

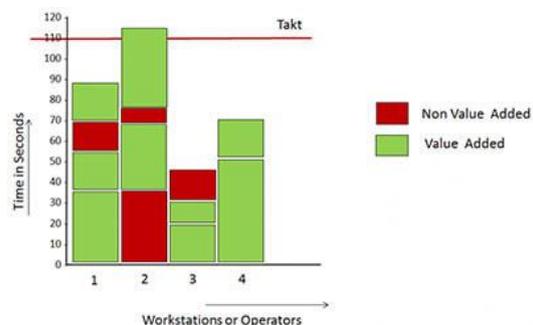
## Creating a Yamazumi Chart

Yamazumi is a Japanese word that literally means to stack up. Yamazumi work balance charts are used to visually present the work content of a series of tasks and facilitate work balancing and the isolation and elimination of non-value added work content. A Yamazumi chart (or Yamazumi board) is a stacked bar chart that shows the source of the cycle time in a given process, the chart is used to graphically represent processes for optimisation purposes.

Process tasks are individually represented in a stacked bar chart, these can be categorised as either Value Added, Non-Value Added or Waste. The mean duration time of each task is recorded and displayed within the bar chart. Each process task is stacked to represent the entire process step.

The axes of the Yamazumi chart are as follow:

y axis represents cycle time.  
x axis represents each process step.



In order to compile the bars in a Yamazumi chart you need to closely observe and time the work, paying attention to detail note the individual tasks being performed (how is the work being completed?) and determine if they add-value or not or if the step is wasteful.

Often, a target cycle time (mean cycle time / takt time) will be plotted to aid line balancing activities. The Yamazumi chart can be used for both process waste elimination and line balancing activity, or to identify what areas to leave alone. Process steps can be changed, rearranged or deleted to optimise and balance the target process.

## Benefits

The Yamazumi chart board provides a mechanism to quickly rebalance a process when takt changes, and allows a visual indication of which operations are overloaded (beyond takt), and which are underutilised.

The Yamazumi chart is a great visual tool to show where delays, wastage and blocks are happening