

classmate
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Models helps us predict the limitation also the real world changes on a particular system or process. To make a model as close to reality as possible it should have a random nature. Hence stochastic model is most preferred one as it recognizes the random nature of components.

Following are the steps to develop a model to plan the process of 'worse case' scenarios.

Step 1:- Define objectives for the modeling process.

Step 2:- Planning of modeling process to validate the model.

Step 3:- Collection and analyzation of necessary data for the model.

Step 4:- Defining parameters and considering most appropriate value here.

Step 5:- Capturing the essence of real world system to predict the detail which may arise in future.

Step 6:- Involving the experts on the model to validate the model when.

Step 7:- ~~Choosing~~ choosing a statistically reliable random no. generator. to perform accurately for modeling.

Step 8:- Programming for model

Step 9:- Debugging the programme

Step 10:- Testing reasonableness of the output in model.

Step 11:- Reviewing the model to confirm that it's appropriate.

Step 12:- Analysing model's output

2:- The factors which would cause this probability to be inaccurate are

- 1) Wrong data collection and then making the model based on it.
- 2) Considering inaccurate parameters
- 3) Not considering real world system
- 4) Not validating or rechecking the model
- 5) Mistaking in model programme.
- 6) Any once in a blue moon situation leading to a system crisis and eventually leading the inaccuracy in model.
- 7) Fraud done by consumers.

3⇒ Identifying an appropriate model is very important and if neglected can result in failure of project that has been modeled

following six stages I would go through in identifying an appropriate model

Stage 1 Model heavily depend on data so collecting high quality data.

Stage 2 Understanding the things to be considered and avoiding using a model as a 'black box'

Stage 3 Then to make sure that the chosen model will represent reality

Stage 4 cleaning the data.

Stage 5 Data analysis which has further 3 steps descriptive analysis, inferential analysis or predictive analysis.

Stage 6 Modelling the data with appropriately selected model.

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4) The key items I would include in documentation on the model are

Documentation of model and it's result is a way of communicating the data to other. It must be easy to understand keeping in mind the people we are communicating their viewpoint and what they desire to get from our model. So that they accept the model as valid and useful tool in decision making. Also the validity of model should remain unaltered and fully creditable.

The key items I would include in documentation of model are

- 1) No large numeric data included
- 2) Tables can be used to represent filtered numeric data
- 3) Using Graphics for showing trends and comparisons.
- 4) Formats such as Pie chart, Bar graph, Line graphs etc should be used.
- 5) Visual information addition enhance the impact and readability.

5. Advantages

- 1) The age-specific consumption rate of past ten years may help in targeting the population who is not using the bar and with the help of TV commercial or schemes.
- 2) To Predict future projections according to increase in consumer company can invest in production capacity or not.
- 3) According to total demand and supply company can think of investing in different project.

Disadvantage

- 1) Age specific consumption rate may lead to tedious process as the data will be huge.
- 2) The rates of consumption with respect to age may not be accurate instead Area wise consumption will give more accurate result.
- 3) Age prediction may show young generation using the bar more compared to old generation but as technology is increasing and with arrival of something different which may substitute the Scramble Bar and all the projection will be considered false.

6) The student accuracy who was assigned the revised data may be fresher so he did some mistake or the ~~data~~ parameter which was not changed ^{needed to} have been to be changed to avoid blunder occurred. The 1st student who made the model may not have considered accurate data. Maybe the ways 1st student presented the data failed to communicate i.e. was not reproducible by third party. So the repeat analysis changed the result. Maybe ^{lack of} ~~lack of~~ Big data was not used by 1st student.

7) Considering age distribution to determine the future population by age and thereby deciding the number of schools for that amount of children is an excellent approach and it is almost accurate but ~~one~~ ^{one} must also consider the increase in industrialization and arrival of new technologies which might encourage the ~~shift~~ ^{shift} of rural population to shift.

in urban areas where a lot of new and best quality of facilities are available hence the prediction might go along as well. Also industrialization will encourage ~~so~~ people from outside that area to get settled there. So population can cross the estimated value.

8-) Factors which the company should take into consideration while developing the model.

- 1) The employees medical history
- 2) Their family background
- 3) Their value for company
- 4) Their salary range
- 5) The people who are dependent on them etc.