Chapter 8

8. Conclusion and Further work

8.1 Introduction

The aim of this project was to introduce and implement a productivity measuring and monitoring system with the intention of increasing the labour productivity and there by decrease the cost of production and to face the challenges of the fierce competition. This chapter is for concluding the overall achievements of the objectives. It is clearly justified that aim and objectives have been achieved successfully, by analysing the trends of productivity changes and the monthly sales turnover with other supportive information like number of leaves taken, labour turnover, late attendance etc before and after the solution is implemented

Further, limitations and draw backs are pointed out in this chapter and finally, possible extensions and improvements also have been discussed here.

8.2 Conclusion

Since, the BSO I was identified as the most feasible solution, software application was developed as per the BSO I by catering for all the user requirements. Since implementation was done in module wise as per the architectural design as shown in Figure 5.8, implementation was easy and could be able to complete successfully as per the project plan. Now system is in operation without any issue. All the expected functionalities are available in the system and users are very much happy to use the system. Based on the system outputs, it was monitored that the pre-set productivity targets had been met by many production lines. Bonus scheme has been started and rewarding of employees has been started based on the system outputs.

It was monitored that both late attendance and absenteeism had been decreased. Further number of leaves taken also have been decreased. That information provides good evidence to prove that the Employees' motivation also has been increased. Number of orders (quantities) processed also have been increased. Further it was noticed that the monthly turnover also had been increased around 30 present compared to earlier months. Detailed analysis was done by considering many other relevant factors like labour turn over, overtime hours etc and has confirmed that the cost of production has been decreased after implementation of the system. By considering the above factors, this system implementation can be considered one of the most successful implementations which has brought tremendous results to the organization and hence it can be concluded that the efforts put for implementation of proposed solution has not gone in vain and has driven the organization towards a successful endeavour.

8.3 Limitations and Further Work

8.3.1 Limitations

There are few limitations in the solution as discussed below.

Although the system calculates the weekly productivity values using raw transaction data in line wise, there is no facility to freeze the adding, editing or deleting transaction data after releasing the final productivity values. In addition there is a possibility of changing the previous published productivity values if some one changes the past data by mistake. As an alternate solution, a utility has been provided to archive the calculated final productivity values for later references.

At the system study it was found that, maximum number of employees who allocates for a single job operation is four. In the system the provision is there to allocate maximum of six employees for a single operation. But if there are exceptional cases, then the relevant operation can be broken into two as two separate operations and use the system without any issue.

Further, at a time only six different graphs can be added to the multiple graph page for analysing purposes.

8.3.2 Further Work

In the BSO II, it has been proposed to implement bar-coding method to capture data through wireless scanning units. Although this BSO is currently not technically feasible, may be this can be implemented by introducing latest technologies. If so, difficulties of data collecting and data entering can be reduced. Accuracy can be increased. Since data entering is done manually, it takes few days to give the productivity values to employees. But, if we can implement bar-coding methodology and wireless scanning unites, productivity values can be generated without any delay.

Further, at present in the new system, productivity values are calculated in line wise. But in the system, the provision is there to implement the employee wise productivity calculation.