

FMEA Worksheet: example

Illustrative example, not customer data. The same worksheet, blank, is on the next page.

Process: Online order returns | Scope: From return request to refund notification | Team: CX, warehouse, finance, product, engineering | Date: Week 1

#	Step	Failure mode	Effect	S	Cause	O	Current control	D	RPN	Recommended action	Owner, due	New S	New O	New D	New RPN
1	Return request	Customer cannot find the return option for a marketplace item	Customer contacts support or gives up; complaint, low rating	5	Return button hidden for marketplace orders in the app	6	Monthly review of tickets tagged "return"	7	210	Show the return button on every eligible order; tag "can't find return" tickets	Product manager, Week 4	5	2	4	40
2	Return label	Return label email not sent	Customer cannot send the item back; refund delayed, repeat contacts	6	Label service times out at peak hours, with no retry	4	None: customers contact support	8	192	Automatic retry; label also downloadable on the order page; same-day alert for unsent labels	Engineering lead, Week 3	6	2	3	36
3	Receiving	Returned parcel received but not linked to the order	Refund never starts; customer chases support	7	Parcels without the printed label go to a manual pile	5	Weekly review of the manual pile	6	210	Pre-printed return label in every parcel; alert when the carrier shows a return delivered but not scanned within 2 days	Warehouse lead, Week 2	7	3	3	63
4	Inspection	Item wrongly graded as damaged by the customer	Refund refused or cut; dispute or chargeback	8	No photo or grading standard; inspectors judge differently	4	Supervisor reviews disputes after customers complain	8	256	Photo at receiving and a grading guide with examples; second inspector before any refusal	QA lead, Week 5	8	2	2	32
5	Refund	Refund paid after the 5-day promise	"Where is my refund?" contacts, complaints, chargebacks	6	Finance runs refunds twice a week	7	Weekly report of refunds older than 5 days	6	252	Daily refund run; alert for refunds older than 3 days	Finance operations manager, Week 6	6	3	3	54
6	Notification	Customer not told that the refund was paid	Extra contacts asking about the refund	4	No refund email for partial refunds	5	None: customers ask support	8	160	Refund email for every refund type; refund status on the order page	CRM manager, Week 4	4	2	4	32
7	Refund	Wrong amount refunded on a split-payment order	Customer loses money or the company overpays; trust and compliance risk	9	Refunds for split-payment orders are entered by hand	2	Finance checks every manual refund daily	5	90	Refunds only from the order record, split payments handled by the system; second approver for exceptions	Finance operations manager, Week 3	9	1	2	18
							Total RPN		1370						275

RPN 200 or more: high (red). 100 to 199: medium (amber). Any severity 9 or 10 is high, whatever the RPN. These thresholds are a team choice, not a standard.
Total RPN fell from 1,370 to 275. Row 7 has the lowest RPN (90) but severity 9, because the customer can lose money, so it got an action anyway.

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FMEA Worksheet

RPN = S × O × D. Score with the rating scales; act on severity 9-10 first, then on the highest RPN.

Process: _____ | Scope: _____ | Team: _____ | Date: _____

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10															

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FMEA rating scales (1-10)

Written for service processes. Agree on the scales before you score, and keep them the same between FMEAs so the numbers can be compared.

Rating	Severity (S): effect on the customer	Occurrence (O): how often the cause happens	Detection (D): will current controls catch it?
10	Safety, legal or regulatory breach, with no warning	Almost every time: 20% of cases or more	No control; nobody would notice
9	Customer loses money or data; a regulatory complaint is likely	10-20%	Noticed only by chance
8	Customer cannot complete the task; dispute or chargeback likely	5-10%	Found only when the customer complains
7	Major delay or rework; customer has to chase several times	2-5%	Found by an occasional manual check (monthly or less)
6	Noticeable delay; customer contacts support	1-2%	Found by a regular manual check (weekly)
5	Customer is annoyed and has to make an extra effort	0.5-1%	Found by a daily manual check or report
4	Minor inconvenience that most customers notice	0.1-0.5%	Automatic report that someone has to read
3	Minor inconvenience that few customers notice	0.01-0.1%	Automatic alert to an owner, the same day
2	Barely noticeable	Less than 0.01%	An automatic check stops it before it reaches the customer, almost always
1	No effect on the customer	Prevented by design: cannot happen	Error-proofed: it cannot reach the customer

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RPN or action priority?

RPN weighs S, O and D equally, so a severe but rare failure can rank low ($9 \times 2 \times 5 = 90$ is below $4 \times 5 \times 8 = 160$). The 2019 AIAG & VDA FMEA handbook replaced RPN ranking with action priority, which looks at severity first, then occurrence, then detection. Whichever you use, read severity first.