

# Empowered Performance

## Lean Math Calculation for Insourcing

Piece/part cost in US - Piece/part cost in outsourced country – Slow cost of freight from production to customer = mass production cost	
+ Identify the additional overhead costs to be allocated to production in the higher-wage location, when production is transferred. <sup>1</sup>	+
- The historic cost of the additional inventory of goods in transit over long distances from the low-wage location to the customer.	-
- The historic the cost of additional safety stocks to ensure uninterrupted supply.	-
- The historic cost of expensive expedited shipments. <sup>2</sup>	-
+ The cost of warranty claims if the new facility or supplier has a long learning curve.	+
- The historic cost of engineer visits or resident engineers to get the process right so the product is made to the correct specification with acceptable quality.	-
- The historic cost of senior executive visits to set up the operation or to straighten out relationships with managers and suppliers operating in a different business environment. <sup>3</sup>	-
- The historic cost of out-of-stocks and lost sales caused by long lead times to obtain the part.	-
- The historic cost of remaindered goods or of scrapped stocks, ordered to a long-range forecast and never actually needed.	-
- The historic, potential cost, if you are using a contract manufacturer in the low-cost location, of your supplier soon becoming your competitor.	-
+ Currency risks	+
+ Country risks	+
+ Connectivity costs	+
<b>Total</b>	

<sup>1</sup> Consider the impact on the current products being produced in the US. This should reduce their overhead costs.

<sup>2</sup> You'll need to be careful here because the plan for the part in question typically assumes that there aren't any expediting costs, when a bit of casual empiricism will show that there always are.

<sup>3</sup> This may include all manner of payments and considerations, depending on local business practices.

**For more information:**

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