



Business Process Activity Mapping

The process activity map is the well known process flow chart; the origins are of course in work study and industrial engineering. Recently, however, with the advent of business process re-engineering and JIT these process charts have gained renewed interest, but with the difference that who now uses them are not just work study practitioners but supervisors and operators as well.

In fact, the first preference is for operators to learn how to use this most effective tool themselves. For an **external change agent**, following the process in detail gives credibility and confidence and helps prevent naive solutions, importantly, process activity mapping helps identify opportunities.

A particular concern that has emerged over the last decade is to do with value-adding and non value adding activities. The process chart is the prime tool for such analysis, (**see Business Value Stream Mapping**)

The process chart lists every step that is involved in the manufacture of a product or the delivery of a service to the end customer and that can be an internal company 'customer' or an external business customer.

The process chart helps identify wasteful actions, and documents the process completely. Good communication is an important reason to do this. The systematic record helps reveal the possible sources of quality and productivity problems in the factory or the office (**see Office Lean**)

A process map is a "snapshot" of activity at a moment in time. Of course, workloads and inventory levels may vary over the course of a month, and hence delay times may change. Record the actual figure that you observe, but you may also ask about minimum and maximum levels.

Most parts are made in batches, so you should try to record the average length of time to make one of the parts. For instance, where a container is being filled at the end of a process, record the length of delay that the median (middle) part will spend in the container before being moved.

Take particular care of inspection and rework points. Why is this necessary? Can it be done earlier? What happens to reject parts?

Some process chart compilers also use a digital camera, whilst going around take note of dates on inventory control cards, levels of dust and container discipline (are containers moved in a first in first out, or a last in first out sequence?). You may encounter some carousels where parts are moved or stored automatically. If so, mark them (unobtrusively if necessary) to get an idea of the length of storage or delay.

For **supply chain** purposes, it is especially useful to record the same product as it flows through several plants or stages. If possible, let the same person or team track throughout its journey along the supply chain.

In service businesses, but also in some customer interface manufacturing locations, process charts can be made more effective by differentiating between front office and back office operations.

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