Company A . $P(A) = 0.8$.

Company B $P(B) = 0.2$.

Success of A . $P(S/A) = 0.95$.

Success of B $P(S/B) = 0.9$

Failure of A $P(F/A) = 0.05$

Failure of B $P(F/B) = 0.1$

Bayes Theorm .

$$P(A/F) = \frac{P(F/A) \cdot P(A)}{P(F)} .$$

$$P(F) = P(F/A) \cdot P(A) + P(F/B) \cdot P(B)$$

$$= (0.05 \times 0.8) + (0.1 \times 0.2)$$

$$= 0.06 .$$

$$P(A/F) = (0.05 \times 0.8) / 0.06$$

$$= 0.6667 . \approx 66.67 .$$