

SOLEMN DECLARATION – INDIVIDUAL ASSIGNMENT

Solemn declaration by student

Module: Operations Management
Module Code: MBAA 812
Assignment No.: Individual Assignment
Assignment due date: 4/3/2020

I, Andries Bernardus Wessels declare herewith that the assignment which I herewith submit to the North-West University as partial completion of the requirements set for the MBA degree, is my own work.

Signature of student:



Student number: 37189182

Signed at Potchefstroom this 4th day of March 2020

Surname and initials: Wessels, AB

Student number: 37189182

Individual submission: Contact session: Contact 2

Theme(s): Human resource management (10), ERP&MRP (14)

Name of my organisation: Syngenta South Africa (Pty) Ltd

Pseudonym to be used if discussed in class: None

Nature of business: Multi-national, Crop protection, Seeds and Biotechnology

Brief (one paragraph) description of the scope of the business that I analyse:

Syngenta develops proprietary genetics through an internal and license based R&D program. These products are tested internally through a rigorous screening program to assess product performance and adaptability versus competitors before being introduced to the market. Production teams are responsible for the supplying the agreed upon volumes as communicated by the sales teams. Several distribution models are used to distribute seed to farmer customers and supported through marketing campaigns.

By submitting this on eFundi, I declare that this submission is my own work

- **Chapter 10: Human Resource (HR) strategy**
- In OM the HR objective should be to manage labour and design their jobs and workspace so that this resource is efficiently utilized while ensuring a good work-life balance, thus matching physical and psychological requirements.
- People make or break operations, but if managed well, become a key competitive edge through mutual trust and commitment for common objectives and reasonable policies.
- HR strategies depend on 3 decisions: 1) labour planning, 2) job design & 3) labour standards
- Labour planning gives staffing guidance on: 1.1) employment stability, 1.2) work schedules and 1.3) work rules. In (1.1) two policies exist: “*follow demand exactly*” that treats labour as variable expense and “*hold constant*” and treats labour as fixed costs (maintains trained workforce and limits layoffs).
- For (1.2), *Flextime* allows for better autonomy and job satisfaction but might be specific to certain industries as production requires full staffing. *Flex/Compressed workweeks* are viable for operational functions if suppliers and customers are accommodated. In service industries, people are moved to *part-time status* to address peak labour needs
- (1.3) is limited by strict Union regulation. Job classification and work rules limit flexibility that in turn reduces competitive edge in the HR strategy. Also difficult to build morale
- Job designs define the task for group or individual and is made up of: 2.1) job specialization, 2.2) job expansion, 2.3) psychological components, 2.4) self-directed teams and 2.5) motivations & incentives.
- 2.1) Adam Smith proposes reduction of labour cost through: dexterity through repetition, reduction of lost time because no change of jobs, specialized tools due to focus. Babbage supports by adding the exact wage that matches the skill set. **Benefit** is efficiency, **Limitation** is that employees don't bring their full selves to the job, only skillset. 2.2) allows for better work-life balance quality through job enlargement (horizontal expansion) or job rotation or job enrichment (vertical expansion). Empowerment allows for “ownership” for better personal interest and performance.
- 2.3) Design jobs to meet minimum psychological requirements i.e., skills variety usage, job identity to allow perception of entirety, impact of the job, offer freedom, provide feedback on performance. 2.4) is a group of empowered individuals reaching common goals in long or short term objectives. Teams are effective because they provide empowerment, ensure job characteristics and fulfil psychological needs
- Job expansions also have limitations mainly due to costs, additional training required, individual differences and smaller labour pools to pick skilled workers from. But firms still find a suitable trade-off in job expansion.
- 2.5) Money serves as both psychological and financial motivator in the form of bonuses, profit sharing and other incentives. Gain sharing is used to incentivize performance improvements. (Scanlon plan shares labour cost savings)
- OM managers should design a suitable ergonomic interface between human, environment and machines to give feedback and inputs to machines while illumination and noise levels should be managed.
- Labour standards relate to the time required to perform the job or part thereof. Accurate labor standards help determine labor requirements, costs, and fair work
- Standards are set in 4 ways: Historical experience, Time studies, predetermined standards, work sampling.
- The ROAM analyses is used to calculate the efficiency of assets' contribution to sales
- OM managers have a large role to play in achieving HR strategies as technical skill will only take you to middle management, people skills is what sets you apart for seniority

- **Chapter 14: ERP&MRP**

- Benefits of Material requirement planning are; 1) quicker responses to customer orders & 2) market shifts, 3) improved asset utilization 4) reduced inventory levels for increased market share and better return on investment as the result of the use of a dependant inventory scheduling system. Schedules thus require dependant systems
- MRP is the basis for ERP because it's a structure for dependant demand
- Use of dependant inventory models require: 1) MPS, 2) BoM, 3) Inventory, 4) PO's outstanding, 5) Lead times.
- 1) MPS is a timetable stating how demand will be met in accordance to aggregate plan developed by S&OP team. Near term plan is usually fixed and only longer term adjustments made. It's not a forecast. Expressed as: Order, Module or End item.
- 2) List of ingredients to make a product by providing structure and costing (picking list) Modular Bill is compiled by subassemblies. Planning bills are used for grouping.
- 3) MRP efficiency requires 99% inventory accuracy. 4) Good purchasing data required for executing MRP. 5) Consists of move, set-up and assembly times.
- Gross material requirements plan combines MPS and time phased schedule. It shows trigger dates for ordering or manufacturing to deliver by demand dates if no inventory on hand. Net requirements plan adjusts for on-hand inventory. Allocated items refer to assigned items for future production. Safety stock should be minimized and only kept as finished goods level.
- Re-planning is a strength of MRP, but should be avoided to limit "system nervousness" by using time fences or pegging techniques that limits rescheduling or tracing upwards in the BoM. MRP's are used for planning, not scheduling with application efficiency in repetitive manufacturing, not process environments that require frequent adjustments. MRP uses time buckets and therefor considered as an infinite planning tool.
- Lot sizing decisions are used to determine finer action of the MRP (how much, when): lot-for lot (exact dependant demand), EoQ for constant demands, PoQ order on timeframes
- With MRP in place, inventory data can be expanding by additional resource components and MRP becomes Material Resource Planning (MRP II) to provide the OM with a tool to manage outputs like effluent, emissions and inputs like money/energy
- As a system that provides feedback to the capacity plan, MPS is a closed loop system.
- To smooth load reports, OM's use Overlapping, operation/Order splitting techniques
- Distribution resource planning is a time-phased stock replenishment plan for all levels, "pulling" inventory through the system.
- Enterprise Resource Planning (ERP) is an information software system that combines the entire companies' resources needed to take, make and ship customer orders. ERPs allow for common database platforms, integration of business processes, and real-time info availability. ERPs use a centralized database that combines a variety of specialized systems like an umbrella ('jou ma se kop'). On top of MRP usage, ERP provide HR and Finance capability (we use SAP) Our Company uses "Salesforce.com" as a CRM ERP system.
- ERP software can be customized to fit requirements but come at considerable cost.
- These expensive and difficult to install systems, when successful, support cost leadership and strategies for differentiation.

