BUSINESS ANALYSIS: LITTLE STARS

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Executive Summary

This document details how the implementation of information systems and technology can greatly benefit the company of Little Stars. This document contains a comprehensive needs assessment, elicitation, and requirements analysis to track and provide critical analysis of the current processes and situation of Little Stars.

The organizational background along with the goals and objectives of Little Stars were first examined. This was followed by developing a problem statement to outline and give a high-level understanding of Little Stars current problems within their existing processes. Following this, a needs assessment was conducted to further identify and understand the business goals and to analyse the current needs, problems and opportunities that exist within Little Stars. This was achieved through the methods of SWOT and TOWS analysis, stakeholder analysis, root cause analysis, capability analysis and gaps. Conducting a needs assessment allowed for the identification of what is needed based on the current conditions of the company, to accomplish the desired outcomes when implementing the new system. Requirement's elicitation was then conducted by obtaining information from key stakeholders to further analyse and understand the current working environment of Little Stars and obtaining information about the causes of the business problems. This was done through the means of creating an elicitation plan, data collection techniques and business requirements. Finally, a requirements analysis was done to provide a further breakdown of the requirements which illustrate what the new system must be capable of and the conditions and capabilities of what the new system needs to have to meet the needs of the business's stakeholders. The requirements analysis is comprised of the current as-is process models, assumptions and constraints, prioritized solution requirements and prioritized requirement traceability matrix.

Although, there are other ways of approaching and dealing with Little Stars current situation, the analysis conducted within this report will demonstrate how the use of information systems and technology will not only solve the current problems within Little Stars, but also allow Little Stars to gain competitive advantage and further achieve the goals and objectives of the company.

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1. Introduction

1.1 Organisational Background and Contextual Environment

Little Stars is a pre-school educational facility in Brisbane that offers nursery and kindergarten facilities to up to 200 children. It is a corporate form company that provides pre-school facilities that are incredibly important for children as they help develop new knowledge, physical, social, and mental skills and enable children to create friendships, all before they transition into school (Raising Children Network, 2022). The quantity of pre-school age children will be directly correlated to the amount of business for a child-care centre in each area. In Brisbane, there are 135,876 children aged 0-4 and 85% of all pre-school aged children are placed into pre-school (ABS, 2022). 339,015 kindergarten-aged children are enrolled in pre-school Australia wide (ABS, 2022) and there is steady population growth in Brisbane of 1.6% per year (WPR, 2022). There are 1226 child-care centres in Brisbane thus it is likely that each Little Stars facility will be competing with multiple other centres (Care For Kids Group, 2022). Private childcare providers can be for-profit while receiving government support. 50% of childcare providers are private for-profit and 35% are private not-for-profit. 11% are managed by state or local government and 4% by non-government schools (Victoria University, 2022). Due to parents having their taxes paid into the childcare they are receiving they expect quality child-care services from government facilities. If a cheaper government-supported childcare centre is available, they will only stay at the expensive childcare centre if the quality-of-service outvalues the difference in price between them, as well as the time cost of moving the child to the other facility. 74% of children enrolled in a preschool program paid $4 or less per hour for pre-school programs after subsidies were deducted (ABS, 2022). If Little Stars cannot compete with the market in providing quality services at their price point there are also alternatives to pre-schooling that involve nannies, au-pairs, online parenting packets and altering the parent's lifestyle to afford to have a parental figure look after the child. Pre-school lifts a lot of the responsibility of providing avenues for development for the parents of that child. Using local preschool facilities is a necessity in a lot of cases such as households where all parents work, meaning supervision of pre-school age children cannot be conducted by the parents. As the functional role of preschool in a lot of parents' eyes is to alleviate burden and free-up time, the pre-school service should be as painless as possible. However, Little Stars has a range of processes with issues. Payment for services costs parents the travel time and wait time to the office and then 15 minutes to fill out a form. This occurs once a month or whenever they leave their child at the casual day-care service. This wastes the parent's time on an inefficient system. All student records at Little Star are manually maintained by the teaching staff. There is no proper learning management system, and the sharing of online learning material is not standardized. These combine to make preparing individual student progress reports time-consuming. Parents do not want to spend extra time figuring out multiple cloud-based storage systems and want to be able to gather a lot of information about their child's daily activities. Special requests are made by parents regarding their children via a paper form. These paper forms are placed on a notice board for the teaching staff to look at, but they are often too busy. Parents often call in and make requests, bypassing the system, slowing down and increasing the complexity of staff operations. Little Stars is having issues with staff leave. A staff member requesting leave must fill out a paper-based form and consult both their HR officer to find out their leave time and their colleagues to arrange a replacement. Approval needs to be obtained from the branch manager and HR officer, with these forms needing to be scanned and emailed to the HR manager**.** Little Stars is having issues with staff record management as monthly staff reports are outdated due to them taking so long to create. The staff details are paper based, maintained and updated by HR. Little Stars has an inventory system where staff fill out paper forms and these are approved by the purchasing officer after checking if the stocks are available. Stocks are ordered from suppliers if unavailable and more paper records track the stock levels, leading to delays in deliveries of items to staff. Most competitors such as Goodstart have an information system that collects the personal information of customers and staff to re-use and handle forms both physically and digitally. Competitors also use automated childcare payment software (Goodstart, 2022).

1.2 Project Goals & Objectives

Goal:

To be the best set of pre-school educational facilities in Brisbane in terms of the quality of service provided to parents, caretakers, and students.

Objectives:

- Reduce the average wait time in payment line from 10 minutes to 1 minute within 6 months
- Reduce the time it takes for clerks to process a payment by 80% within 6 months
- Have a reduction of foot traffic at the payment counter down to at most 25 people per day within 6 months
- 95% reduction in paper form usage company-wide within 2 years
- 80% reduction in the turnaround time from form submission to approval within 6 months
- Reduce the ratio of staff to students to 1:1 without a decrease in the number of students
- Produce a staff report on demand instead of monthly
- Improve efficiency of stock request fulfilment and stock management by 80%

1.3 Problem Statement

Little Stars currently has an outdated paper-based information system that cannot handle the scale of its current services, causing major delays for both customers and staff. The result is inefficiency in staff handling of forms and substandard service for parents due to miscommunications and long waiting times.

Processes that can be automated are currently being completed manually which is inefficient and error-prone; processes may have several approval steps which can be rejected causing the process to potentially start again. This increases the chances for paperwork to be out of date, incorrect or lost entirely.

2. Needs Assessment

2.1 SWOT Analysis

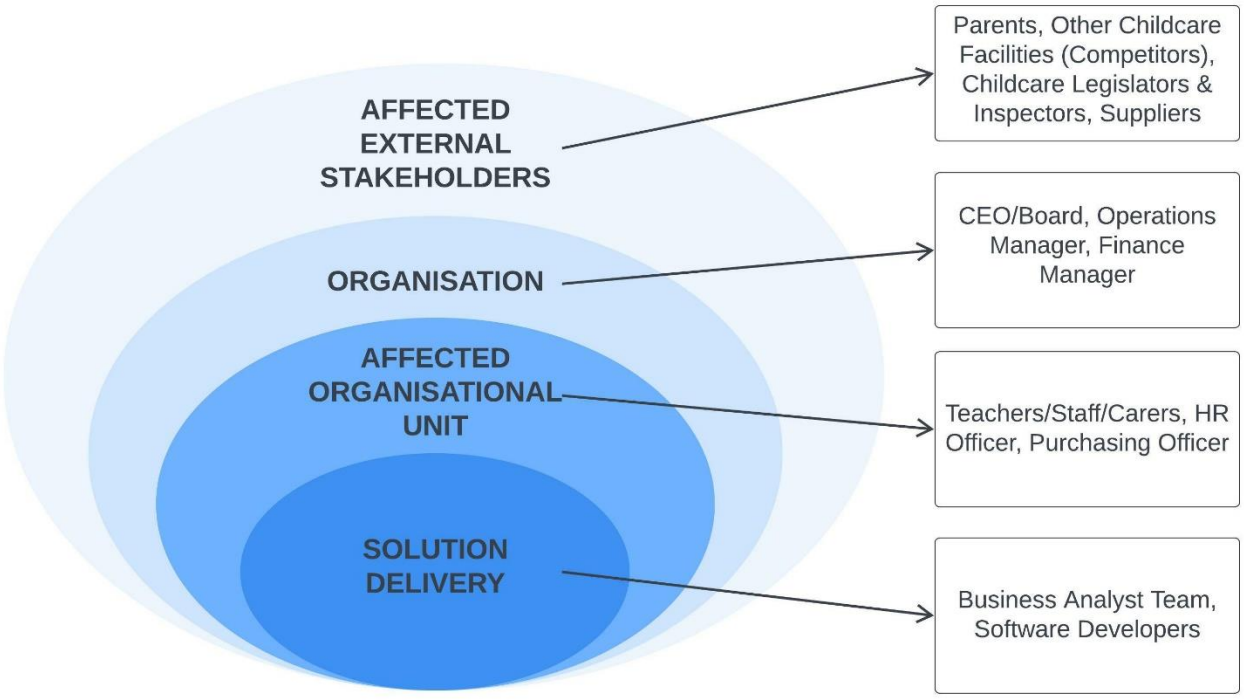
Strengths	Weaknesses
1. Provides both nursery and kindergarten 2. Large staff to child ratio 3. Difficult for parents to change childcare providers 4. Professional staff with up-to-date skills 5. An enthusiastic tech-savvy executive who is onboard with tech solutions 6. Learning management systems knowledge 7. Suited for information system upgrade 8. Existing paper records available to digitize 9. The flexibility of childcare times 10. Parents already experienced in filling in forms 11. A variety of digital payments are already accepted 12. Staff ability to arrange replacements for leave	1. Paper-based Processes 2. Redundancy in forms 3. Staff records tracked in Excel 4. Long wait times for parents 5. Outdated staff reports 6. Non-unified online cloud storage provider 7. No learning management system 8. Manual child progress report creation 9. Non-Government Funded 10. Slow inventory handling 11. Staff overwhelmed during the mornings 12. Poor special-consideration communication methods 13. Manual payment checking 14. Staff inexperience with information systems 15. Staff upset at current systems
Opportunities	**Threats**
1. Standard information systems and databases 2. Growing population 3. Websites 4. Variety of enterprise learning management system services 5. Variety of cloud-based storage services 6. Return from Covid 7. Process automation of forms and reports 8. Online teaching 9. Automatic payment checking 10. Lack of childcare in rural areas	1. Increasing competitors 2. Growing parent discontent 3. Increase in home-schooling 4. Staff leaving for competitors 5. Rising house prices & online work pushing people out of cities 6. Government mandates and staff compliance 7. Covid19 outbreaks

TOWS Matrix

Strengths & Opportunities	Weaknesses & Opportunities
• How to utilize the enthusiasm to introduce information systems, websites, LMS, cloud storage and process automation (S5, S7, O1, O3, O4, O5, O7, O8) • How to use existing seminar knowledge to design a tailored learning management system (S6, O4) • How to get more kids to use the facility to match the already high staff numbers (S2, O2, O8) • How to link existing payment methods to automated process handling (S11, O9) • How to transfer the wealth of data in paper forms into sets for databases and process automation systems (S8, O1, O7)	• How to use websites to reduce paper form usage (W1, O3) • How to use database modelling to reduce redundancy in forms (W1, O2) • How to use process automation to help staff in report generation (W5, O7, W8) • How to update the staff records to be stored in a database (W3, O1) • How to reduce wait times for parents using automation of systems (S4, O7, O9) • How to use a cloud storage provider to provide unified storage for all teachers (W6, O5)
Strengths & Threats	**Weakness & Threats**
• How to utilize a large staff force to decrease parent discontent before an IT solution is implemented (S2, S4, T2) • How to design a system that decreases parent discontent (S6, S5, T2) • How to leverage the knowledge of tech solutions and online payment to keep kids that are moving to rural areas (S5, S6, S7, S11, T3, T5)	• How to improve the efficiency of forms and reduce waiting times to reduce staff and parent discontent (W2, W4, T2, T6) • How to reduce staff inexperience with information systems while not pushing them to leave for competitors (W14, T4) • How to improve the communication methods to reduce the threat of those moving to rural areas (W12, T5)

2.2 Stakeholder Analysis

Onion Diagram



RACI Matrix

	Identify Problem	Analyse Current Situation	Model Processes	Verify Processes	Implement System
CEO/Board	A	A	A	A	A
Business Analysis Team	R	R	R	R	R
Teachers/Staff/Carers	C	C	I	I	I
HR Department	C	C	I	C	I
Software Developers	I	I	C	I	R
Operations Manager	C	C	C	C	C
Payment Clerks	C	C	C	C	I
Other Counter Staff	C	C	I	I	I
Purchasing Officer	C	C	C	C	C
Finance Manager	C	C	C	C	I
Registered Suppliers	C	C	I	I	-
Legislators and Inspectors	I	C	I	I	-
Parents	C	C	-	-	I

The stakeholder analysis provides an outline of the key persons and their individual needs in order to develop and deliver the project outcome. The Business Analyst Team has developed an Onion Diagram (shown on the previous page) which illustrates the internal and external stakeholders that will be affected by the implementation of the new system. Additionally, the Business Analyst team has also developed a RACI matrix (shown on the previous page) which illustrates the key stakeholders and their roles for the project.

Childcare Legislators and Inspectors are part of the affected external shareholder as outlined in the Onion Diagram. These Legislators and Inspectors have high influence and impact in the management and implementation of the solution. Hence, any of the needs and requirements for the development of the solution will be cross examined and monitored to ensure that it will satisfy the rules and standards placed by the Childcare Legislators. Moving on, whilst parents, along with other childcare facilities, may not have any full control in terms of solution development for the system, they will be monitored, particular with parents where they will be consulted in order to gain more information regarding the development and implementation of the solution. Additionally, registered suppliers will be consulted to identify any business problems and are further interviewed (3. Requirement Elicitation) about their requirements for the new system.

The CEO/Board of Little Stars will be accountable for identifying the analysing the current situation of the company. Other tasks such as modelling and verifying process and the implementation of the system will be held accountable for by the CEO/Board. The Operations Manager will be consulted for every task as they will be knowledgeable about the current operations and processes that is currently practiced within the business. Similarly, the Finance Manager will also be consulted about the processes within their respective department and will be informed about the implementation of the new system.

Whilst having not much capability in terms of implementing the solution, the teachers/staff/carers will have high influence as they are one of the main affected stakeholders in regards with the solution implementation. They will be consulted about the current business situation, problems, and processes in order to assist with the development of the solution. Along with teachers/staff/carers, the HR and Purchasing Officers will also help in identifying and recommending solutions in order to improve the current business processes which relate to their areas of expertise within the company.

Finally, the Business Analyst team and Software Developers will be responsible for the delivery of the solution. The Business Analyst team will do the necessary analysis and examination of the current business situation and development of the solution in order to meet the requirements, goals, and objectives of Little Stars. While the software developers will be in charge of the overall technical implementation of the mediated solution by the Business Analyst team.

2.3 Root Cause Analysis

Fee Payment Process Problem	
Why are staff complaining about the high workload?	Because there is too much work to do at the front counter while handling forms
Why is there too much work to do at the front counter?	Because parents hand in forms in person that require manual checking of student payment files
Why do parents have to hand in forms in person? Why do forms require manual checking?	Because both the forms and the records are paper-based
Why do we handle forms in paper?	Because we do not have an IT system to handle payments
Redefined: How do we design an IT system to handle payments?	

Staff Leave Management Process Problem	
Why are staff complaining about the high workload?	Because it is difficult for them to get a break
Why is it difficult for them to get a break?	Because it is difficult to use their leave
Why is it difficult for them to use their leave?	Because it takes too much time and effort to use their leave
Why does it take too much time to use their leave?	Because they have to arrange substitutes themselves. Because it takes too long to get approval
Why do they have to arrange substitutes themselves?	Because the HR officer is unable to arrange it.
Why does it take too long to get approval?	Because staff leave must go through the HR officer, colleagues, supervisor and branch manager.
Why is the HR officer unable to arrange leave? **Why does staff leave go through so many staff members?**	Because there is not a unified way of accessing staff timetables
Redefined: How do we build a way of allowing unified access to staff timetables	

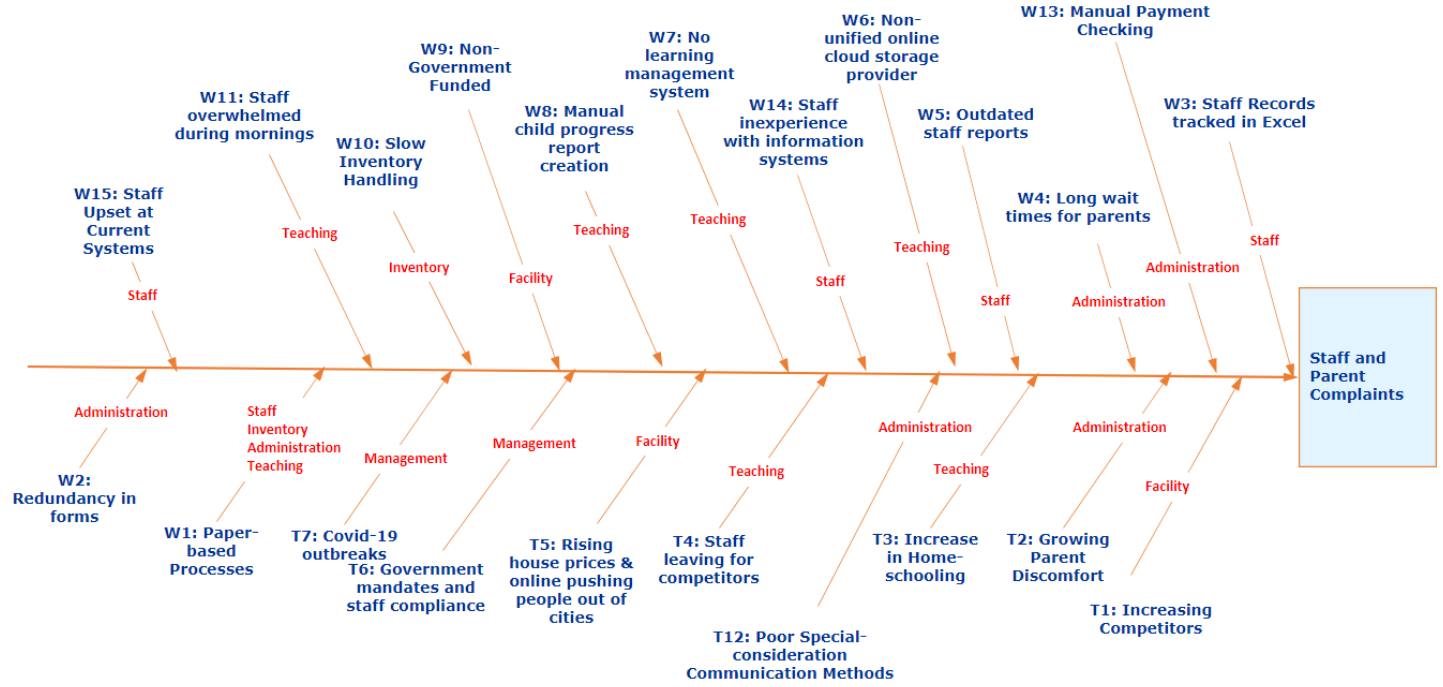
Staff Record Management Problem	
Why is staff planning difficult and incorrect	Because the reports used to plan it are out of date when produced
Why are staff reports out of date when produced?	Because the staff reports take a month to produce
Why do the staff reports take a month to produce?	Because the staff reports contain a lot of information that is difficult to collate
Why is this information difficult to collate?	Because all the records maintained by HR are paper-based
Why are the records paper-based?	Because the forms that are handed in are paper-based
Why are the forms paper-based?	Because there is no current way of handing in digital forms
Redefined: How do we build an IT system that can handle the digital submission of work forms?	

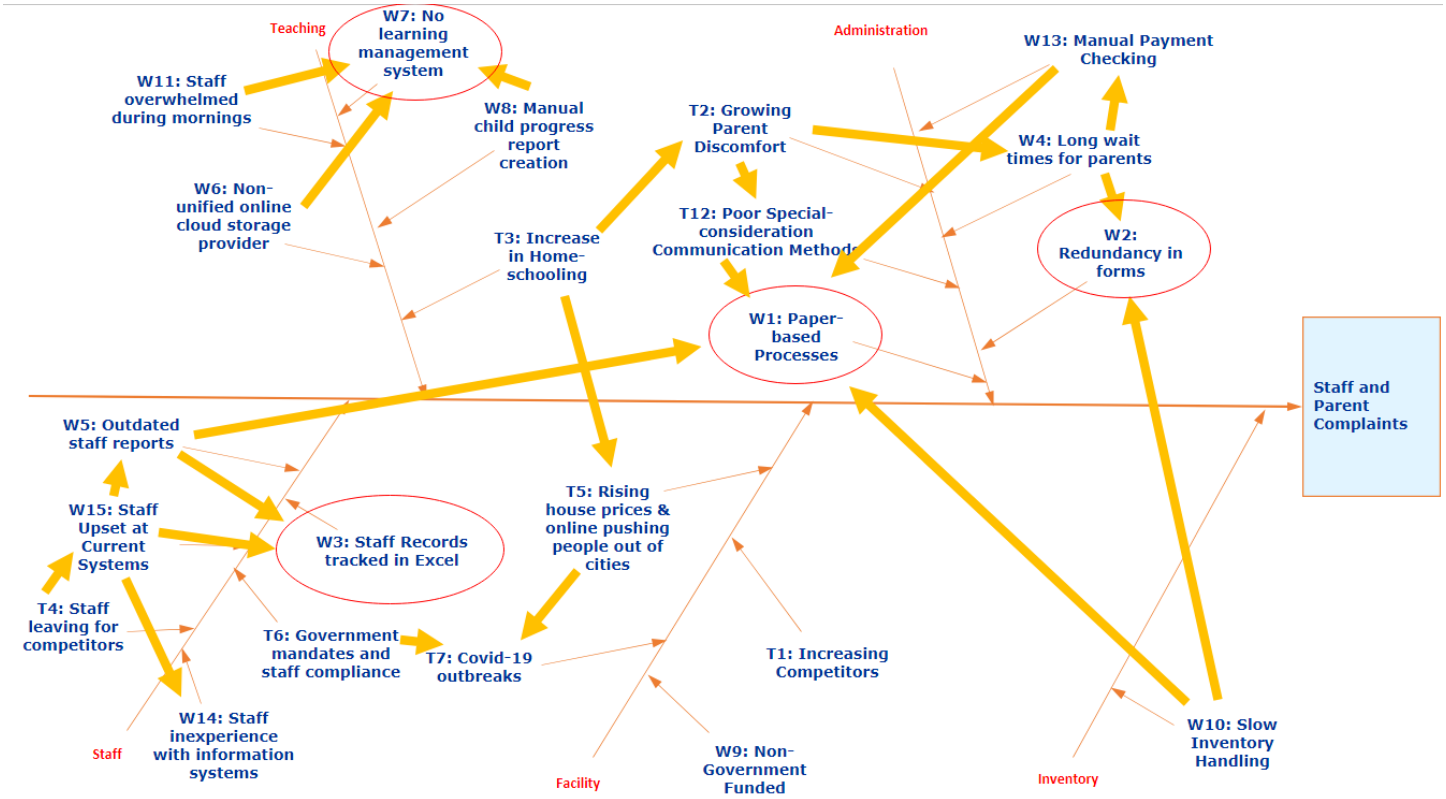
Student's Special Arrangement Problem	
Why are parents complaining about students' special arrangements system?	Because the special arrangements are not being fulfilled
Why are special arrangements not being fulfilled?	Because teachers and staff are unaware of the arrangements
Why are staff unaware of the arrangements?	Because they do not have enough time to view the board of arrangements
Why is there not enough time to view the board of arrangements?	Because it is a generalized board of a lot of information that all staff have to check on in each room which takes a lot of time. Because the form has to be questioned, signed and taken to the office which takes time.
Why do all staff need to check all room boards? Why are the room leaders handling forms?	Because there is no system to receive task-specific special arrangements
Redefined: How to build a system that allows for task-specific arrangement receiving and viewing	

Student Record Management Problem	
Why are parents complaining?	Because it is a hassle to get information for their child's classes
Why is it a hassle to get information?	Because online storage it is being shared through is non-standardized
Why is online storage non-standardized?	Because cloud storage is chosen by individual teachers
Why is cloud storage chosen by individual teachers?	Because there is no learning management system for teachers to use to give information to parents
Redefined: How do we build a learning management system for teachers to use	

Inventory Management Problem	
Why are staff complaining about obtaining supplies?	Because most of the deliveries are delayed
Why are most of the deliveries delayed?	Because stock tracking and ordering are not efficient
Why is stock tracking and ordering not efficient?	Because the purchasing officer uses the inventory request forms to track stock levels. Because supplies can only be purchased through registered suppliers after the stock is checked
Why is stock tracking performed via the inventory request forms?	Because there is no system to track the current stock levels
Redefined: How do we build a system to automatically track the stock levels	

Fishbone Diagrams





2.4 Capability Analysis & Gaps

The purpose of undertaking a capability gap analysis is to assess the current capabilities of Little Stars and determine the current gaps which prevent it from meeting the current and future business requirements & objectives.

Capability Gap Analysis			
Current Limitation	**Root Cause**	**New Capability**	**Project Deliverable**
Non-existing IT system(s)	- Little Stars currently does not use any IT systems - Tasks are performed manually	- An easy-to-use IT system to manage payment and finances, HR Records keeping including leave, student and staff records, inventory, and student special arrangements	- A singular ERP system implementing web portals to aid staff in day-to-day processing and parents to manage finances
Outdated Payment Processing	- Paper Based Forms - Manual Processing and fee calculation	- An IT system to manage the Fee Payment Process	
Inefficient HR Planning	- Staff must find replacements for leave - Staff must contact HR staff to get there leave balances - Approve forms are scanned and emailed to HR manually for reporting and record keeping	- A portal for staff to access and manage their leave - Leave Balances available on demand - Reporting available on demand - Automatic capacity planning assessment	- A portal for staff to fully manage their leave from submission to approval - A portal to see historical leave
Poor Record Management	- Reports take up to a month to produce as they contain a lot of information that is difficult to collate	- On Demand reporting the new system will automatically generate reports when required	- The system will have a reports capability allowing for each type of report to be generated on demand. - The system will have the capability to schedule reports so that they can be sent at predefined times.
Poor Inventory Management	- The purchasing officer uses inventory request forms to track stock levels. - Supplies can only be purchased through registered suppliers after the stock is checked	- Inventory Tracking, the system will be responsible for tracking inventory stock levels - The system will be responsible for ordering and tracking new stock	- A portal for staff to enter and maintain inventory and allow for it to be updated when stock is consumed - A portal for staff to request a item through a registered supplier
Ineffective Special Arrangement Planning	- A generalized board is used with a lot of information that all staff must check on in each room which takes time. - The form must be questioned, signed, and taken to the office which takes time.	- Special Arrangement tracking for each room and student - The system will allow for form to be filled out online or in the office	- A portal for staff and parents to use to register and approve special arrangements - A portal for staff to check special arrangements on a room by room basis

3. Requirements Elicitation

3.1 Elicitation Plan

Jason Dau

Leave Management – Elicitation Plan			
Required Information	**Source**	**Method**	**Sequence**
The current Leave Process	Teaching Staff Supervisors & Branch Managers HR	Interview Observation	1
Available Project Resources	CEO	Interview	4
Development Resources • Available Resources • Cost • IT Developers • Testers	CEO Software Developers	Meeting	6
Enterprise Architecture: • Back end • Front end	CEO Software Developers	Meeting Documentation Analysis	7
Existing Processes that should remain	Teaching Staff Supervisors Branch Managers HR	Interview	3
New Processes/Features that should be considered for Implementation	CEO Teaching Staff Supervisors & Branch Managers HR	Meeting Benchmarking Workshop	5
Staff Leave Management Preferences	Teaching Staff Supervisors Branch Managers HR	Interview	2
Training required to use a new system	HR Software Developers	Interview	9
Level of Technical Knowledge	Teaching Staff Supervisors & Branch Managers HR	Interview Observation	8

The elicitation will have a focus on collecting information to form user requirements to assist in the build process of a new leave management system. To fully determine the system requirements the current leave management process must be examined and understood. From the briefing given to the BA team the current leave process will be further examined by observing and interviewing the Teaching Staff and HR, gathering their preferences on leave management, and understanding any existing processes and facets that should be transferred over the new system. Next the available resources of Little Stars must be determined and fully understood so that the user requirements can be correctly prioritised. Then Meetings and workshops will be undertaken to discover any new processes or features that should be considered in the new system. Then a meeting will be held with the IT Developers and Testers to make sure that they understand the goals and scope of the project allowing them to assist in the elicitation process by gathering any additional requirements that they may know of. Finally, discussions and analysis will take place to discover the Enterprise Architecture that will be used for the project. Once this elicitation process has concluded a new leave management system can be designed and developed.

Fee Payment Process Requirements Elicitation – Elicitation Plan			
Required Information	**Source**	**Method**	**Sequence**
Current Payment Process • Attributes • Exceptions	Parents Payment Clerks Other Counter Staff Accountants	Survey Interview Observation Document Analysis Desk Audit	1
Parts of current process that can be translated into the new system	Payment Clerks IT Devs Parents Other Counter Staff Accountants	Document Analysis Interview Survey	7
Enterprise architecture to be used: • Front End • Back End External	CEO/Board Software Devs	Technical Documents Interview Meeting	8
Functionalities desired in the new system	CEO/Board Payment Clerks Software Devs Other Counter Staff Childcare Legislators Parents	Meeting Benchmarking Interviews Observation	3
Parent payment preferences	Parents	Survey	5
Skills and reskilling needed to adapt to the new system	Other Counter Staff Payment Clerks HR Software Devs	Interviews Observation	3
Resources available for the project	CEO/Board	Meeting	2
Developers of the new system	CEO/Board HR IT Devs	Meetings Interviews	4

The elicitation that will be performed will focus on gathering the required information to form user requirements to build a new payment processing system. In gathering the requirements for a new payment processing system, the current payment processing system must be understood further than the description that was given to our BA team. Then the ability of the company both in allocated and practical resources must be determined so that specific requirements can be prioritized accurately. Next, the developers of the new system must be selected, interviewed, and understand the goal of the project so that they can participate in the rest of the requirements elicitation in an Agile Scrum manner. Developers will be able to generate prototypes in sequence with requirement gathering, the next step, of both internal, external, and existing functionalities for the new system. Discussion with software developers, CEO and BA team will need to occur over architecture to specify architecture specific requirements as the solution implementation begins. Following this elicitation process, a solution for the payment processing system should be able to be mediated.

Inventory Management – Elicitation Plan			
Required Information	**Source**	**Method**	**Sequence**
The Current Inventory Management Process	Purchasing Officer Registered Suppliers	Interview	1
The Current Process for Requesting New Stock	Staff Purchasing Officer Operations Manager Registered Supplier	Interview	2
The Current Procedures that can be adapted into the New System	Purchasing Officer Operations Manager Registered Suppliers IT Devs	Meeting Document Analysis	8
The Current Stock Checking Procedure	Purchasing Officer	Interview Observation	3
The Current Documents and Tools Used	Staff Purchasing Officer Operations Manager Registered Suppliers IT Devs	Document Analysis Observation	7
Insight regarding the manual processes within the Inventory Management	Staff Purchasing Officer	Interview Observation	4
The Current Ordering Process	Purchasing Officer Registered Suppliers	Interview	5
Insight regarding the environment about the staff dissatisfaction and complaints	Staff Purchasing Officer	Interview Survey Observation	10
The level of understanding regarding technology	Staff Purchasing Officer	Interview	6
Necessary requirements to be implemented in the new system	CEO Purchasing Officer Operations Manager	Meeting	9

The elicitation plan has been developed with the aim of gathering information from the key stakeholders for the new Inventory Management system. Gathering more information from the key stakeholders gives the Business Analyst Team a deeper understanding of the Inventory Management process and environment and more insight about its problems. The plan outlines the necessary information required from each stakeholder in order to develop the requirements for the solution and implementation of the new Inventory management system. The methods and sequence that will be used to gather information from the stakeholders are also outlined. The methods used were interviews, meetings, observations and document analysis. These methods were used by the Business Analyst Team as it is important to extract all the required information in order to have the full sense of the situation which would ultimately lead to a robust and accurate solution for the issues within the Inventory Management process.

3.4 Data Collection Techniques

Jason Dau

Questions:

Leave Management - Interview Questions		
Question	**Target**	**Type**
How long does it take to find a suitable replacement so that you can access leave?	Teaching Staff	Closed
Have you had issues with having leave approved? If so, what was the cause of the issue?	Teaching Staff	Open
Would you be comfortable applying for leave and accessing your leave balances via an online portal?	Teaching Staff	Probing
What is the process to alert work when you require sick / unplanned leave?	Teaching Staff	Probing
What is the time spent handling leave? a) Approval b) Staff contacting HR to get the current leave balance c) Scanning in Approved Leave Forms d) Reporting	Head Office	Closed
What is the current substitution process for sick / unplanned leave?	Head Office	Probing
Have there been instances of a substitute for approved leave being unfit skill wise or not available because of (sick / unplanned) leave?	Head Office	Closed
Would there be any issues if a system was to automatically assign a substitute based on an employee's skill tags?	Head Office	Closed
Who would be responsible for managing this information?	Head Office	Probing
Who would be responsible for providing training for staff?	Head Office	Closed
Would it be beneficial to be able to see all leave (approved and unapproved) on demand?	Head Office	Probing

Interview Answers

1. Dependant on the time schedule and time of year. It is more difficult during the holiday periods.
2. Have had issues with leave approval because they don't have a leave balance. Unsure if it was true as they couldn't easily see acquired and used leave.
3. Would be incredibly comfortable and much prefer to access leave via a portal rather than contacting HR
4. Sick leave requires a leave request form after getting back to the office as they are uncomfortable with going to the office whilst sick. They contact their immediate supervisor to let them know they're unable to make it in.
5. Handling Leave:

a) 3-4 hours spent handling leave for an individual HR staff member over a 2–3-day period.
b) Teaching staff spend 1 hour contacting HR to find out their current leave balance.
c) 30 minutes to 1 hour is spent per week scanning in approved leave forms.
d) 1 hour a week is spent on the reporting process.

6. A spreadsheet is used to understand the current available staff members at any given period. A staff member is contacted if they have the correct skills and can fill in for someone who is sick.
7. Have always been able to find another staff member who has the correct skills to fill in for someone.
8. There are no issues with a system automatically assigning other teaching staff based on their skill tags.
9. A HR officer would be responsible for maintaining skill tags.
10. A HR officer would be responsible for providing training to Teaching Staff for a new system.
11. It would be beneficial and more convenient if the system could generate reports on demand.

Leave Management - Survey Questions		
Questionnaire	**Target**	**Type**
On average how much time does it take to average a leave request	Supervisor Branch Manager	Probing
Would you have any issues if a system automatically determine**s** leave availability based on skill tags? If so please state why	Supervisor Branch Manager	Open
Do you think it is necessary to approve a leave request after a supervisor has already approved it	Branch Manager	Open

Interviews Summary

From interviewing the Teaching and Human Resource staff the BA team was able to gather additional information about the current leave management process. Based on the teaching staff it was discovered that manually finding another person to cover leave is difficult and is highly dependent on the time of year with the holiday period making it much more difficult. It was also discovered from HR that it can take up to 1 hour to find and provide a Teaching Staff members leave balance. As this is a manual process Teaching staff aren't sure on the accuracy of the information provided and have had doubts about it. Teaching Staff are incredibly supportive of accessing and managing there leave through an online portal.

Speaking to the Human Resource staff it was discovered that the time spent processing leave on a weekly basis was higher than expected. Currently a spreadsheet is used to track currently available staff, and this must be maintained for each approved leave request. Human Resources are happy to maintain skill tags for Teaching Staff for a new system. They have also express great interest in having a system that can generate reports on demand rather than it being a manual process.

From the survey questions provided to the supervisors and branch manager it was discovered that it can take up to 5-10 minutes to verify and action a leave request. Taking longer if the leave request is rejected as the staff member needs to be manually informed. Supervisors and Branch Managers are open to having a system automatically determining availability for a replacement staff member based on skill tags, but they would want to make sure that it is monitored initially ensure that it works correctly. The Branch Manager would like to continue the second leave approval step if a notification is sent to the staff member if the leave is rejected.

With this additional information it has given the BA team a better understanding of how the solution can be developed for the Leave Management process.

Fee Payment - Interview Questions		
Question	**Target**	**Type**
How much time is spent on: • Retrieving student payment files? • Checking the balance and payment status on a file? • Calculating the amount payable? • Collecting payment? • Issuing a payment invoice? What parts of the fee payment form are most frequently used? How many forms in a day do you process? Would it be beneficial to have the payment status and amount payable automatically accessible? Would it be beneficial to have invoices automatically generated?	Payment Clerks	Closed
Could you lead me through how you process payments? • Explain how do you check the balance or pending payment status on a student payment file? • Explain how do you calculate the applicable amount payable from the form and student payment file? • Explain how is payment currently collected? • Explain how do you issue a payment invoice? • Explain how do you store the forms for record-keeping? How do you maintain the student payment files with the care and supplies that have been provided to the students? What are your biggest problems with the current system? Would there be an issue if the payment system automatically calculated the total payment required?	Payment Clerks	Open
If there was an interface that you would want to enter the form details into, what would it look like or what other piece of software would it resemble? If parents miss their payments what occurs?	Payment Clerks	Probing
What resources are dedicated to the solution? Who are your biggest competitors? Who will maintain the site? Who updates the cost of childcare services? What are the training considerations for developers and staff? What are your biggest concerns regarding external regulations and the solution? Who else should we talk to?	Head Office	Closed
What are your success criteria? What benefits do you expect from the payment system? What inspired the update for payment processing? How important to you to have an information system that uses automation and machine learning? If a new information system was implemented that used neither but significantly increased efficiency, would you still require it?	Head Office	Open
Do you intend to place increased priority on online childcare services? What do you believe the future of Little Stars to be? Are there any other changes happening within the organization that may impact the new payment process system's success?	Head Office	Probing

Interviews Summary

The payment clerk and head office interviews had a lot of information that could already be derived from other methods such as observation, desk audit and document analysis but new information was still derived. In the fee payment processing system, a lot more time is spent dealing with the paper system than was previously estimated. An exponential amount of time could be saved by using an information system and payment portal by the payment clerks. Both the student payment files and forms being paper based create an incredible bottleneck as minutes must be spent on tasks that if digitized would take a second. The number of forms being processed per day is quite low and it is obvious why there are large lines with the number of students at Little Stars. Resistance from the payment clerks seemed minor and instead, they seemed enthusiastic about the update. A surprise was the monthly audit and alphabetical binders. Both will make it easier to digitise existing documents and make sure no fees are left unpaid in paper form. For the head office member made it clear the BA team has 6 months to produce results. The board want a smooth development, no problems, and quick results. They plan on using an in-house team of developers which will make requirement translation easier. The financial manager on the board updates the cost of childcare and will need to be included in the requirement gathering. The simultaneous upgrading of the inventory management system will have impacts both positive and negative. Positive being the digitization of the inventory management means the stock on the fee payment site will be accurate and purchase requests can be sent directly to inventory management from parents. However, the inventory management upgrade will compete for development resources, but it seems that the head office is willing to put enough manpower behind both projects for them to succeed.

Fee Payment - Survey Questions		
Questionnaire	**Target**	**Type**
In what suburb or area do you live in? Do you usually make a separate trip or pay when dropping off your child? How often do you need to fill in the payment forms? If you make mistakes when entering information in the current forms, what are they? How do you book for the casual day care service? Do you have an internet connection at your home? Would you be comfortable creating an account with Little Stars with your personal information? What is your preferred payment method? Would you be comfortable having that payment method information stored for repeated use? Would you use an automatic payment system instead of re-submitting a form each week? Would it be useful to receive notifications when a payment is due?	Parent	Closed
What is your experience with Little Star payments? What would you like the new site to look like? If we were to copy a payment processing design from another site, what would that site be and why? Are there any website payment portals that you do not like?	Parent	Open
Could you describe a website that you thinks looks great?	Parent	Probing

Inventory Management - Interview Questions		
Question	**Target**	**Type**
How many request forms are received on a weekly basis? How often are stock checked, is it on a weekly, fortnightly, or monthly basis? How long does it take to update the inventory list when new stock arrives? Are purchases done throughout the week, or are there dedicated days when purchases are done? Is there a given budget per department on how much money they can use when requesting items?	Purchasing Officer	Closed Ended
What happens if the request is not fulfilled at the date and time required? What happens if a specific registered supplier does not have stock of a requested item or items?	Purchasing Officer	Open Ended
How long does it take for items to be collected upon receiving a purchase order from the client? How long does it take for the purchase order items to dispatch once the items have been prepared for delivery?	Registered Supplier	Closed Ended
What is the process if a specific item or items requested by the client is not currently in stock?	Registered Supplier	Open Ended

Interviews Summary

After interviewing both the head purchasing officer and registered supplier, the Business Analyst team were able to obtain additional information about the current situation and processes about Inventory Management. Based on the answers provided by the purchasing officer, there is an abundance of request forms that get received on a weekly basis which results in an incredible amount of time manually reviewing each form which leads to the Inventory Management process being incredibly inefficient. To follow this up, stock only gets checked once a month due to the time constraints that the purchasing officer has, it can also be derived that this time constraints are caused by the time used reviewing all the request forms which causes the bottleneck in checking the stock. Furthermore, it was given that updating the inventory list also takes at least one day due to the manual work that is required which is also one of the causes of inefficiency within the Inventory Management process. Regarding requested stock not arriving at the requested date and time, there is no real process that the purchasing officer does, which essentially is one of the causes of staff dissatisfaction and complaints. Furthermore, if a registered supplier does not have any stock of a requested item, the request is automatically rejected. Other information that was gathered during the interview with the purchasing officer is that purchasing is done throughout the week and no issues has resulted in terms of department budget limits and item requests. A registered supplier was also interviewed in order to gather more information regarding why stock ordering, delivery and tracking is inefficient. Based on the information gathered, one of the causes of inefficiency is due to the paper forms that Little Stars use when ordering requested items even though the registered supplier has online portal which can be used. Other information gathered was stock preparation and delivery is done at a relatively quick amount of time, however the bottleneck happens with the amount of forms a registered supplier receives which is in the form of paper. IF no stock is available, purchase orders also simply get rejected. All of this information gives the Business Analyst team an insight of how a solution can be produced for the Inventory Management process.

3.6 Business Requirements

Jason Dau

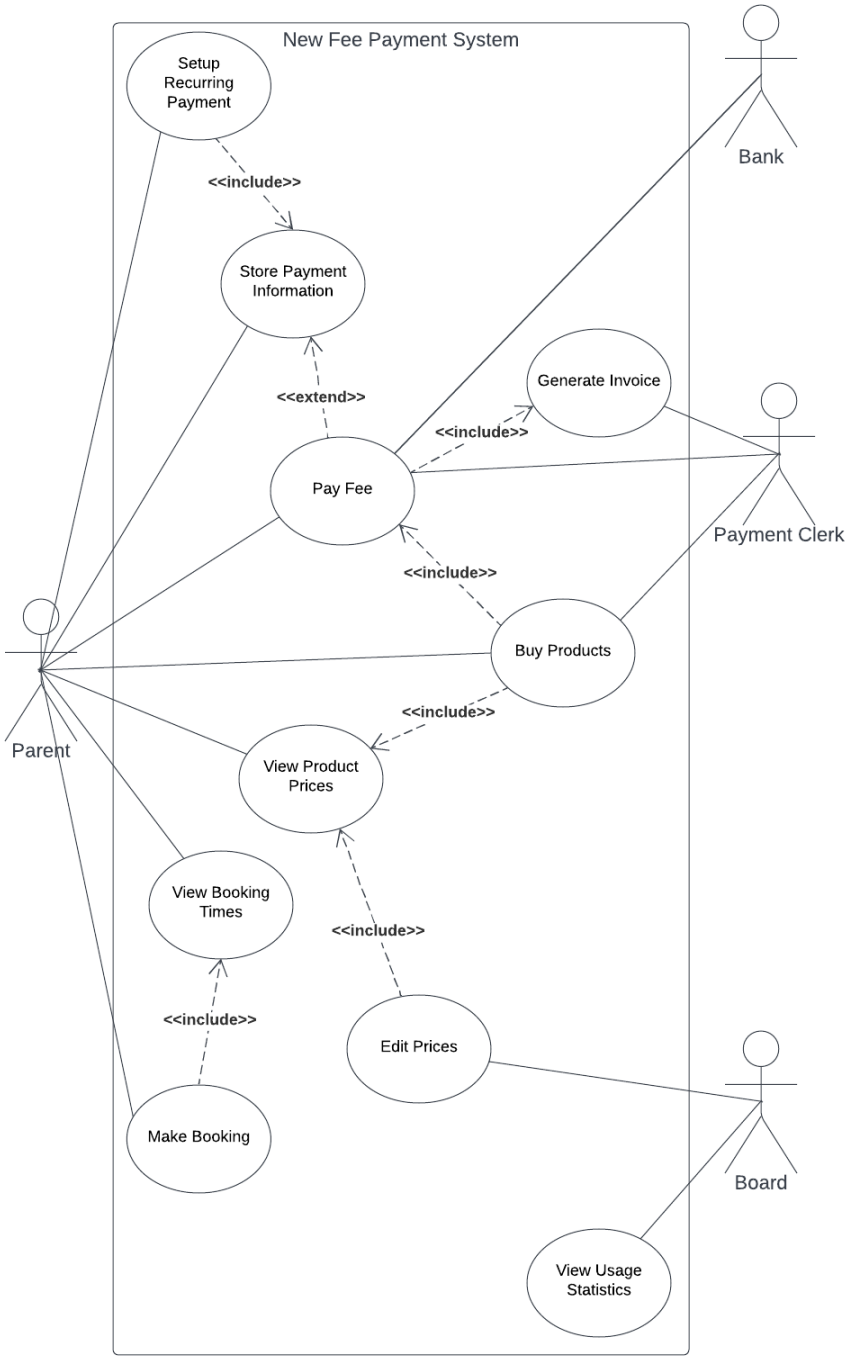
Staff Leave Management Process – User Stories			
As a	**I want**	**So That**	**Acceptance Criteria**
Teacher	To see my available leave balances	I can check when I can take a time off	**Given** I am on the leave management page **When** I click “Leave Balances” **Then** I am shown my remaining leave balances broken down by annual and sick leave
Teacher	To submit a leave request	I can take time off	**Given** I am on the leave management page **When** I click “Leave Request” **Then** I can enter a start date, end date, and leave type
Teacher	To check my leave requests status	I can confirm if I can take leave	**Given** I am on the leave management page **When** I click “Leave Requests” **Then** I can see if my submitted leave request has been actioned
Teacher	To check staff availability	I can check when it would be best to book leave	**Given** I am on the leave management page **When** I click “Leave Availability” **Then** I can see a breakdown of staff availability
Supervisor	To see pending leave requests	I can pick-up and action a leave request	**Given** I am on the leave management page **When** I click “Pending Requests” **Then** I can see a list of pending leave requests that require supervisor approval
Supervisor	To see staff availability based on skills	I can verify that a leave request is appropriate	**Given** I am on the leave management page **When** I click “Leave Availability” **Then** I can see a breakdown of staff availability with a breakdown based on skill tags
Supervisor	To action pending leave requests	I can action a leave request	**Given** I am on the leave management page **When** I click a pending request **Then** I am able see: - The name of the requestor - The dates the request is for - An “approve” and “reject” button
Branch Manager	To see pending leave requests	I can pick-up and action a leave request	**Given** I am on the leave management page **When** I click “Pending Requests” **Then** I can see a list of pending leave requests that that require branch manager approval
Branch Manager	To action pending leave requests	I can action a leave request	**Given** I am on the leave management page **When** I click a pending request **Then** I am able see: - The name of the requestor - The Supervisor who approved the request - The dates the request is for - An “approve” and “reject” button
HR	To see approved leave requests	I can create report	**Given** I am on the leave management page **When** I click “Create Report” **Then** I can enter a date range and generate a report for all teaching staff that are on leave for that period

Fee Payment – User Stories			
As a	**I want**	**So That**	**Acceptance Criteria**
Payment Clerk Stories			
Payment Clerk	To create an account for a parent	All student payments can be maintained via the account	**Given** a parent has given me a filled in the fee payment form **When** I enter this information into the create an account page **Then** their account is created with the information
Payment Clerk	To edit an account for a parent	I can update the parent's account to match their current circumstances	**Given** a parent has given me new information for their account **When** I change the information on the edit an account page **Then** their account is updated with the new information
Payment Clerk	To transfer a child to another parent	The payments required for that child can be handled by a different parent	**Given** parents with a child in their account have shown valid identification to match their account so they can transfer their child **When** I enter the transfer into the transfer child page **Then** the child is now in the other parent's account
Payment Clerk	to search for a parent's account with a parent's name	I can confirm the parent has an account with Little Stars	**Given** I have the parent's name **When** I search that name on the site **Then** their account is displayed
Payment Clerk	to search for a parent's account with a child's name	I can confirm the parent has an account with Little Stars	**Given** I have the parent's name **When** I search that name on the site **Then** their account is displayed
Payment Clerk	to retrieve the payment statuses of a parent	I can tell the parent whether they have payments outstanding	**Given** I am on the page showing the parent's account **When** I look below the 'Pending Payments' header **Then** can see all the fees that need payments
Payment Clerk	to retrieve the amount payable of a parent	I can charge the parent the amount they have outstanding	**Given** I am on the page showing the parent's account with pending payments **When** I click on a pending payment **Then** it shows the amount payable
Payment Clerk	to see that a payment has been confirmed on a fee	I can tell the parent that the fee has been resolved	**Given** a parent has selected a non-cash payment **When** they give payment **Then** the fee is listed as paid
Payment Clerk	To record the payment method used to pay for a fee	I can view it later for record-keeping	**Given** there is a paid fee in an account **When** the paid fee is selected **Then** the fee is shown to have been paid with the payment method
Payment Clerk	To print an invoice	I can give the invoice to the parent for their record-keeping	**Given** there is a paid fee in an account **When** the 'invoice' in the paid fee is selected **Then** the invoice can be printed

Parent Stories			
Parent	to create an account with my personal information	I do not have to re-enter that information	**Given** I have pressed 'create account' on the Little Star site **When** I enter my personal information **Then** the information is saved for future use
Parent	to view all the outstanding fees	I know what payments I need to make	**Given** I am on the account page **When** I look below the 'Pending Payments' header **Then** can see all the fees that need payments
Parent	To purchase supplies directly	My child can have the item while at Little Stars	**Given** I am on the supplies page **When** I click on an item **Then** I can purchase it for my child
Parent	To save payment information	I can use them next time I am paying	**Given** I am on the payments page **When** I enter payment information **Then** I can save it for future use
Parent	To set up recurring payments	I can have tuition charged monthly to my account without interference	**Given** I am on the payments page **When** I select recurring payment **Then** the payment for tuition will be paid automatically from existing payment details
Parent	To view prices for supplies	I know how much I may need to pay in the future for items	**Given** I am on the supplies page **When** I click on an item **Then** it shows how much the supply would cost to purchase
Parent	To make bookings via the website	My child can be looked after in the casual day-care service	**Given** I am on the bookings page **When** I select a free period **Then** I can pay to have my child looked after for that period
Management Stories			
Board	To change prices	We can match changing supply demands	**Given** I am on the supplies page as an administrator **When** I enter a new value for a supply **Then** that value is saved as the new price for the supply
Board	To set the supplies available for purchase	We can sell supplies that we can sell	**Given** I am on the supplies page as an administrator **When** I add a new supply with a price **Then** it is available to be purchased via the site
Board	To view usage statistics of the site	We can make informed business decisions	**Given** I am on the usage statistics page as an administrator **When** I scroll the down the page **Then** the usage statistics for each part of the site are viewable

Use Case Diagram:

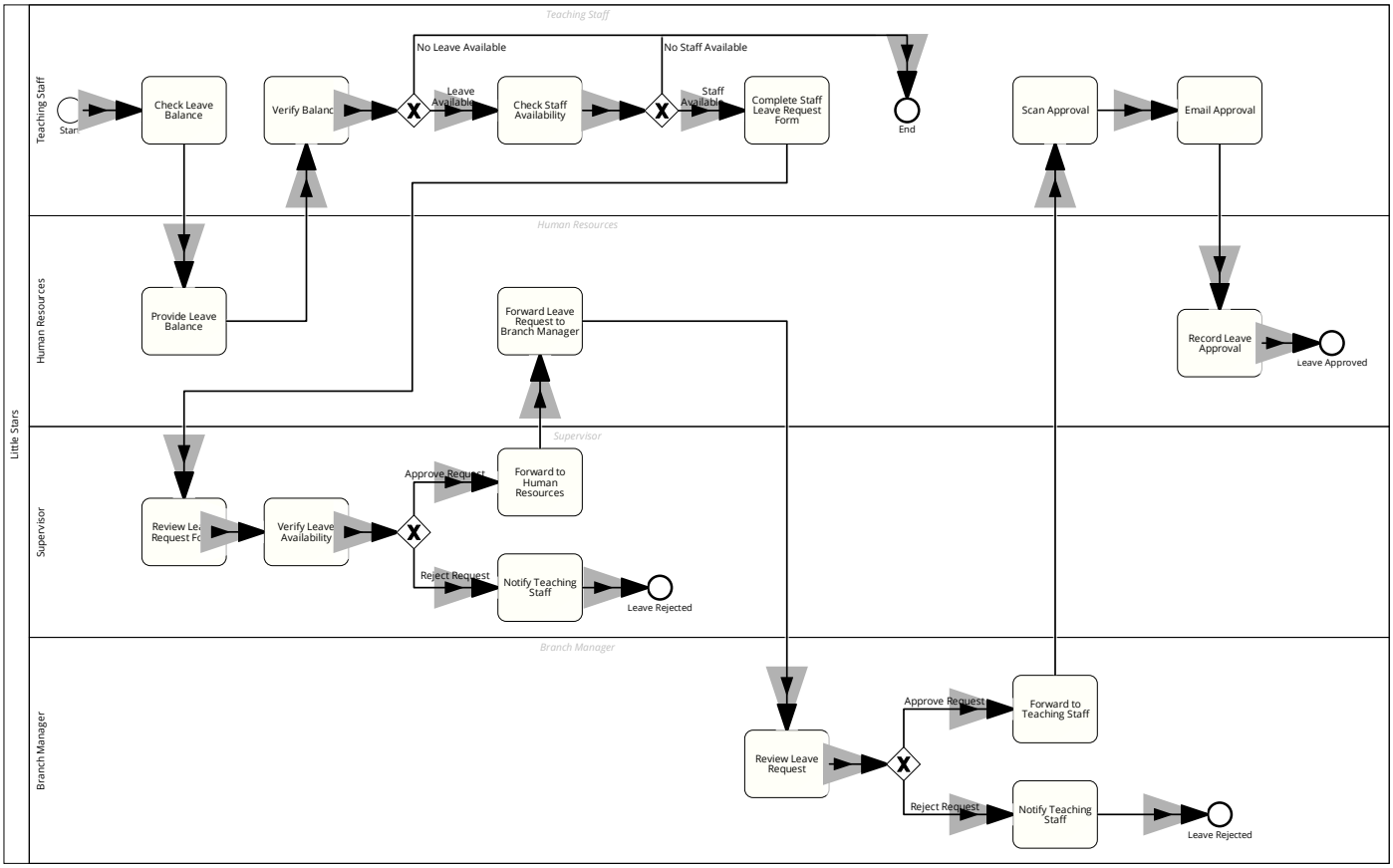
From these user stories, a use case diagram could be created encompassing the entirety of a new fee payment system. Logging in was not included as it is a generic use case that will need to be unified across all the new systems to be implemented.



Inventory Management – User Stories			
As a	**I want**	**So That**	**Acceptance Criteria**
Purchasing Officer	To have all request forms available online	The maintenance of inventory request forms is easier	**Given** I am on the admin site for inventory management **When** I enter the unfulfilled request forms **Then** I should see a list of unfulfilled request forms
Purchasing Officer	To be able to see the last time stock has been checked	I am more aware of when stock should be checked	**Given** I am looking at the inventory list on the site **When** I view an item **Then** I should see a column dedicated for the date of when the item was last stock checked
Purchasing Officer	To be able to scan an item directly	The item automatically gets updated in the inventory list	**Given** a purchase order item has arrived **When** I scan the barcode **Then** the total available quantity of the item in the inventory list should automatically get updated
Purchasing Officer	To have request forms automatically sorted by the most urgent date/time	The purchase orders are prioritized and done first to ensure arrival of the purchase order is on time	**Given** I am on the admin site for inventory management **When** I enter the unfulfilled request forms **Then** I should see a list of unfulfilled request forms automatically sorted by the most urgent date/time
Purchasing Officer	To see the amount of money each department has used	I can inform the respective department about their spending	**Given** I am on the admin site for inventory management **When** I view expenses **Then** I should see an option to view the stock expenses per department
Purchasing Officer	To see a visual indicator of all the inventory request forms that is overdue with the date/time	I can take the necessary actions when dealing with overdue request forms	**Given** I am on the admin site for inventory management **When** I enter the unfulfilled request forms **Then** I should see a list of unfulfilled request forms with the overdue request forms at the very top with a clear visual indicator
Purchasing Officer	To view a list of suppliers that has the stock of a certain item	I can ensure that the staff requesting the item/s gets the item/s	**Given** I am on the admin site for inventory management **When** I view the registered suppliers search page within the site **Then** I should be able to search for an item which should result in a list of registered supplier/s with stock available
Registered Supplier	To have a link to our website that is accessible for the purchasing officer on their system	Ordering becomes more efficient	**Given** the client wants to order from our company **When** we receive their purchase order **Then** it should be through our online form and not a paper form
Registered Supplier	To be able to see the urgency of the purchase order	We can prioritize collecting and shipping of the order, so it arrives on time	**Given** we receive an order **When** I view the purchase order form **Then** it should clearly indicate that it is an urgent request
Registered Supplier	To have a list from the client of regular items that they will be purchasing	We can easily inform them about stock changes and availability	**Given** we have a list of regular items that the client purchases **When** we do our stock checks **Then** we can prioritize our reporting to the client about our stock availability of their regular purchases

3.5 As-Is Process Model

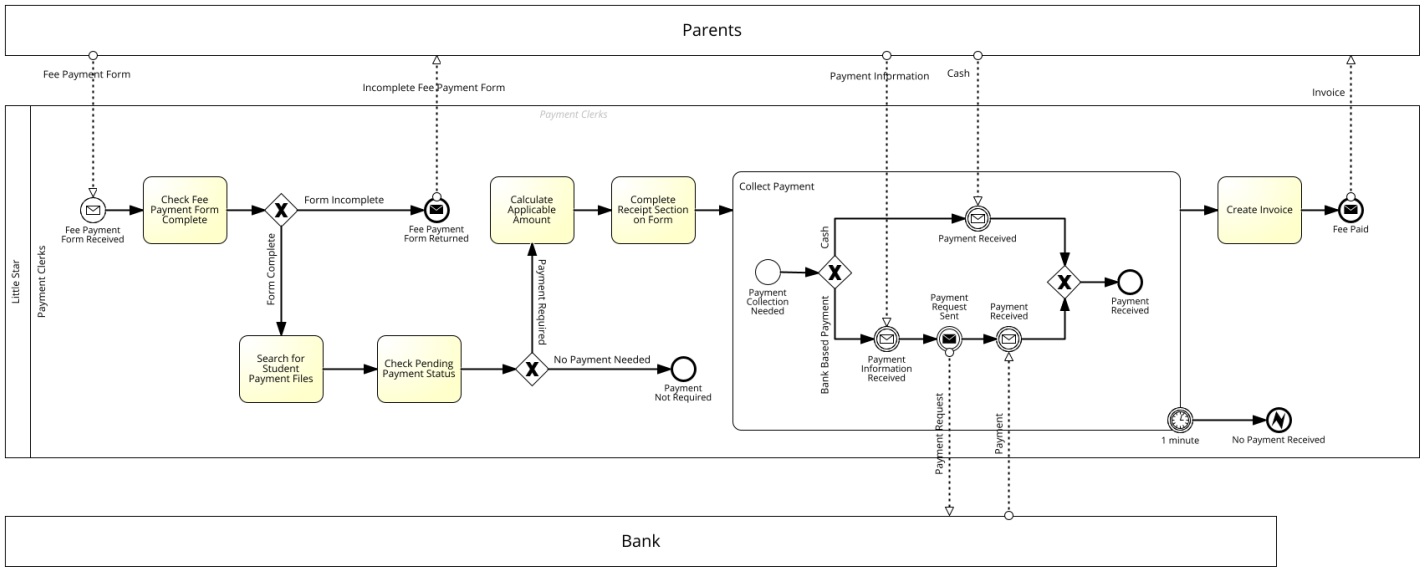
Jason Dau



Process Analysis

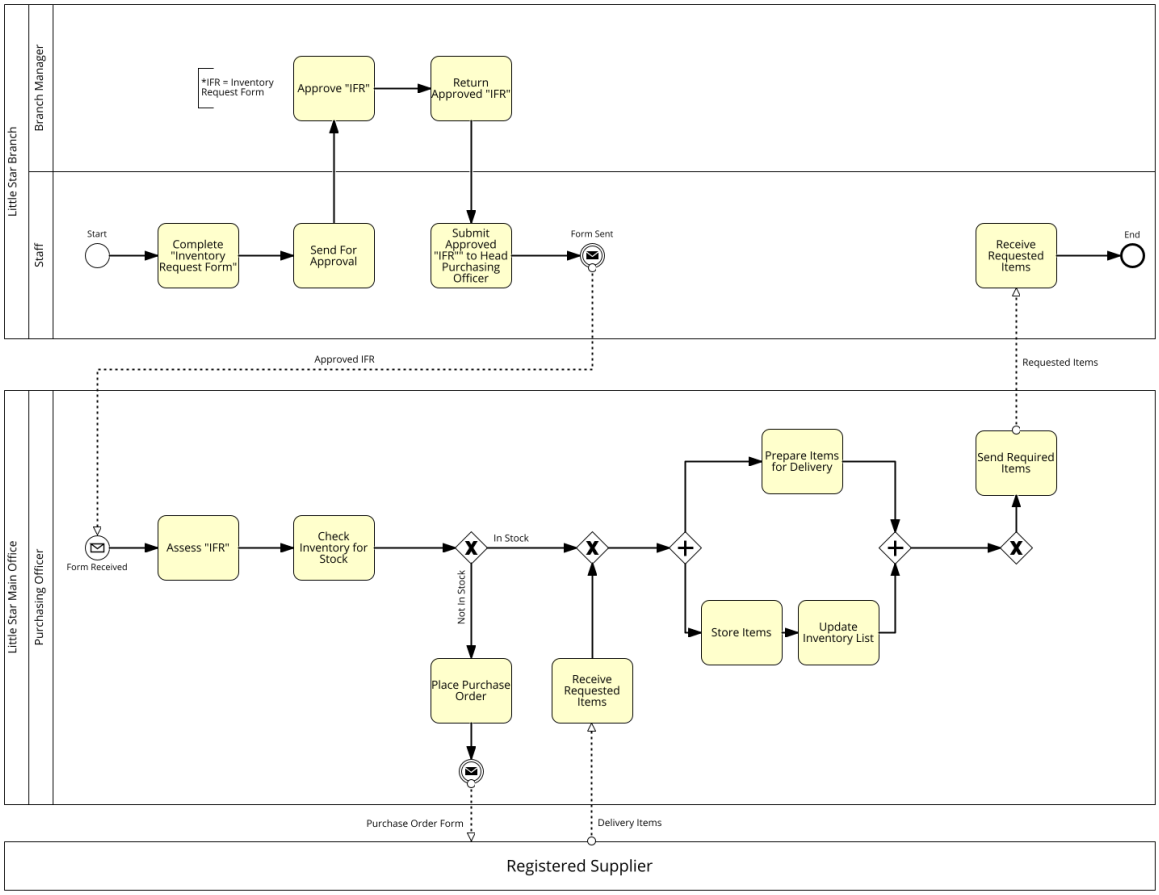
The as-is process is currently a completely manual process and currently needs to go through multiple people to have a leave request actioned. To begin with a Teach staff must contact Human Resources to find out their current leave balances this can take up to 1 hour to perform. If they do not have a sufficient leave balance, then the process exists. Otherwise, if they do, they must speak to other teaching staff to find out their availabilities to see if it is feasible to take leave. If no other staff are available, the process exists as no-one is available to fill in. If a teaching staff has an adequate leave balance and has found someone who can fill in why they are away they fill in a paper-based leave form and hand it to their supervisor for approval. The supervisor must verify the leave request form to make sure it is correct and again verify the leave availability they must then make the decision to approve or reject the leave request. If the leave request is rejected, they must notify the teaching staff and the process ends. Otherwise, if it is approved it is forwarded onto Human Resources who sends the request to the branch manager for final review. The branch manager must review the leave request and again they must then make the decision to approve or reject the leave request. If the leave request is rejected, they must notify the teaching staff and the process ends. If approved the request is sent to the Teaching staff who must scan the approval and email it to Human Resources for record keeping. Finally finishing the process.

The current process is not ideal requiring a significant amount of effort from the teaching staff to just take leave. The time of many resources is wasted as there exists a significant amount of manual processing from discovering the current leave balances to the two-step manual approval process to finally scanning in, emailing, and archiving the approved leave request.



Process Analysis

The as-is process currently has multiple problems throughout. To begin with, the form that the parents are completing to start the fee payment process takes 15 minutes to fill in which is a large amount of time to be spent on paperwork each visit. If this form is not complete, then they exit the queue and must finish filling it in since it takes so long to fill in. Once the payment clerk has the form, the payment clerk being a type of counter staff, they then must use the information on the form to search for the student payment files which takes a substantial amount of time as the payment student files are all paper based, being a needle in a haystack scenario. Once the payment files are found for the student, the form is checked against the payment files to see if payment is required for the product the form specifies. If it isn't then the parent has to leave the queue and either refills out a form they have incorrectly done or leaves. If payment is needed then the total payment is calculated using the student payment files with what is owing, usually how many hours the child was in care and what the rate was. Once this has been calculated the parent is offered to pay via the payment method on the form. If it is cash, then the parent provides cash. If it isn't then the parent provides payment information, and the bank sends the money to Little Star. If Little Star does not receive the money within a two-minute window, then the parent must leave the queue and try again. If payment is received then an invoice is generated, marking the fee as paid, and the invoice is issued to the parent. It is strange to issue an invoice since invoices are usually business items and also as a request for payment not after payment has been made. However, this is semantics as they can also be used as a receipt. It is not obvious what the 'receipt' section on the form is as it is not marked but it is assumed that it is the "For Office Staff Only". The form is assumed to be kept as proof of payment and record keeping. From interviews, it was gathered that monthly audits also occur to double-check payments and for entering the forms into records.



Process Analysis

The current process for Inventory management is straightforward, however, it is extremely manual and has activities that causes the current problems that is resulting in the inefficiency of the processes within Inventory Management. The process begins with the staff completing a paper-based inventory request form which they are required send by email to have approved by the branch manager. When approved, the branch manager returns the request form to the staff that requested, in which the form then gets send to the main office of Little Stars for review and assessment by the head purchasing officer. The use of paper forms, which is already a prevalent problem across other processes within Little Stars, along with the multiple form passing, causes an irrelevant waste of time, which causes the inefficiency within the process. Once the purchasing officer has reviewed the form, they then proceed to check the inventory for stock in a spreadsheet which is manually maintained. If the items are in stock, the items are prepared for delivery and the inventory list is updated which gets sent by a selected courier for delivery back to the branch that requested the items. However, if stock is not available, the purchasing officer requests a purchase order through one of the registered suppliers. In which the process proceeds as normal once the stock has arrived at the main office. Items are stored and prepared, and inventory list is updated, finally shipping the requested stock to the respective branch, concluding the process.

4. Requirements Analysis

4.2 Assumptions & Constraints

Jason Dau

Assumptions

- It is an assumption that Little Stars has or will procure or lease any IT infrastructure that is required for the project. This includes but is not limited to Servers, Networking, Internet, and Desktops.
- It is an assumption that all current staff members will be on-boarded into the new system
- It is assumed that Little Stars will have a training process to make sure that all current and future staff are taught how to use the system
- It is assumed that if there are any laws and/or regulations regarding the leave process that they be included in the new system
- Finally, it is assumed that the leave management system's reporting will integrate into the systems reporting and record keeping processes.

Constraints

- As Little Stars is currently paper based transferring over all open and pre-existing leave requests must be done manually. This conversion process will be time consuming.
- It is a constraint that Teaching Staffs skill tags are maintained accurately. As the new system will use this information to check availability if it is not accurate availability issues will arise.
- It is a constraint that staff swap over to the new system when it goes live as paper-based forms will no longer be processed. Therefore, it is essential that staff are comfortable with and up to speed by go live.

Declan Barrett

Assumptions

- It is an assumption that Little Stars will be able to both hire developers and provide these developers with the hardware necessary to build the new fee payment system. IT hardware such as routers, servers and terminals will be able to be purchased and delivered to both the development team and the payment clerks who will be using the new system.
- Another assumption is that the inventory management system will be able to handle the digitizing of the fee payment system. There will be a need for the fee payment system to interact with the inventory management to handle the supplies that are purchased through it and have these items given to students and parents.
- It is assumed that the staff will be able to be trained to enter information in the new fee payment system and that all stakeholders, payment clerks, software developers and head office will all be cooperative in this training process.
- It is assumed that the head office has been assigned enough time and budget to complete the development of the project based on the enthusiasm of the CEO and the interview conducted with a member of the board.
- It is assumed that the software developers being hired to create the new fee payment system will have enough skill to make it and integrate the existing payment methods so that the new fee payment system can completely replace the old one.

Constraints

- Due to the number of students that are at Little Stars and the dual nature of both the student payment files as well as the fee forms being stored, the conversion of these documents to the new fee payment system will take a long time.
- Payment clerks could see the upgrade in systems as making them somewhat redundant and worried about their job security. This is especially so since the new fee payment system will allow parents to pay for their parent's tuition and supplies from home. Payment clerks may become uncooperative with the changes, either giving false or misleading information to the BA and development teams to stall progress so that completion falls outside the range of time (6 months) to have the system creating results.
- It is a constraint on the system that cash is still used a lot and thus the counter clerks will still be needed to handle the manual cash payments and entering in the payment information into the fee payment system rather than the entire system be available online and happening automatically. In line with this, it is a constraint that those manually using cash will also have trouble adapting to a robotic system such as self-checkout and thus it will not be implemented.
- The accuracy of the information given in requirements elicitation may be minimal for those parents who filled out the forms due to the current fee payment system requiring 15 minutes of form filling and even longer times in line waiting and at the counter attempting to pay. Parents are busy and may not give accurate responses since these surveys would add to the paperwork that they were already doing.

Jericho Maniquiz

Assumptions

- It is an assumption that Little Stars will hire the IT developers that has the sufficient skills to replace and implement the new Inventory Management System. Furthermore, it is assumed that Little Stars will buy or have the necessary hardware needed by the IT developers to build the new Inventory Management System. This will include hardware such as computers, routers etc.
- It is an assumption that the Operations Manager will inform all the registered suppliers about the necessary information that the registered suppliers need about the new Inventory Management system such as the new process for purchasing items. Other information such as timelines and project progress is also assumed to be the responsibility of the Operations Manager to relay the necessary information to the registered suppliers.
- It is assumed that the staff will be trained to use the new Inventory Management System based on the relevant features for the staff.

Constraints

- Since Little Stars currently has no proper IT system for Inventory Management, the migration of information may hinder the progress of the project depending on the given time available to develop the potential solution.
- The technical skills of the current staff may be a constraint depending on the amount of required training is needed to be done in order to have the staff use the new system in the most efficient way possible.
- The hardware that Little Stars currently has or will purchase for the new system may cause problems during or after development depending on the number of resources and budget that Little Stars is currently willing to allocate.
- Any childcare or government laws and regulations may be a constraint depending on the information system standards that are employed.

4.3 Prioritised Solution Requirements

Jason Dau

ID	Source	Business Requirements
BR1	Teaching Staff CEO/Board	80% reduction in the turnaround time from leave form submission to approval
BR2	CEO/Board	A 95% percent reduction in the usage of paper-based forms within 2 years

The Business requirements were derived from 1.2 Project Goals & Objectives. Which was derived from the original scenario provided by Little Stars. These requirements directly relate to the leave management system and what Staff expect the new Leave Management system to do.

ID	Source	Stakeholder Requirements
SR1	CEO/Board	The new leave management system must allow user management
SR2	Teaching Staff	The new leave management system must allow creation of leave requests
SR3	Teaching Staff	The new leave management system must be able to show all submitted leave requests
SR4	Supervisor Branch Manager	The new leave management system must allow the approval of submitted leave requests
SR5	Teaching Staff	The new leave management system must show remaining leave balances
SR6	Supervisor Branch Manager HR	The new leave management system should automatically check availability for a submitted leave request
SR7	Supervisor Branch Manager HR	The new leave management system must allow for the display of all submitted leave requests belonging to a given user
SR8	Teaching Staff	The new leave management system should notify the submitter of the outcome
SR9	Supervisor Branch Manager HR	The new leave management system should produce an availability report at demand
SR10	CEO/Board	The new leave management system must allow leave values to be updated

The stakeholder requirements are the high-level features the stakeholders expect from a new leave management system. Delivering these requirements helps to meet the business requirements & objectives.

SRID	FRID	Source	Functional Requirements
SR1	**FR1**	CEO/Board	The new leave management system must allow the creation of user Accounts based on user roles
	FR2	Software Developers	The new leave management system must allow users to maintain their login credentials
	FR3	Software Developers	The new leave management system must prompt a user if their login credentials are incorrect with the message “Login Credentials are incorrect, please check and try again”
	FR4	Software Developers	The new leave management system must login a user if their login credentials are correct
SR2	**FR5**	Teaching Staff Software Developers	The new leave management system must allow for the creation of a leave request with the following details: - Leave Type – Mandatory – Annual or Sick - Start Date – Mandatory – Valid Date - End Date – Mandatory – Valid Date - Comments – Optional - Text
	FR6	Teaching Staff	The new leave management system must allow updates to be made to unapproved leave requests
	FR7	Teaching Staff	The new leave management should allow an unapproved leave request to be cancelled
	FR8	Supervisor	The new leave management system must assign a leave request to the teaching staff’s supervisor once submitted
SR3	**FR9**	Teaching Staff	The new leave management system must show all leave requests belonging to the user. The following must be visible: - Type - Start Date - End Date - Approval Status
	FR10	Teaching Staff	The new leave management system should navigate to a given leave request if it is selected from the “leave requests” screen.
SR4	**FR11**	Supervisor Branch Manager	The new leave management system must allow a pending leave request to be approved or rejected.
	FR12	Branch Manager	The new leave management system must assign an approved leave request to the branch manager if approved by a supervisor.
	FR13	CEO/Board HR	The new leave management system must deduct the leave hours from the submitters leave balance for the submitted leave type.
	FR14	Supervisor Branch Manager	The new leave management system should show the staff availability on the leave request screen.
SR5	**FR15**	Teaching Staff	The new leave management system must show remaining leave balances with the following details: - Leave Type - Remaining Balance in Hours - Refresh Date
SR6	**FR16**	Supervisor Branch Manager HR	The new leave management system should show staff availability for a given date range. The following information should be visible: - Name - Available From - Available To - Skills

	FR17	Supervisor Branch Manager HR	The new leave management system must show the number of available staff members and their skills for a given date range.
SR7	**FR19**	Supervisor Branch Manager HR	The new leave management system must show the leave requests submitted by a particular staff member. The following must be visible: - Type - Start Date - End Date - Approval Status
SR8	**FR20**	Teaching Staff	The new leave management system must notify the submitter of the leave request on final approval or rejection.
	FR21	HR	The new leave management system must notify Human Resources on final leave request approval
SR9	**FR22**	Supervisor Branch Manager HR	The new leave management system should have the ability to produce a report on demand
SR10	**FR23**	CEO/Board	The new leave management system must allow for the hours of leave to grant each month to be configurable
	FR24	CEO/Board	The new leave management system must update the staff's leave balance every month

The functional requirements provide details on how the stakeholder requirement are to be implemented and achieved. This list should be a minimum starting point for the software developers to implement the stakeholder requirements.

SRID	NFID	Source	Non-Functional Requirements
SR4	**NF1**	Software Developers & Supervisor	The new leave management system must not allow Teaching Staff to approve there own or others leave requests
All	**NF2**	Software Developers	The new leave management system must not take any longer than 15 seconds to perform any action on the system
All	**NF3**	CEO	The new leave management system should have an uptime of 99%
All	**NF4**	Software Developers	The new leave management system must use HTTPS on the website / portal
SR1	**NF5**	Software Developers	The new leave management must use Argon2 for password encryption
All	**NF6**	Teaching Staff	The new leave management system must have at least one computer available to staff members to process and action leave

The non-functional requirements detail requirements that cannot be implemented by direct functionalities but are still required for the overall solution to meet the stakeholder requirements. They range from security based (NF1, NF4, NF5) to system availability.

ID	Source	Business Requirements
BR1	Parents & Board	Reduce the average wait time in payment line from 10 minutes to 1 minute within 6 months
BR2	Clerks & Board	Reduce the time it takes for clerks to process a payment by 80% within 6 months
BR3	Board	Have all current students have parents with online accounts within 5 months
BR4	Board	95% reduction in paper form usage company-wide within 2 years

The business requirements are from the project goals and objectives which were derived from the scenario description. These are the business requirements that relate to the fee payment system in regard to what the board, parents and clerks expect of the new fee payment system. Time estimates were derived from the interviews conducted in information gathering.

ID	Source	Stakeholder Requirements
SR1	Parents & Payment Clerks	The new fee payment system must allow for the creation of parent accounts
SR2	Parents & Payment Clerks	The new fee payment system must allow for the payment of outstanding fees via an online portal accessible online
SR3	Parents & Payment Clerks	The new fee payment system must allow the purchasing of products
SR4	Payment Clerks	The new fee payment system must produce invoices for fee payments
SR5	Parents	The new fee payment system should allow for bookings to be made for the casual day care service via an online portal accessible online
SR6	Board	The new fee payment system must allow for the changing of product costs
SR7	Board	The new fee payment system should enable site usage information to be viewable

The stakeholder requirements are the overall features that the stakeholders expect from the new fee payment system without delving int the functionalities of the new fee payment system. These requirements will help achieve the business requirements via being the requirements for the new system, again from the parents, payment clerks and boards perspective. Each of these stakeholder functionalities will need to be implemented for the new fee payment system to achieve the business objectives, with their functional implementation requirements being specified below.

SRID	FRID	Source	Functional Requirements
SR1	**FR1**	Parents & Payment Clerks	The new fee payment system must allow for the creation of parents' accounts with the parents' details which include the parent's name, student numbers, student names, email, phone number and address
SR1	**FR2**	Parents & Payment Clerks	The new fee payment system should allow for the editing of parents' details that is stored in a parent account including the parent's name, student numbers, student name, email, phone number and address
SR1	**FR3**	Software Developers	The new fee payment system must allow users with an account to log in with a username and password
SR1	**FR4**	Software Developers	The new fee payment system should display the error message "password entered was incorrect" when an incorrect password attempt occurs

SR1	**FR5**	Board	The new fee payment system must allow for 'parent', 'clerk' and 'management' to be separate account types with separate functionalities
SR1	**FR29**	Software Developers	The new fee payment system must allow for the creation of 'clerk' and 'management' accounts with a username and password by the Software Developers
SR1	**FR6**	Payment Clerks	The new fee payment system must allow clerks to search for a parent's accounts via either their • Name • Student Name • Number
SR2	**FR7**	Payment Clerks	The new fee payment system must display a list of all outstanding payments for a specific parent once that parent's account has been selected
SR2	**FR8**	Payment Clerks	The new fee payment system must display a list of all outstanding payments for a specific student once the child has been selected underneath a parent's account
SR2	**FR9**	Payment Clerks	The new fee payment should display the error message "no account found" if a search is made for an account but no accounts match that search
SR2	**FR10**	Payment Clerks	The new fee payment system must allow for the selection of an outstanding payment to see how much money is needed to be paid for it
SR2	**FR11**	Parents	The new fee payment system must allow payment information for • Credit Cards • Debit Cards • B-Pay to be entered into it so that money can be taken from that payment method to pay for an outstanding payment
SR2	**FR12**	Parents	The new fee payment system must allow for the storing of entered payment information for a payment method so that the payment information can be used for that payment method in the future
SR2	**FR13**	Parents	The new fee payment system should allow for tuition to be paid recurring every month without parent input from the payment information stored for a payment method
SR2	**FR14**	Payment Clerks	The new fee payment system must allow for fees to be marked as 'paid' by clerks
SR3	**FR15**	Parents	The new fee payment system must display a list of products with how much they cost on the 'products' page
SR3	**FR16**	Parents	The new fee payment system should allow for the purchasing of a product selected out of the list of available products
SR3	**FR17**	Purchasing Officer	The new fee payment system could send purchase orders with the purchased product quantity to the new inventory management system
SR4	**FR18**	Payment Clerks	The new fee payment system must allow the generation of an invoice for an outstanding payment that has been paid
SR4	**FR19**	Payment Clerks	The new fee payment system must allow for the printing of a generated invoice in a standard A4 format
SR5	**FR20**	Parents	The new fee payment system should display a view of times that are available for the casual day-care service
SR5	**FR21**	Parents	The new fee payment system should allow bookings to be made for the casual day-care service at times when the casual day-care service is available
SR5	**FR22**	Parents	The new fee payment system could show the number of slots left for students in a casual day-care service period
SR6	**FR23**	Board	The new fee payment system must allow for editing the product cost displayed in the list of products from a management account

SR6	**FR28**	Board	The new fee payment system must allow for adding products to the displayed list of products from a management account
SR7	**FR24**	Board	The new fee payment system should display the total times each page of the website was viewed to management accounts
SR7	**FR25**	Board	The new fee payment system should enable the viewing of how often each product is purchased from management accounts
SR7	**FR26**	Board	The new fee payment system could enable the viewing of which parents' accounts have payments which are overdue from management accounts
All	**FR27**	Software Developers	The new fee payment system must check that: • The search field is alphabetic or numeric • The name field is alphabetic • The addresses are within Australia only • The address field to be either alphabetic or numeric • The phone number is numeric • The cost field is a positive decimal number • The card number is numeric

The functional requirements listed detail the functionalities needed for each of the stakeholder requirements to be achieved. This list should fully satisfy the developers requirements for what requirements to implement. Some of these functionalities such as FR27 cover all stakeholder requirements while the rest are placed underneath the stakeholder requirements needed. The stakeholder requirements neatly organise the functional requirements into features which could be used in project release plans. The use of 'and' in these requirements is not for compound purposes but to list multiple categories that will be needed in a single requirement. Dot points are used for sub-requirements as listing out each requirement separately would confuse that they are part of a singular requirement that requires all of them to be complete similar to the example given in Lecture 5 Slide 16.

SRID	NFID	Source	Non-Functional Requirements
SR1	**NF1**	Software Developers	The new fee payment system must not show parent information to other parents
SR1	**NF2**	Software Developers	The new fee payment system must not allow parents to use the account features of management and clerk accounts
SR2	**NF3**	Payment Clerks	The new fee payment system should take no longer than 5 seconds to search for a parent account
SR7	**NF4**	Software Developers	The new fee payment system should take no longer than 2 seconds for any internal database call
SR7	**NF5**	Software Developers	The new fee payment system should have an uptime of 98%
SR7	**NF6**	Software Developers, Legislators	The new fee payment system must use HTTPS on the website
SR1	**NF7**	Software Developers, Legislators	The new fee payment system must use SHA-256 password encryption
SR4	**NF8**	Payment Clerks	The new fee payment system could have two computers in the payment office dedicated to the new fee payment system
SR2	**NF9**	Payment Clerks	The new fee payment system should take a maximum of 30 seconds to have payment confirmed once payment has been provided
SR6	**NF10**	Board	The new fee payment system should refresh all current sessions with new price information within 30 seconds of an update being made

The non-functional requirements are detailing requirements that cannot be directly implemented by functionalities but still need to be in the solution to meet the stakeholder requirements. A lot of these are common sense like NF7 where the lack of including it would cause unnecessary risk and thus external codes of conduct exist to prevent harm to users.

Jericho Maniquiz

ID	Source	Business Requirements
BR1	CEO/Board	95% reduction in paper form usage company-wide within 2 years
BR2	CEO/Board	80% reduction in the turnaround time for inventory request form submission to approval
BR3	CEO/Board	Improve efficiency of stock request fulfilment and stock management by 80%

ID	Source	Stakeholder Requirements
SR1	Staff/ Purchasing Officer/ Branch Manager	The new Inventory Management system must have inventory request forms digitalized
SR2	Staff/Purchasing Officer/ Branch Manager	The new Inventory Management system must allow for easier inventory request form approval in between each user
SR3	Purchasing Officer	The new Inventory Management system must allow for automatic stock level updates in the inventory list
SR4	Purchasing Officer	The new Inventory Management system must allow for easier searching and ordering through the registered suppliers
SR5	Purchasing Officer	The new Inventory Management system must allow for easier stock searching and checking
SR6	Staff/Purchasing Officer	The new Inventory Management system must have a way to monitor the progress of a request

SRID	FRID	Source	Functional Requirements
SR1, SR2	**FR1**	Staff/Purchasing Officer/ Branch Manager	The new Inventory Management system must be digitalized with different levels of access depending on the user
SR1	**FR2**	Staff/Purchasing Officer	The new Inventory Management system must have the Inventory Request Form digitalized with the same information as the paper-based Inventory Request Form such as fields for: requested by, department, order date and time, date and time required, purpose, branch, item, specifications, and quantity
SR2	**FR3**	Staff/Purchasing Officer/ Branch Manager	The new Inventory Management system must alert the respective users when a form is needed for approval, has been approved
SR5	**FR4**	Purchasing Officer	The new Inventory Management system must have a sophisticated search feature, additionally when scanning any items, the inventory list must display all necessary details about the item
SR3	**FR5**	Purchasing Officer	The new Inventory Management system must be able to automatically update the quantity of an item in the inventory list when new stock gets scanned
SR4	**FR6**	Purchasing Officer	The new Inventory Management system must have a dedicated page with all the registered suppliers and a feature to search any item to see what stock each supplier has and a link that goes to each of their respective ordering forms.
SR6	**FR7**	Purchasing Officer	The new Inventory Management system must notify and display a visual indicator of the progress of a request if it is fulfilled, on track, late, or rejected.
SRID	**NFID**	**Source**	**Non-Functional Requirements**
ALL	**NF1**	Software Developers	The new Inventory Management system must not allow staff to have the same level of access as purchasing officer

SR3, SR5	**NF2**	Software Developers	The new Inventory Management system must take no longer than 2 seconds for any internal database calls and updates
SR4	**NF3**	Software Developers	The new Inventory Management system must take no longer than 10 seconds to search for any stock availability from any of the registered suppliers

4.4 Prioritised Requirement Traceability Matrix

Jason Dau

Business Requirement			**Stakeholder Requirement**			**Functional Requirement**			
BRID	**Stakeholder**	**Requirement**	**SRID**	**Stakeholder**	**Requirement**	**FRID**	**Requirement**	**Priority**	**Dependency**
BR1	Teaching Staff CEO/Board	80% reduction in the turnaround time from leave form submission to approval	SR1	CEO/Board	The new leave management system must allow user management	**FR1**	Account Creation	**M**	
						FR2	Account Management	**M**	FR1
						FR3	Login Verification	**M**	FR1, FR2
						FR4		**M**	FR1, FR2
			SR5	Teaching Staff	The new leave management system must show remaining leave balances	**FR15**	Display Leave Balances	**M**	
			SR6	Supervisor Branch Manager HR	The new leave management system should automatically check availability for a submitted leave request	**FR16**		**S**	
						FR17	Staff Availability	**M**	
			SR7	Supervisor Branch Manager HR	The new leave management system must allow for the display of all submitted leave requests belonging to a given user	**FR19**	Display Leave Requests	**M**	FR5
			SR8	Teaching Staff	The new leave management	**FR20**	Approval Notification	**M**	FR11
						FR21		**M**	

					system should notify the submitter of the outcome				
BR2	CEO/Board	A 95% percent reduction in the usage of paper-based forms within 2 years	SR2	Teaching Staff	The new leave management system must allow creation of leave requests	**FR5**	Submit Leave Request	**M**	
						FR6	Maintain Leave Request	**M**	FR5
						FR7		**S**	FR5
						FR8	Leave Request Approval	**M**	FR5
			SR3	Teaching Staff	The new leave management system must be able to show all submitted leave requests	**FR9**	Display Leave Requests	**M**	
						FR10		**S**	FR9
			SR4	Supervisor Branch Manager	The new leave management system must allow the approval of submitted leave requests	**FR11**	Leave Request Approval	**M**	FR5
						FR12		**M**	FR11
						FR13	Leave Balance Maintenance	**M**	FR12
						FR14	Staff Availability	**S**	
			SR9	Supervisor Branch Manager HR	The new leave management system should produce an availability report at demand	**FR22**	Leave Reporting	**S**	
			SR10	CEO/Board	The new leave management system must allow leave values to be updated	**FR23**	Leave Balance Maintenance	**M**	
						FR24		**M**	

The traceability matrix links the business requirements to the stakeholder requirements and the stakeholder requirements to the functional requirements. The matrix also clearly outlines the functional requirements that are either ‘must haves’ or ‘should haves’ along with the dependencies on each other. All functional requirements are dependant on FR1-FR4 being completed as they all require a user account.

Business Requirement			Stakeholder Requirement			Functional Requirement			
BRID	**Stakeholder**	**Requirement**	**SRID**	**Stakeholder**	**Requirement**	**FRID**	**Requirement**	**Priority**	**Dependency**
BR1	Parents & Board	Reduce the average wait time in payment line from 10 minutes to 1 minute within 6 months	**SR2**	Parents & Payment Clerks	The new fee payment system must allow for the payment of outstanding fees via an online portal accessible online	**FR7**	List outstanding payments by parent	M	FR1
						FR8	List outstanding payments by student	M	FR1
						FR9	Search error	S	FR1
						FR10	Select outstanding payment	M	FR7, FR8
						FR11	Pay outstanding payment	M	FR10
						FR12	Store payment information	M	FR1
						FR13	Recurring payments	S	FR12
						FR14	Marking as paid	M	FR1
						NF3	Quick search time	S	FR1
						NF9	Quick payment time	S	FR10
			SR5	Parents	The new fee payment system should allow for bookings to be made for the casual day-care service via an online portal accessible online	**FR20**	View available times	S	FR1
						FR21	Book day-care	S	FR20
						FR22	Show slots left	C	FR21, FR20
BR2	Clerks & Board	Reduce the time it takes for clerks to process a payment by 80% within 6 months	**SR3**	Parents & Payment Clerks	The new fee payment system must allow the purchasing of products	**FR15**	List product cost	M	FR23
						FR16	Purchase products	S	FR15
						FR17	Send purchases to inventory	C	FR16
			SR4	Payment Clerks	The new fee payment system must produce invoices for fee payments	**FR18**	Generate invoices	M	FR11
						FR19	Print invoices	M	FR18
						NF8	Two clerk computers	C	
BR3	Board	Have all current students have parents with online	**SR1**	Parents & Payment Clerks	The new fee payment system must allow for the creation of parent accounts	**FR1**	Create user accounts	M	FR5
						FR2	Edit user accounts	M	FR1
						FR3	Log in to accounts	M	FR1

		accounts within 5 months				**FR4**	Error wrong password	S	FR3
						FR5	Separate account types	M	
						FR6	Search for account	M	FR1
						NF1	Prevent account information sharing	M	FR5
						NF2	Separate account features	M	FR5
						NF7	Use encryption	M	
BR4	Board	95% reduction in paper form usage company-wide within 2 years	**SR6**	Board	The new fee payment system must allow for the changing of product costs	**FR23**	Edit product costs	M	FR28
						FR28	Add products	M	FR29
						NF10	Quick edit cost time	S	FR23
			SR7	Board	The new fee payment system should enable site usage information to be viewable	**FR24**	View visit statistics	S	FR29
						FR25	View product statistics	S	FR29, FR16, FR11
						FR26	View overdue payments	C	FR29, FR14, FR11
						NF4	Quick database calls	S	
						NF5	90% uptime	S	
						NF6	Use HTTPS	M	
ALL			**ALL**	Software Developers		**FR27**	Check fields	M	

To ensure the solution conforms to the requirements a traceability matrix has been constructed which logically links the business requirements to the stakeholder requirements, and these stakeholder requirements to the functional and non-functional requirements. The dependencies of requirements and explicit marking of priority is also provided for each functionality. A lot of functionalities are dependent on the accounts that contain the functionalities needing to be created and be separate from other accounts. The next most depended upon is being able to pay an outstanding payment since this is the main functionality of the new fee payment system. All dependencies are necessity dependencies since subset requirements are listed as dot points underneath a requirement in the functionality requirements. Effort and value dependencies are not covered by the traceability matrix.

Business Requirement			Stakeholder Requirement			Functional Requirement			
BRID	**Stakeholder**	**Requirement**	**SRID**	**Stakeholder**	**Requirement**	**FRID**	**Requirement**	**Priority**	**Dependency**
BR1	CEO/Board	95% reduction in paper form usage company-wide within 2 years	**SR2**	Staff/ Purchasing Officer/ Branch Manager	The new Inventory Management system must allow for easier inventory request form approval in between each user	**FR1**	User Account Access Level	**M**	FR3
						FR3	Form Approval Status Alert Notification	**M**	FR1, FR2
			SR1	Staff/ Purchasing Officer/ Branch Manager	The new Inventory Management system must have inventory request forms digitalized	**FR2**	Digital Inventory Request Form	**M**	FR1
			SR4	Purchasing Officer	The new Inventory Management system must allow for easier searching and ordering through the registered suppliers	**FR6**	Built-in Registered Supplier Stock Search and Order	**S**	FR4
			SR6	Staff/ Purchasing Officer	The new Inventory Management system must have a way to monitor the progress of a request	**FR7**	Request Fulfilment Visual Indicator	**S**	FR3
BR2	CEO/Board	80% reduction in the turnaround time for inventory request form submission to approval	**SR2**	Staff/ Purchasing Officer/ Branch Manager	The new Inventory Management system must allow for easier inventory request form approval in between each user	**FR1**	User Account Access Level	**M**	FR3
						FR3	Form Approval Status Alert Notification	**M**	FR1, FR2

			SR1	Staff/ Purchasing Officer/ Branch Manager	The new Inventory Management system must have inventory request forms digitalized	**FR2**	Digital Inventory Request Form	**M**	FR1
BR3	CEO/Board	Improve efficiency of stock request fulfilment and stock management by 80%	**SR3**	Purchasing Officer	The new Inventory Management system must allow for automatic stock level updates in the inventory list	**FR5**	Inventory List New Stock Auto Quantity Update	**M**	FR4
			SR4	Purchasing Officer	The new Inventory Management system must allow for easier searching and ordering through the registered suppliers	**FR6**	Built-in Registered Supplier Stock Search and Order	**S**	FR4
			SR5	Purchasing Officer	The new Inventory Management system must allow for easier stock searching and checking	**FR4**	Sophisticated Inventory List Querying	**S**	FR6
			SR6	Staff/ Purchasing Officer	The new Inventory Management system must have a way to monitor the progress of a request	**FR7**	Request Fulfilment Visual Indicator	**S**	FR3

5. Conclusion

In summary, this business analysis report covered the current business situation of Little Stars, along with methods in which the Business Analyst team used to gather information in order to develop and provide Little Stars a potential solution using technology and information systems. Analysis of Little Stars current background, goals and objectives was first done. A problem statement was then developed which outlined and gave a high-level understanding of Little Stars current process issues.

A needs assessment was then produced utilising different methods of analysis which allowed for further identification and understanding of business goals and the needs, problems, and opportunities for Little Stars. This gave an insight as to how to approach the project and fill in the gaps of the current situation within Little Stars and what they want in the future.

Requirement's elicitation was then conducted in order to obtain further information from the stakeholders. It was conducted to get their needs and requirements for the new system. Additionally, upon gathering more information from each stakeholder, it gave the Business Analyst team a further understanding of the current organizational environment within Little Stars and allowed the team to obtain more in-depth information about its current issues.

Finally, requirements analysis was done in order to develop what the new system must be capable of and the conditions and capabilities that are needed based of the given requirements of the stakeholders. The team used the requirements given by the stakeholders during elicitation and aligned it with the needs of Little Stars. Models were created in order to visualise the information gathered and to achieve further clarity and insight for the development of the solution.

In conclusion, the aforementioned analysis techniques should demonstrate and give insight on how the current business problems of Little Stars current processes could be mediated.

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