Report On

Advance towards Digitalisation: Automation of Inbound Logistics of Unilever Bangladesh Limited

By

Subah Shaheen
16104106

An internship report submitted to Brac Business School in partial fulfillment of the
requirements for the degree of
Bachelor in Business Administration

Brac Business School
Brac University
January 2020

Declaration

It is hereby declared that

1. The internship report submitted is my own original work while completing degree at Brac University.

2. The report does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.

3. The report does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.

4. I have acknowledged all main sources of help.

Student's Full Name & Signature:

_____

Subah Shaheen
16104106

Supervisor's Full Name & Signature:

_____

Md Shamim Ahmed
Deputy Registrar, Brac University
&
Assistant Dean- Accredition and Quality Assurance, Brac Business School, Brac University

Letter of Transmittal

Md Shamim Ahmed

Assistant Dean- Accredition and Quality Assurance, Brac Business School

Deputy Registrar, Brac University

BRAC University

66 Mohakhali, Dhaka-1212

Subject: Submission of Internship Report on "Advance towards Digitalisation: Automation of Inbound Logistics of Unilever Bangladesh Limited"

Dear Sir ,

This report has been crafted based on my experience working as the Finance intern working with the supply chain finance team under the Finance function of Unilever Bangladesh Limited.

This report is the result of my learning from my tenure and I hope that I have been able to make it informative and analytical so that it may come to good use to the readers.

Sincerely yours,

_____

Subah Shaheen

16104106

BRAC Business School

BRAC University

Date: January 6th, 2020

Acknowledgement

Knowledge accumulates over time and I know that my capabilities today are the reflection of all the effort, love, and blessings my teachers have showered me with. I would like to start by thanking all my teachers to whom I will forever be indebted. To my internship advisor, Mr. Shamim Ahmed, thank you for all the help and being so considerate with my submission. It was actually a lot of what I had learnt in Strategic Management course that helped me provide analysis to my report.

From Unilever Bangladesh Limited, I would like to thank my supervisor Mr. Amdadullah Bhuiyan for his guidance, support and for trusting me with the opportunity to contribute to the project; Ms Iftesham Jahan, who has also been my supervisor, for helping me learn and showing me how to improve myself. I have been fortunate enough to be in a team where my supervisors have always been very kind to me and constructive with their feedback enabling me to not only work on my skills but also, made my work experience very pleasant. I have also had the chance to work with Mr. Masrul Mollah and Mr. Zakir Hossain who have all taught me about the details of inbound logistics as well as provided insight as to how the company runs.

My time in UBL was also made more special by my fellow cohort of interns especially my colleagues of the second floor who have helped and advised me throughout my tenure. I am glad that along with the professional learning, I have also gained some amazing friends who have made my first step in the corporate world so much more exciting.

My parents to whom I owe my life, thank you. To the Almighty who is the most gracious and the most merciful, I am grateful for every opportunity that you have ordained for me. All praise be to You.

Executive Summary

Unilever Bangladesh Limited is one of the biggest names of the country and for the right reasons too. The company is a global consumer goods manufacturer with some of the most well renowned brands in the world. During my internship in this company, I have had the chance to understand the first step that goes into making these products, that is the inbound logistics operations as well as the problems in that current system. To resolve those issues and advance towards digitalization, there was to be an automation project which would see the process flow changing. My task as intern dealt primarily with the facilitation of that project so as to aid its progress. This experience further provided me with experience related to project management. The report thereby summarizes my learning over the past three months as well as highlights my own analysis and take on the matter dealing with the transformation of one of the most crucial aspects of one of the biggest companies in the world.

Keywords: Unilever Bangladesh Limited; inbound logistics; digital; transformation; process flow; project management

Table of Contents

Contents

.List of Acronyms

UBL   Unilever Bangladesh Limited

FMCG   Fast Moving Consumer Durables

CD   Customer Development

HR   Human Resources

SDG   Social Development Goal

USLP   Unilever Sustainable Living Plan

C & F   Clearing and Forwarding

Chapter 1

Chapter 1: Report Background

1.1 Introduction

Change is the only constant. In this era of rapid transformation, it is vital for companies to update and automate themselves to ensure efficiency and product relevance. Unilever Bangladesh Limited, one of the largest and most notable multinationals of the country has always been a pioneer in development crafting the way for others in the industry and in the business world as a whole. Having worked with UBL as an intern in the supply chain finance team under the Finance function, I have seen and experienced firsthand the transition of UBL from traditional to digital in respect to its inbound logistics. This report has been crafted based on my learning and analysis and incorporates all relevant aspects of the company, the inbound logistics, the automation project and how all this comes together to make a change that will keep UBL successful in the long run. This report not only examines UBL and its transformation but provides an insight into how, when and why a company should digitalise its processes.

1.2 Objective

The objective of this report is to provide a clear and practical picture of the present condition of UBL and one of its most vital processes and how that process is being digitalised keeping in line with the trend of the times. As my responsibility deals with facilitation of the project, this report also examines project management and the challenges, solutions and outcome of it. As the supporting literature will show, project management is an aspect of business that can at times become crucial to its success and it is a field with increasing importance in all industries.

1.3 Methodology

This report has been tailored based on my experiences and learning from my internship as well as information from relevant reports and journals related to this topic. The report therefore combines both primary and secondary sources.

1.4 Scope

While this report examines the situation from UBL's perspective, this report can be used as an insightful document for any person or entity wishing to understand the operations and workings of that specific company or of internal logistics in isolation which is an integral internal operation procedure for any manufacturing company. This report can therefore act as a source document or used as a reference in decision making. The findings from this report can also be applied in project management since a big aspect of it relates to how the project of automation transpired bringing with it challenges and opportunities that can be used as lessons.

Chapter 2

Company Profile

2.1: Unilever Bangladesh Limited

One of the most renowned names in the corporate world of Bangladesh is Unilever Bangladesh Limited which is a leading global FMCG business owning some of the most popular brands in the world being the market leaders in 17 of the 28 segments they operate in. The company operates with the implicit vision to, "make sustainable living commonplace" and the mission, "to add vitality to life. We meet everyday needs for nutrition, hygiene and personal care with brands that help people feel good, look good and get more out of life."

The company started operating in Bangladesh as Lever Brothers Bangladesh in 1964 and changed to its current name in 2004. It is owned jointly by Unilever and the Government of Bangladesh with the former holding 60.4% of shares and the latter holding 39.6% of shares. In Bangladesh, the company is headed by the Management Committee (MC) consisting of Kedar Lele, CEO, KSM Minhaj, Customer Development Director, Sakshi Handa, Human Resources Director, Zahidul Islam, Finance Director, Ruhul Khan, Supply Chain Director, Nafees Anwar, Beauty and Personal Care Director, Tanzeem Ferdous Alam, Home Care and Food and Refreshment Director, SOM Rashedul Quayum, Legal Director.

Under the MC are the various division heads and managers of their respective departments- Human Resources, Customer Development, Finance, Supply chain, Marketing, Legal- who together with their teams run UBL. The company has a comparatively flatter organizational structure.

The company has its own factory in Kalurghat, Chittagong, and operates depots across the country. The company also manufactures through carefully monitored third party facilities.

2.2: Unilever

Unilever is one of the largest consumer goods companies in the world that produces 400 brands and operates in 190 countries. The company owns over 25% of the world's top 50 brands making 2.5 billion lives better every day through their products. The company has set itself three main goals to achieve by 2020: to help one billion people improve their health and wellbeing; to improve the livelihoods of hundreds of thousands of people in the supply chain; and to halve the environmental footprint of the group's products. In fact Unilever runs zero carbon operations in multiple countries.

It is a dual listed public Limited company co- headquartered in –Rotterdam, Netherlands and London, United Kingdom. The company was founded in 1929 by the merger of Dutch Margarine Unie and British Lever Brothers. The current CEO is Alan Jope who assumed office on the first day of January. The shares of the company are traded in multiple stock markets across the world such as London, New York and European stock markets.

2.3: Brands

The product portfolio of UBL is one of the most well known due to the active efforts of its marketing department and the company's approach of attaching each of its brands with a unique purpose. The brands and there purpose have each been listed in the following table. Here is a list of the values of some of the most well known of the brands and the purpose they represent.

1. HomeCare

A. Fabric Solutions

Rin- Provide opportunity to shine

Wheel-Evoke freshness in thought and attire

Surf Excel- Help kids by unleashing their full potential

B. Home and Hygiene

Vim- Liberate women from daily chores by unlocking their time

Domex- Win the war on poor sanitation

C. Life Essentials

PureIt- Quest for everyday health and wellness for everyone on the planet.

2. Beauty and Personal Care

   A. HairCare

   Sunsilk- Open possibilities for girls

   Clear- Inspire people to become resilient and keep a cool head

   Dove-make positive experience of beauty universally accessible

   Tressemme- Equip women to make their presence count

   Ayush- ancients wisdom for a modern lifestyle

   B. Oral Care

   Pepsodent- Unlock the power of smiles

   CloseUp- Inspire people to turn mutual attraction into action

   Ayush- ancients wisdom for a modern lifestyle

C. Deo

Rexona

Axe

D. Skin Care

Fair & Lovely- Democratize Fairness

Dove- make positive experience of beauty universally accessible

Pond's- Inspire every woman to rise

Vaseline- Heal everyone's skin so they can fully participate in lufe

Ayush- ancients wisdom for a modern lifestyle

E. Skin Cleansing

Lifebuoy- Save lives

Lux- Inspire women to defy judgements and express feminity

3. Food & Beverages

   A. Savoury

   Knorr

B. <u>Tea</u>   Lipton

Taaza

2.4: Corporate Social Responsibility

As apparent from the inherent mission and vision of the company, UBL places great importance in contributing to the world. Indeed the actions and initiatives of Unilever are such that it has become a pioneer and role model on how a business can contribute to people's lives and make mother earth an active priority. The company has made and operates to achieve its Sustainable Living Plans (USLP). From 2010, the Unilever Sustainable Living Plans (USLP), has been creating sustainable growth through their purpose-led brands, cutting business costs, reducing risk and helping build trust.

The company aims to create a positive social impact and contributes towards achieving the social development goals (SDGs) which are outlined below-

- Improving health and well being for more than 1 billion people
- Reducing environmental impact by half- By taking into account greenhouse emissions, water usage, waste and packaging as well as sustainable sourcing
- Enhancing livelihoods for millions- By ensuring fairness in the workplace, equal opportunities for women and inclusive business.

Based on this aims the company has already greatly achieved or is in the process of achieving many of its targets.

2.5 Logo

While it is the blue and white capital "U" that people associate with Unilever the logo is not just a single letter. On closer observation it can be seen that the giant U is made up of many smaller icons each representing a signature quality of the company's. This logo was designed by Wolff Olins in 2010 and consists of 26 distinct icons each contributing to the overall Unilever brand identity of, "adding vitality to life." The details of the icons and their unique meanings are provided in Appendix 1.

Chapter 3

Inbound Logistics of UBL

3.1: Introduction

Being one of the largest consumer goods companies, UBL needs to make sure that all aspects of its value chain are operating smoothly to make sure that there is a consistent smooth flow of products to its consumers. As the company produces 28 different products there is no single process that corresponds to each, however, the first part of the supply chain for the majority of products begins with the receiving of the raw materials from the port and the subsequent transfer to the warehouse or factory location. This part of the process of production is referred to as the Inbound Logistics and is the responsibility of various personnel of UBL.

3.2: Current process flow

The current process flow begins with the Clearing & Forwarding agents receiving the goods from the port and completing the formalities related to discharge of the shipment. These agents are third party service providers who are through contract employed by UBL. The C & F team of UBL contacts the C & F agents telling them which shipment to expect when and what documents will be required by mail and phone. The C & F agents then arrive at port and carry out the necessary formalities to receive the goods.

UBL then assigns a transport vendor whose vehicles will be used to transport the good to the desired location. The shipment and location details are explained to the transporter and the C & F agents hands over the goods to the transporter along with the "challan" i.e. the paper containing the details of the shipment. A scanned copy of a typical challan is presented in appendix 3. The transporter then drives to the location where upon arriving, gate security at that point carry out the necessary formalities such as filling the details of the vehicle and time on the register. The vehicle is then allowed to enter and the shipment is unloaded into UBL premises.

The final part of this operation are the store keepers checking the goods that are brought in and doing GR against the stock to make sure the record accurately represents the number received which will be used for production. The information from the challan which the transporter hands over to the stock keeper, is thereby checked and confirmed in this step.

The process flow has been outlined below. The Inbound Logistics process consists of functions to be performed by both internal and external parties. The roles and responsibilities of each have been outlined in appendix 2.

3.3: Problems with current process

Necessity is the mother of all invention and naturally for there to be a change in the current process, there had been some challenges the stakeholders faced because of it. Some of those issues are highlighted below-

- Loss of time in communicating to various stakeholders- Since the inbound team has to inform the C & F team which has to assign the transport vendor and C & F agent and each party has to update the respective team again with progress regarding the shipment, there is a lot of time that is wasted in simply checking and updating and waiting.
- Communication gap or inaccuracy among stakeholders- This is a grave concern since the volume of shipments transported for a company like Unilever is phenomenal and requires constant monitoring. Incomplete or inaccurate information could lead to late delivery of shipment or a issue at the port which would mean financial loss for Unilever as well as risks to its efficiency and reputation.
- Inefficiency in terms of delivery time – It is a common occurrence that the transport vendor responsible for the goods does not transport the shipment as early as possible. Considerable time lag occurs as he changes routes, takes frequent breaks, or simply does not unload the goods immediately after reaching the factory. This inefficiency though not severe in a small scale is actually a big issue when thought of in the scale of UBL's inbound logistics.
- Mismatch between physical challan and actual quantity- Since the goods are received at port to when the final GR takes place it is normal for the stock quantity to vary due to loss and unusable inventory. However for any business the quantity of actual, short and defected goods has to be known and noted so that the loss can be accounted and insurance applied for accordingly. Also there is always risk of theft or loss by negligence so the amount received by the C & F team, and the amount received by the store keeper of the inbound logistics team has to be kept in record.
- Manual entry in challan leading to inaccuracy- Many of the major problems involving the current system revolves around the challan and its inefficiencies. One such inefficiency is the handwriting causing confusion regarding the quantity and shipment details. This can lead to major problems in record keeping, stock reconciliation and even billing.
- Issues with billing- One of the most serious issues of the current system is that it can lead to loss of company funds through double and over billing. By copying and rewriting on a challan, it becomes possible for fraudulent claims to be made and so stronger control in this scenario has become vital.
- Excess paper usage- For a company making limiting its environmental footprint a top priority, it is important to limit the unnecessary usage of paper that this current process requires. In this era of softcopy it would be an unnecessary financial and social cost if printing multiple challans was a practice that continued to be practiced.

Chapter 4

Automation Project

4.1: Project Brief

Keeping those issues in mind and in line with the digital trend which has seen the automation of manual processes, UBL's supply chain finance team has come up with the idea of a common server and app through which the different stakeholders will get notifications and can input information to the server directly and that information will be forwarded to the relevant party and saved in the background report of the system. Most importantly this system will mean that the challan can be made online and printed directly, removing the need for manually writing on the challan.

A username and password will be assigned to each user and the Hermes app installed on their smart devices through which they will be able to access the server. Under this new system the process flow will be transformed as such-

1. The inbound team will issue the requirement to the sever and assign the C & F agent and transport vendor through the server

2. The C & F agent will issue a challan through the app where the details of the shipment will be entered and this will be stored in the system. Once the challan has been issued a time frame will begin by when the transporter has to reach the location. This will depend on the route selected.

3. Once the transporter reaches the location, some security checks will need to be carried out through the app and a gate pass can be issued through it.

4. Finally the store keeper can check the stock and update the challan on the amount received and defected quantity.

5. The information regarding quantity is therefore stored and updated in the server making the process more transparent and creating a greater opportunity for analysis.

The roles and interface network of relevant parties are shown in appendix 4.

4.2: Timeline

Timing is vital to ensure the success of any project and a generalized timeline has been provided in appendix 3. This timeline includes the breakdown of all the tasks and functions that go into materializing the automation project. This can be used as reference to plan other such projects of similar scale or type. While the time duration here has been provided as an approximate figure it can be used for ballpark figure estimate.

4.3: Resources

Project management is a vital aspect of a business's operations and since the cost benefit value of moving to a different process largely depends on the cost involved of the project it is important to make sure the project is conducted in an efficient manner to make sure that the project is completed timely and properly. For that purpose it is necessary to procure and maintain the required resources. A list has been provided below for guidance based on this project.

- Core Team- This consists of the UBL members held responsible for landing the project and should ideally include at least one representative from each department involved with the process being transformed. That is to make sure the project is being created in a way that is user friendly so that it truly betters the experiences of those who will actually produce output through it.
- Vendor- This is an important consideration as if the project is not made internally, a third party service provider will have to be contacted and assigned the responsibility of building the software. The hardware might either be bought or rented from the same party or a different party contacted for the purpose. In order to finalise the vendor, a series of steps must be taken. Firstly, a circular or through internal recommendation a few vendors providing the service need to be contacted and meetings arranged. In the first meeting, a brief of the project and information about the vendor company is received. Based on that a soft proposal and quotation is sent by the vendors to the core team. A meeting to discuss the details of the proposal and quotation is held after that and an analysis done by the team to decide the best alternative. A final meeting is held with the selected company and the project handed over.
- Budget- This is a vital aspect of any decision making as the budget of operations determines the scale, timing and even the quality of operations. If the budget for any operation is not sufficient to provide the right quality for a given scale and time frame then the scale or timing has to be adjusted since quality must never be compromised. Compromising with quality can lead to problems that only grow with time.
- Facilitation support-Coordinating the progress of the project is essential to make sure that it is completed properly on time. This can be done through employing or delegating that responsibility to a specific person who keeps track of meetings, documents, prepares reports as and when required and also provides a check on the condition of the project by using specialist software or traditional techniques like gantt charts.

4.4: Challenges and Solutions

A number of difficulties might present itself during the transition and implementation of the project which have to be mitigated as a priority. A few common problems and ways to solve them are presented below-

- Schedule Clashes- This is a common problem when implementing a new project since the parties involved have their own regular responsibilities as well. In this case it is best to set up a fixed slot once or twice a week for the project and keep that time free from other meetings and work. While it might not be possible for all core members to meet every time, there must be a coherent communication through mail at least so that all parties are updated and can contribute to the project.
- Budget Constraints- For large organizations, this will be decided in advance and it is best to start planning and coordinating the resources after an assessment of the budget available for it has been finalized. To decide on that amount, it is important to first assess the financial benefits of that initiative and carry out a proper backward calculation with the right discount rates after the target for cash savings has been determined.
- Ambiguous requirements-This is a common problem that arises due to miscommunication or misunderstanding between parties. This could be between the core team and the vendor or among the core team members as well. It is important to therefore maintain a written formal account related to all ideas and suggested plans related to the project be it an important deliverable or a suggestion. That way though it might lead to a time lag at times and more effort will need to be applied, everyone will be on the same page which is very important for the smooth running of any operation.
- Delegation of work- It is often found that not everyone on the project exerts equal effort on it and that might cause tensions within the group. This is also why it is important to have someone leading the initiative and a clear division of responsibilities so that each can be held accountable. While doing any work the people involved need to be sincere and dedicated so as to contribute to the overall big picture and in cases when work pressure or other responsibilities stop them from it, they should be transparent about that to make sure the others can carry on.

Chapter 5

Impact of Digitalisation

5.1: Project Scope

The changed process flow has been provided below.

With the world advancing towards digitalization, it is important for companies in Bangladesh to as well. Often it is MNCs that pioneer this shift and UBL moving to digitalization will allow its local partners and employees to experience the changing times and its advantages firsthand. For businesses it becomes a matter of survival to stay relevant and apply the latest techniques in their process of production to increase or maintain efficiency. In case of automating the inbound logistics process it will not only improve the performance of that sector but also mitigate the existing problems that have been identified as a challenge to UBL's performance.

5.2: Benefits

The transition to this project will see a number of financial as well as non monetary benefits for the business. Some of the savings and benefits that can be achieved through the system have been outlined below-

- Savings from gate security- Since the work of gate security has been standardized, fewer number of people need to be employed solely for the purpose of keeping track of truck registers. This leads to long term annual savings from the salaries and other costs of employment.
- Time savings- This occurs since a lot of the manual work doesn't need to be done anymore as well as communication becomes faster since the server and app carries out necessary checks and notifications.
- Higher control of inventory- Since the quantity of inventory is put and updated in the server it leads to more transparency regarding the quantity and condition of the shipment. This makes manipulation almost impossible.
- Higher control of transport vehicle movement-Due to additional controls placed in the system such as entering the vehicle's number plate and a notification setting off if the goods are not received by the store keeper a certain time period after gate security lets the vehicle enter, there will be greater efficiency from the transporter.
- Reduced risk of double billing- Since the server will assign a distinct challan number for each shipment which will include all the relevant details relating to that shipment, billing will become airtight and impossible to counterfeit.
- Improved record keeping- Since all details will be updated in the server and a background report maintained, it will improve record keeping as all the relevant information will be available on the server.
-

5.3: Cost

The costs involved with implementing this new automation project can be summarized in the below list-

- Cost of app development
- Cost of device installation
- Cost of training

Risk of user un-cooperation- This is a non monetary cost to the business and is labeled better as risk since the real test of the project lies in making the direct stakeholders of this current process use it. If despite all the advantages of this system if the people continue to use the previous way of doing things then that would mean a major loss for the business financially. To prevent this, the users' needs and the interactive nature of the app has to be made a priority when planning the features and design. However, a little push must be made once the app is launched to make sure the users use it and give it a try. Though change is vital there is often resistance to it that must be handled strongly but sensitively.

Chapter 6

Conclusion

This report primarily deals with the inbound logistics process of UBL and how that is being changed to make the process more beneficial for the company. The current process and the flaws of it have been outlined in this report along with the details of the automation project and how the process will be altered through it. However though in this case Unilever had a problem and an opportunity that led to this advance towards digitalization, in this current age companies cannot wait for problems to start compiling before they can take action. Companies rather should invest in trying to find ways to change and improve before it becomes necessary for them to. Research and development should not be limited to brands only but also to the way the different processes and functions of the company can be done more effectively.

Another aspect of this report deals with project management which is something all companies will face more or less routinely since there are many activities of firms especially large firms which are outsourced to other companies. While it is most important to find the right company to delegate that responsibility to it is also

important to keep track of the progress and prepare the right path for the company to understand. Project Management is an increasingly important sector of business and my internship experience has taught me many practical lessons regarding how to approach it.

The learning I have gotten from my tenure working with UBL is not limited to the technical skills I have acquired working on reports or the knowledge of the inbound logistics aspect of the supply chain function; working in a corporate setting and in such an enriching environment has provided me with a better understanding of business as a whole and how one process, one action can contribute to the bigger picture of helping a brand, a company, an economy and the whole commercial world, grow and that too sustainably.

References

1. (2019). Retrieved from Unilever Global: https://www.unilever.com/about/who. (Accessed 20/11/2019)

2. [Online]. Available from: http://www.bracu.ac.bd/resources/ayesha-abed-library (Accessed: 15/11/2019)

3. Sahay BS, Gupta AK. Supply Chain Modelling & Solutions. Macmillan; 2007 Feb 1

4. Atkinson, R. (1999). Project management: Cost, time, and quality, two best guesses and a phenomenon, it's time to accept other success criteria. International Journal of Project Management, 17(6), 337–342.

5. A. Aksoy, N. Öztürk Design of an intelligent decision support system for global outsourcing decisions in the apparel industry. J. Text. Inst., 107 (10) (2016), pp. 1322-1335

Appendix 1: Icons

Spoon
A symbol of nutrition, tasting and cooking.

Spice & flavours
Represents chilli or fresh ingredients.

Fish
Represents food, sea or fresh water.

Sparkle
Clean, healthy and sparkling with energy.

Bird
A symbol of freedom. It suggests a relief from daily chores, and getting more out of life.

Tea
A plant or an extract of a plant, such as tea. Also a symbol of growing and farming.

Lips
Represent beauty, looking good and taste.

Ice cream
A treat, pleasure and enjoyment.

Recycle
Part of our commitment to sustainability.

Particles
A reference to science, bubbles and fizz.

Frozen

The plant is a symbol of freshness, the snowflake represents freezing. A transformational symbol.

Container

Symbolises packaging - a pot of cream associated with personal care.

Heart

A symbol of love, care and health.

Clothes

Represent fresh laundry and looking good.

Wave

Symbolises cleanliness, freshness and vigour.

Liquid

A reference to clean water and purity

Appendix 2: Roles and Responsibilities of stakeholders

Sl No.	Key Issue	Task	Party Responsible
1	Initial documents	Send shipment documents to C &F team	Procurement team
		Check documents as per requirement and assign C & F agent	C & F Team
2	Assign C& F Agents	Inform C & F agent to receive documents. (table 1.1)	C & F team
3	Document verification	Receive the required documents and verify all the information online with IGM	C & F agents
4		Input data regarding Bill of Entry in custom server.	C & F agents
5	Duty Assesment	Collect print of bill of entry number from server.	C & F agents
6		Complete custom assesment at custom office	C & F agents
7		Send C & F team requisition for Duty/Shipping Charge/Freight Charge/Port Charge	C & F agents
8	Complete duty and other payments	Make payment to document related shipping agent for container charge and receive a delivery Order (DO)	C & F agents
9		Make duty payment, receive information for duty clearance and collect release order from server.	C & F agents
10	Processing for good releasing	Visit port to identify position of the container.	C & F agents
11		Go to Port One stop service desk to collect delivery order and assessment order.	C & F agents
12	Requisition for transport	Share a program to port on which container will be delivered tomorrow.	C & F agents
		Assign transport vendor and number of trucks based on requirement	Inbound Team
13		Clear all documents by paying all port charges on delivery day.	C & F agents
14	Port clearance for loading	Pay berth operator charge.	C & F agents
15		Collect cart ticket from port, submit the challan along with cart ticket to Port at the time of goods delivery	C & F agents
16		Load goods to truck	C & F agents
		Prepare 6 pages delivery challan against per truck over their own letterhead, one copy submitted to port at the time of delivery, two copies kept for billing and record purpose, three copies handed over to transporter.	C & F agents
17	Issue of Transport PO and challan	Collect the receiving seal and signature over the three delivery challans from UBL security and production store team.	Transport Vendor
18		One copy of delivery challan handed over to PS team and two copies preserved for own billing and documentation purpose	Transport Vendor
19	Gate Check	Maintain register of In/Out time for trucks	Gate Security
		Provide seal on challan documents	Gate Security Stock keeper (Inbound)
20	PS record keeping	Maintain registry of stock	Stock keeper (Inbound)
		Collect challan from transport vendor	

Appendix 3: Timeline

Month	Sl No.	Activity
1	1	Finalise core team
	2	Meeting to brief core team
	3	Initial Meetings with prospective vendors
	4	Meeting with user groups
	5	Receive quotations from all vendors
	6	Meeting with all vendors about quotations
	7	Vendor selection
	8	Meeting with final vendor
2	1	Field visit with vendor
	2	Meeting with stakeholders
3	1	Complete development
4	1	User testing
	2	Test Run
5	1	Full Launch

Activity	Month 1				Month 2				Month 3				Month 4				Month 5			
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18	Week 19	Week 20
Vendor Selection	■	■	■	■																
Initial Meetings with prospective vendors	▨																			
Receive quotations from all vendors		▨	▨																	
Tele-meeting with all vendors about quotations			▨																	
Vendor selection			▨	▨																
Meeting with final vendor				▨																
Strategic Planning with internal team			■	■																
Meeting with C & F agent			▨																	
Finalise core team			▨	▨																
Meeting to brief core team				▨																
Field Visit with vendor					■	■														
Meeting with stakeholders						■	■													
Development						■	■	■	■	■	■	■								
Trial Run and Debugging													■	■	■	■				
User testing													▨	▨						
Test Run															▨	▨				
Full Launch																	■	■		

14

Appendix 4: Role of stakeholders under automation project

C & F agents

```
            ( Login )
                |
                v
   +---------------------------+        +-----------+
   |     Create Challan        | -----> |   PRINT   |
   |  Load Challan Page (1.1)  |        +-----------+
   +---------------------------+
                |
                v
          +-----------+
          |  Delete   |
          +-----------+
```

Gate Security

```
   +-----------+                      +------------------+
   |  Log in   | ------------------>  |   Scan Challan   |
   +-----------+                      +------------------+
                                               |
                                               v
   +---------------------------+        +------------------+
   |     Transport Check       |        | Load Gate Pass   |
   |                           | <----- |     window       |
   | Check truck number plate  |        +------------------+
   | and lock condition.       |
   | Upload picture of truck   |
   | plate number.             |
   +---------------------------+
                |
                v
   +---------------------------+
   |     Issue Gate Pass       |
   +---------------------------+
                |
                v
   +---------------------+        +---------------------+
   |       Print         | -----> |  Enter Out Time     |
   | Sign on document    |        |  (when leaving)     |
   | and handover        |        +---------------------+
   +---------------------+
```

Stock Keeper

Collect challan from trasport vendor (T24) → PS record keeping (T26)

Procurement Team

Start
Login
Name:
Password:

↓

Upload documents

Shipping Document → **Notifies C &F Team** → Delete

→ **Confirm**