



Symbiosis University of Applied Sciences, Indore

India's First Skill University

PRACTICAL JOURNAL

Enrollment Number – 2019BTCS088

Year of Enrollment – 2019

Name of the Student – YASH GUPTA

School of COMPUTER SCIENCE & INFORMATION TECHNOLOGY

Program – B. TECH

Specialization/ Branch – CS&IT

Semester – 4TH

Section – B2

Branch – CS&IT

Paper Code – BTCS04CF01

Name of Paper – Business Processes & MIS in BFSI

Faculty-In-Charge – AMRITA CHAURRASIA MAM

CERTIFICATE

**THE PRACTICAL EXPERIMENTS
ENTERED IN THIS JOURNAL HAVE BEEN
SATISFACTORY PERFORMED BY**

**ENROLLMENT NO - 2019BTCS088 MR/MS YASH GUPTA
STUDYING IN PROGRAM B. TECH BRANCH CS&IT IN
SCHOOL OF COMPUTER SCIENCE & INFORMATION
TECHNOLOGY
DURING SEMESTER 4TH OF ACADEMIC YEAR 2020-2021**

(Faculty in charge)

Date: _____

INDEX

[illegible]

PRACTICAL ACTIVITY NO: 1

Date: June 09th, 2021

PRACTICAL ACTIVITY NO: 1

1. TITLE: Creating Form & Database in MS Access ^{LibreOffice Base}
2. AIM/OBJECTIVE: The objective of this practical activity is to:-
- (a) Find out what are forms & databases in ^{LibreOffice Base} ~~MS Access~~ why do we need them?
 - (b) How to use forms for displaying cases of our stores?
 - (c) How to design database schema in LibreOffice Base?
 - (d) How many types of forms we can create in it?

3. METHODOLOGY: There are many types of forms we can create. But the two main broad categories are

- a. Bound Forms
 - Single Item Form
 - Multiple Item Form
 - Split Form
- b. Unbound Forms

→ Step 1: We gonna create Bound form → of Multiple items
So firstly start your PC then open your LibreOffice Base.

→ Step 2: Open our Database. If your Database is created
else
First Create your Sample Database using following steps:-

- (a) Go to the Database Wizard.
- (b) Select Database type. In first step.
- (c) Then select "Register your database" in LibreOffice option & tick mark "Open the Database for editing".
- (d) Click on **Finish** button.

→ Step 3: Go to create tab in the forms group, in the upper right-hand corner you will see the form wizard button.

→ Step 4: Click on that button to launch the form wizard
On the first screen of the wizard, we can select ~~this~~
fields that ~~you~~ want to display on our form
& we can choose from fields from more than
one table or a query.

Our Fields Name →

Id	Name	Phone No	School
----	------	----------	--------

Our Field Types :

Id	}	Integer	← Selecting this as a primary key!
Name		Text	
Phone No.		Integer	
School		Text	

4. BRIEF DESCRIPTION : Forms in LibreOffice Base are like display cases in stores that make it easier to view or get the items that we want. Since forms are objects through which we or other users can add, edit or display the data stored in our LibreOffice Base desktop database, the design of our form is an important aspect.

1. Bound Forms → These forms are connected to some underlying data source such as Table, Query or SQL statement.

→ Bound forms are what people typically think of when they think of the purpose of a form.

→ Forms are to be filled out or used to enter or edit in a database.

Ex: → Where a user use to enter, view or edit data in database.

2. Unbound Forms : → These forms aren't connected to an underlying record or data source.

→ Unbound forms could be dialog boxes, switch boards or Navigation forms.

Single Item Form : This is the most popular one & this is ^{used} where the records are displayed ← one record at a time.

Multiple Item Form : This displays multiple records at a time from that bound data source.

— x —

Assessment Parameters (To be filled by faculty)

1. **Successful completion of Practical (Y/N)**
2. **Time taken (hours/ minutes)**
3. **List other Parameters & Outcomes:**

<u>S.No.</u>	<u>Parameters</u>	<u>Outcomes</u> <u>(Achieved / Not Achieved)</u>

Remarks:

DATABASE SCHEMA OF OUR USER FORM IN LIBRE-OFFICE BASE:

	Field Name	Field Type	
🔑	Id	Integer [INTEGER]	This is a primary key
	Name	Text [VARCHAR]	
	Phone no.	Integer [INTEGER]	
	School	Text [VARCHAR]	

DATABASE WIZARD IN LIBRE-OFFICE BASE:

Database Wizard

Steps

1. Select database

2. Save and proceed

Decide How to Proceed After Saving the Database

Do you want the wizard to register the database in LibreOffice?

☒ Yes, register the database for me

☐ No, do not register the database

After the database file has been saved, what do you want to do?

☒ Open the database for editing

☐ Create tables using the table wizard

Click 'Finish' to save the database.

Help

< Back

Next >

Finish

Cancel

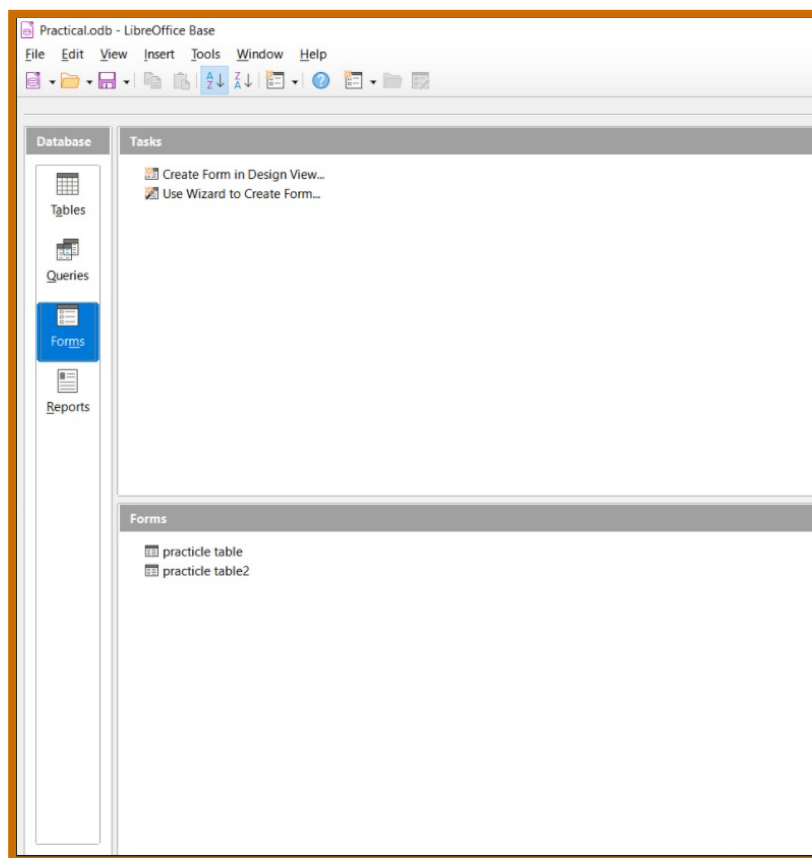
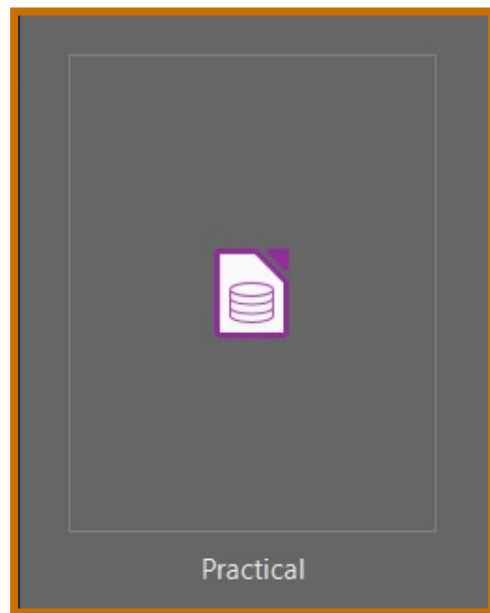
USER INTERFACE OF OUR USER FORM IN LIBRE-OFFICE BASE:

ID	<input type="text" value="1"/>
Name	<input type="text" value="Yash"/>
Phone no.	<input type="text" value="9785452211"/>
School	<input type="text" value="csit"/>

TABLE CREATED IN OUR DATABASE AFTER USER FILL'S THE FORM:

	ID	Name	Phone no.	School
▶	1	Yash	9785452211	csit
	2	Suresh	9564785544	bba
	3	Ganesh	9874521144	bfsi
+				

DATABASE UI AS SHOWN IN LIBREOFFICE BASE:



PRACTICAL ACTIVITY NO: 2

Date: June 10th, 2021

PRACTICAL - ACTIVITY-02

1. TITLE: Data Visualization in MS-Excel

2. AIM/OBJECTIVE: The objective of this practical activity is to:-

- ①: Why we humans need to visualize data?
- ②: What do we mean by Data Visualization?
- ③: Use case of Data Visualization in Excel.
- ④: Implementing different kinds of Charts in MS-Excel.

3. METHODOLOGY: As we have various kind of charts which we use for visualizing our Data in MS-Excel

As we have taken one example related to "Display the sold quantities against the sales per year".

↳ Step ①: Open MS-Excel software. Create one ~~new~~ ~~database~~ workbook. Then Import dataset from Internet.
(Site: <https://www.gurug9.com>)

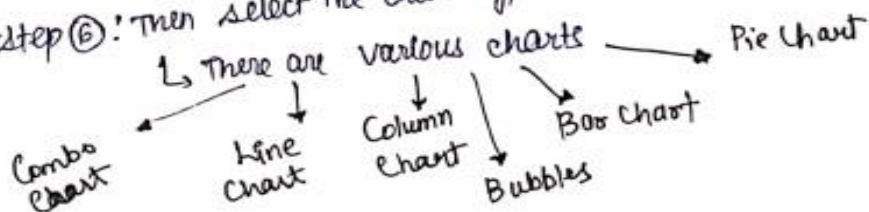
↳ Step ②: Enter the data from data source { In our case above website }

↳ Step ③: First select the datatable which we want to represent in graph.

↳ Step ④: Then click on INSERT tab from the ribbon bar.

↳ Step ⑤: Under the Columns click on the column chart drop down button.

↳ Step ⑥: Then select the chart type we want.



4. BRIEF DESCRIPTION : (Humans perceive vision)

→ we can very easily visualize rather than doing computation like computers. Hence,

we (humans) are more comfortable with the visuals.
Now Here, visualizing the data → provides a very deep insight about dataset & ↗

these combined sets of data in visuals is known as

CHART.

→ A chart is a visual representative of data in both columns and rows.

Charts are usually used to analyse the trends & patterns in data sets. Using charts, we can easily tell which year had the most sales and which year had the least.

→ Importance of charts : → It is easier to analyse trends & patterns using charts in MS Excel

→ It allows us to visualize the ~~charts~~ data graphically.

→ Easy to interpret compared to data in cells.

→ Chart type : → when ~~you~~ ^{we} want to quantify items & show them as percentages.

↳ (Pie chart)

↳ (Bar chart) → when ~~you~~ ^{we} want to compare values across a few categories. The values run horizontally.

↳ (Column chart) → when ~~you~~ ^{we} want to compare values across a few categories. The values run vertically.

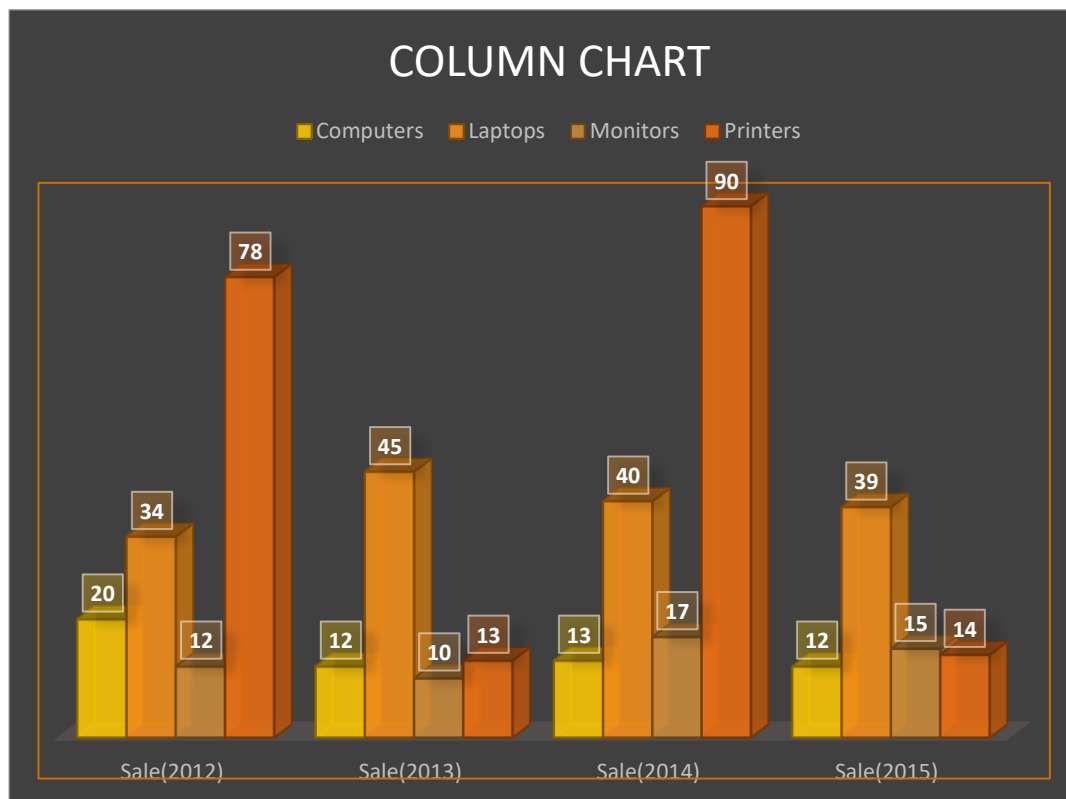
↳ (Line chart) → when we want to visualize trends over a period of time i.e. months, days, years etc.

↳ (Combo chart) → when ~~you~~ ^{we} want to highlight different types of information.

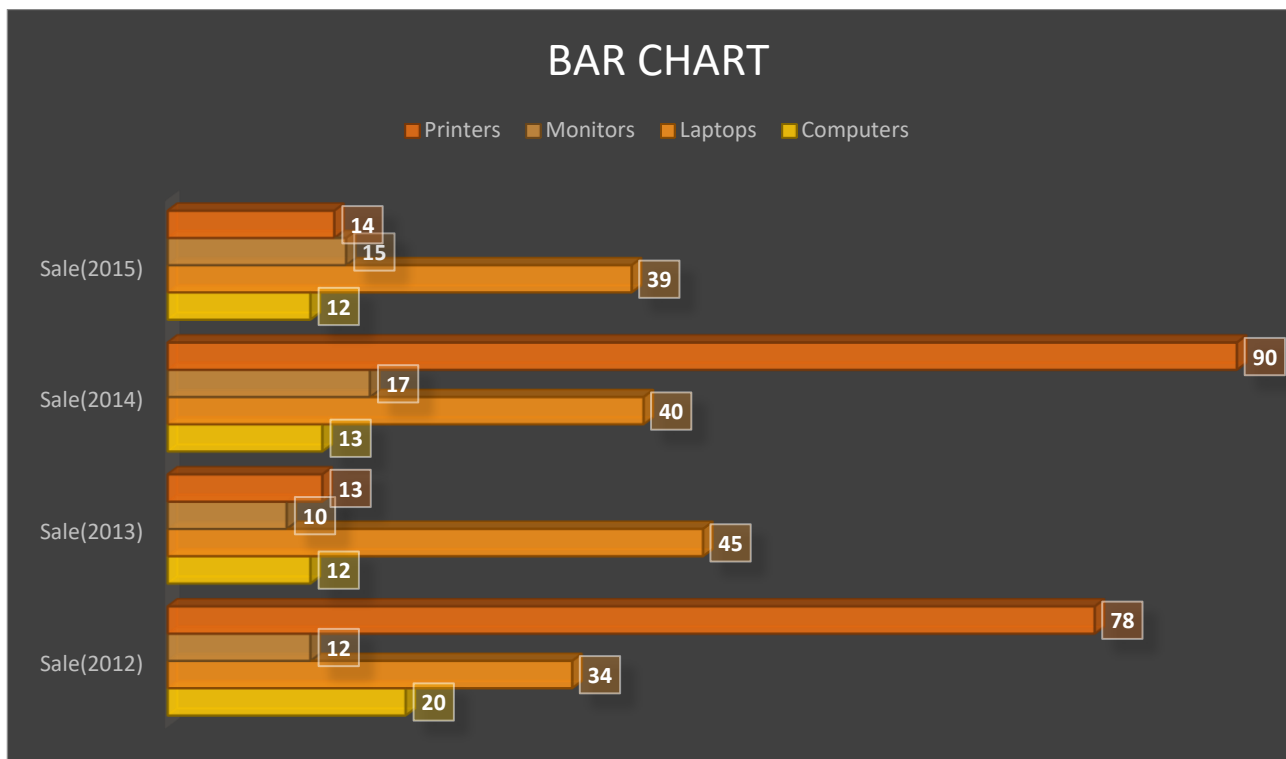
SELECTING FIELDS OF OUR DATA TABLE:

Item	Sale(2012)	Sale(2013)	Sale(2014)	Sale(2015)
Computers	20	12	13	12
Laptops	34	45	40	39
Monitors	12	10	17	15
Printers	78	13	90	14

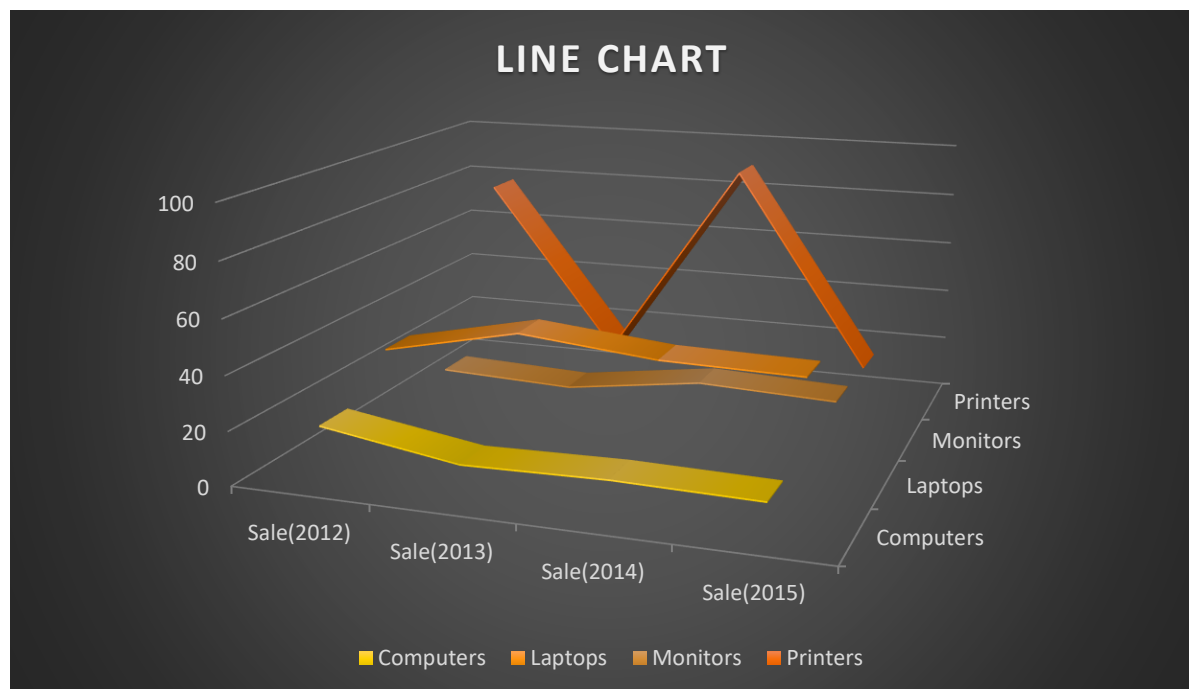
COLUMN CHART:



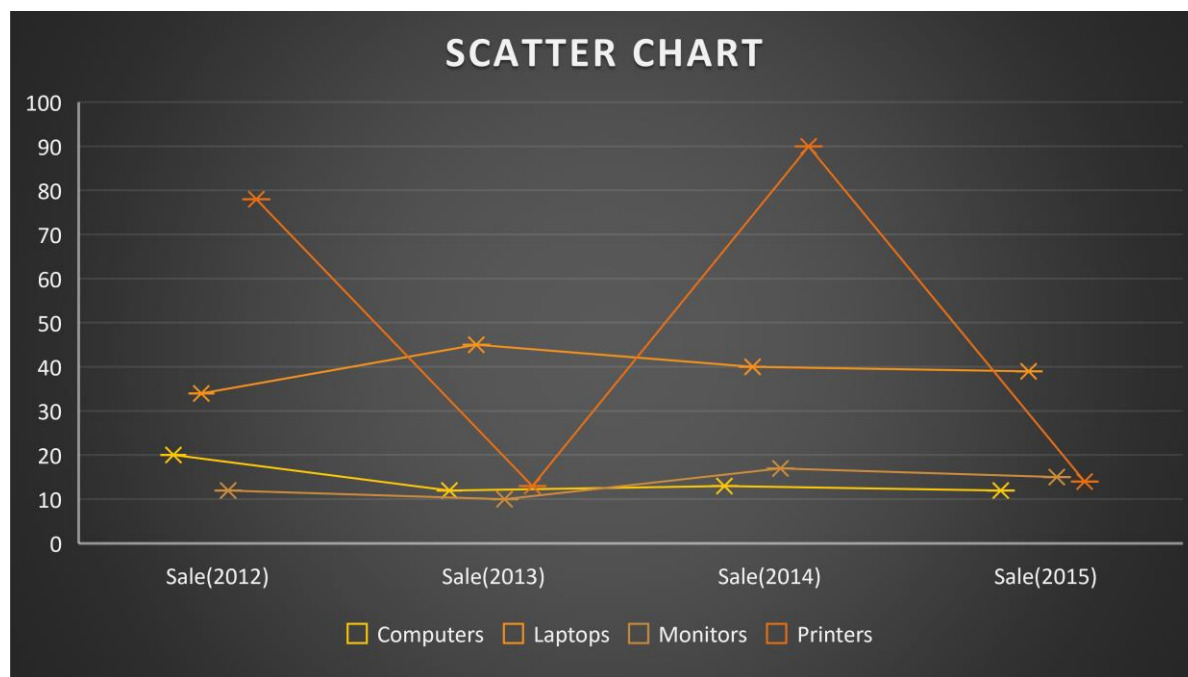
COLUMN CHART:



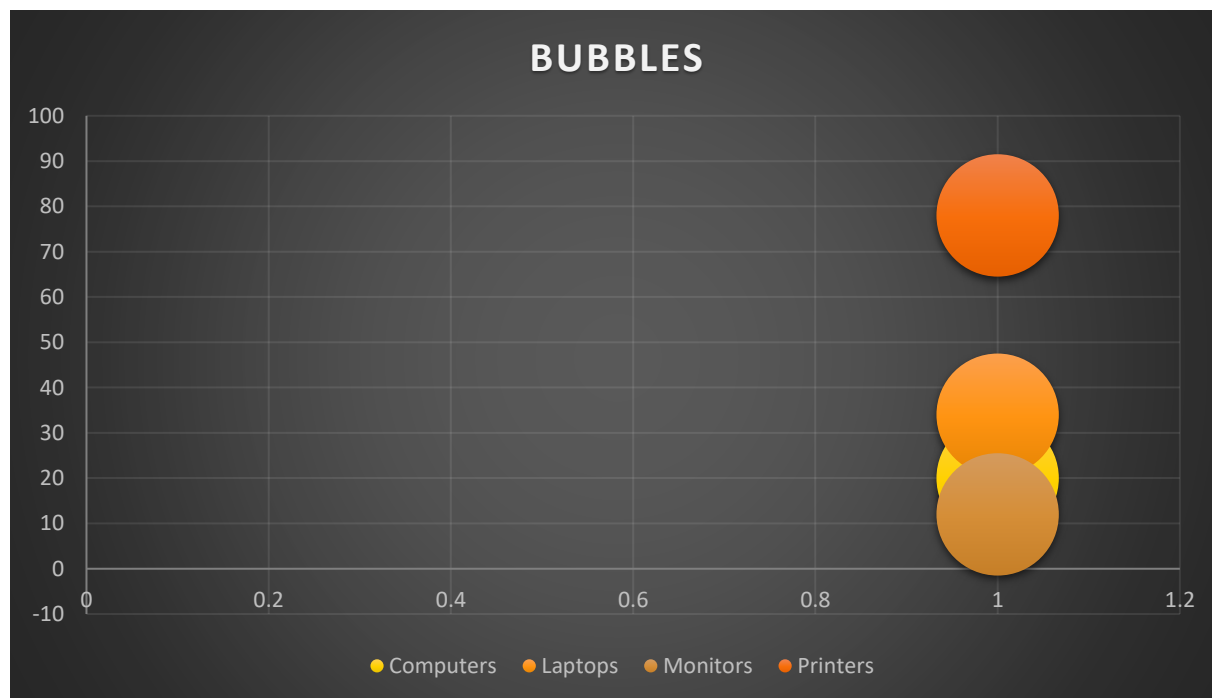
BAR CHART:



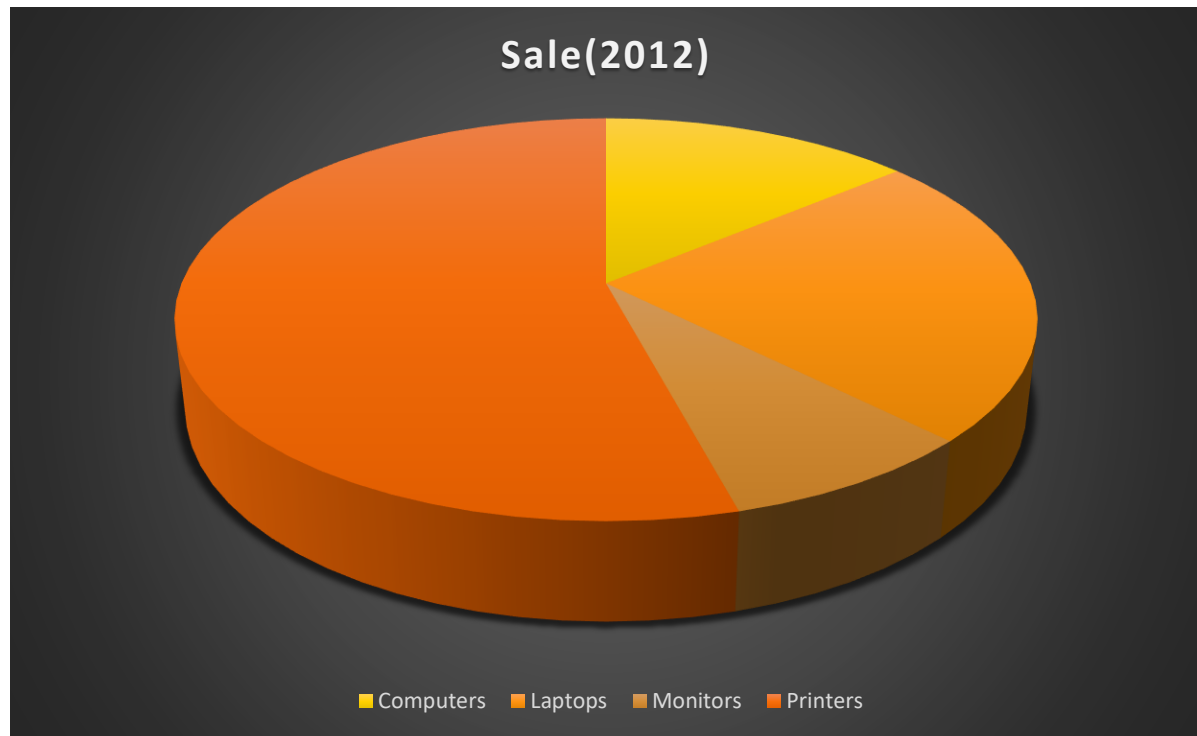
SCATTER CHART:



BUBBLE CHART:



PIE CHART:



Assessment Parameters (To be filled by faculty)

1. **Successful completion of Practical (Y/N)**
2. **Time taken (hours/ minutes)**
3. **List other Parameters & Outcomes:**

<u>S.No.</u>	<u>Parameters</u>	<u>Outcomes</u> <u>(Achieved / Not Achieved)</u>

Remarks:

PRACTICAL ACTIVITY NO: 3

Date: June 12th, 2021

PRACTICAL - NO - 03

1. TITLE: Creating Pareto Chart in MS-Excel

2. AIM/OBJECTIVE: The objective of this practical activity is to -

- ↳ ① Find out what is Pareto chart? Why we need it? Where to use it? In which Dataset Pareto chart fits?
- ↳ ② How to implement/create Pareto chart in MS-Excel?
- ↳ ③ Overall use case of Pareto chart in Real world problems?

3. METHODOLOGY: There are many different ways to create a Pareto chart in MS-Excel.

- ↳ ① Constructing a Pareto chart using some Maths in MS-Excel.
 - ↳ Step ①: Total the data of each field & then sum these fields to determine the grand total.
 - ↳ Step ②: Reorder the fields in any particular order i.e.
 - ↳ smallest ————— largest or
 - ↳ largest ————— smallest
 - ↳ Step ③: After that determine the cumulative % of the total fields.
 - ↳ Step ④: Then draw & label the left vertical axis
 - ↳ Step ⑤: Draw & label the Horizontal axis i.e. divide the axis into as many as divisions as there are contributors.
 - ↳ Step ⑥: Draw & label the right vertical axis i.e. label the axis from zero to 100%.
 - ↳ Step ⑦: Draw bars to represent the magnitude of each field's ~~contribution~~ effect. Basically, the height of the bars corresponds to the magnitude of that contribution as measured on left axis.
 - ↳ Step ⑧: Then draw a line to represent the magnitude of ~~each contributor's~~ ~~field's~~ effect i.e. cumulative % of the total.

⑤ Constructing a Pareto chart using insert options:-

↳ Step ① Select the range of data sheet from A3:B13

↳ Step ② On the Insert tab, in the Charts group, click the Histogram symbol.

↳ Step ③ : Then click on "Pareto". NOTE: a Pareto chart combines a column chart and a line graph.

↳ Step ④ : Enter a chart title. Click on the "+" button on the right side of the chart & click the checkbox next to the Data Labels.

4. BRIEF DESCRIPTION:

→ A Pareto Chart is a combination of a Bar Graph & a line Graph. Each bar usually represents a type of defect or problem. The height of the bar represents any important unit of measure — often the frequency of occurrence or cost.

→ The bars are presented in descending order (from tallest to shortest). Therefore, we can see which defects are more frequent at a glance. Here, the line represents the cumulative % of defects.

→ A Pareto chart is a quality tool; it helps analyze & prioritize issue resolution. The Pareto Principle can analyze Pareto charts, also known as 80/20 rule.

Applications of Pareto Principle (chart):

↳ (1) If we want to assess the quality/defects in any production unit, then we can apply Pareto charts directly.

Assessment Parameters (To be filled by faculty)

1. **Successful completion of Practical (Y/N)**
2. **Time taken (hours/ minutes)**
3. **List other Parameters & Outcomes:**

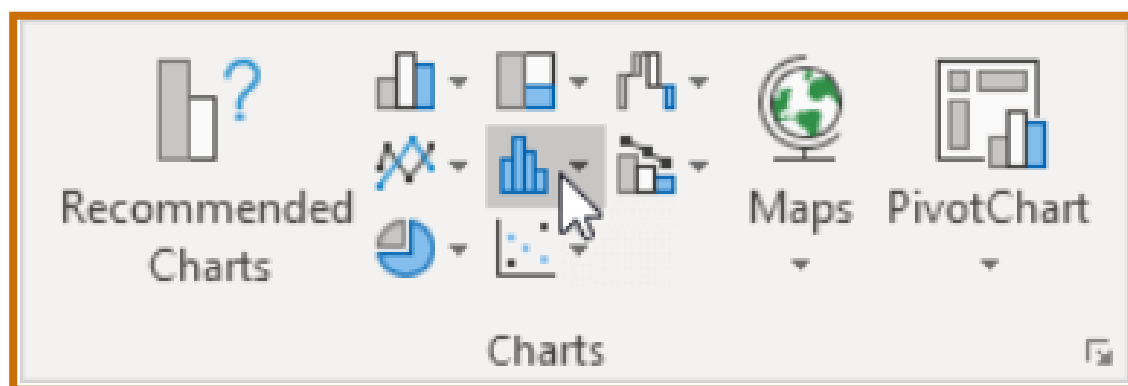
<u>S.No.</u>	<u>Parameters</u>	<u>Outcomes</u> <u>(Achieved / Not Achieved)</u>

Remarks:

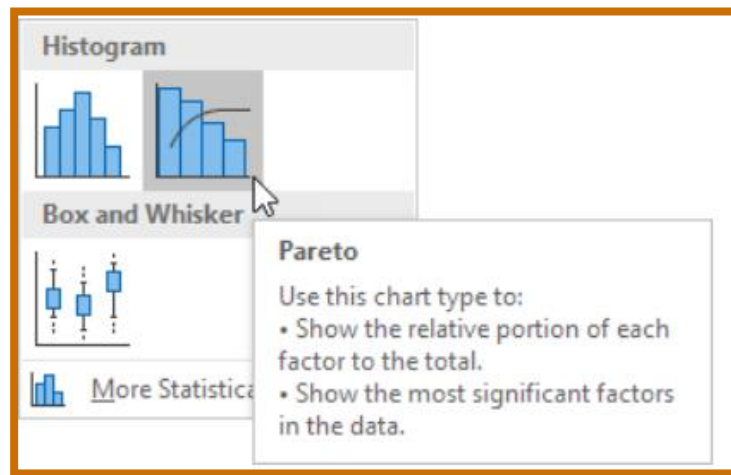
SELECTING FIELDS IN OUR DATA TABLE:

	A	B	C
1	Restaurant Complaints		
2			
3	Complaint Type	Count	
4	Too noisy	27	
5	Overpriced	789	
6	Food is tasteless	65	
7	Food not fresh	9	
8	Food is too salty	15	
9	Not clean	30	
10	Unfriendly staff	12	
11	Wait time	109	
12	No atmosphere	45	
13	Small portions	621	
14			

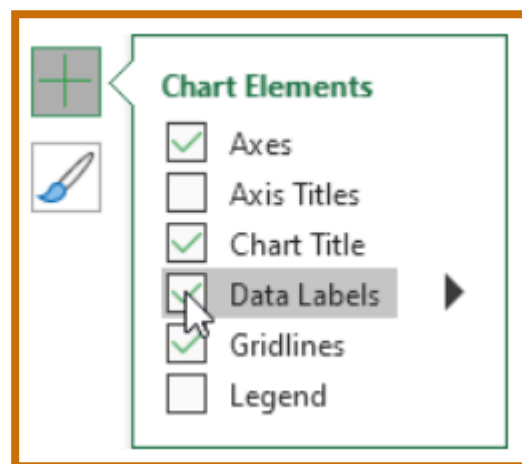
SELECTING HISTOGRAM SYMBOL UNDER INSERT TAB:



SELECTING PARETO CHART TYPE:

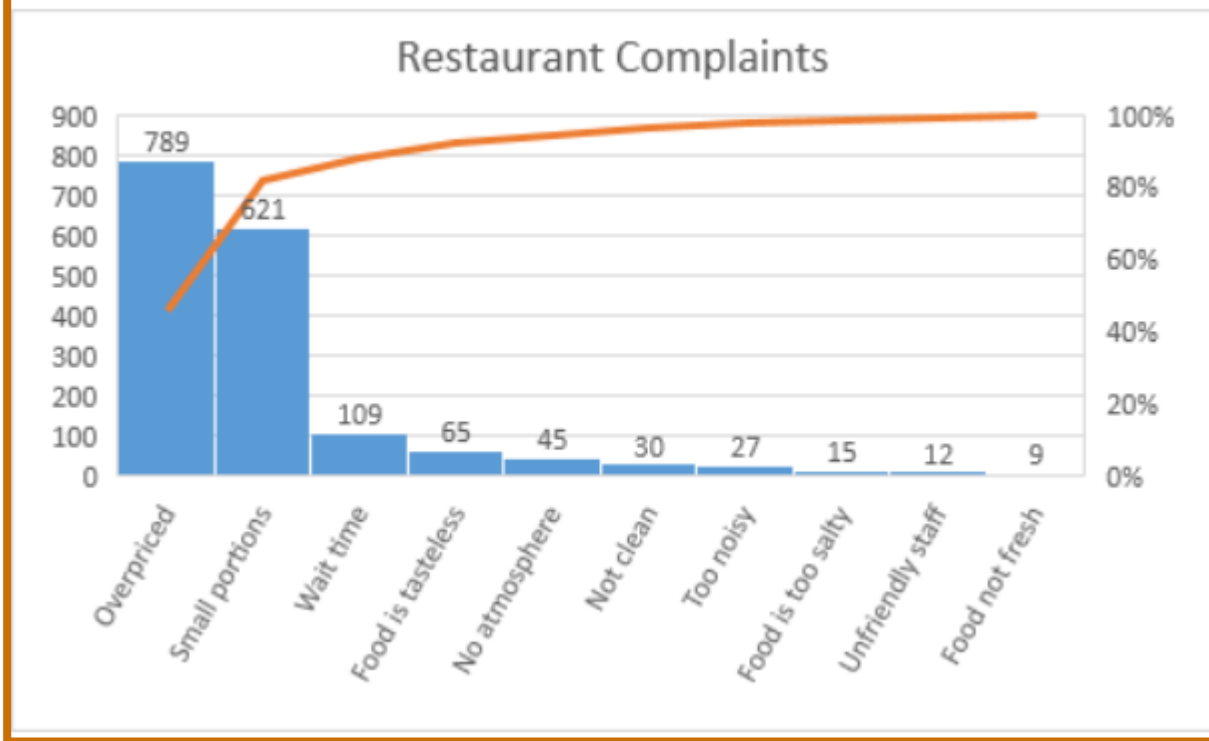


SELECTING DATA LABELS TO SHOWN IN PARETO CHART:



OUR PARTEO CHART:

Result:



PRACTICAL ACTIVITY NO: 4

Date: June 16th, 2021

PRACTICAL ACTIVITY-04

1. TITLE: Role of Business Analytics in MIS

2. AIM/OBJECTIVE: The objective of this practical activity is to:-

- ① Find out how the industry is shifting from traditional information systems to Business Intelligence
- ② Find out impact of Data Driven Decisions via help of BI in MIS.
- ③ How BI is integrated with large scale MIS systems
- ④ AKA this to define relations between simple and complex informing intended to satisfy different sets of needs & provided by different sets of support tools.
- ⑤ Find out what that common goal where MIS and BI intersects & support the same sense-making.

3. METHODOLOGY: The methodology we used is to find out how both (MIS and BI) are correlated with each other. First we will see MIS (its needs, its execution cycle) then same with BI & then we will derive our conclusion, that how Role of BI is highly linkable to with MIS.

4. BRIEF DESCRIPTION

Introduction } Despite the advances in IT, information systems intended for management informing didn't uniformly fulfill the increased expectation of users (mostly about complex information needs).

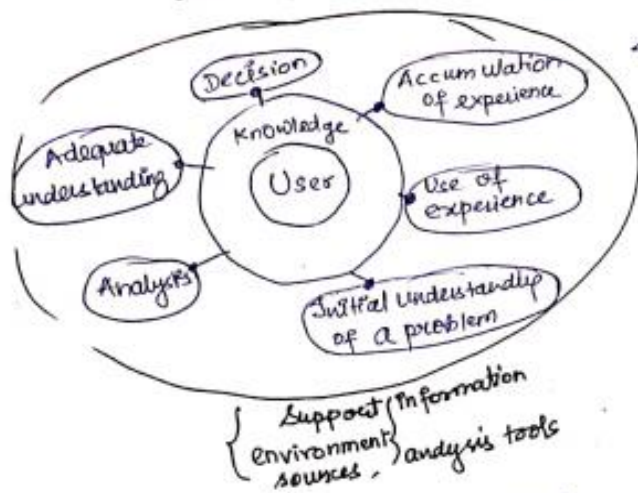
Role of MIS & BI } In both the technologies i.e. MIS and BI they have been largely ^{sup} complemented by BI technologies because both of them are supported by respective information techniques.

The development of systems for managerial information needs has been based on a heterogeneous set of needs. Some of these needs stay stable (developing, implementing & adjusting strategy).

The Information Environment (support infrastructure) is driven by the nature of business activities which are Recurrent in Nature & cyclical, ~~intelligent~~ supported mostly by function of MIS.

On the other hand (i.e. BI), this nature is turbulent, ~~un~~ unpredictable requiring intelligent & insightful support. It is the function of BI system & related applications.

• Structure of Decision Support Process



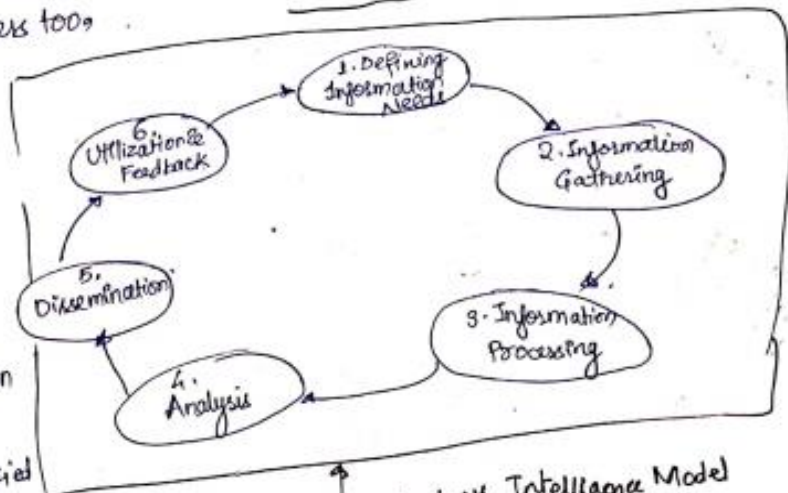
← A decision support process includes a number of stages & if accumulation & subsequent use of experience is included, the process takes a cyclic nature.

↑ Decision Support Process (MIS)

• Structure of Business Intelligence Process

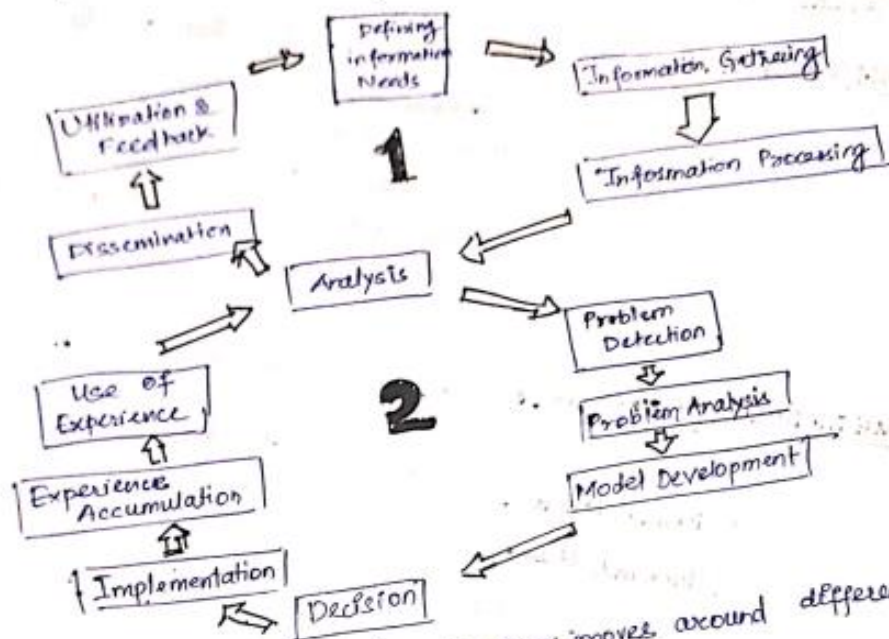
The Business Intelligence Process too, takes a cyclic nature & includes the stages of information needs definition, information collection, information processing, analysis, information dissemination, information utilization & feedback.

The cycle structure is justified if the received feedback helps to re-evaluate or redefine information needs.



↑ A generic Business Intelligence Model Process

• Relation of Business Intelligence & MIS { Decision Support Cycle }
(Linking)



As the cycle 1 and 2 unfold, the focus moves around different types of information Needs.

Cycle 1 → the steps of information gathering & processing can be attributed to the common & simple part of information Needs. The analysis step uses processed information & produces derivative results that produce additional insights & move from simple to more complex Needs.

Link → if a problem situation is recognized, special needs arise, & cycle 2 gets ACTIVATED.

Cycle 2 → For a problem analyst, depending upon the severity of problem the special needs can consist of both SIMPLE & COMPLEX Nature. A problem-specified model is developed for better understanding of the problem & evaluating the alternatives.

• **Conclusion** : Decision implementation brings in valuable experience that is saved for later reuse & together with other experience, satisfies common information needs important both for Future Business Intelligence & MIS.

Assessment Parameters (To be filled by faculty)

1. **Successful completion of Practical (Y/N)**
2. **Time taken (hours/ minutes)**
3. **List other Parameters & Outcomes:**

<u>S.No.</u>	<u>Parameters</u>	<u>Outcomes</u> <u>(Achieved / Not Achieved)</u>

Remarks:

PRACTICAL ACTIVITY NO: 5

Date: June 17th, 2021

PRACTICAL ACTIVITY-05

1. TITLE: Case Study on Dell Computer Corporation

2. AIM/OBJECTIVE: The objective of this practical activity is to:-

- ① Find what's the purpose of a case study:
 - How a case study helps in describing an individual situation (eg a person, business, organisation, or an institution) in detail.
- ② How to identify the key issues of the case
 - { means where we should focus on? → Here, in our case it is Dell Computer Corporation }
- ③ How to analyse the case using relevant theoretical concepts which we learned during our classes?
- ④ Find out all the Tip to Top about the Dell Computer Corporation

3. METHODOLOGY: We will start from -

- ↳ Step ①: Find out our problem statement regarding Dell Computer Corporation.
- ↳ Step ②: Understand problem statement means WITH principle application on it.
- ↳ Step ③: Dell's Vision & Mission Statement
- ↳ Step ④: Performing SWOT Analysis on D.C.C
- ↳ Step ⑤: Finally, providing our conclusions over D.C.C future

4. BRIEF DESCRIPTION:

- a. Problem Statement: The problem statement refers to the concise description of the issues that needs to be addressed. We stating the Dell's Inc problem statement is not just writing the fact, it's more about the factors that are affecting or may affect the organisation in long term, therefore while developing the solution for the problem statement the factors such as Human Resource skills innovation, technology, change Resistance are considered.

⑤ Understand More abt

Dell Computer Corporation : In 1983, 19-year-old Michael Dell left his college ^{to} work full-time for the company he founded as a freshman, providing hard-drive upgrades to corporate customers.

- Dell grew through the 1980s & 1990s to become at one stage the largest seller in PCs & SERVER. Dell venture had \$6 million in annual sales.
- In 1985, Dell changed his strategy to begin offering built-to-order computers, via which company generated \$70 million in sales.

⑥ Dell Vision & Mission Statement:

Vision : →

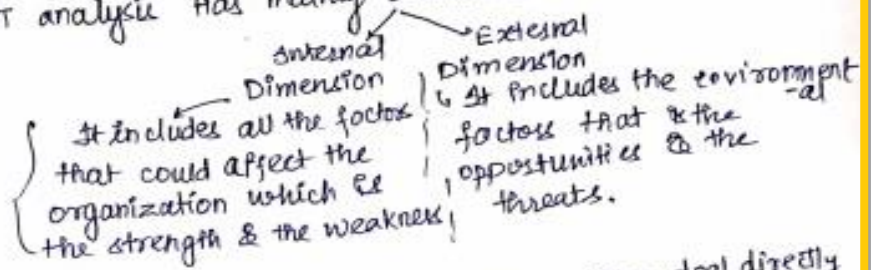
The company's vision statement is all about the way they do business & the way they interact with the community. should be the best customer experience in the markets we serve. In doing so, Dell will meet ~~meet~~ customer expectations of the Highest Quality.

Mission : →

1. Delivering the best customer experience :
To satisfy this component of its mission statement, Dell prioritizes on providing its customers with products whose quality has been tested and rigorously proven. At Dell, every design goes through a process to ascertain that it meets the minimum expected standards. The meticulous culture has distinguished Dell products such as Inspiron 15 Gaming & many others because of the work & precision that goes into ensuring the customers get Maximum experience while using the items.
2. Exceeding expectations : Dell doesn't settle for anything less than the highest quality as expressed in this mission statement. The company commits all its resources to produce products that agree with the changing needs in the consumer Market.

⑤ SWOT Analysis of Dell Inc

The SWOT stands for Strengths, Weakness, Threats & opportunities. It is a useful tool that is widely used for strategic planning & management in many organizations. It is effectively used in building strategies for the organization to maintain its competitiveness in the Market. SWOT analysis has mainly 2 dimensions



STRENGTH

NO MORE MIDDLEMAN

- Dell is the biggest PC maker in the world. They deal directly with the customers with NO use of MIDDLEMAN.
- Dell started out as a direct seller, first using a mail-order system & then taking advantage of the Internet, to develop an online sales platform. Well before the use of internet went mainstream, Dell had begun integrating online order status updates & technical support into their customer-facing operations.
- Also an important side-benefit of the Internet Based ~~company~~ direct sales-model was that it generated a wealth of market data the company used to efficiently forecast demand trends & carry out effective segmentation strategies. This data drove the company's Product Development efforts.

VIRTUAL INTEGRATION

- On the manufacturing side, the company pursued an aggressive strategy of "virtual integration". Dell required a highly reliable supply of top quality PC components, but management didn't want to integrate backward to become its own parts manufacturer.
- The strategic closeness with supplier partners allowed Dell to reap the benefits of vertical integration, without requiring the company to invest billions setting up its own manufacturing operations in-house.

INNOVATION ON THE ASSEMBLY FLOOR

In 1997, Dell recognized its assembly processes. Rather than having long assembly lines with each worker repeatedly performing a single task, Dell instituted "manufacturing cells". These "cells" grouped workers together around a workstation where they assembled entire PCs according to customer specifications. Cell manufacturing doubled the company's manufacturing productivity per square foot of assembly space & reduced assembly times by 75%.

Dell combined operational & process innovation with a revolutionary distribution model to generate tremendous cost savings & unprecedented customer value in the PC market.

- ↳ 1. Dis-intermediation {cutting out the middleman}
- ↳ 2. Enhancing customer value
- ↳ 3. Process and operations innovation
- ↳ 4. Let data do the driving.

WEAKNESS → • Dealing with large amount of supplies from many different countries can cause a large issue when products are recalled.

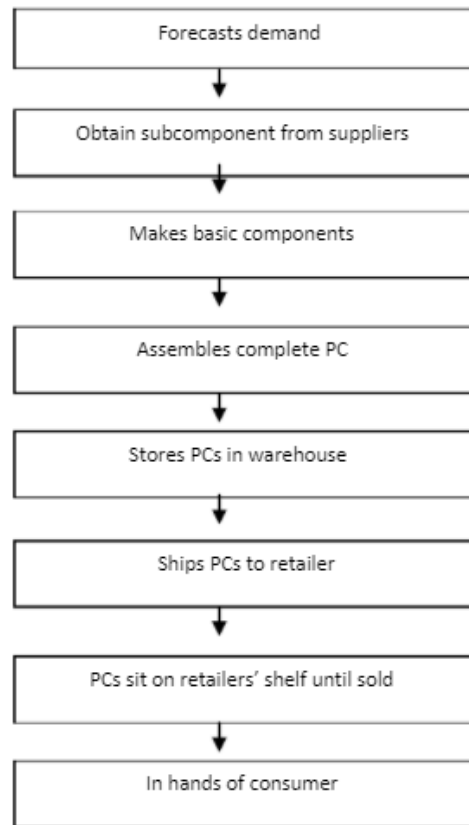
- • Dell build computers, not development.
- • Their supply orders are so large that they become limited to dealing with a small few supplies that can handle the volume.
- • They have weak business relationships with many computer retailers.
- • They do not have unique technologies to offer the Market {such as Apple, Has developed own in-house MI chips for PCs & laptops}

OPPORTUNITIES → • Continuing to PC/laptop Market on the Internet to gain larger Market bases. Because Internet → provides Data → which helps in taking decisions regarding any issues inside Dell Inc.

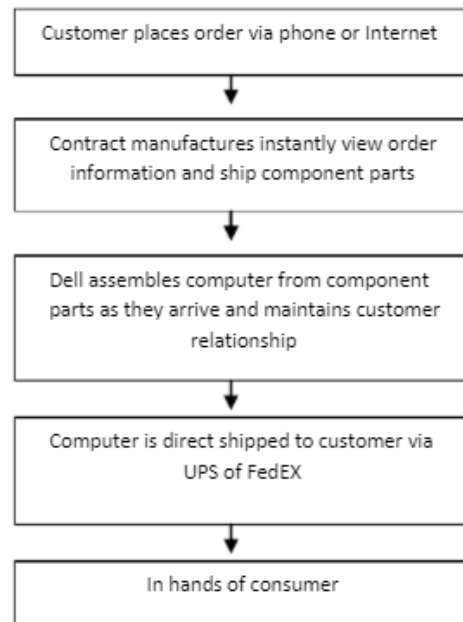
- • Recently, Dell has its many 4 ideal location strategic Nations {Brazil, China, Ireland, India, Poland, S. Africa} but after COVID-19 Pandemic, they have to diversifying their scope

Dell's approaches to selling PC versus Traditional manufactures'

Traditional Manufacturer (E.g. Hewlett-Packard or IBM)



Dell



- ~~Ex~~ Collaborate more on the ground level with:
 - Big education-tech startups & government. Provide sponsorship to the students who help Dell in their research & correspondingly Dell selling the PCs/laptops to those students.
- Branding. Offer lower cost, lower priced computers that are sold anonymously.

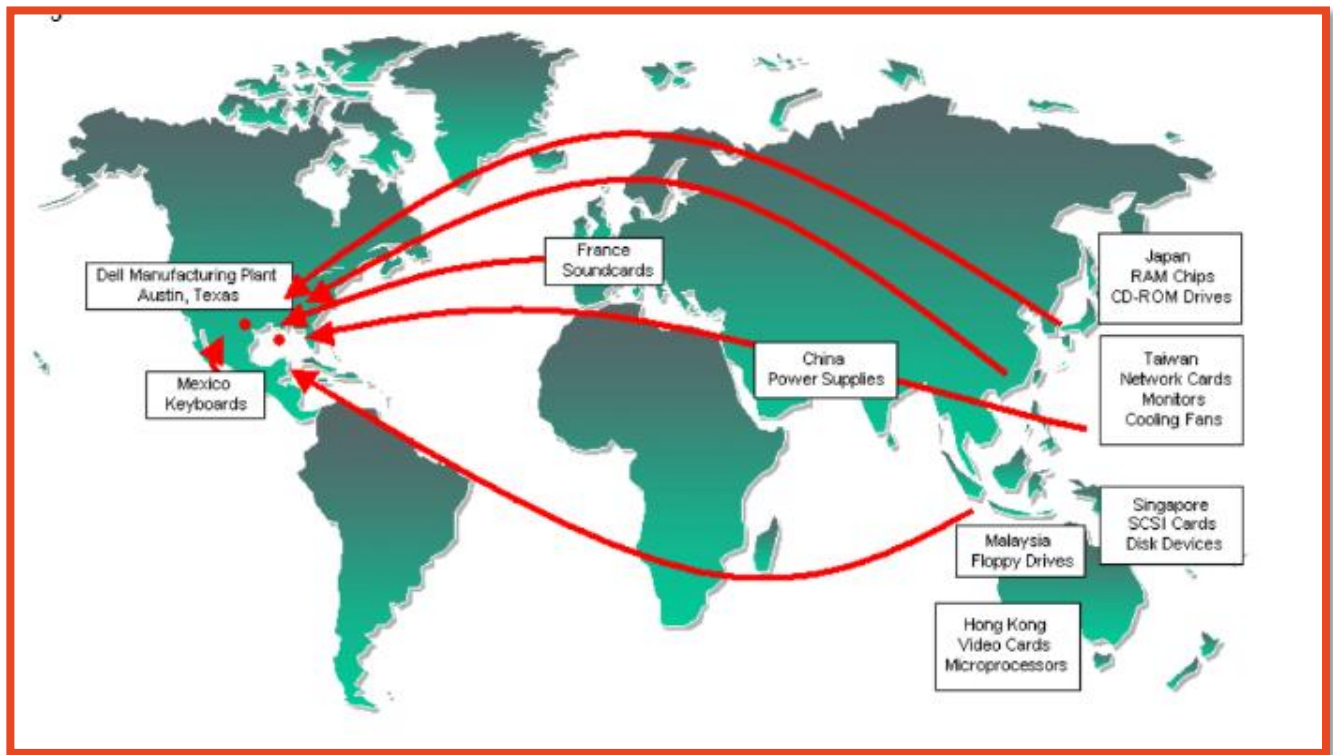
THREATS : → Deep potential risks associated with Dell's global supply chain management strategy.

- ↳ JIT manufacturing exposes Dell to a number of risks,
 - ↳ such as
 - ① sudden issues those associated with the supply chain. { COVID-19 Pandemic }
 - ↳ Highly dependency on JIT manufacturer procedure which involve a major overhaul of business systems. → Hence, much expensive & difficult to maintain whole process in a foolproof manner
 - ↳ Cyber-Attacks on JIT manufacturer, which leaks Dell company design of its H/D & software paradigm.
 - ↳ Tariff-Trade barriers affecting their positions in multiple countries.

CONCLUSION & RECOMMENDATION : A simple formula "eliminate the intermediate & sell for less" made Dell as reputed fastest growth company. In a short span of time how much reputation company has gained is the best part I found in this case study. Dell was founded in 1984 with a small concept & sell other product but in the current period Dell has earned customers' loyalty. As discussed in the case & the article, Dell is more concerned with delivering good computers to the customers at the cheapest cost.

In comparison to its mission statement & current condition ~~that~~ I found that Dell Inc. & the team of its management focused on rapid change, globalization, technology & innovation diversity & e-business. The unique part is that its website which they launched for dell.com to their corporate & public sector customers.

My views in respect of market penetration & market segmentation is the best part of Dell's marketing strategy. Dell has done a good job in identifying their economy & hence penetrating those aspects of markets leaving less room for ambiguity. The e-business which they have adopted is a very cost efficient method of selling their product.



- I recommend Dell that what they are doing, keep continuing, but customers desires & needs are dynamic. Use to take customers feedback & do improvement.
- In the current global competitive market the main challenge for Dell is competition. Top competitors for the Dell Inc are Hewlett Packard, Lenovo, Apple, Gateway, IBM. They are also manufacturing the same kind of product & following the same kind of marketing strategies. If Dell doesn't keep attention about these competitors it should bear huge losses in the future sales & profit. So what I recommend to Dell is that what they have been won is Customer's Faith & keep it up. Watch the global market and competitors. Find out the customer's changing ~~problem~~ perception & about product; try to provide better quality & service with low cost than Competitors.

— x —

Assessment Parameters (To be filled by faculty)

1. **Successful completion of Practical (Y/N)**
2. **Time taken (hours/ minutes)**
3. **List other Parameters & Outcomes:**

<u>S.No.</u>	<u>Parameters</u>	<u>Outcomes</u> <u>(Achieved / Not Achieved)</u>

Remarks: