize performance, security, scalability, and compliance with data protection laws to ensure a reliable and user-friendly platform.

Business requirements

Here is a complete set of business objectives for Loblyst's e-commerce platform following the **[Action] + [Measure] + [Timeframe]** format: (Conestoga College, 2024a, p. 18)

ID	Statement
BO-01	Increase the conversion rate by 15% within 6 months of launching the new e-commerce platform.
BO-02	Reduce cart abandonment rate by 20% within 8 months of implementing user-friendly checkout enhancements.
BO-03	Increase customer satisfaction by 25% within 12 months of improving the website's user interface and performance.
BO-04	Increase mobile transactions by 30% within 10 months by optimizing the mobile platform experience.
BO-05	Reduce support tickets related to checkout issues by 50% within 9 months of streamlining the payment process.
BO-06	Increase repeat purchase rate by 18% within 1 year by implementing personalized recommendations for returning users.
BO-07	Increase average order value (AOV) by 10% within 7 months through targeted upselling and cross-selling strategies.
BO-08	Achieve 40% growth in new user registrations within 6 months by launching an integrated marketing campaign.

Functional Requirements

The functional requirements outline the system's need to integrate with PC Optimum for account access and points management, ensuring secure sign-in, and enabling pre-filled data during checkout to streamline the user experience. The platform must provide a smooth checkout, real-time delivery tracking, and seamless inventory management for efficient order processing and fulfilment. Additionally, the system should offer customer support channels, feedback collection, and maintain high performance and scalability to handle growth and traffic.

Requirement Identifying Number	Requirement Description	Requirement prioritization (H, M, L)	Traceability	Requirement Notes
FR001	The system must integrate with PC Optimum, allowing users to sign in using their PC Optimum account, points, and profile data.	H	BO-08	Integration with PC Optimum is crucial for user experience.
FR002	The system must allow account sign-in access using PC Optimum with one password recovery and two-step authentication.	H	BO-08	Ensures secure login processes for users.
FR003	After signing in with their PC Optimum, the system shall send a password change confirmation email. Then the user can go to their PC Optimum account and update their personal details like name, email address, and contact number.	M	BO-08	Enhances user control over account information.
FR004	The applied discounts must be seen, items in the cart must be reviewed, and the user can check out using multiple payment options.	H	BO-02 BO-07	Improves user experience during checkout.
FR005	The system must provide a smooth and prompt checkout process where user information from their PC Optimum account must be prefilled wherever possible.	H	BO-02 BO-05	Enhances checkout efficiency.
FR006	Inventory interfaces must also be further connected to the platform to validate the inventory for stock presence and facilitate the picking and packing process.	H	BO-01 BO-07	Ensures seamless integration with inventory management.
FR007	It must be capable of making specific orders substituted by other	M	BO-01 BO-06	Enhances customer satisfaction by avoiding order delays.

Requirement Identifying Number	Requirement Description	Requirement prioritization (H, M, L)	Traceability	Requirement Notes
	products in case some are out of stock and inform buyers about that.			
FR008	The platform must provide customers with a message that their order is ready for pickup or delivery, including detailed instructions on how to proceed and timeframes.	M	BO-01 BO-04	Improve customer communication.
FR009	The system should make it more convenient for the users to follow their delivery status in real-time with the relevant estimated arrival time and the driver details if available.	H	BO-03 BO-04	Enhances transparency and user satisfaction.
FR010	The platform must require a survey form or advanced rating to understand users' experience after ordering the products.	M	BO-03	Facilitates service improvement through feedback.
FR011	After the order is completed, the clients should be given several means of communication (live chat, email, phone) and a ticket system for complaints.	H	BO-03 BO-05	Ensures timely issue resolution for customers.
FR012	Points earned should be instantly retrievable and usable from the PC Optimum account during checkout.	H	BO-01 BO-07	Critical for seamless loyalty program integration.
FR013	The system must address issues with incorrect points synchronization for example, during guest checkout, and offer a solution.	M	BO-01 BO-06	Ensures accurate points tracking for users.
FR014	The load time for the platform is to be 3-5 seconds, even under high traffic volume, for the platform's future growth beyond the GTA.	H	BO-03 BO-04	Essential for user experience during high traffic.
FR015	The system must be up running 99.9% of the time, with database enhancements for expanding visitor traffic and the number of orders.	H	BO-01 BO-04	Ensures reliability and scalability of the platform.

Nonfunctional Requirements

The non-functional requirements focus on ensuring system performance, security, usability, and scalability. Key performance goals include fast load times, responsive actions, and minimal downtime, with security measures like encryption and two-factor authentication safeguarding user data. The system must also maintain usability across devices, comply with regional data protection laws, and regularly track performance metrics, user satisfaction, and geographic order expansion for ongoing improvement and scalability.

Requirement Identifying Number	Requirement Description	Requirement prioritization (H, M, L)	Traceability	Requirement Notes
NFR001	The system will load each page within 2 seconds under standard conditions.	H	BO-03 BO-04	Essential for user satisfaction and retention, especially during peak periods.
NFR002	The system will respond within 1 second after a user initiates an action (e.g., adding items to the cart).	H	BO-02 BO-03	Key to maintaining smooth user experience in an e-commerce environment.
NFR003	The system will allow users to navigate from the homepage to the checkout within three clicks.	M	BO-02	Improves overall user journey and ease of use.
NFR004	The system will automatically adjust the layout to fit desktop, tablet, or mobile screens when it detects a screen resolution change.	H	BO-04	Ensure responsive design across devices.
NFR005	The system will allow users to search for products from the home page.	H	BO-01 BO-08	Important for user engagement and quick navigation.
NFR006	The system will encrypt all sensitive data, including user credentials and payment information, both in transit and at rest.	H	BO-05	Compliance with regulations and essentials for protecting user data.
NFR007	After a user log in, the system will prompt two-factor authentication before completing payments.	H	BO-05	Additional security for sensitive transactions.
NFR008	If the system detects an unusual login attempt, the system will	H	BO-05	Essential for security to prevent unauthorized access.

Requirement Identifying Number	Requirement Description	Requirement prioritization (H, M, L)	Traceability	Requirement Notes
	trigger an alert and block the attempt until verified.			
NFR009	The system will initiate load balancing to distribute traffic evenly across servers when it reaches 80% of server capacity.	H	BO-04 BO-01	Ensures system can handle high traffic without failures.
NFR010	The system will provide an intuitive administrative dashboard that reduces the time required for routine maintenance tasks by 25% within 6 months of launch.	M	BO-01 BO-05	Essential for long term scalability and system evolution.
NFR011	The Oracle database and CRM system will be updated quarterly, reducing system downtime by 5% and improving query response times by 15% annually.	M	BO-01 BO-05	Regular maintenance to ensure efficient operation.
NFR012	The system will be compliant with regional data protection laws for customer data.	H	BO-05	Must comply with laws like GDPR and PIPEDA.
NFR013	Privacy measures will be audited quarterly with a compliance report achieving at least 90% adherence to data protection laws like GDPR and PIPEDA.	H	BO-05	Key for maintaining trust and legal compliance.
NFR014	The system will have less than 0.1% downtime during peak traffic every month.	H	BO-01 BO-04	Critical to maintaining operational efficiency during peak times.
NFR015	The system will have full operational functionality during times of high demand.	H	BO-01 BO-04	Ensures no loss of functionality even under heavy traffic.
NFR016	The system will track performance benchmarks on load times of 3-5 seconds and uptimes of 99.9%.	M	BO-01 BO-04	Tracking performance metrics to ensure system reliability.
NFR017	Customer satisfaction will be monitored via post-purchase surveys and NPS, with	M	BO-03	Provides ongoing feedback for system improvement.

Requirement Identifying Number	Requirement Description	Requirement prioritization (H, M, L)	Traceability	Requirement Notes
	satisfaction increasing by 10% within 6 months.			
NFR018	Geographic order dispersion and order volume will be tracked quarterly, with order volume increasing by 20% in newly expanded regions within 12 months.	M	BO-01	Evaluates success based on order distribution and volume, contributing to growth tracking.

Acronyms

- ✓ **PC** - President's Choice
- ✓ **GTA** - Greater Toronto Area
- ✓ **NPS** - Net Promoter Score
- ✓ **CRM** - Customer Relationship Management
- ✓ **GDPR** - General Data Protection Regulation
- ✓ **PIPEDA** - Personal Information Protection and Electronic Documents Act

References

Conestoga College. (2024b). *W-3 Communicate with decision makers*. 24S-INFO8687

<https://conestoga.desire2learn.com/d2l/le/content/1252314/viewContent/27041749/View>

Loblaws. (2024). Ecommerce Website

<https://www.loblaws.ca/>

Team 4. (2024, Sept 18). Assignment 3. F24_Group 4__INFO8687

[F24_Group 4 INFO8687 Assignment 3.docx](#)

Team 4. (2024, Oct 07). Assignment 4. F24_Group 4__INFO8687

[F24_Group 4 INFO8687 Assignment 4.docx](#)