



De La Salle University • College of Computer Studies

Interview Transcripts and Problem Analysis Worksheets
Requirements Engineering

Name (last name first) : Fernandez, Austin
Quindoza, Rissa
Tan, Shayane
Velez, Gio
Poblete, Clarisse
Uy, Mervin
Angeles, Antonio
Coquilla, Bryan
Salceda, Francesco
Cote, Christian
Section : S19A
Date of Submission : January 28, 2015

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Transcript: Torrent Pharmaceuticals

Subteam 1: Angeles, Antonio; Cote Christian; Quindoza, Rissa

LEGEND:

[I]: Interviewers

[A]: MIS Analyst

NOTE: The interviews were done thru email, sent by Clarisse Poblete who knew the contact person personally. The content of the emails sent were done by Subteam 1.

INTRODUCTORY INTERVIEW

I: I am Clarisse Poblete. My groupmates (Rissa Quindoza, Christian Cote and Antonio Angeles) and I, all Computer Science students from De La Salle University, would like to ask you a few initial questions in order for us to have a background of your company as well as an idea what we can do to help. This is to aid us in the design of a software system that is tailored to your company's needs. Generally, what does the company do?

A: Torrent Pharma Philippines Inc. (TPPI) is a pharmaceutical company. We distribute our products to drug stores companies like Mercury Drug, SouthStar, Watsons, Actimed and TGP.

I: Are there tasks that you still do manually that could possibly be done through a system? Are you using any systems or programs that are unsatisfactory or may need any improvements?

A: Every month, these companies gives us a report of our products which they have received from the previous month, we call it "Transfer Reports". From each transfer reports, we are mapping it to our Territory Codes. We do this only in excel.

I: Lastly, do you have any requests regarding the system to be designed?

A: If your team chose TPPI to design a software, I would like you to design a software, where we can just import the raw data of transfer reports and it will be automatically mapped to our territory codes.

FIRST INTERVIEW

I: We thank you for your quick reply. We would like to ask you a few more questions in order to help us understand more of your data and processes, as well as have a glimpse of the problems you are encountering. What sorts of reports are mapped into the Territory codes? May we see examples of each report?

A: In the attached file "MDC Sample raw to processed", sheet "Raw", is the data we received from mercury, and on the other sheet is the mapped data. You can notice that sheet 'raw' has 11,337 lines of data, while sheet processed has 11,367. Why? Because there are branches which being shared with 2 territory codes (you can see it on the remarks).

What we did here is:

1. Identify the branches for sharing.
2. In the final qty column we divide the qty by 2.
3. Copy the lines and paste it below.
4. And manually update the territory code.

I: Can you please elaborate on your Territory Codes? May we see examples of it?

A: Territory code is a primary key of medreps (MR). We use it to monitor the performance of our personnel of our main division, "Healthline" and "Lifeline". Territory codes for the said divisions are not the same. It is based on the Configuration.xls.

I: Are there instances when reports were revised and so the Territory Codes must be changed as well?

A: Yes, it might have an additional or reduce.

I: What kinds of users will use the system? What do they use it for (tasks/processes)? What are their restrictions (data access)? How do they interact with the other users?

A: Here the following suggested list of user categories:

Category	Access/Restriction
MR	Can view only his Account
PM	Can view MRs Account but only his product
AM	Can view MRs Account under his supervision
Boss	Can view all under his supervision + can set target
Admin	CRUD

I: What sort of reports do you want to be produced by the proposed system? What are the information in reports and their frequency of production?

A: Kindly open the 'Sales Reporting - Healthline Division - Sample.xlsx' (*This report is needed every month, and system to be developed is all about this report*). For example, in sheet 'Dist. 1 - HA', you can notice the heading "Target for the month", this is the only data can be updated by the front-end user.

I: Are there other systems that the proposed system should work in tandem with?

A: None so far.

I: Is there an existing system you would like us to look into for reference? Ideal features or ideal design?

A. I don't know if there is existing software. I'll inform you when I find one. I'm suggesting that it should have a configuration page/form for every master tables especially for; Item Master, Branch Master & User/Employee Master. And if you have additional it will be appreciated.

I: Thank you for the quick reply. Before ending this interview, we would like to summarize what we have learned from the previous set of questions.

Torrent Pharma Philippines Inc.(TPPI) is a pharmaceutical company that distribute products to drug stores companies like Mercury Drug, SouthStar, Watsons, Actimed and TGP. Every month, these companies give a report of products which they have received from the previous month called "Transfer Reports". For each transfer report, the company maps it to Territory Codes in an excel file. Territory codes are the primary key of medreps, used to monitor the performance of the personnel of the company's main divisions. Additionally, monthly sales reports are to be generated.

There are five categories of users, namely MR, PM, AM, Boss and Admin. MRs can only view their respective accounts. PMs may view MR accounts but only of their product. AMs may view MR accounts under their supervision. The boss may view all under his supervision. Lastly, the Admin has full access: create, read, update, and delete data.

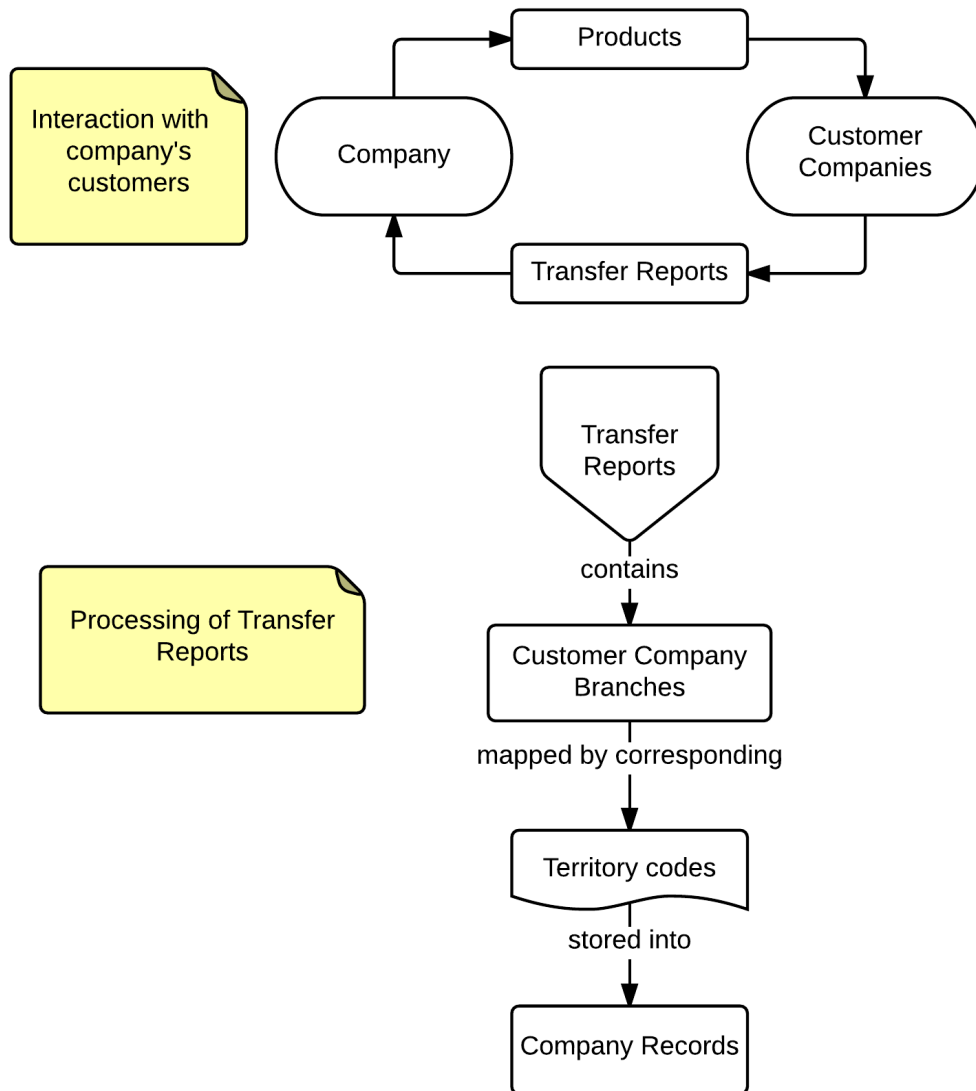
The company would like us to design a software that automates the mapping of raw transfer report data into their territory codes.

If there are any mistakes, please let us know. We will get back to you in a few days for any follow-up questions. Once again, thank you for your time.

Problem Analysis (Torrent Pharmaceuticals)

Description (What's the problem?)	Cause (What causes the problem?)	Symptoms (How do we know the problem exists?)	Impact (Why is this important? What are the consequences?)
Having to map the Transfer Reports to the Territory codes is time consuming.	The system is not automated, and therefore each entry is done manually.	Having Microsoft Excel as their current system, thus, data must be transferred manually.	The time consumed mapping the records can be spent doing other tasks.
The system is not able to handle effectively special cases such as multiple territory codes assigned to a single branch.	Having Microsoft Excel as their current system limits their capabilities.	They have to perform manual computations whenever a single branch is assigned to 2 or more territory codes.	Data integrity is at risk and causes additional work load.
Any kind of user has free access to update or view any of the files.	Having Microsoft Excel as their current system limits application of user restrictions.	There are no access restrictions in the current system.	Users will be able to modify and view files or data that they do not own, and possibly even spread the modified data to others.
There is a need for a better configuration page that allows access to other types of data such as the list of products and employees.	Having Microsoft Excel as their current system limits their capabilities.	The master tables for the Item Master, Branch Master & User/Employee Master are joined together in one file.	A configuration page would allow flexibility and ease in adding new item and employee details.
The current system is susceptible to human error.	The system is not automated, and therefore each entry is done manually.	Having to make revisions for Transport reports.	Manually mapping each entry from the Transfer Reports can affect data integrity caused by human errors.

Visualize the Process



What's the business goal? Why do they need software?

The business distributes products to drug stores and needs to keep track of these transactions, mapping the reports sent to them by their customer companies into their own records. The software aims to automate this mapping process, saving time and minimizing errors.

What characteristics should the software have?

The software must be efficient and effective at mapping the transfer reports into the company's records. It must also effectively handle different kinds of users and their respective restrictions in regards to data access. It should also allow customization as well as revisions for the data, reserved for specific types of users.

Transcript: CAI-STA

Subteam 2: Poblete, Clarisse; Tan, Shayane; Coquilla, Bryan

Shayane - S

Austin - A

Clarisse - C

Bryan - B

Ms Fernandez - F

S: How the process of—

F: Purchase? Okay. We have, okay. Brief explanation lang? We have a partner in US. So they get us our clients. Marketing **** So we also have list of purchase. So the requirements from the clients are parang data gathering, stuff like that. So they discuss things like software, hardware, internet connection and once it's final, they send it through me then I'll be the one to source it out. So I make a P.O., pero simple lang pero I use Excel only. We're the ones pala who developed ATM, the Bancnet, also the LTO registration. We're part of a team kaya lang we don't have enough time to our own inventory kasi it's not earning money. So upon request, sinosort out yan and I make the P.O. using Excel only and then before the inventory system is online from U.S. but it's too slow and so many data that we don't need kasi sa kanila kasi online, the DELL laptops online so we even we say So we want to make it simpler, what we need lang is the model for the or we'll start na lang from the purchase order? So we did this a.. you want to see? Gusto nyo macheck na? Uh sige. Kita niyo naman eh so this one is the P.O. number, hard for hardware, soft for software, gen for general items so gusto ko sana the numbering is automatic what do you call that?

S: Auto-increment

F: so yeah para di nagdodouble ung bill so nagdrop down sya para kapag kung hardware yung ipupurchase ko yeah then ah there's name so ayun and then check to wherever if there's some modification then ito palang kasi so item description, 123, unit price, the total with vat and the grand total with the signature, this is me, purchase manager and then the president. Eto pala yan, parang yung condition, these are the things that I need lang.

S: So ano..

F: So we can give you a copy sa excel para automatic nagcocompute yung ano

S: So aside from you who else, other types of users who can have..

F: I'm the only one

S: So what, aside from editing or putting the necessary information in the purchase order are you also the one parang nagaadd ng customer?

F: Yeah

S: Yung parang other products?

F: Yeah, I canvass it, different suppliers. I pick up the lowest bidder not exactly the low quality then I make the P.O. out of the (quotation?) So hindi na computerized yan kasi it's manual. So parang final na, nasa akin na yung chosen supplier and I'll be the one to input or to input their address and contact but if we can regular suppliers if can just pick it up. I don't have to worry. Pwede ba yun?

S: So kelangan po namin ng parang I think ng list ng suppliers ng data?

F: Yung regular, or later on I can edit it or add. So clear tayo sa purchase order it's very simple so and then when the time na it was delivered already, that's the time na I want it computerized to the inventory system. Asset, We call it Asset Management. So for example, dineliver laptop, a laptop has specs, and then service tag number para kapag sira sya you just give the service tag number to the supplier and they know kung anong warranty nyan. And then we have an asset tag, this is for our own use. Alam namin through asset tag kung kanino sya nakaassign. So ang lalabas dun yung item description, asset tags, service tag number and data of delivery.

S: Gano po ka-frequent yung ***** sa purchase nyo

- F: Purchase? It depends kung anong dating ng project. May time na ang dami dami. May time na ilang months wala
- S: Are there any business rules po na may influence po or may effect po sa data? Descriptions parang ganun. Parang ano, let's say, let's say kunwari sa faculty. Kunwari 15 units yung load nila, sa pagka purchase order po, parang may business rules po kayo?
- F: Wala naman, wala naman kaming business rules. Although for the equipment I want something that kasi 1 equipment kapag dineliver yan may 5 yrs warranty I want it parang may tracking kung yung warranty when magstart at matatapos. Parang kasi after 5 yrs kapag nasira siya hindi mo na ipapagawa it's more expensive Pero when it's under warranty pwede mo pa syang ipagawa sa supplier but you have to know, kasi yung mga desktop hindi mo na babaligtadin para malaman mo kung anong service tag number nya so kapag sinabi yung asset number eto na yung ano dapat may record. Right now kasi a simple
- S: Ms, Tanong lang po. Diba kayo po nageedit ng, basta main editor ng purchase order?
- F: Ako lang yung purchase order, ako lang nageedit then sinasubmit ko sya. Anong nagvoview ng P.O.? AKo lang. And then yung president. Pero yung inventory
- S: Sino sino po sila?
- F: Yung inventory, yung technical namin kasi when nadeliver kapag dumating yung delivery go straight to them they'll be the one to input yung mga details ng ... I double check their work kung tama yung inventory namin diba. Although kasi the boss will go to me, although we have these hardware the boss will not go to them, that's why I review their work para alam kung. Pero now if you have the system, if we have the system, pwede ko ng iview itype ko yung dell 620, ayan parang date of purchase, may end of warranty, hardware specs..
- S: yun po yung format ng inventory?
- F: since we don't have inventory system I'm using lang Excel para nasosort out ko sya kaya ganyan lang. I don't know papano nyo ba to gagawin pero yung report na kelangan sometimes ganyan. Eto yung username, eto yung model, service tag, asset tag, date of warranty so eto yung mga information na kelangan. May nakita akong sample. What else do you need?
- S: So if ever gagawin po namin yung system. Ano po yung platform? Ano po yung OS na gagamit para compatible po yung system na gagawin po namin sa mga computers nyo? windows or?
- F: Windows, nakawindows kami although we have linux pero kami lahat nakawindows. Nasabi mo java?
- A: Yeah
- F: Para walang license involved
- A: But you have to install java runtime environment though
- F: But we don't have to buy?
- A: No, free
- S: Sa paggawa ng mga nito, may mga ano po ba kayo, problems encountered?
- F: Problems? Ano bang favorite mong problems among klaseng problems?
- S: Para po di po namin maulit yung
- F: Ah sa inventory system before? Like I said wala pa kaming inventory system
- S: Like pag manual po may problems po ba?
- F: Wala kasi excel lang sya tas parang ano .. so syempre sa inventory system gusto ko ng security. Hindi matatamper. SO may user's may, administrator syempre. Una tayo papasok sya sa PO and as I've said kapag nadeliver pupunta

sya sa inventory system. Lahat yan manual mo yan iinput sa system Important dun is the item description like what is stated in the PO and addition lang dun is the asset tag, the service tag, the price hindi naman important sa inventory, the quantity, the warranty period. Meron syang ano. We need to know if it's available or not available or in store or yung items in store, available, in use, and junked, disposed parang disposed sira na sya so remove na sya sa inventory. Pero may history pa rin na naremove na sya sa inventory kasi junked na sya para alam mo na hindi ninakaw yung ano. Tapos the reports has the ability to export the reports in excel. Track the life cycle of assets. So pwede mo syang itrack. Track information assets with notification if the warranty is about to expire. Like for the servers which cost mga 1 million we renew it after 5 years nerereneu pa rin namin yung contract nya. So if halimbawa mga 30 days, mga dec 30 mageexpired na sya pwede ba may notification sya sakin na mageexpired na yung contract. Kaya ba yun?

B: Yes, we can do it.

F: Hm?

B: Yeah

F: So parang dun sa program parang lalabas lang parang mayroon kang puti sa taas inventory tapos contract parang nandun yung MA. We call it maintainance contract parang nakaspecify dun kasi pwede mo ipasok dun manually ah. If pwede kong ipasok dun yung items with contract. So yun yung mga kakaroon ng contract...

S: Yung items with contract po if ever ano po yung information na kelangan?

F: Start and entry sometimes pwede rin siguro yung amount pero lahat naman yan parang remarks yan. So ang drop down nyo is IT assets, non IT assets sa inventory? IT assets, non IT assets tapos asset component, software, and others, mga office supplies mga consumables, non IT na yun eh. Kuha?

C: Can you repeat?

F: ang items nyo for the inventory is IT assets pag IT assets yan yung mga equipment, non IT mga tables, chairs, office supplies, consumables, asset component uh IT component sya yung parts nung mga binili mo, software lahat na ng software. Yan lang yung drop down ng mga items nyo sa inventory.

S: Okay lang po ba clarification? So purchase reports, mga inventory tapos yung contracts

F: The contracts is information lang. Hindi mo naman ipprint yung buong contract. So kasi the contract is paper. Paper license we have a share of share holder for that. Ang kelangan lang syempre sa dami ng items, sometimes kapag namiss ko yung patay ako so gusto kong maremind. Sa US kasi meron silang ganun pero they don't want to share with us kasi may license. Dapat simple lang yung gagawin nyo. Meron akong nakita eh.. So eto parang ganito yung nakito ko dun sa ano contract.. Parang ganyan ganyan lang. Parang contract rules. parang may date from..Parang ganito..so tanggalin na natin yung mga changes para madali sa inyo so parang eto yung purchase code ng P.O., eto yung purchase order tsaka eto yung mga assets tapos pwede kayo maglagay jan ng mga computer, IT, non IT para may idea na kayo so yun na yung demo although natin kelangan yun diba... para may idea ka sa design. So this is our software..

S: Mayroon po bang mga ano?

F: Pero it's not working ha. Para meron kayong idea.

A: Do you have a centralized server for the database or ..?

F: pero this one ,standalone sya ako lang.

A: 'Cause we can either install the database here or kung nakaconnect ka sa net may local area network pwedeng ilagay yung database sa server mismo and then ethernet cable nalang

F: Pwede. Nakawifi ako. Isend ko na lang sayo. Simplehan nyo lang para hindi kayo mahirapan. Ang kelangan nyo lang na information is ganun kasimple. Tingnan mo yung warranty, iisa isahin mo pa.. Are there any?

A: Ano pa yung mga may asset tag, service tag, description dito? Laptops only.

F: Hindi lahat may asset tag. Yung mga simple items..

A: So IT assets?

F: IT assets.

A: yung components?

F: wala rin. yung mga equipments lang.

A: so sila rin yung mga may warranty?

F: lahat may warranty

A: all equipments pati yung components?

F: Yung components may warranty pero hindi ganun kaimportante... so lahat ng sample ibibigay ko nalang sayo, kung ilang digits din yung service tag...

S: yung ano lang po..

F: summary?

S: purchase order po, tapos po, for you only use excel for the PO for the purchase of order the information that you need... so yung ...tapos ano pa po yung iba?

F: Gen is for general other than software and hardware so it's general.

S: So tapos po yung number po na... So yung sa PO po yung kelangan po product description, quantity, unit price, asset, total.. tapos sa inventory?

F: once completed delivered. the items in that PO magtatally sya directly pupunta sya dun sa inventory. Although not necessarily pero para madali niyo makuha yung info.

A: after the PO what happens to get the item to the inventory?

F: because when you make the PO, the information hindi pa complete so if you receive the items, that items in the PO may iclick ka para mag go sya sa inventory. So you have to retype so andun na sya.

A: Separate yung list of items sa inventory kasi you have to transfer?

F: the inventory naman will have the info for the quantity kasi and the warranty, date of purchase pa.

S: sa inventory po yung mga information pong kelangan yung asset tag?

F: hindi una description pa nya, parang yung IT asset, non IT, classification you call that classification.

C: sorry.

A: so this is for all items? the description-the classification. Are there any special attributes for id components aside from the warranty?

F: warranty, asset tag, service tag.

A: for the components?

F: ganun din.

A: available in use, disposed?

F: sya yung san nga ba sya papasok. what do you call that. parang kapag hinanap mo yung items, for example, laptop, e620 pag you click that one lalabas sya in use,

B: status

F: status nya, assignee kanino nakaassign. kapag in use sya kanino nakaassign.

A: so that goes for all items, yung in use .. where do you get the information for assignees?

F: we assign it. manual ano din sya pero yung report lahat na sya manual entry kapag dumating items, ikikey in mo, halimbawa idesign ko sa inyo each one of you. the description, your name the description everything is included there. Pero kapag after a week I'll key in the description of this computer. Makikita ko na lahat nakaassign sa kin. So assignee, Austin Fernandez then the description.

A: so imemaintain yung list of your assignees? is there any other previous source for the list? do you retrieve it from the database or manual sya?

F: We have an IT tracking system. Once you log-in to your computer, it shows all the description in your computer, all the software. Because we're not allowed to install pirated so all the software nag-aUP yan. Although I lost my access when I changed my laptop and it's from the US so I can't access it anymore. So once you log-in to your computer makikita lahat to tapos da S. Fernandez that ganyan and all the software in my laptop. But we don't need that kasi meron na kami ngayon. Now dinadrive ko yung inventory kasi out of that IT tracking system, pwedeng may excel file yun eh so they just give me the excel file and from that parang manual kong ginagawa para pagnanghingi ng reports yung presidente I'll just give it to her. So sinend ko lahat ng info. Itong ginagawa natin is for tracking of asset lang hindi naman *** talaga. Kasi natatrack yung nakaconnect. Natatrack yung in use eh, yung nakaconnect sa network but you can not track yung mga on-stock dun sa system namin kasi yung once you log-in pero nasa stock room hindi nakikita sa inventory. That's what I want to kasi wala kaming control kung may nakapasok dun although we have cctvs so but if we have the inventory.

A: Are there any special information you need for your software?

F: we have also, the inventory is. when we use it the ** license. For example in one **** license meron syang 5 users so sumexerox kasi namin yung 5 copies na yun and we put in the individual folder with your asset tag number so it means to say na yung isang license, meron syang license key everything lahat. may inventory kami nun eh. License key, tas quantity nakaassign yun sa asset tag. Microsoft Office 2010 to parang ganun yung license sa software namin para we're sure na walang pirated na nakakalusot.

A: So yung software may asset tag din?

F: wala. ano sya quantity lang, license key.

A: yung software may assignee din?

F: pero masyadong mahirap para sa inyo yung. quantity na lang itag natin and user kasi masyadong for the software madaming information kasi yung ano eh

A: You can maintain a list of your customers?

F: yes

A: and suppliers?

F: yes. and oh it's good you mentioned. I need a project name. Project name kasi yung assignee.. Nakaencode yung project na yun.

A: how many projects can an assignee have?

F: even you have two projects you only have 1 the other *** lang. this asset tag number is assigned to you on what project.

C: so if the person had two projects will the asset be assigned to both projects or just one of them?

F: both projects.

C: ok.

A: Can equipment be assigned to someone pero wala syang project?

F: yes. may training sya. so pero kung training lang yun. we have the training. pag may training lang ** computers. pag di mo sya owner, wala kang ownership dun sa training pc. so it means to say that computer sa training room is on stock. so ang inventory nun is on stock sya. actually sa training can be assigned to, used *** anybody.

A: so during the training, who is it assigned to?

F: uh no, training pc. you call it pc, if we don't say any need for that. we assign it then we buy new ones. kasi we always get yung top of the line. Pag bumili ka you dont buy the same model kasi madaling magobsolete sya. kaya napakadaming ng models kasi we don't stick to one. pag bumili ka this week, next week iba na yung specs nya so magiiba na naman yung inventory. so yung pag project assigned..

S: so sabihin ko ulit. sorry sorry.. yung users po ikaw na po, pati yung nakakaedit.

F: ako yung user sa purchase order. ako lang yung user sa purchase order. sa inventory we can be three.

S: sino sino po ung three?

F: technical level. so sila yung mga nagaassign. sila yung mga nageexam parang technician ng computers. technical support.

A: so the technical team has access to the system?

F: sila yung nagkikeep.

A: so bigyan nalang namin sila nung software pero may password para sa kanila lang. The president can only view?

F: only receives the reports. she doesnt need to view.

A: so yung excel file lang.

F: oo

A: there are only three kinds of users: you, technical level 1 and level 2. anong difference ng level 1 and level 2?

F: mas magaling yung level 2.

A: that's it?

C: is there a difference in how much they can access in the system?

F: actually they can access it kasi if not I'll be the one to do it. so dapat may access sya anyway they're the ones maintaining the security of everything so secret naman sya.

A: they can't edit the purchase order though?

F: they have more access than I have kasi sila talaga ang may alam ng lahat ng security. so full access. except for the PO.

A: they can't edit the PO.

F: they can't

A: but they can view the PO?

F: no, ako lang.

S: so yung contract po start and end date tapos ano pa po yung ibang?

F: yun lang report.

A: contract bills with an item any of the four types?

F: only equipment

A: so IT assets

F: yes.

A: so you need the PO, the INVENTORY, the CONTRACTS, the PROJECT ASSIGNMENT is there anything else?

F: The project assignments included in the inventory, part of the inventory and the contract also is part of the inventory. everything naman ** purchase order

A: Pero kasi we can add a separate module para you can add projects tapos sa inventory drop down na lang.

F: normally naman ganun eh so there's a facility where you can add everything kasi equipment naman can be air condition, hindi naman lahat IT so may air condition pa rin yun pwedeng vehicles. so pwede kayo magsample ng ganun I'll just change it.

A: prototype?

F: yeah

A: anything else?

S: so thank you for everything thank you for the interview. if there are any more issues *** and we'll give you preview***

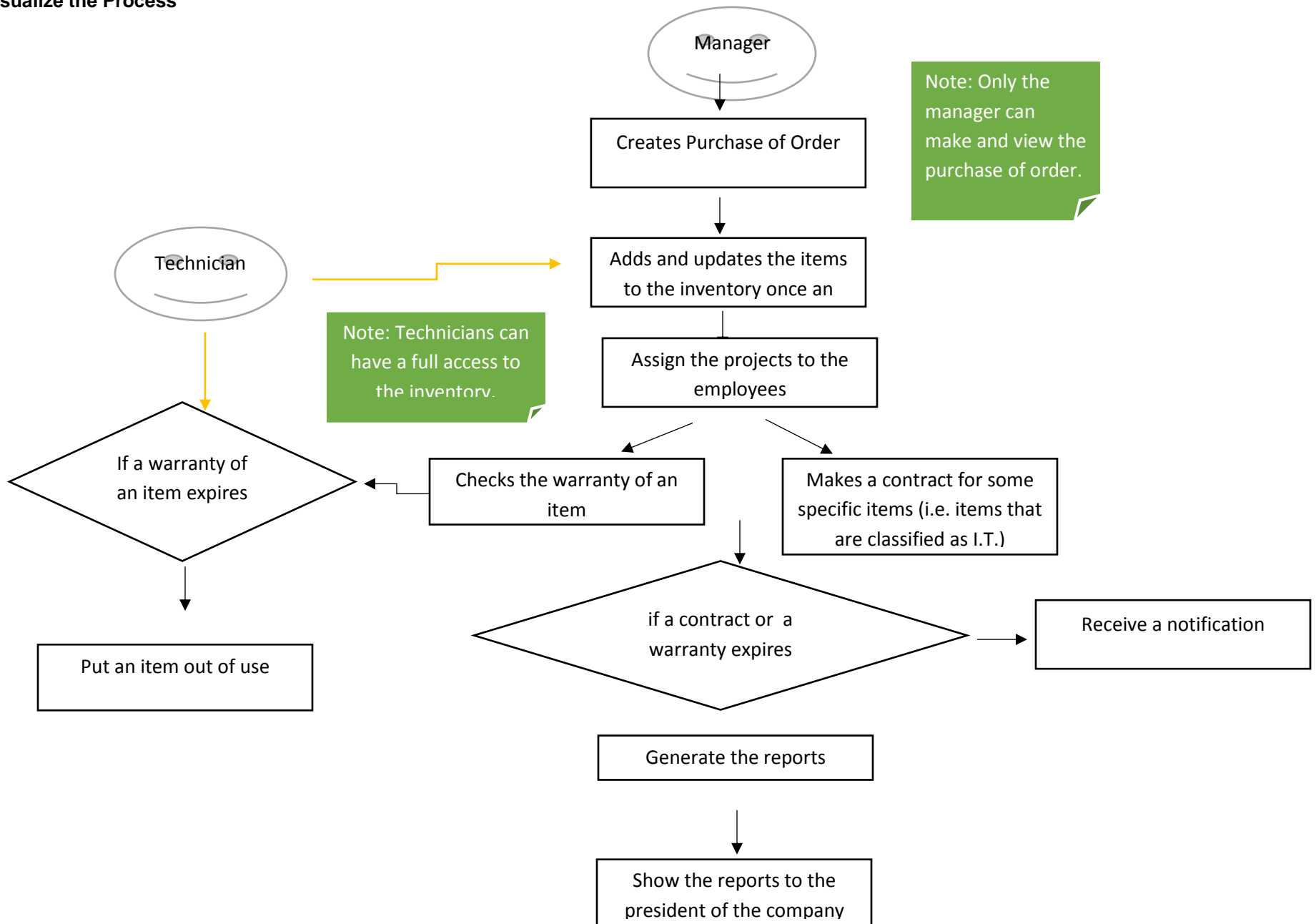
ALL: thank you

F: thank you

Problem Analysis (CAI-STA Interview)

Description (What's the problem?)	Cause (What causes the problem?)	Symptoms (How do we know the problem exists?)	Impact (Why is this important? What are the consequences?)
The current approach in managing the inventory for purchases and the purchase order is inefficient.	The client uses MS Excel in handling the aforementioned business documents.	The client consumes a lot of time in making the documents such that she lacks time in doing other important tasks.	The inefficient approach of handling these documents may jeopardize the integrity of the data and may lead to other problems that may be caused by human error.
There are instances wherein the client overlooked contracts of some items and end of warranties.	MS Excel does not have a notification feature that the client needs to manually set the dates in a calendar application for her to be notified.	The end of warranties and contracts of some items are often overlooked by the client.	If a piece of equipment was to get damaged, and its warranty or contract weren't renewed, then there will be complications in the repair or replacement of that piece of equipment.
The current approach in managing the inventory is open to inconsistencies.	There is no centralized database for easy data management; instead multiple MS Excel files are used, often for the same data.	The client uses multiple MS Excel files in updating her inventory so discrepancies and duplications of data often occur.	Discrepancies of information between the records and the actual availability of the equipment can lead to complications in the handling of this equipment.
The client is experiencing a difficulty in filtering items that are of the same type.	There is no automated system available to aid the client in sorting the items.	The client needs to have a separate MS Excel sheets to manually sort the items by their category.	Having multiple files containing the same data just for the sake of rearranging and regrouping them can open the system to discrepancies between these files and invalid information.
It is difficult to keep track of the projects assigned to an employee.	The client needs to access multiple files in order to know which projects are assigned to which employee.	Projects that are already assigned to an employee can be assigned to another employee.	This can cause the company to lose track of which employee is responsible for which project in the company.

Visualize the Process



What's the business goal? Why do they need software?

The goal is to have a consistent inventory system to keep track of items, the person they are assigned to, and the project the item is being used for, as well as a system to keep track of the purchase orders and contracts related to these items in inventory. Warranty expiries and ends of contracts should also trigger notifications.

Software is needed because the current system being used is manual, which leads to more work, especially in generating reports. Also, inconsistencies arise because of the separation of the purchase manager's system and the technician's system. Additionally, it is currently easy to forget the ends of warranties and contracts manually.

What characteristics should the software have?

The software should present consistency in records and ease in creating purchase orders, adding items to inventory, and generating the necessary reports. It should have the correct information at all times, to be implemented by using a single database, and it should be easily maintainable.

Transcript: Camella Homes

Subteam 3: Velez, Gio; Salceda, Francesco; Uy, Mervin

Interviewer: C

Interviewee: I

(Phone Rings)

I: Hello?

C: Hello. Good Afternoon po this is Mervin Stewart Uy po along with me here is Gio Velez from SystemScape.

I: Good Afternoon!

C: Review lang kami po.. Ang purpose lang po ng interview is para mas ma optimize naming po yung software at mas magamit nyo po nang maayos. So unang tanong po sino-sino po ang gagamit ng software kayo lang po ba?

I: Yung most common na gagamit ng software is yung mga engineers and architects... umm not necessarily sa isang company lang. Further use actually ng ano ng mga construction industry. Usually sa mga construction ng mga houses mga ganyan. Pwede sa houses, pwede din sa buildings depende sa scope nung software na gagawin. Initially, pwede siya for houses then eventually pwede na siya for large scale buildings like multi story buildings. So initially pwede simulan sa small scale, halimbawa for one or two story buildings which can be used by engineers and architects.

C: Ok. Namention nyo po na engineers and architects ang gagamit ng software?

I: Yes, yes

C: Ano po ang mga klaseng data na iaaccess nila?

I: Ah, data na iaaccess nila or data na iinput nila?

C: In terms po dun sa data, for example for engineers, ano yung mga specific na features na magagamit nila compared sa mga architects?

I: Mostly for engineers, kapag gagamitin nila ung software kailangan makapagcomeup sila ng details like cost of materials, parang quantity and cost of materials para makuha nila, in total, kung magkano lalabas ung for example ung bahay. For architects, usually they don't need those kinds of details. Parang parametric lang, mostly parang ung total cost lang nung building. Ayun lang actually ung difference nung dalawa, more on details ung engineer sa architect naman ung parametric cost lang siya.

C: Ok po. So to clarify lang, sa engineers, detailed cost of materials ung sa kanila. Sa architect ung total square meters? Parang ganun?

I: Ah yes, for example, meron isang building na let's say one story na bahay. Ung gusto lang malaman ng engineer kunwari magkano ung total cost nung bahay or mas specific na cost for example, magkano ung structural cost or magkano ung roof, magkano ung architectural finishes, ayun lang. When you talk to engineers naman, mas detailed un. Kumbaga, magkano ung bakal, ung concrete, ung mga ganun, it goes into specific details na. Ganun ung difference niya. Pero the software can be either both. Parang pwede niyang ipakita ung detailed or ung major components lang.

C: Ah sige po. Let's say ung architects and engineers, kailangan po ba nila magkaroon nang sariling account or open lang siya?

I: It can be open actually. Kunwari, sa isang project, you can choose nalang siguro kapag kukunin mo ung cost nung project nayun kung ipapakita sya in a detailed format or in a simple format. Pero, it's the user's choice nalang kung engineer or architect but necessarily engineer or architect kahit na any person kung gusto niya makita ung detailed or ung simple format.

C: Ok po. So saan po ba gagamitin itong software, sa computer po ba?

I: Yes, mas ok kung sa computer siya. Pero maganda rin kung kasi yung mga software ngayon pwede sa computer, pwede sa mobile, sa tablet or phone. Pero, for this one, pwedeng sa computer lang siya.

C: Ok po. So dito po sinabi niyo na pwede siyang pc, would you prefer it to be on a website also?

I: No, mas maganda siya na installed na software. Kumbaga for a certain company lang siya. Para ung mga database niya, nakainstall lang sa pc na un. It will not use cloud or the internet to safe keep the information.

C: Ah ok po. So before this interview, may ginagamit po ba kayong software?

I: Actually, basic lang. Microsoft excel lang. Ung simple lang na paggenerate nang cost. Excel lang.

C: So, for example, pag magcocompute ung user ng cost. Sila po ba magdedesignate ng materials na gusto nila? Form type po ba?

I: Ah no, mas maganda kung user friendly na sya at minimal input lang ang kailangan. For example, when they create a new project, pipili lang sila kung single story house or two story house. Tapos pag select nila nun, bibigyan lang sila ng list of materials na predetermined ng software. Ilalagay nalang nila ung cost nung materials. For example, ung cement, magkano siya ngayon or door or window, magkano un cost niya. Tapos ung mga next steps, to come up naman with the quantity. Tapos ung software icompute naman niya ung quantity based on sa information na ibibigay ng user. For example, column, ibibigay lang ng user ung width, length, and height, tapos nandun na sa software ung formula kung pano icompute ung volume so ibibigay narin niya ung quantity nung cement, quantity nung sand, quantity nung gravel. So automatic na un lahat, ibibigay lang ng user ung critical information pero ung computation nandun na siya sa software.

C: So you're saying sir na ung list of materials, nadetermine na sa program ung set of materials, tapos hahanapin nalang ng user sa program ung materials na kailangan nila.

I: Yes. Ah pero para medyo flexible ung software, mayroon siya option na mag add new material. Pero ang nakikita kong limitation dun, kapag nagadd sya ng material, sa mga formula or calculations, pano malalaman ng software kung saan ilalagay ung material na yun. Hindi ba?

C: Opo

I: So medyo mahirap siyang isama. So ang nakikita ko, ung mga materials o yun mga formula dapat nandun na siya sa software para hindi magagalaw ng user. Siguro pwedeng mangyari ung sa updating ng version ng software. Pwede sigurong may admin, kung saan ung admin, siya lang pwedeng magdagdag ng material. Pero ung user mismo, ung gagamit nang software.

C: Hindi niya nagagalaw?

I: Oo. Restricted siya dun. Para ung nagagalaw nya lang, selected information lang.

C: Ok po

I: So ung example dun, nakalagay lang sa software ung cement, sand, and gravel tapos ung computation niya for the column, yung length, width, and height lang ibibigay ng user tapos may formula siya, ibibigay na nung software ung quantity nung cement, sand, and gravel. Ganun lang siya kasimple. If mayroon siyang gusto idagdag ng material, restricted si user dun. Pwede ung admin magdagdag ng parang quantity of water pero sa first version wala un. Kapag nagupdate ung version ung software, pwede idagdag ni admin un.

C: Ok po. So for example, one story or two story building, defined ba ung structure nang building na un? In terms of-

I: Not necessarily. Actually, ung isang limitation nung software, pwede mo syang gamitin for two story building pero three story up, hindi na pwede. Initially, parang ganun lang muna pero pagnaguupdate siguro pwede magdagdag ng story, ganun. Pero nakikita ko ung complication kasi nung mga formula pag nagdagdag ka ng higher story. So initially simple siya for single or two story lang. Pero yung sa shape nung bahay, hindi siya magmamatter. Kasi, ung mga information na hihingin sa user, ung length, weight, quantity, ganun lang.

C: So depende nalang po dun sa measurement niya?

I: Oo, not necessarily na ipapakita mo ung itsura nung building or ipapakita ung floor plan. Hindi necessary ipakita ung ganun.

C: Opo. So aside from building cost, may iba po bang reports na ipapakita ng software?

I: Ang magandang report na ipapakita niya ay isa is, kung magkakaroon siya ng database ng material is yung trending ng material. Kumbaga this month, ito ung price ng material tapos every month naguupdate ung user ng presyo ng material so makikita ngayon ung report. Kumbaga bar graphs lang na ito ung increase o changes in material prices. So, pwede ka magpakita ng ganun. At the same time ung effect niya rin sa project, ano ung effect nung increase sa project na yun. For example, umakyat ung presyo ng materials, this month so makikita niya ung increase na lumaki din ung construction cost nung project dahil dun. Parang ganun. Mostly collected siya dun sa material prices at usually ganun kasi sa construction industry, kapag gumalaw ung cost ng materials mo affected lahat.

C: Ok po so thank you po. Isusummarize lang po naming ung sinabi niyo po para maclarify po natin. So ung gusto po gawin ng software is basically, for construction of houses and buildings iestimate ung cost based on the materials given at ung size ng lot per se.

I: Oo

C: Tapos po, for engineers, they have the option to see a more detailed cost of materials bali per material un cost nila. And then dun sa architects, ung ipapakita po sa kanila ung metric total cost, dun sa structural, sa roof, and sa lot. Tama po?

I: Ah tama.

C: And then open software siya, for those who will use it, they can either choose a detailed or simple format for the report. Tapos masbetter po sya paginstalled siya sa pc. Tapos user friendly po sya, may option na single or two story house. At dun po sa updating, bali, as the software improves saka nalang magdadagdag ng materials na bago. Tapos dun sa database, let me clarify this, ung sa extra reports ipapakita ung trend ng bawat material?

I: Oo

C: Tanung lang po, dito po sa trends ng material, so maguupdate sya every month hindi ba?

I: Yes yes

C: Tapos dito po sa materials, ipapakita ung effect niya?

I: Sa cost nung building. Example, ung building, this month nasa 100,000 un cost nya. So next month, inupdate ng user ung presyo ng materials, so icompute na iyon ng software ung panibagong cost niya. So makikita nyo na kung nagingincrease ung cost ng building from 100,000 to let's say 120,000, ganun. So at least makikita ngayon ano ung effect nung increase ng materials mo dun sa building cost.

C: Ah opo.

I: Initially, ayon palang nakikita ko dun sa software. Actually, pwede rin magdagdag ng additional features like parametric masking which magiging guide lang siya ng user. Parang magbibigay lang ng information parang, magkano ba isang poste, o magakano ang isang roof ng bahay. Mga ganun information na pwede ibigay ng software pag meron na syang database.

C: Opo so thank you po for your time sa interview na ito. We'll keep in touch nalang po through these numbers na binigay nyo po pati ung binigay ko po sainyo.

I: Ah ok, sige sige. Thank you!

C: At just in case po. Do you have any other time na magpaschedule kami po ulit, just in case we have any further questions?

I: Ok lang, sure.

C: So ano po ung time? We'll contact you through email nalang?

I: Pwedeng through email or you can text me din, kung magrerequest kayo ng interview or if you want to meet kung nandito ako sa manila.

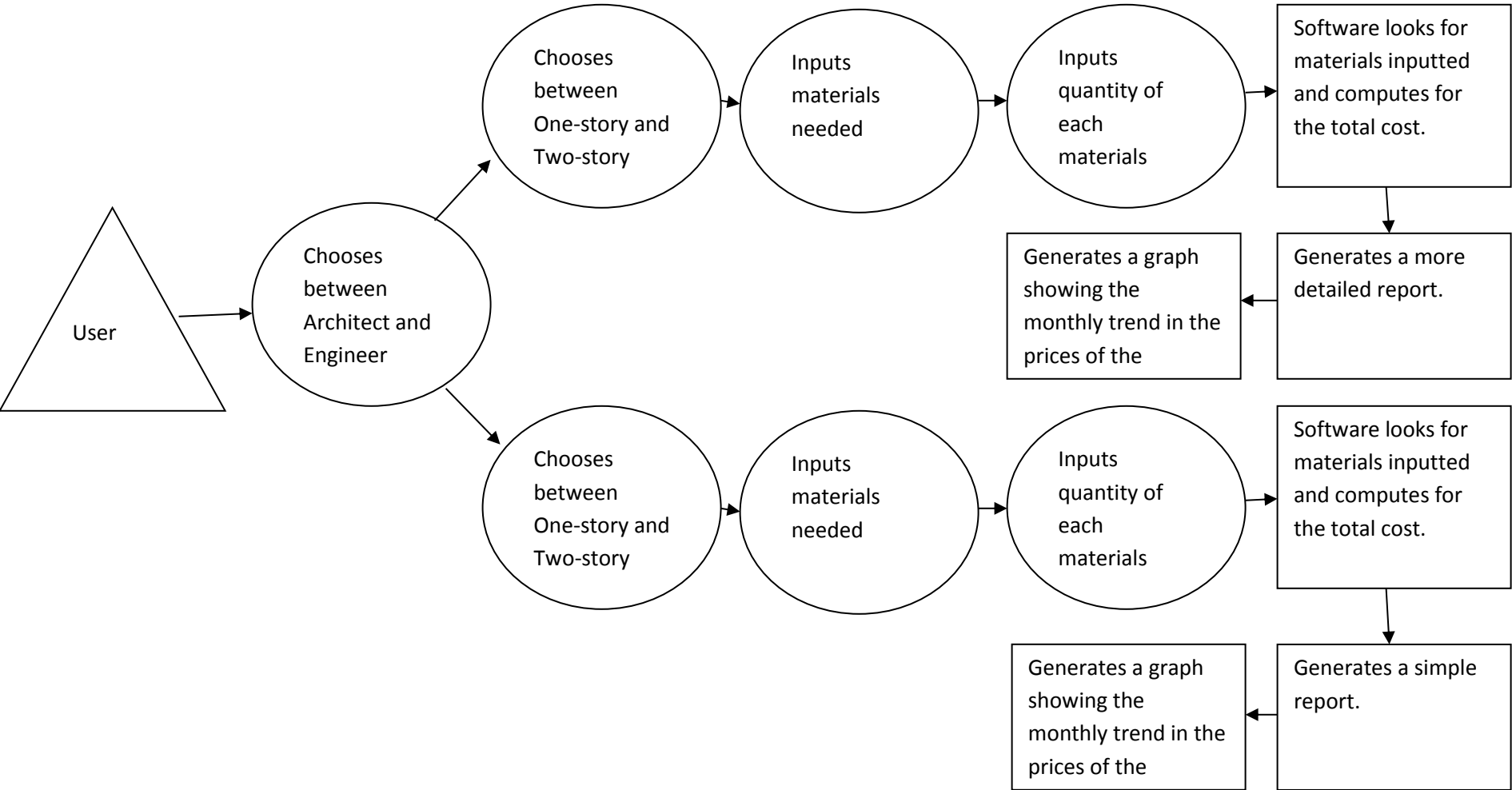
C: Ok. Ok po. Salamat po sir!

I: Ah sige sige.

Problem Analysis (Camella Homes)

Description (What's the problem?)	Cause (What causes the problem?)	Symptoms (How do we know the problem exists?)	Impact (Why is this important? What are the consequences?)
The current system, an Excel Spreadsheet document, is prone to errors and inconsistencies	The current system does not provide checking and validation in terms of the data entered by the users	The current system is not optimized for this type of work.	It is important because in this case, data integrity will be affected, and because the system computes for the overall cost of the building based on the input data; the entire system depends on each input
There are many unnecessary work involved in the current system which makes it tedious such as having to scan the whole document just to compare and look for the desired material.	The user must still have to look for the desired material in the spreadsheet one by one just to complete the process and get the desired computation.	This kind of feature does not exist in Microsoft Excel	The process would be very time-consuming due to it being complex. Because of this, the process requires close monitoring of the data in every spreadsheet. This would also result to the further increase of inconsistencies due to the complexity of the current system.
The process can only be performed by someone who is capable of using the spreadsheet and knowledgeable of how the data should be used in computing for the total cost of the building	Not all the users know how to use excel and are knowledgeable on the contents of the system.	There are people who are not aware of how the system works	The process would require a user who knows how to input data and arrive at the overall computation based on the given inputs.
The process of keeping track of the list of materials needed for construction and its current cost in the market manually requires lots of time and effort and requires the user to look into many resources	The cost of materials may vary from time to time depending on its supply and demand in the market. The list of materials increases as new types of materials are introduced into the industry.	The market and economy is constantly changing due to supply and demand among countries	Being aware of the cost of the materials is integral to construction since a small change in the cost of a single material would affect the cost of the finished building exponentially
It is hard to make computations in calculating the cost of the building, and would take much time to compute and double check the result.	It makes use of complex formulas which could take plenty of time to compute manually.	There are construction projects that could not start on time because the client and the construction firm would not agree on the price. This is most likely due to miscalculations	The calculation of the building cost is the most integral process of the construction industry's business side. The project could not start unless the correct cost is presented to the client. A lengthy calculation would mean the completion of the building would be delayed

Visualize the Process



What's the business goal? Why do they need software?

The business needs the software in order for them to allow their clients to immediately be able to see the cost of the proposed building based on the materials and dimensions of the building. They need the software because their current system is tedious and requires more time to accomplish the task of being able to compute and estimate the overall cost of the building.

What characteristics should the software have?

Data should not be easily tampered in the software, which should be easy to maintain. The software should also be secure and safe(no information leak) and extensible(easy to add/delete feature).