Objective 4 – To improve the process using Lean Principles. Develop a new process map reflecting the changes in the process.

To improve the process using Lean Principles we can pick one Lean Principle and validate if the current process is in accordance with that or not. If not, how can we change it

- Defining value – Yes the value is clearly defined, the customer is the one creating the RFQ, he is ready to pay for the services. He trusts the company's services.
- Mapping value stream – Not Met. There are a lot of inefficiencies in the current step.
- Creating flow – Not Met. There is a significant amount of waste in terms of time, money, effort, etc.
- Establishing a pull system – Yes this is defined and met. They only procure material when they receive an order.
- Pursuing continuous improvement – Not given. It's difficult to comment on this principle based on the information in the case study. Although the case study does raise concerns over the current process and requires improvement.

The following questions can help to carve out a process fully inclined to Lean Principles.

1. Waiting – Too much waiting time exist for inter and intra-departmental approvals
2. Paperwork – The paperwork is manual which further adds to delays and waiting time.
3. Information Transfer – The transfer of documents in the whole process is not smooth and currently has multiple touchpoints.
4. Physical Movement – Since the transfer of information is still physical it requires transferring the document from one desk to another.
5. Over Processing – Some of the steps are redundant, which could be eliminated.
6. Uneven Workflow – Since all the documents are filed together, the operations teams get all the installation work together, so do Ron and Amanda.

Proposed process points that can be changed are:

1. Transform the current application system from manual to paperless. ABC IT Services Inc can deploy any CRM-based software like Zoho, Hubspot to transfer the application system online.
2. Transferring the system to a CRM or even Sharepoint based system would remove the need for manual paperwork. Sharepoint has power tools like Power Apps, which could work seamlessly in this kind of situation.
3. It is important to shift the system online rather than just turning the application system partially online as that would still have the requirement of scanning and printing the documents.
4. Once the system is turned online the Operations Manager will not be getting all the contracts at once to review nor the operations team to install. This could be done more uniformly as the processing of the order can be achieved as and when received.

5. The need of sending the documents to and fro so many times would also be removed as all the stakeholders will have access to the document at the right time and they don't have to wait for a particular day to review and finish.
6. Each person Amanda/ Ron/ Claire/ Clerk would have 4 options in front of him for any order –
    - Accept,
    - Reject,
    - Comments or
    - Send for Review.
7. Shifting the system online would ensure that Ron doesn't need to be in the office to sign off the document, he can do so whenever he gets time like between two client meetings or buffer time before ending/ after starting a shift.
8. Documents stored in soft copy are better protected and easily accessible rather than piling the paperwork in different departments.
9. By switching the system online all the manual work and the above questions would be answered fully. There would be no need to go anywhere physically for signing/ reviewing and no hassle of storing the documents.
10. The process would become completely real-time and each of the stakeholders can work as soon as the client creates an order. No need to wait for any particular day of filing/ review/ sending.
11. The sample of the dashboard on any stakeholders screen for each order could be as given below:

Name	**First Quote**	**Order Accepted**	**Installation Pending**	**Document Filing**	**Invoice Review**	**Invoices**
Amanda	Done	Pending	-	-	Done	-
Ronald	Pending	Pending	-	-	Done	-
Ops Team	-	-	Pending	-	-	-
Claire	-	-	-	-	Rectify and resend	Done
Clerk	-	-	-	Done	-	-

Along with the above, there would also be one more summary dashboard showing the number of pending tasks and the number of quotes waiting for an action to be taken for the next step. This could be like the following:

Name	Quotes left to be reviewed this week	Contracts left to be signed this week	Implementation requests
Ron	4	2	3

The new process flow map will work as follows:

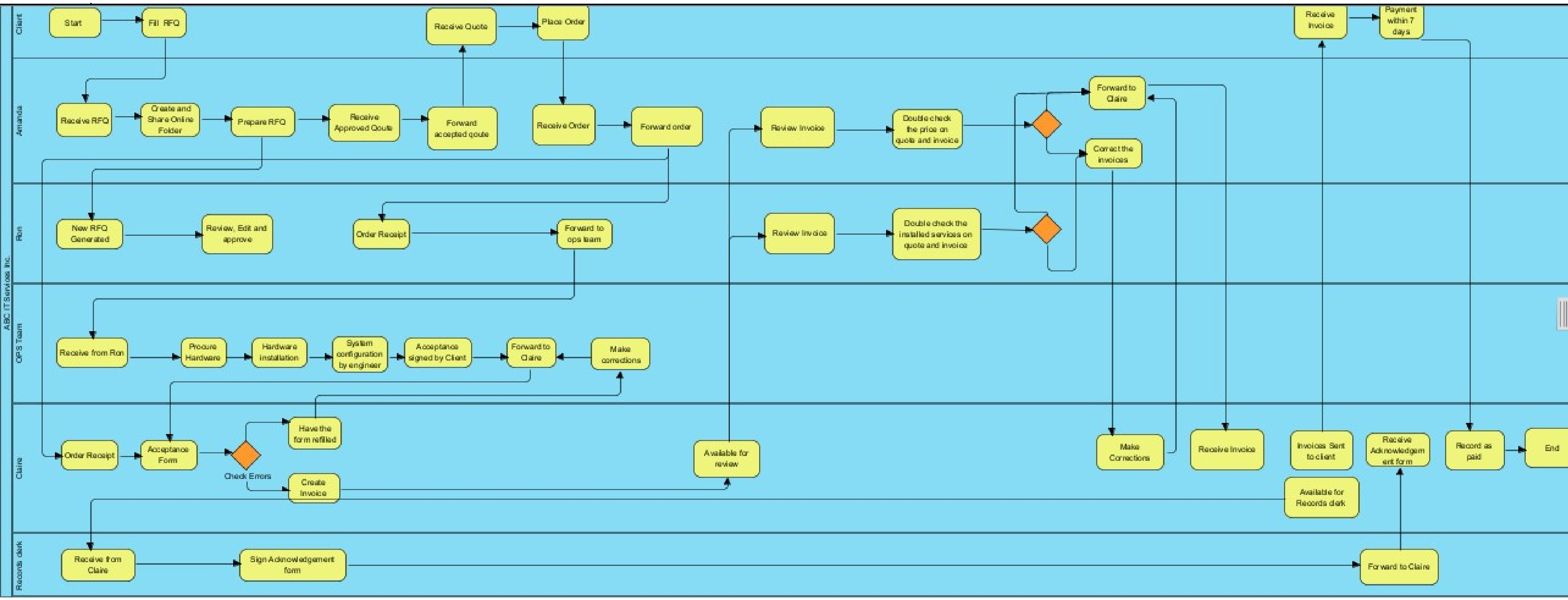
1. The client fills the RFQ online
2. CRM Automatically generates the enquiry and forwards the filled RFQ to Amanda
3. RFQ Received by Amanda
4. Amanda creates an online folder and shares it with Claire, Ron, the Ops team and the Records Clerk. This drive contains ALL the files and requirements of the Client

5. Amanda prepares the quote and marks it ready for review by Ron
6. The quote is now active in Ron's CRM for review
7. Ron reviews and make his edit and forward it to Amanda
8. Amanda receives the quote from Ron and finalizes it within 1 business day.
9. Amanda forwards the quote to Client
10. The client receives the final quote
11. The client places an order within 2 business days of receiving the quote to ensure price validity
12. Order received by Amanda
13. Amanda forwards a copy of the accepted order to Ron and Claire
14. Ops team start the procurement of hardware, installation and get the acceptance form
15. Ops team marks the form as available for review in Claire's CRM
16. Claire recheck the form and send for a refill in case of any error
    Note - (Claire does not forward the form to the Records clerk since it is only an internal step of keeping record)
17. Claire then creates an invoice based on the accepted quote and acceptance form
18. Claire shares the access of invoices to both Amanda and Ron in case they have to make any inputs. Although she is not required to send the invoice for rechecking since it was made by already approved documents from Amanda, Ron and Ops Team
19. Amanda and Ron have up to 2 business days to make/ suggest any changes
20. Amanda/ Ron can request an additional 2 business days in case of an exception
21. Amanda/ Ron does not need to be physically present in the office for accessing or reviewing any documents since everything is present on the CRM and shared drive
22. Claire then forwards the invoice to the Client and also marks it available for the Record Clerk for his reference
23. The client accepts the invoice and releases the payment with 7 days

New processing time – The new processing time should see a reduction of at least 30-50% of the above process is implemented. The reasons are:

- Removed physical documents
- Removed waiting time
- Removed filing on a specific day
- Re-reviewing of the already approved documents
- Removed bottlenecks in installation since the order would be forwarded as received

The new Process flow is given below


ABC IT Services Inc.
Client
Amanda
Ron
OPS Team
Claire
Records clerk
Start
Fill RFQ
Receive Quote
Place Order
Receive Invoice
Payment within 7 days
Receive RFQ
Create and Share Online Folder
Prepare RFQ
Receive Approved Qoute
Forward accepted qoute
Receive Order
Forward order
Review Invoice
Double check the price on quote and invoice
Forward to Claire
Correct the invoices
New RFQ Generated
Review, Edit and approve
Order Receipt
Forward to ops team
Review Invoice
Double check the installed services on quote and invoice
Receive from Ron
Procure Hardware
Hardware installation
System configuration by engineer
Acceptance signed by Client
Forward to Claire
Make corrections
Order Receipt
Acceptance Form
Check Errors
Have the form refilled
Create Invoice
Available for review
Make Corrections
Receive Invoice
Invoices Sent to client
Receive Acknowledgement form
Record as paid
End
Available for Records clerk
Receive from Claire
Sign Acknowledgement form
Forward to Claire