Optimization of Order Processing Procedures to Reduce Order Execution Time

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Abstract

Every company in this competitive world wants to increase its revenue share. One of the ways to increase revenue is by increasing production. In this study it was observed that the delay in production was because of the ordering process. Elimination of the delays from order processing, can increase the production. Workflow activities have inherent data interrelationships and errors in data can impact on other related activities. Considered human factor from which errors might get generate in information flow. Another reason for delays could be not taking corrective action on previous issues in time. This paper tried to optimize the order processing procedure by automating intermediate manual activities of order processing to eliminate errors and proposed a method to effectively prioritizing the issues to take corrective action, this can lead to decrease wastage of resources also. This approach will help to increase the production and ultimately revenue of the company.

Keywords

Order Processing, Optimization, Issue Prioritization and FMEA,

1. Introduction

A multinational company is a supplier of fuel dispensers, point of sales systems, payment systems, forecourt merchandising and support services. Its major revenue share comes from fuel dispenser. XYZ sales their fuel dispenser through distributors and also directly to state run oil industries and private oil industries.

Improvement is needed in the system in order to survive in global competition. This improvement should be more effective and efficient than earlier system while fulfilling customer's demand. Increase in the production can be reflection of improvements in the system. And production can be increase by eliminating delays from order processing.

Order reaches to customer service team in the company through regional team in configurator file (Configurator file has all the features of dispenser along with prices). The company is observing delays in order processing. These delays are divided in two stages i.e., 1) Order to sales order, 2) Sales order to dispatch.

Observations:

1) Order to sales order: In this process it is observed that delays are happening due to errors in information flow, that is customer service team has to fill two forms (Order summary or checklist and customer order acknowledgment (OA)) for engineering team and customer respectively after getting order from regional team. Engineering team makes BOM by referring order summary form and customer service gets order confirmation by customer's signature on customer OA form. This confirmation gets in four working days. Order summary and customer OA are filled manually. If error happens while filling these forms, that error will flow through the system, and it will be unnoticeable until customer ask for amendment in OA form. Due to this order to sales order stage takes more than two weeks of time.

2) Sales order to dispatch: Delays are notice in this stage due to not taking corrective actions on previous issues in time. And this is because of ambiguity in prioritization of issues.

Ultimate impact of such delays is decrease in the production. By optimizing order processing procedures will lead to increase in production as well as the revenue of the organization.

What is issue

An issue is an event or condition that has already happened and has impacted or is currently impacting the project objectives. There is no uncertainty or probability aspect associated with an issue. the probability of a risk may range between 0 and 100%, but it can't be either 0 or 100. The probability of an issue is 100% (Table 1).

Table 1. Difference between risk and issue

Risk	Issue
A risk is something that could occur in the future. It's an uncertainty for which project managers can create plans and strategies.	An issue is something that has occurred or is currently happening. It is something that the project manager can work to address in the present.
A risk is something that could be an opportunity or a challenge depending on the project and the risk.	An issue is something that challenges the current project. Project managers consider this an obstacle that they can address. The solution can be a positive benefit.

Issue Management

- **Planning:** When faced with an issue, project managers can review and refine their business plans. They may also create an alternative plan detailing a solution.
- **Prioritization:** Project managers may prioritize components of an issue to create a short-term and long-term plan. For example, if there is a technology issue during development, the project manager might prioritize fixing the issue first, so that production can continue. Next, they can review their process to prevent the issue in the future.
- **Communication:** Collaboration and communication are important tools in issue management. A project manager may delegate new tasks and communicate expectations to a production team.

1.1 Objectives

Optimization of order processing procedure by automating some process to reduce order execution time. Below objective need to fulfil to optimize the process.

- Reduce time of form filling process.
- Prioritize open siren issues effectively.

2. Literature Review

2.1 Introduction to Fuel Dispenser

A Fuel Dispenser is a machine at filling station (retail outlet) that is used to pump gasoline, diesel, or other types of fuels into vehicles. Dispenser classification,

- Based on shape of frame: 1) H – Frame, 2) C - Frame
- Based on Hose Outlet Location: 1) High hose version, 2) Low hose version
- Based on Nozzle Position on Frame: 1) "Lane" Orientation Nozzle location is on Front panel, 2) "Island" Orientation Nozzle location is on Side panel
- Type of configuration: Based on Number of Products, Hose and Display

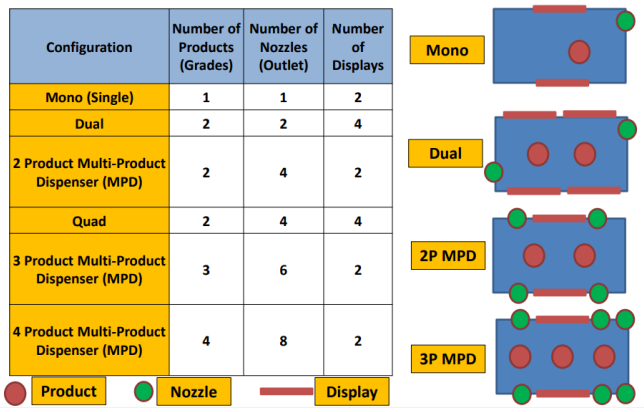

Figure 1. Type of configuration of dispenser

- Based on pumping type: 1) Suction: Fuel is sucked from the underground storage tank and pressurized inside the "dispensing pump", (Figure 1).

2) Pressure: Fuel is supplied under pressure from pumps fixed inside the underground storage tanks

There are two dispensers XYZ manufactures that is Edge and Scope both are having 3 sub models. E160, E210 and E230 are the models of Edge and OS100, OS200, OS300 are models of Scope.

2.2 Sales Order

Derks and Weston (2005) described workflow processes that naturally include data linkages. Common forms of data-related mistakes have been described in terms of how they influence workflow activities' output and how they may propagate to affect other related activities. Important elements of workflow activities are graphically expressed and encoded so that computers may "execute" them. Data outputs from activity have an influence on the real system and serve as inputs for further activities.

Rowe (1987) described the importance of human and ergonomic factors in sales order processing. The working system and new work role affect current work of sales order clerk and further it reflects in sales order as mistake.

Djamaris et al. (2016) tried to find the root cause of delayed order processing and improve order-processing function so as to minimize delayed order processing. Correct and clear order information provided by customers helps order entry process run smoothly. Later, order-filling activity is performed. A formalized procedure regarding order-filling priorities is important to prevent the company against failure of completing important orders. Final order processing stage is order status reporting which ensures that good customer service provided by keeping the customer informed of any delays in order processing or delivery of the order.

2.3 Issues Prioritization

A risk that has occurred can also be considered an issue and need corrective action. It can be prioritized as we prioritize risks. FMEA is tool to prioritize the risk and it can be used to prioritize issues also.

Rhee and Ishii (2002) identifies flaws and presents a fresh technique called Life Cost Based FMEA, which values risk in terms of cost. By expressing detection difficulty ad severity in terms of time lost, the ambiguity is removed. Life Cost Based FMEA is a novel approach that was developed to address the ambiguity of evaluating detection difficulties and the logic of multiplying three ordinal indicators (severity, occurrence and detection). The Life Cost Based FMEA quantifies the cost of failure and risk. In terms of severity, cost is the common language that engineers and others can easily understand. Failure cost has three major components: labour cost, material cost, and opportunity cost. Labour cost and opportunity cost can be measured in terms of time and can be further broken up into four different stages: detection time, fixing time, delay time, and recovery time.

Bahrami et al. (2012) proposed effective application of the Failure Mode Effect Analysis (FMEA) approach, which is a recommended for innovation in project management and implementation. FMEA is a systematic technique that first discovers mistakes, flaws, and failure in the project, process or system. By making wise selections, they are meant to be eliminated. This won't be achievable until problems are prioritized based on valid data, allowing for the effective and efficient planning of corrective action.

Jos and Mathew (2013) provides the use of Failure Mode and Effects Analysis (FMEA) for improving the reliability of sub systems in order to ensure the productivity which in turn improves the bottom line of a manufacturing industry. They further explain the detection level in their paper that, Detection is an assessment of the probability that the current process control will detect a potential weakness or subsequent failure mode before failure mode the part or component laves the manufacturing operation or assembly location. Assume the failure has occurred and then assess the capabilities of the current process control to prevent shipment of the part having this nonconformity (defect).in simple words it can said that detection ranking is done based on prevention failure modes from occurring or which detect the failure before it reaches to the customer.

Doshi and Desai (2017) explains There are many quality tools available which make more difficult to choose the right tool to achieve Continuous Quality Improvement (CQI). And Failure Modes and Effects Analysis is one of the tools to achieve (CQI). FMEA is a structured analysis used for identification of failure modes and their effects. It is a very prevailing tool, extensively used in manufacturing processes design, to scrutinize failure modes and to reduce effects of respective failures. Hence it helps in identifying measures necessary to improve the product and processes by concentrating on failure modes and its impact. Continuous quality improvement can be achieved by initiating quality improvements which may be identified based on the implementation of quality tools.

Sader et al. (2020) explain multi classification is applied to develop a new technique to enhance failure mode and effect analysis and the generation of risk priority number. Three related parameters – severity, occurrence, and

detectability are multiplied to generate the risk priority number, a quantitative value. Additionally, they describe impact describe repair efforts, time, the recurrence of the same task, and the total effect of the claim on the company's reputation and image.

3. Methods

1. Data Collection
2. Implementation

A sales order is an internal document of the company, meaning it is generated by the company itself. A sales order should record the customer's originating purchase order which is an external document. Rather than using the customer's purchase order document, an internal sales order form allows the internal audit control of completeness to be monitored.

3.1 Current Procedure for sales order

Current procedure to create sales order is, customer service team get the order from regional team in configurator file which has all the details and features of dispenser along with price. Then to create BOM, customer service has to team filled Order summary form for engineering team which is responsible for BOM creation. To get order confirmation from customer, customer service team also has to filled customer order acknowledgment (OA) form, which they send to customer. Customer sends OA form in return by signing it. This form filling activity is manual process. Further to create sales order Part master creation, BOM creation, MM view, Sales view, Routing, MRP, Cost rollup and Account view this process is followed sequentially and it is taking more than 2 weeks in current process. This is due to the manual errors in form filling activity since it filled manually.

To create sales order following process is followed in XYZ (figure 2).

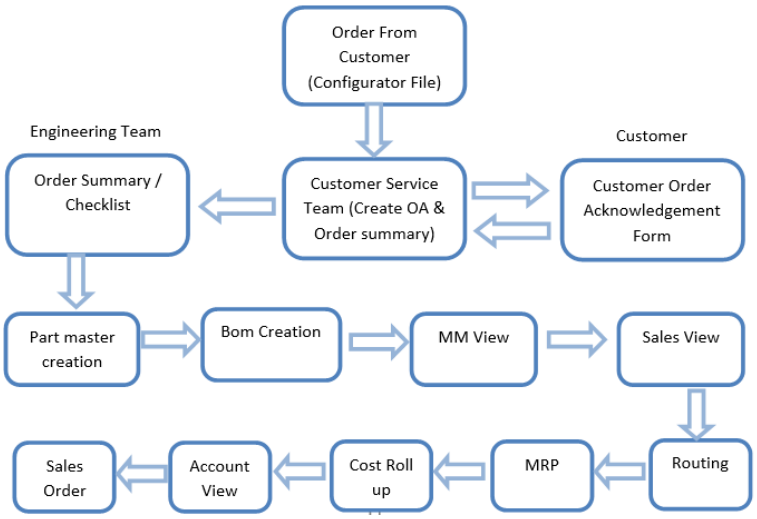

Figure 2. Flow to create sales order

Time taken by old method

In old method, different time was consumed at each week which is tabulated in below table 2.

Table 2. Time taken by old method

	Week 1	Week 2	Week 3	Week 4
Avg. time required to fill order summary and OA form (min)	25	25	25	25
No. of forms filled in week	12	10	10	7
Total Time taken in a week (min)	300	250	250	175

Total average time consumed in a week by old method = (Total time taken in a week / no. of weeks) = 300 + 250 + 250 + 175 = 243.75 min. equivalent to 4 hrs.

3.2 Data for sales order

Data collection plays an essential role to offer optimal solution. All the features provided in Scope with their combinations are collected also these data are the part of Order summary and customer OA from. (Table 3)

These data include:

- Orientation: 1) Lane–nozzles are situated in front and back side, 2) Island- nozzles are situated inside.
- Fuel Grades: Petrol and diesel,
- Model: Models to be populate on checklist/Order summary and customer order acknowledgment. Scope models: OS100, OS200, OS300.

Table 3. Models with their code

Sr. No.	Model	Option ID	Configuration	Flow
1	OS100	OS100-S	Low Hose Island	Standard Flow
2	OS100	OS100-H	Low Hose Island	High Flow
3	OS100	OS100-M	Low Hose Island	Mix Flow
4	OS200	OS200-S	High Hose Island	Standard Flow
5	OS200	OS200-H	High Hose Island	High Flow
6	OS200	OS200-M	High Hose Island	Mix Flow
7	OS200	OS200-SL	High Hose Lane - Narrow Frame	Standard Flow
8	OS200	OS200-HL	High Hose Lane - Narrow Frame	High Flow
9	OS200	OS200-ML	High Hose Lane - Narrow Frame	Mix Flow
10	OS300	OS300-S	High Hose Lane - Wide Frame	Standard Flow
11	OS300	OS300-H	High Hose Lane - Wide Frame	High Flow
12	OS300	OS300-M	High Hose Lane - Wide Frame	Mix Flow - 1
13	OS300	OS300-M1	High Hose Lane - Wide Frame	Mix Flow - 2
14	OS300	OS300-M2	High Hose Lane - Wide Frame	Mix Flow - 3
15	OS200	OS200-U	Narrow Frame - UHF	UHF
16	OS300	OS300-U	Wide Frame - UHF	UHF

Edge models: E160, E210, E230

- Dispenser type: Pressure or Suction
- Variant: It is alphanumeric term which shows number products, number of hoses, and number of displays that dispenser have like, 2P2H2D. Each model has particular variants as per below table 4.

Table 4. Models and their variants

OS100 - Island	1P1H2D	OS - 300	1P2H2D
	1P2H4D		2P4H2D
	2P2H4D		2P4H4D
OS200 - Island	1P1H2D		3P6H2D
	1P2H4D		4P8H2D
	2P2H4D		3P6H4D
OS200 - Lane	1P2H2D		4P8H4D
	2P4H2D		
	2P4H4D		

- Flowrate: 1) Standard flow (40 to 50 LPM),
  2) High Flow (70 to 80 LPM),
  3) Mix Flow (it consist of standard and high flow),
  4) Ultra High Flow (110 to 120 LPM)
- Display: Two type of displays are used i.e., 7-7-6 display and 15.6” Media display

(Significance of 7-7-6 these no. is 1st 7 shows price of the fuel that dispenser dispensing, 2nd 7 shows amount of fuel in litres and 6 shows price of the fuel.)
In media display, it shows above details as well as it uses for advertisement.

- Meter inlet filter: 10-micron mesh non-washable and 30-micron mech washable.
- Motor type: Motor is used in only suction type of dispenser; three types of motors are used i.e., 1) SIDA 230V, 1Ph, 1hp 50Hz, 2) SIDA 230V, 1Ph, 1hp 60Hz, 3) SIDA 380V, 3Ph, 1hp 50Hz
- Hanging Hardware: It consist of hose, nozzle, breakaway, swivel and VDI (visual dispensing indicator) are used in dispenser (table 5).

Table 5. Options for hanging hardware

Hose	Nozzle Option	Breakaway	Swivel
No Hose	No	No	No
Standard Hose - 3 Mtr	OPW	Elaflex Pump	Single Plane
Standard Hose - 4 Mtr	Elaflex 3/4" with 3/4" spout	Elaflex Nozzle	Two Plane
Elaflex Hose - 4/4.5 Mtr	Elaflex 1'' with ¾'' Spout	Elaflex 3/4" or 1" Nozzle	
	Catlow	Elaflex CSB21 VR Breakaway	
	ZVA19 (Drip stop)		
	Vapor Recovery Nozzle - OPW		
	Vapor Recovery Nozzle - Elaflex		
	ZVA25		

- Packaging: Standard, reusable and air shipment are three types of packaging used to pack dispenser for dispatch.
- Pumping Unit: Vane or gear
- Canopy: Top part of dispenser for aesthetic look. (figure 3)

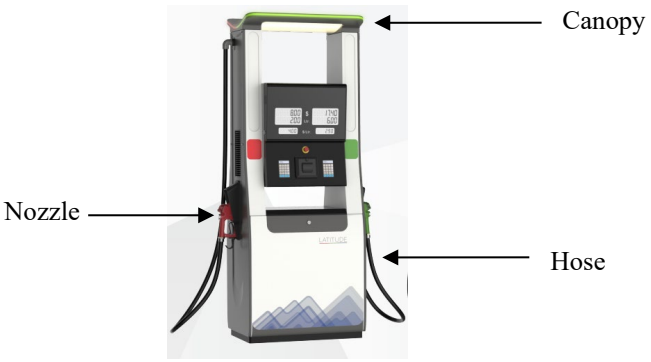

Figure 3. Image of dispenser

From configurator file below data is collected:

- Product description
- Quantity of dispenser that ordered by customer
- Unit Price

3.2.1 Current procedure of prioritization of issues

In XYZ, corrective actions are taken by prioritizing the issues. A numerical value is calculated called as QDRF (Quality Defect Ratio Factor) by multiplying severity and occurrence only. Highest numeric valued issue is considered as first priority and so on. Corrective action is taken on issue as per priority. But this procedure does not show the cost of impact of the particular issue.

3.3 Implementation

3.3.1 Order Summary and Customer Order Acknowledgment

Customer service team fill two forms one is Order Summary, and another is Customer Order Acknowledgment. Order summary shared with engineering team to make BOM. And customer order acknowledgment form is sent to customer, which customer checks and sends back with signature to confirm the order. If customer found any error in OA form, they inform to customer service team and then customer service team makes corrections in order summary as well as in OA form send back to engineering team and customer respectively.

Both the forms Customer OA and order summary are filled manually earlier, and it takes 20-30 min for experienced person without any mistake. But same forms are taking 45-60 min for non-experienced person with possibility of errors. If error generates, it could get carry forward to customer as well as to engineering team. This error gets corrected after the feedback from customer. Its take 4 working days on an average to get feedback from customer. Meanwhile engineering team has made BOM. Making amendments in BOM can leads to delay the sales order and apparently dispatch. Order to Sales Order takes more than 2-week time that must reduce to less than 1 week to decrease the order processing time.

To reduce the possibility of error and reduce the time to fill the forms, in other word to optimizing the process automation has to be done. BOM creation, MM View, sales view, routing, MRP, cost rollup, Account view and sales order this process are done on SAP. So, order summary and customer OA form we can automate in the system. To automate excel is used. These two forms in configurator file itself so that regional team can also verifies the form.

To automate, one master data has to be made from where data can be pulled in the order summary form and same data can populate in customer OA form. The Master data sheet called OA Master sheet has made according to Scope data (Given in data collection). In order summary, data pulled from OA master sheet. And in OA master data gets from raw data, product code and pump model sheet. These three sheets are made to fill Scope configurator. Where data for dropdown menu in Scope configurator pulled from raw data sheet. From pump model sheet, information such motor, flow rate, variant, product description etc. can populate in Scope configurator. Product code sheet is used to populate BOM or FG code.

There is no consolidate master data for Edge so, dropdown menu with conditions needs to be added to avoid error and select data as per Edge configuration. Conditions are as following,

1. If pressure type dispenser selected, then motor type will not display since motor is used in only suction type.
2. There are five flow rates in Edge standard, high, mix, UHF 115 and UHF 130 these all five are available in E160 and E210. But not in E230 so, when E230 is selected only standard, High and Mix flow rates are populated in dropdown menu.
3. 1P1H2D, 1P2H4D, 2P2H4D and 2P4H4D these variants are available in F210 and F230 but not in F160 so, when F160 is selected only 1P1H2D, 1P2H4D and 2P2H4D.

FG Code/BOM number is automatically generated for Scope in its configurator and made arrangements to populating automatically in order summary form but for Edge, engineering team makes the FG Code/BOM number, and this form sent back to customer service.

3.3.2 Time taken by new method

Some additional information needs to be fill in order summary and customer OA form, it is taking 5 min. on an average of time (Table 6).

Table 6. Time taken by new method

	Week 1	Week 2	Week 3	Week 4
Avg. time required to fill order summary and OA form (min)	5	5	5	5
No. of forms filled in week	12	10	10	7
Total Time taken in a week (min)	60	50	50	35

Total average time consumed in a week by new method = 60 + 50 + 50 + 35 = 48.75 min.

3.3.3 Prioritize Open Siren Issues

An event or condition that has already happened and has impacted or currently impacting the project objective. Issue is also a risk that has occurred and need corrective action. It can be prioritized as we prioritize risks. As FMEA used to prioritize the risk so, it can also use to prioritize issues. And take corrective action as per prioritization. Rating has been given to each of the issue to prioritize.

Earlier prioritization done by multiplying severity and occurrence. The severity rating measures the seriousness of the effects of a failure mode. And occurrence is the frequency of failure happening. In XYZ the multiplication of these two factor or issue prioritization number called as QDRF (Quality Defect Ratio Factor).

But this number does not show cost impact of the particular issue. For example, if issue found at the final testing stage, then lots of resources might be wasted till that stage and it could cost delaying the dispatch. Failure cost has three major components: labour cost, material cost, and opportunity cost. Labour cost and opportunity cost can be measured in terms of time (Rhee and Ishii, 2002). So, there is need to add impact or detection stage to prioritizing process. There is difference between detection level in FMEA and detection or impact stage in issue prioritization process. In FMEA detection level means the chances of failure being detected. And in this issue prioritization impact stage or detection means at which stage the failure encountered. Bellow tables shows three levels of severity, occurrence, and impact (Table 7 and table 8).

Table 7. Three levels of severity, occurrence, and impact.

Severity	
S1	Performance, Product/ Subcomponent- Non functional
S2	Assembly Issues, Assembly difficult. Assembly Reworks
S3	Aesthetics- Scratches/ Craftsmanship
Occurrence	Overall
High	> 10%
Medium	6-10%
Low	< 5 %
Impact Stage (Detection)	Removed from Classification
High	Final Test/ Wet test/ Final Inspection
Medium	Sub Assembly/ Main Assembly Stage
Low	Pre-Assembly

Table 8. Description of levels of severity.

Level	Description
Severity 1	- Product is non-compliant with applicable standards and regulations (e.g. UL, PCI, WNM, FCC, etc.) - Product could cause injury - Product contains security vulnerabilities that could result in loss or theft of customer secure data - Failure of primary project or product functionality with no work-around - Product will not install on supported configurations -Loss of revenue due to defect. (End user over-charged, customer loss of revenue)
Severity 2	- Failure of secondary application functionality with no work-around - Loss of data, non-secure
Severity 3	- Defect causes failure of non-critical aspects of the product / system. Buzz, Squeak and/or Rattle noticed by Customer - Craftsmanship issues, e.g. Lights out on card reader, bubbling /peeling graphics, unable to close/lock dispenser door

Company has decided rating for severity and occurrence rom 1-5, and for impact stage also assume rating from 1-5. Refer below table 9 for rating.

Table 9. Severity, occurrence, and impact rating

Severity	Rating
S1	5
S2	3
S3	1
Occurrence	**Rating**
High	5
Medium	3
Low	1
Impact Stage (Detection)	**Rating**
High	5
Medium	3
Low	1

For prioritizing the issues these rating of severity, occurrence and impact is used and that priority number called QDRF (Quality Defect Ratio Factor). QDRF calculated by below figure 4

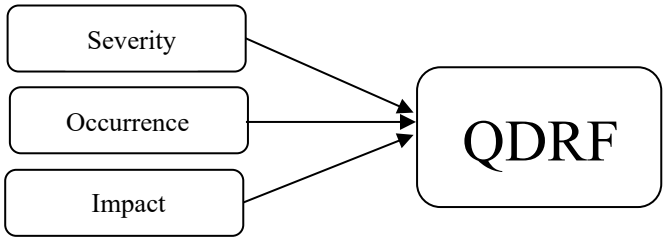

Figure 4. Severity X Occurrence X Impact = QDRF

By incorporating impact stage in prioritization of issue management can get the idea of cost impact of issue that occurred in production or in pre-production stage below prioritizing issue table shows before and after adding impact in QDRF calculation (Table 10 and Table 11).

Table 10. Prioritizing issue without impact

Sr. No	Issue List	Severity Level	Occurance (overall-Produced)	Impact (Detection Stage)	Severity	Occurance	QDRF	Defect Qty
1	ASSEMBLY CONSTRAIN-SIDE FRAME (Side-Removal HOles)	L2	High	M2	3	5	15	6
2	EVOLVE 2.1 PULSAR ASSEMBLY CONCERN-LS300	L2	High	M2	3	5	15	15
3	ASSEMBLY CONSTRAIN-SIDEPANEL GASKET	L2	Medium	M2	3	3	9	12
4	INNEAR SHEATH-CRACK ISSUE	L2	Medium	M2	3	3	9	8
5	ASSEMBLY CONSTRAIN-OUTLET TUBE HITTING INNER SHEATHING (Grommet not feasable for assembly)	L2	Medium	M2	3	3	9	4
6	9802 ERROR -PRINTER FAILURE	L1	High	M3	5	5	25	18
7	ASSEMBLY CONSTRAIN-VENTILLATION GRILL TO SIDEFRAME	L3	High	M2	1	5	5	22
8	Evolve pulsar-8031 error	L1	High	M2	5	5	25	80
9	Evolve pulsar-Wrong Checksum	L2	High	M3	3	5	15	44

Table 11. Prioritizing issue with impact

Sr. No	Issue List	Severity Level	Occurance (overall-Produced)	Impact (Detection Stage)	Severity	Occurance	Impact	QDRF	Defect Qty
1	ASSEMBLY CONSTRAIN-SIDE FRAME (Side-Removal HOles)	L2	High	M2	3	5	3	45	6
2	EVOLVE 2.1 PULSAR ASSEMBLY CONCERN-LS300	L2	High	M2	3	5	3	45	15
3	ASSEMBLY CONSTRAIN-SIDEPANEL GASKET	L2	Medium	M2	3	3	3	27	12
4	INNEAR SHEATH-CRACK ISSUE	L2	Medium	M2	3	3	3	27	8
5	ASSEMBLY CONSTRAIN-OUTLET TUBE HITTING INNER SHEATHING (Grommet not feasable for assembly)	L2	Medium	M2	3	3	3	27	4
6	9802 ERROR -PRINTER FAILURE	L1	High	M3	5	5	5	125	18
7	ASSEMBLY CONSTRAIN-VENTILLATION GRILL TO SIDEFRAME	L3	High	M2	1	5	3	15	22
8	Evolve pulsar-8031 error	L1	High	M2	5	5	3	75	80
9	Evolve pulsar-Wrong Checksum	L2	High	M3	3	5	5	75	44

From above both the table 10 and table 11, we can spot that issue no. 6 has higher cost impact.

4. Results and Outcomes

4.1 Objective 1

Time taken to fill order summary and customer OA form has been reduced after automating the form filling process. Below table 12 shows time taken by before and after automating the process.

Table 12. Comparison of time taken by old and new method.

	Before	After
Avg. time required to fill order summary and OA form (min)	25	5
No. of forms filled in 4 weeks	39	39
Total Time taken in 4 weeks (min)	975	195
Avg. Time taken in 4 weeks (min)	**243.75**	**48.75**

From above comparison it can be seen that, old process taking average time of 243.75 min in 4 weeks to fill order summary and customer OA form and new process taking only 48.75 min (Table 12).

4.2 Objective 2

Issue prioritization is based on QDRF no. higher the QDRF no. higher the priority.
By comparing table no. 8 and 9, it is observed that issue no. 6 has higher cost impact, and this issue needs to be taken as first priority to take corrective action. Similarly issue no. 8 and 9 need to be taken as second priority, and so on.

5. Conclusion

Delays can slow the order processing process, and ultimately reduce the production that company intended to achieve in constrained resources. As delays are observed in order processing process due to errors in information flow. Order processing delay is an indicator that orders processing function is not an effective and efficient process. These errors are eliminated by automating manual form filling process i.e., Order Summary and Customer Order Acknowledgment form using excel. Standard template is developed to understand all requirements of the customer along with terms and condition in Customer OA form. Due to automation human interference in the process got less, no need to assign resource to fill up form and give lot of time to verify and do amendment in the mistaken form as well as in BOM. Due to this 80% of the time is reduced in form the filling process. Also, no need to inform about delays due to this process and it also improve the image of the organization in customer.

To show the cost impact of the issue, impact stage rating added in prioritization of issues along with rating of severity and occurrence. By multiplying all three criteria, it gives effective prioritized open siren issue for corrective action, and it also help to show which issue has highest cost impact. Ultimately both actions i.e., automating form filling process and open siren issue prioritization helps to reduce order execution time.

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Biography

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