

Supplier Risk Assessment

How-to guide: what the workbook does, how to use it and what every number means.

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Supplier Risk Assessment

Score every supplier risk for severity, occurrence and detection, see which ones to act on, and track the mitigation actions to closure.

For: Supplier quality engineers, buyers, purchasing and supply-chain managers, and the plant leadership that reviews supply risk.

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Quick start

1. On Setup, agree the RPN threshold, the severity floor and the as-of date, read the rating guide, and replace the example suppliers with yours, with annual spend and single-source flags.
2. On Risk Register, add one row per supplier risk: category, what could fail, and severity, occurrence and detection from 1 to 10.
3. For every row that says Act, enter the mitigation action, owner and due date; type the closed date when it is done.
4. Fix anything the Check column flags, then open the Dashboard for the risks to act on and the overdue actions.

What is in the workbook

Start Here	Read this first: what the workbook does and how to use it.
Setup	Scoring rules, the as-of date, a rating guide and the supplier and risk category lists.
Risk Register	One row per supplier risk: ratings, RPN, priority, the mitigation action and its status.
Dashboard	The supplier risks to act on, overdue actions and where the risk sits, by supplier and category.
Method	How every number is calculated, with assumptions, limits and sources.
Verify	Self-check: the workbook's formulas recomputed on fixed inputs against an independent reference.

What each number means

Quantity	How it is calculated	Units
RPN	Severity x occurrence x detection (blank ratings count as 0 and the Check column says so).	1-1,000
Criticality	Severity x occurrence: the risk before any credit for detection.	1-100

Quantity	How it is calculated	Units
Vs threshold	RPN - the RPN threshold on Setup. Positive is over the threshold.	RPN
Priority	Closed when a closed date is typed; otherwise Act when RPN >= threshold or severity >= the severity floor, else Monitor.	-
Trigger	Which rule made the risk Act: RPN, severity, or both.	-
Action status	Complete when closed; otherwise Overdue when the due date is before the as-of date, Due soon within the due-soon window, In progress after that; blank with no due date.	-
Sort key (helper)	For open risks, RPN + 1 - ROW()/100000: the RPN plus a tie-breaker below 1 that keeps register order. The top-ten list takes LARGE(sort key, k) and finds its row with MATCH.	-
Open risks to act on, overdue actions	COUNTIFS of Priority = Act, and of Action status = Overdue, over the whole register.	count
Highest open RPN	INT(MAX(sort key)); by supplier and category, SUMPRODUCT(MAX((key matches) x (not closed) x RPN)).	RPN
Spend with an Act risk	Sum of the annual spend on Setup of every supplier with at least one Act risk (SUMPRODUCT over the supplier list with COUNTIFS > 0).	currency
Severity x occurrence matrix	COUNTIFS of open risks (Act or Monitor) whose severity and occurrence fall in each pair of bands (1-2, 3-4, 5-6, 7-8, 9-10).	count

Assumptions, limitations, sources and the self-check (the Verify sheet, which recomputes the workbook's formulas on fixed test inputs) are in the workbook. The last page shows the Dashboard with the example data for Brenmoor Conveyors, a fictional business.

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The supplier risks to act on, overdue actions and where the risk sits, by supplier and category.

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Register for Brenmoor Conveyors (example): 26 risks. Act = RPN of 100 or more, or severity of 9 or more. Action status as of 12 Oct 2026.

OPEN RISKS TO ACT ON	OVERDUE ACTIONS	HIGHEST OPEN RPN	SPEND WITH AN ACT RISK (EUR)
6	3	144	4,580,000
RPN or severity at its Setup limit	Target 0	Threshold 100	53% of annual spend on Setup
	Above target	Above target	

