

Why Production Planning is Venus and Manufacturing Execution is Mars!

Is the production planning environment, in which we deploy the ERP systems, really so different from the manufacturing execution environment? Can't we just deploy the traditional ERP systems in the execution environment as well? Here are some facts about the two environments that indicate otherwise - that planning is actually Venus and execution Mars!

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Facts about Manufacturing Execution:

- ♂ The Manufacturing Execution environment is a **real-time** environment.
- ♂ In the Manufacturing Execution environment a **fast, accurate, and intuitive user interface** is required.
- ♂ The typical input device is a **bar code** or **RFID scanner**, or a **touch-based interface**.
- ♂ The user or operator can be a **seasonal worker** who has received **no training** in the IT systems.
- ♂ The pace and beat in the execution environment is often dictated by machines.
- ♂ In the execution environment, new shifts constantly take over where the previous shift left off.
- ♂ Communication is **anonymous** – the sender and the receiver are identified by skill or resource type, not by name.
- ♂ Manufacturing Execution is about **change handling, local planning**, and optimization. It's about employing **empirical** or craftsman knowledge.

Facts about Production Planning:

- ♀ Production Planning environment is an **asynchronous** environment in which the planning process is an iterative set of refinements.
- ♀ Production Planning is done through a **classic graphical Microsoft Windows user interface**.
- ♀ The typical input devices are **mouse and keyboard**, and keyboard shortcuts to do information filtering etc.
- ♀ The user is **trained** in the ERP system and traditionally holds the same or a similar position within the company for several years.
- ♀ The pace and beat is to a large extent controlled by the individual production planner.
- ♀ In the planning environment **named** resources typically complete a full task or informally pass tasks on to co-workers.
- ♀ Communication is **point-to-point** with a named sender, and a named receiver.
- ♀ Production planning is a **global activity** – optimizing the overall utilization of company resources.

As a result of planning and execution being so inherently different, separate and incompatible IT systems are very often deployed in the two environments. Specialized manufacturing execution systems with their own data models are being deployed, making it very difficult and cumbersome for the planning and execution environments to interact.

The consequences of implementing completely separate systems for planning and execution:

- Low-speed communication – information about unforeseen changes in the plan or during execution cannot be expedited quickly.
- Low bandwidth communication between planning and execution - the communication channel between planning and execution can quickly become overloaded.
- Since the computer is the primary tool in the administration, IT investments in the administration tend to outpace investments made in the execution environment, in which investments in advanced machinery are prioritized.
- The consequence of this distortion is that manufacturing companies often acquire more and more advanced ERP systems as well as more and more advanced machines – but the road from the advanced ERP system to the advanced machines remains a simple country road!

Why Dynaway BLUE opens up a 4-lane highway from Venus to Mars!

Dynaway BLUE is all about breaking down the barrier between planning and execution, without ignoring the very different nature of the two environments! And Dynaway BLUE is about inherent respect for the execution environment, and the unique use case scenarios found in that environment.

Dynaway BLUE is built on the data model from the ERP system, thereby saving you from spending your IT budget on interfacing and maintaining two different IT systems.

Read more at www.dynaway.com/blue about the features of the Dynaway BLUE platform and how Dynaway BLUE can empower your shop floor for continuous improvement!

