1) Additional research and assumptions

1a) Assumptions

Assumption 1: LetLukeMoveYourThings does local and national delivers, thus in this case study it I will be assumed that the company is based in Canberra, Australia, which does Local deliveries around Canberra and by in terms of national delivery it will be around Australia.
Assumption 2: It is assumed that all driver will have a reliable working smart phone to access the app and that the mobile application is accessible on various devices and easily adaptable.
Assumption 3: It is assumed that, although they are going to outsource a company to build their fleet management system and provide ongoing support they will still have an inhouse IT support department to handle day to day issues and help in providing the information needed for the outsourced IT company to build the system. This is shown in the Rich picture in (2).
Assumption 4: It is assumed that the vehicle Maintenance is done by an external Vehicle repairs/Maintenance company. This is shown in the Rich pictures in (2).
Assumption 5: It is also assumed that there are managers/ executive staff that will take real time data from the fleet management system to make business decisions**.** This is shown in the Rich pictures in (2).
Assumption 6: It is assumed that all the communication between the Driver, Dispatcher and the customer is done through the app. Furthermore, it is also assumed that the payment is done through the app by the customer for the delivery thus an external party such as a bank will be involved. This is shown in the Rich pictures in (2).
Assumption 7: It is assumed that in the real picture the flow of real time information will include information flowing of location of vehicles, progress of each delivery, allowing the company to adjust delivery plans and communicate with drivers/dispatchers/ customers in real time. This is shown in the Rich pictures in (2).
Assumption 8: All stakeholders are assumed internal specified otherwise in stakeholder analysis.
(Parihar, 2023)

1b) Expansion

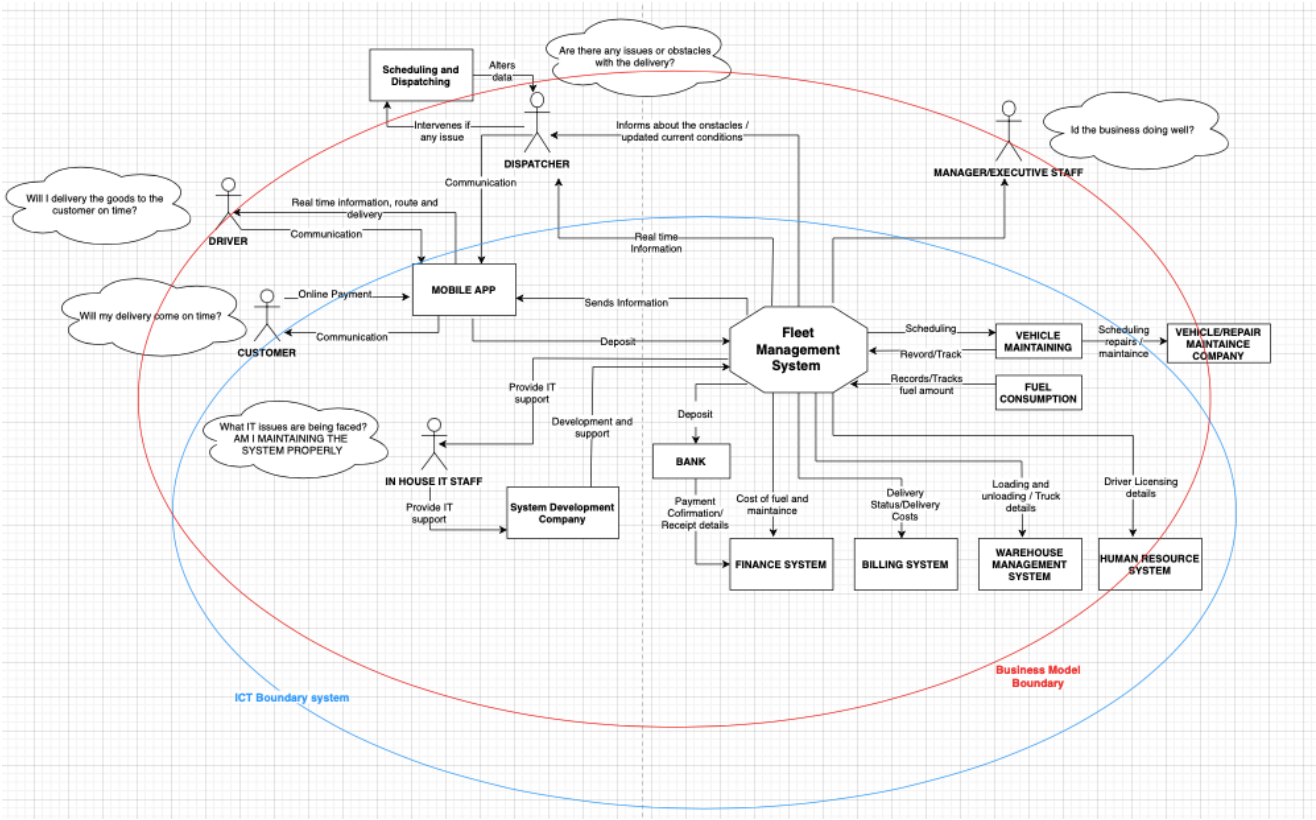
In terms of expansions LetLukeMoveYourThings can provide proper traning to the drivers, dispatchers and the employers on the new system so they will have the necessary knowledge to use the system and the app effectively.
Furthermore, they can also integrate driver behavior, performance and retention management capabilities such as adding KPIs and more into the system to ensure that their drivers perform well.
Moreover, can also have a customer survey form which will be sent to the customer and the survey could be of the services provided and about the driver and the information from it could directly be added to the system and sent to the specific drivers through the app to them about their service skills which will help them improve.
By using the fleet management system, they can also expand and get a tailor-made business reporting function with the help of real time data which will help the senior executives to make informed strategic decisions.
(Nichol Smith, 2021)

1c) Additions

Additions for LetLukeMoveYourThings according to research is that they can conduct interviews and send in survey to stakeholders such as fleet managers, drivers, dispatchers, warehouse, finance staff etc which will help to understand what exact changes is required to ensure workload is efficiently handles which in turn will make the process better flowing and smooth. It will also help find out what are the expectations of the new system. This will help understand what needs to be improved and added to the new system.
According to the case study they are in a highly competitive market therefore they should analyze the fleet management systems used by the industry leaders which will help in providing insights of the best practices used, potential gaps in the company's current running system as well as help understand the innovative

features used by the competitors. This will help identify any gaps, which will help the company create a unique selling point.
Furthermore, in the app that the customer uses they can integrate features such as chatbot to ensure fast responses back to the customers (Attanasio et al., 2023)(MARKET2X GROUP LIMITED, 2023)(Frotcom, 2022) (supplychaingamechanger, 2023)

2) Rich picture – (2a to 2d covered below)



2e) Boundaries Identified:

Business model boundary system:
The business model systems are marked in a red circle consist of the complex business structure of LetLukeMoveYourThings business. It consists of all the entities and actors that are involved in the business and in using the fleet management system.

ICT Boundary system:
The ICT boundary system is marked in a blue circle describes the technical communication in-between the entities from the fleet management system to the finance, warehouse management, billing and human resources systems. All of these systems are managed and run by the help of ICT. Thus, these are enclosed by a boundary name ICT boundary system.

3) System vision (3 marks)

3a) Problem description

LetLukeMoveYourThings is facing an issue where their current fleet management system is outdated and unable to effectively handle the work load. Their current software lacks real time data and analytics capabilities, is not user friendly, delays vehicle tracking, driver monitoring and delivery scheduling, as the data is being manually entered this in turn makes tracking of vehicle maintenance and fuel consumption difficult. Therefore, they want to create and implement a new system that eliminates all the problems mentioned above.

3b) System capabilities - high-level requirements and constraints

The new system will have the following capabilities:

1) Automated scheduling and dispatching
2) Integrating the new system with the rest of the systems in the company
3) Real time vehicle tracking and driver monitoring
4) Mobile app will enable easy flow of communication in real time between driver, dispatcher and the customer
5) Alters scheduling according to traffic and weather conditions
6) Monitors fuel consumption and vehicle maintenance
7) Real time route and delivery information will be provided.

Constraints

1) New system should ensure high levels of data security
2) Must be user friendly
3) Should align with existing business processes
4) Ensure the transition from the old system to the new system shouldn't be difficult

3c) Anticipated business benefits

1) Eliminates unnecessary tasks and increases productivity of drivers and dispatchers.
2) Enhances operational efficiencies.
3) Improve in customer satisfaction as there is real time communication.
4) As there is no need for manual data entry this will reduce costs and as less man power is needed and improve business efficiencies.
5) Optimized scheduling will increase productivity and reduce costs in the long run.
6) Improved efficiency for all aspects of the business.
7) Helps the organization take data driven decisions.
8) Automated scheduling.
9) Record all data in real time.
10) Record all data automatically.

4) Stakeholder analysis (6 marks)

4a) Stakeholders identified from the case study

1) Clients or customers:
   Are the key stakeholders, who participate in the revenue and the sale of the service, furthermore they provide feedback on the service that letlukemoveyourthings provide which will help in business growth.
2) Drivers:
   They are responsible for making deliveries to the customers and communicates with customer and dispatchers.
3) Dispatchers:
   They are involved in scheduling, dispatching and monitoring deliveries sand ensuring a smoot flow of operations. They play a curial role in ensuring that the delivery operations take place timely and effectively.
4) Finance system:
   They are involved in the financial aspect of the business. Manging the accounting and financial part.
5) Warehouse management system-
   They are involved in the loading and unloading of trucks, and in handling the warehouse of the business
6) Billing system-
   Involved in the billing aspect of the company such as providing cliental billing of deliveries.
7) Human resource system-
   Involved in the human resource management of the business such as ensuring if drivers licensee is up to date and if they are correct for different vehicle types.
8) System development Company:
   They are external stakeholders who are involved in the building and customization of the new fleet management system to Letlukemoveyourethings specific needs and provide ongoing support and maintenance to the business as well.

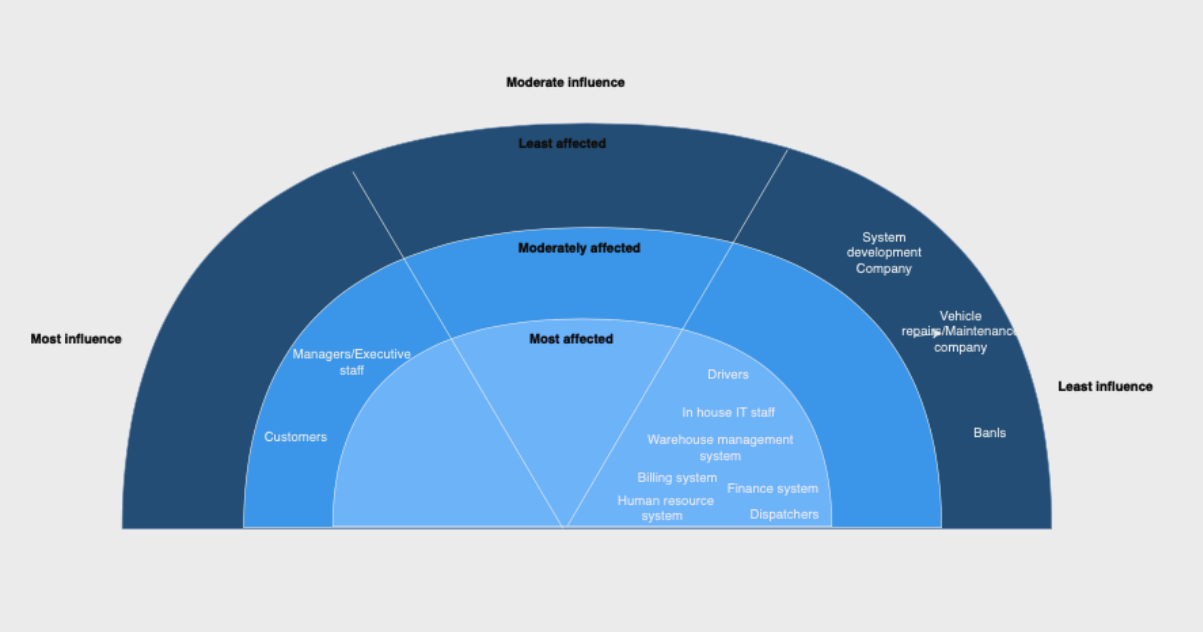
4a) Stakeholders that are assumed

9) Managers/Executive staff-
   They are responsible for making strategic decision, resources allocation, ensuring their business goals are being met with the system.
10) In house IT staff:
    They are responsible for dealing with any IT related issues that may come up in the business and also in providing with the necessary details to the system and development company
11) Vehicle repairs/Maintenance company-
    External stakeholder who are responsible for repairing and maintaining the vehicles used for delivery.
12) Bank:
    External stakeholder who is responsible for depositing payments in the business bank account as well and make payments for expenses or any other reasons for the business.

4b) Classification of all identified stakeholders

	Operational	Executive
Internal	• Drivers • Dispatchers • Finance system • Warehouse management system • Billing system • Human resource system • In house IT staff	• Managers/Executive staff
External	• System development Company • Vehicle repairs/Maintenance company • Banks • Clients/Customers	

4b) Stakeholder classification Explanation



The diagram above explains the stakeholders' classification, that how much they are affected and influenced on different levels.

4c) Stakeholder identified from the case

Customers-
They are the key external stakeholders, who participate in the revenue and the sale of the service, furthermore they provide feedback on the service that letlukemoveyourthings provide which will help in business growth. They are identified as operational stakeholders who are external as they regularly interact with the system when using their service but they are external as they are not a part of the organization. Furthermore, they have most influence over how the business does as they can affect the business revenue however they are moderately affected by how the business performs as if doesn't provide prior service they will switch to using the services of the competitors.

4d) Stakeholder that was added on Assumption and additional research

In house IT staff-
They are internal stakeholders, which was assumed in the assignment as they are needed to handle any issues that come up in the business that is related to IT as they would be needed to solve the problem. They will also take part in providing the necessary information that will be needed by the systems development company that will be making the new fleet management system. They are operational and internal stakeholder as they take part in the day to day activity of the business and are a part of the business. They are most affected by how well the business does as if the business doesn't perform well they will be fired or face wage cuts however they have the least amount of influence. (supplychaingamechanger, 2023)

5) Event table (6 marks)

Event Name	Source	Type	Condition	Trigger	Action	Response	Destination
Scheduling delivery	Fleet management System	External	System schedules delivery	Delivery is scheduled	System updates and schedules delivery	Scheduled delivery details sent to dispatcher	Dispatcher
Delivery status	Fleet management System	External	System updates delivery status	Update Status	Systems updates delivery status through mobile application	updates delivery status	Consumer
Delivery status	Fleet management System	External	System updates delivery status	Update Status	Systems updates delivery status through mobile application	updates delivery status	Dispatcher
Issues/ obstacles faced during delivery process	Fleet management System	State	System updates issues with real time data	Updates issues/obstacles	System updates issues/ obstacles	Updates issues/ obstacles	Dispatcher
Generates report using real time data	Fleet management System	N/A	N/A	Managers/Executive staff clicks button on system to generate report	System Generates report from real time data	Display report	Manager/ Executive staff

Scheduling Vehicle maintenance	Fleet management System	Temporal	When vehicle needs maintenance at the end of the month.	Vehicle damaged/needs service	System Books Vehicle maintenance appointment	Appointment booked	Vehicle maintenance /repair company
Calculates Cost of fuel	Fleet management System	Temporal	when fuel is needed at the end of the month	Vehicle needs fuel/ ran out of fuel at the end of the month	System calculates the cost of fuel	Fuel cost being calculated and paid	Finance system
Dispatching delivery	Fleet management System	External	When order is ready for dispatch	Systems Dispatched delivery	Dispatcher and the systems dispatch the delivery	Delivery Dispatched	Driver
Payment made	Customer	External	When booking delivery	Makes payment through the mobile application	Customers banks the payment	Payment received	Finance system
Delivery delayed	Fleet management System	External	When order is delayed	traffic/ Bad weather condition	System will notify via APP	Notified Via Mobile app	Customer
Driver license expired	N/A	State	N/A	Driver license expire	Updates sent to Human resource	Human resource will receive information about driver licensing	Human resource

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