CHAPTER 7:
DATA COLLECTION AND CLASSIFICATION
DATA COLLECTION SOURCES

The data for the research is collected from 200 different small and medium scale entrepreneurs or decision makers. It was proposed to be a convenient sample of the entrepreneurs, but in the due course of data collection process, it was realized that to collect data from a large mass of busy entrepreneurs, who are not using computers to a noticeable extent, and who are especially not looking up to any customized computerized solution, is a real challenging task.

So the method adopted to collect data and to regularize it, a questionnaire was designed, but the details collected through informal talks, indirect approach, on-line form filling. However, a structured format of personal interview is not followed, the details collected are arranged in the strict format of questionnaire and the classification is as follows.

PRIMARY CLASSIFICATION

1. TYPES OF UNITS: The first criterion selected is the type of unit, since decision pattern changes a lot with the change of type. As displayed in the chart, out of 200 units 44 units were manufacturing, 155 units were service providing, 1 unit is EXIM unit.
2. **Scale of Units**: The second criterion is the scale of units, because financial and technical feasibility largely depends upon the scale and financial capacity of the unit. As it can be seen in the diagram 9.2 out of 200 units interacted with, 38% are small and 29% units are medium scale units.
3. **MARKET SHARE**: Past decisions can be assessed with different parameters, one of which is market share. For 200 units contacted, the scenario about market share is displayed in this diagram. 61% units claim to hold 20% to 40% market share in their respective area.
4. UTILIZATION OF ESTABLISHED CAPACITY: The best decisions majorly lead to optimum allocation of resources, and eventually to maximum utilization of established capacity of a firm. Here, as seen in the diagram, 160 units (80% units) utilize on 50% to 70% established capacity of their firm, which is a signal of poor resource allocation and so of weak decision making.
5. **Failure of Production Schedule:** Production scheduling is a routine decision. Such decisions are normally taken by gross experience. This results in failure of production schedule in 10% to 30% cases, for 133 units (66.5% units). More shocking figure is that of 7 units having failure rate from 30% to 50%. Although the number is not too big in a sample of 200 units, it might count remarkable in the complete assessment if conducted.
6. **Demand Forecasting Method Adopted**: Planning and scheduling greatly depends on demand forecasting efficiency. Demand forecasting can be done with different methods. We have collected data, and found the units using methods like Agency Services, Intuition / Experience, Statistical Methods, Software or Other Methods. It is noticeable here that 168 units (84% units) forecast demand only using Intuition / Experience, which is quite disappointing.
7. **DIFFERENCE BETWEEN ACTUAL AND FORECASTED DEMAND:**

Efficiency of the method employed for demand forecasting is assessed with the help of deviation observed of actual demand from estimated/forecasted demand. Apparently, there are 56% units (112 units) having deviation rate of 10% to 25%.
8. SOFTWARE / APPLICATION USED: around 29.5% units (59 units) do not use any software. Units using computer software comprise of the units using Microsoft Word (62 units), Microsoft Excel (39 units), Microsoft Access (2 units), Tally Accounting software (15 units), Word and Excel (12 units), Customized software (3 units – these units also have got the applications designed mainly for inventory and accounting), and Lotus (8 units). Now this discomforting number of 59 units explains the whole case. When in a sample of 200 units 59 units are not using any software, for the whole population this number may elevate to a greater extent. We will apply proportion test (z-test) and will try to assess this point in the next chapter. Another scope for statistical analysis
is to check whether the proportion of units demanding customized applications is significantly greater than zero, will also be traced.

Figure 7:8 - SOFTWARE USED

9. FACING PROBLEMS IN USING SOFTWARE: Out of 141 units using some software for their routine activities, detail storage or analysis, 123 are happy with the basic applications they use, 18 decision-makers face problems with the applications they utilize.
10. **PROBLEMS IN USING SOFTWARE**: Looking into this point, it amazes us with a fact that, majority problems come as technical infeasibility to use a computerized tool rather than financial infeasibility or non-affordability. Although, here software application in question are very primary applications like Word, Excel, Access and Tally and one or two customized applications, it does not lose significance that prime concern is technical comfort over financial one.
11. **DO YOU OPT FOR CUSTOMIZED SOFTWARE?** This is a question which leads to the future scope for Business Intelligence tools to play role in decision making of small businesses, they way they contribute in large business processes. At juncture too subdued outcome is 144 units are quite indifferent towards the need of a customized application and so for the need of computerization in the day-to-day business process for decision making. We can consider lack of skilled employees or the technical infeasibility in the root of this pessimistic retort. *Here it exhibits a clear vacuum in the area of Business Intelligence Tool / Application designed principally for SMEs.*
12. **Features Expected in Customized Solution:** When asked about the features decision-makers seek in customized software solution, their responses were woven around six main factors i.e. Cost, Good Presentation, Less Hardware Requirement, Complex but more facilities and functions, Ease of use and maintenance and Implementation Ease. The combinations they suggested are displayed as given in diagram 9.12.
Independently treating the features, we have the preferences like mentioned below.
As we can see, Cost and Ease of Use and Maintenance are the characteristics most preferred in a customized software solution. Means financial and technical + technological feasibility is the main concern for the entrepreneurs. Eventually it narrows down to the path leading to a tailor-made software solution which satisfies the primary requirements and helps an individual to arrive at a decision following an easy alternative selection process.