

Selection-rate and impact-ratio calculator

Fictional sample. Requires tailoring and responsible review.

Document control

Field	Value
Document type	Selection-rate and impact-ratio calculator
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Status	At or above entered review threshold
Classification	Fictional sample. Requires tailoring.
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Purpose and decision boundary

Calculate two selection rates, their percentage-point difference and the comparison-to-reference impact ratio using customer-entered counts and threshold.

The output is a descriptive screen. It does not establish adverse impact, discrimination, statistical significance or a legal violation.

Entered counts and review thresholds

Input	Value	Basis
Reference group applicants or cases	600	Enter the complete reference group count for the same process and period.
Reference group selected	240	Enter favorable outcomes for the reference group.

Input	Value	Basis
Comparison group applicants or cases	400	Enter the complete comparison group count for the same process and period.
Comparison group selected	128	Enter favorable outcomes for the comparison group.
Review threshold percentage	80	Enter the organization's review threshold. A common 80 percent screen is only a rule of thumb and is not a legal conclusion.

Calculation findings

The threshold comparison is a descriptive screen. A qualified reviewer must interpret the result and the underlying data. Displayed percentages are rounded to two decimal places. Gates use unrounded expressions.

Measure	Result
Reference selection rate	40.00%
Comparison selection rate	32.00%
Selection-rate difference	-8.00 percentage points
Impact ratio	80.00%
Entered review threshold	80.00%

Entered review gates

Gate	Result	Basis
Impact ratio threshold	Met	Exact count cross-products against the entered decimal threshold. Inclusive boundary. Undefined reference rates do not pass.

Method and precision

- Selection rate = selected count divided by total count.
- Impact ratio = comparison selection rate divided by reference selection rate.
- Threshold comparison = impact ratio percentage compared with the customer-entered review threshold.
- Counts and ratio gates use exact integer cross-products.
- JSON and the workbook retain unrounded numeric observations. Those are floating-point approximations. Gate decisions use exact count and decimal expressions.

Responsible review

- The output is a descriptive screen. It does not establish adverse impact, discrimination, statistical significance or a legal violation.
- Confirm population completeness, labels, sampling and comparability against retained source evidence. This calculator accepts entered aggregate counts and does not inspect individual records.
- Customer-entered gates do not establish statistical significance, fairness, legal compliance or release approval.

Official sources

Source	Provision	Date	Link
Fairlearn project: Common fairness metrics	Selection-rate and impact-ratio calculator. Descriptive metric context. This calculator uses the customer-selected reference group, not the largest group or the minimum-to-maximum group ratio. No default legal threshold is supplied.	October 7, 2026	https://fairlearn.org/main/user_guide/assessment/common_fairness_metrics.html
scikit-learn project: Binary confusion matrix definitions	Selection-rate and impact-ratio calculator. Descriptive count validation. No customer labels, population completeness or fairness conclusion is established.	October 7, 2026	https://scikit-learn.org/stable/modules/generated/sklearn.metrics.confusion_matrix.html