

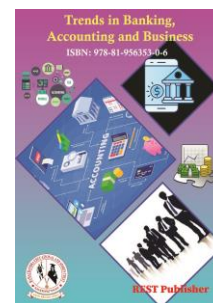


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A Study on Production Planning Control with Reference to Surin Automative at Hosur

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Abstract: Production planning is a pre-production activity. It is the pre-determination of manufacturing requirements such as manpower, materials, machines and manufacturing process. Ray wild defines "Production planning is the determination, acquisition and arrangement of all facilities necessary for future production of products." It represents the design of production system. Apart from planning the resources, it is going to organize the production. Based on the estimated demand for company's products, it is going to establish the production program to meet the targets set using the various resources. Production planning and control (or PPC) is a maintenance strategy that aims at enhances the efficiency by allocating human resources, manufactured goods, and equipment/machines. Manufacturers must create high-quality items at a cheap cost while maintaining adequate flexibility to satisfy quickly changing consumer needs in order to be competitive. the use of production. Production planning and control looks at any equipment outages or maintenance schedule and tries to keep things running smoothly. This will aid the facility in being productive and on-time with larger deals. Schedules, dispatching, inspections, quality control, inventory control, supply management, and equipment's management all need production planning. Production method guarantees that the production team meets the specified production target, makes the best use of resources, manages quality, and saves money. PPC advantages, stages included in production's planning and control, issues impacting production planning's and controls, function of PPC in business management, and PPC's interconnectedness with other parts of the production department are all discussed in this study

Keywords: Production's planning and control, manpower, materials, machines

1. OBJECTIVES OF THE STUDY

To study and analyses the material requirement planning on daily, weekly & monthly basis.

To study the actual lot size and reducing lot size based on the consumption value.

To study the receipts material as per collection plan as well as shortage plan and to find out the shortage quantity of material so that over production will be continuing.

To make a coverage plan for the parts blocking & unblocking in order to control the excess material & without collection plan material inward.

To calculate percentage savings of the organization.

2. SCOPE OF THE STUDY

To manufacture a product, different types of inputs are used. The quality of the product depends upon the nature of the inputs are used. To achieve a level of production, determination of quantity of the inputs and their composition is very important. A product can be prepared only when there is an estimate of the required composition of inputs. It ensures the proper coordination among the workforce, machines and equipment. This leads to a avoidance of wastages and smooth flow of production. The planning of materials ensures the regular supply of raw materials and other

components. The regular flow of materials and supplies are helpful in the uninterrupted production. There is a need to use the available resources effectively. It is helpful in bringing down various costs of production.

3. LITERATURE REVIEW

Karen Santin [2017] developed a Production planning model using an open queuing network. By acquisition of utilization, queue length of the resources and packet delay, and reliability of the systems, they derived the service Production of the systems along with the arrival rates of clients and the failure rates of the resources. They demonstrated that large-scale multimedia service systems with feedback are unreliable operation.

Becher (2017) His objective was to identify the revenue potential of a rule-based implementation of revenue management as a method for simultaneous Production and price control. First, the general conduction of this integrated method was described based on the available literature. Second, the limitations and constraints in the use of the underlying model especially in terms of the applicability in practice and the impreciseness of information were illustrated. Third, a solution concept was established that is able to cope with these limitations. Necessary stability and robustness of a fuzzy control system was developed by a simulation tool that was able to performing a large number of fuzzy systems with changing parameters and analyze changes in the solution due to changes in the system. Showed that one of the most compelling reasons for this kind of solution, in addition to significant improvements in income, was the ability to use the rule set for CPC and also for the SCPC

Ceryan, Koren (2017), formulated Optimal Production selection problem using mixed integer programming and numerical studies performed to provide insights about how these decisions are affected by investment costs, product revenues, demand forecasting scenarios and fluctuations in the planning periods .They showed that optimal investment strategies include greater participation of flexible systems under lower flexibility investment cost, high product revenues as well as high products uncertainties within the time periods.

Giarola et al.(2018), developed a general mixed integer linear programming modelling framework to assess the design and planning of a multi-period and multi-echelon bioethanol upstream supply chain under market uncertainty and aiming at the maximization of the financial performance of the business (expected net present value, eNPV) and complying with environmental sustainability criteria (minimum GHG emissions savings). Results showed the effectiveness of the model as a decision making-tool to steer long-term decisions and investments.

Koenig, Meissner (2018), considered the problem of a firm selling multiple products that consume a single resource over a finite time period and analyzed the difference between a dynamic pricing policy and a list-price Production control policy. The differences between the policies showed that list pricing can be a useful strategy when dynamic pricing is costly or impractical.

4. RESEARCH METHODOLOGY

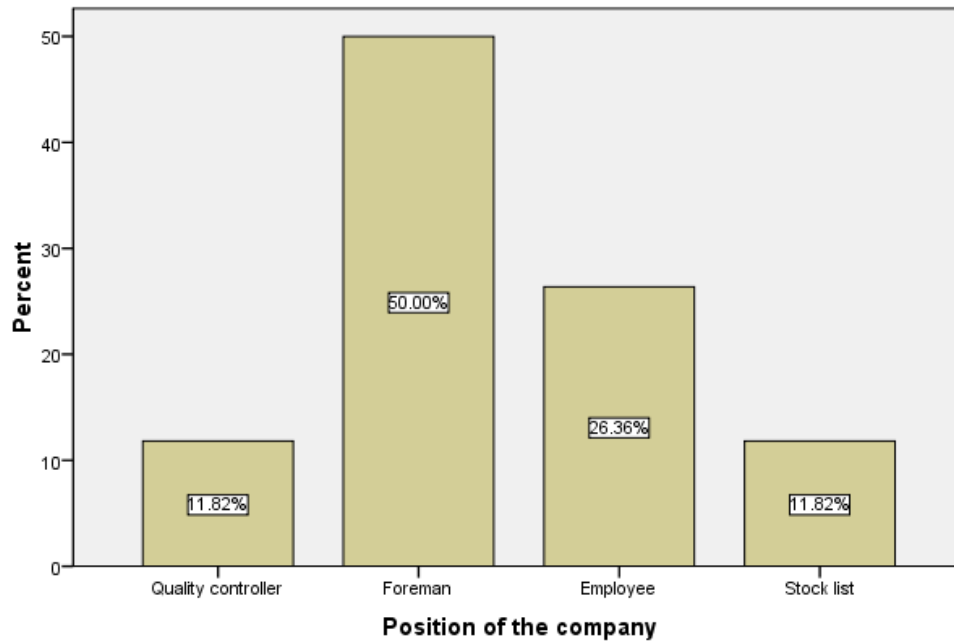
5.

Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. In it we study the various steps that are generally adopted by a researcher in studying his research problem along with the logic behind them. It is necessary for the researcher to know not only the research methods techniques but also the methodology. It refers to process used to collect information and data for the purpose of making business decision.

6. DATA ANALYSIS

POSITION OF THE COMPAN

POSITION	RESPONDENTS	PERCENTAGE
Quality controller	13	11.8%
Foreman	55	50.0%
Employee	29	26.4%
Stock list	13	11.8%
Total	110	100.0%



Correlations			
		an advantage of process layout	agree with are possible limitations of having smart PPC
an advantage of process layout	Pearson Correlation	1	.940**
	Sig. (2-tailed)		.000
	N	110	110
agree with are possible limitations of having smart PPC	Pearson Correlation	.940**	1
	Sig. (2-tailed)	.000	
	N	110	110

** . Correlation is significant at the 0.01 level (2-tailed).

7. FINDINGS

1. Majority 83.6% of the respondents are male
2. Majority 40.0% of the respondents are in the age between 31 -40 years
3. Majority 50.0% of the respondents are foreman
4. Majority 37.3% of the respondents are experienced in 10-15 years
5. Majority 36.4% of the respondent are earning below Rs.15,000
6. Majority 41.8% of the respondents are require routing facilities
7. Majority 40.0% of the respondents are require following up facilities
8. Majority 31.8% of the respondents are feeling very high about production facilities
9. Majority 29.1% of the respondents are always and often producing the desired products at the desired rate
10. Majority 35.5% of the respondents said machines' down time also increases is the disadvantages of product layout
11. Majority 40% of the respondents said breakdown of one machine does not stop the production process is the advantages of process layout
12. Majority 53.6% of the respondents are allows flow of materials in operation
13. Majority 28.2% of the respondents are provide operable services
14. Majority 79.1% of the respondents are completed digitalization initiative/production

8. SUGGESTIONS

The study also revealed that Production planning systems tool ensures that the right items are bought and made available to the manufacturing operations at the right time materials procurement process ensures that raw materials are availed at the right place and sourced at the lowest possible cost Reducing plant schedule through integration with design and cost systems Improving risk management through better overall project performance, project cash flow management, and true management by exception. That manufacturing organisations make raw material plans and schedules such that arrival of raw material and other inventories is programmed to ensure that there is no delay between requisition time and the time. Production planning and control involves generally the organization and planning of the manufacturing process. Specifically, it consists of the planning of the routing, scheduling, dispatching and inspection, co-ordination and the control of materials, methods, machines, tooling and operating times. Based on this project, the researcher has identified the various weakness zones of production planning and controls like for the cancellation of orders, complaints from customers and failures in delivery commitment through survey and analysis using statistical tools

9. CONCLUSION

The study concludes that implementation of productive planning systems tool positively influenced the performance of SURIN AUTOMOTIVE (P) LTD at Hosur. The automobile industries had implemented planning systems tool to a great extent. planning systems tool helped to optimize performance through customer service and that the firm had achieved significant cost saving, improvement in production efficiency and that materials management tool ensured that the right items are bought and made available to the manufacturing operations at the right time. The study concluded that implementation of inventory control positively influenced performance of automobile industry in Hosur, further investments in inventory control tools would promote efficiencies in industries and that inventory control tool ensured smooth production operations are achieved though maintenance of reasonable stocks of materials.

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