

Business Data Management Week 5,6



Concepts

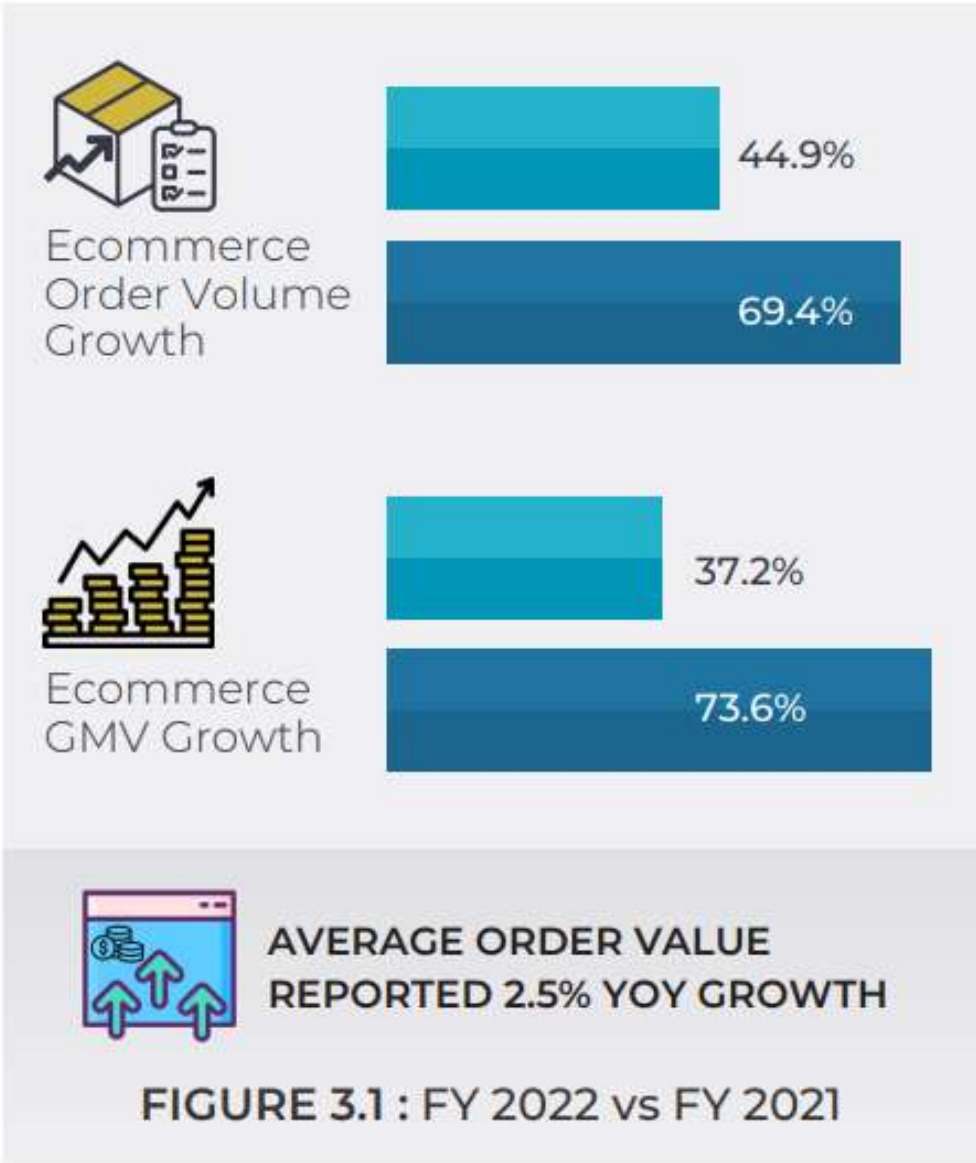
- E-Commerce – Overview
- Niche to Mass Market
- Selecting Target Market
- Stock Management
- Platform Companies V/S Niche Companies
- SKUs
- Data Review
- Possible Inferences

E-Commerce
Market-space
Share

Table 1: Category-wise Share across Channels in FY 2022					
	Overall Retail		Share of Channels (%)		
	Share (%)	Size (US\$ Bn)	Traditional	Organized - B&M	Online
Food & Grocery	63.3%	528.7	93.7%	4.9%	1.4%
Apparel & Accessories	7.9%	65.6	56.3%	23.7%	20.0%
Footwear	1.4%	11.3	51.9%	26.1%	22.0%
Mobile	3.8%	31.3	26.6%	18.4%	55.0%
Consumer Durables and Appliances	3.3%	27.6	58.7%	23.6%	17.6%
Jewelry & Watches	8.6%	71.9	59.8%	39.6%	0.6%
Beauty & Personal Care	2.0%	16.7	72.3%	18.3%	9.4%
Furniture & Furnishing	3.6%	30.1	79.1%	13.6%	7.3%
Pharmacy	3.5%	29.3	81.5%	13.2%	5.3%
Others	2.9%	24.2	79.9%	16.9%	3.2%
Total	100%	835.9	81.5%	12.0%	6.5%

Source: Wazir Analysis

Growth of E-Commerce



Source: Unicommerce

GMV stands for “Gross Merchandise Value”. The GMV measures the total value of goods sold across a given period

Niche Market

- A niche market refers to a specialized segment of the market that caters to a specific target audience with distinct needs, preferences, or interests.



Mass Market

- The mass market refers to a broad consumer market where products or services are designed to meet the needs and preferences of a large, diverse customer base.



Target Audience

User Profile	Name	Income (INR)	Job	Interests
Tech Enthusiast	Rajesh Sharma	12,00,000 per year	Software Developer	Latest gadgets, mobile photography, gaming
Fashion Influencer	Aishwarya Singh	15,00,000 per year	Fashion Blogger	Social media, photography, fashion trends
Business Professional	Ananya Verma	18,00,000 per year	Marketing Manager	Productivity tools, networking, travel
Music Lover	Arjun Patel	8,00,000 per year	Music Producer	Music production, streaming, live concerts
Adventure Seeker	Mohan Gupta	6,00,000 per year	Outdoor Adventure Guide	Hiking, photography, travel, rugged durability

Platform VS
Niche
Companies



Design by:  freepiker.com



Inventory Management

Inventory methods include a set of three priorities:

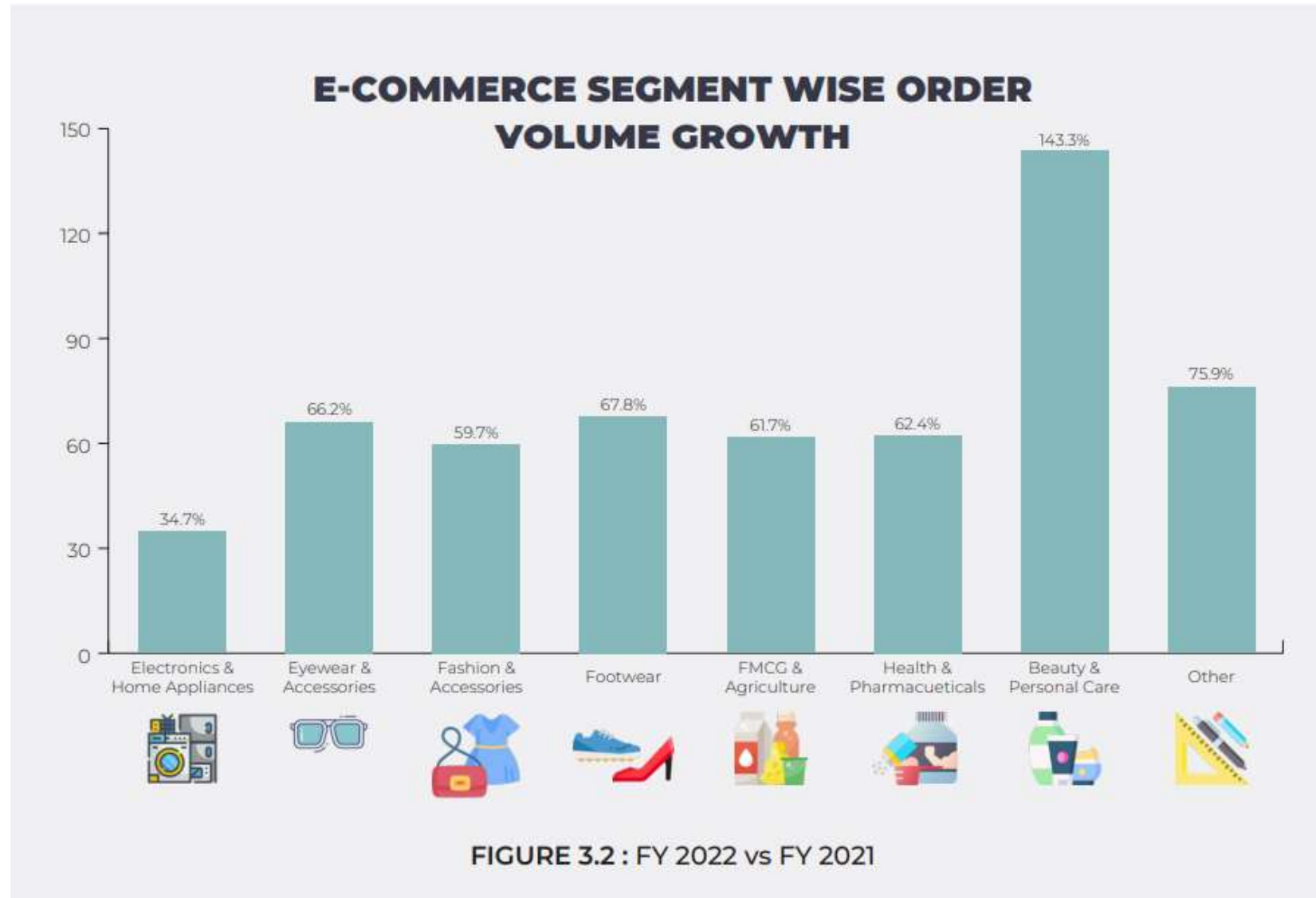
- Sell inventory for maximum profit.
- Hold the smallest possible amount of inventory.
- Keep your customers happy.

Terminology

- Par Stock
- EOQ / MOQ
- Just In Time (JIT)
- Stock Out
- Days of inventory
- Average Days of Inventory
- LIFO / FIFO



Terms



Review of Data

BU	SKU	Brand	Model	Avg Price
Mobiles	M01	RealU	RU-10	12000
Mobiles	M02	RealU	RU-9 Plus	10000
Mobiles	M03	YouM	YM-99	16000
Mobiles	M04	YouM	YM-99 Plu	20000
Mobiles	M05	YouM	YM-98	8000
Mobiles	M06	RealU	RU-9	8000
Mobiles	M07	Sumsang	S-20	49000
Mobiles	M08	Sumsang	S-21	54000
Mobiles	M09	Orange	O-10	55000
Mobiles	M10	Orange	O-11	60000
FMCG	F01	Babaji	Babaji Oil	300
FMCG	F02	Vedic	Vedic Crea	200
FMCG	F03	Vedic	Vedic Shar	290
FMCG	F04	Babaji	Babaji Sha	365
FMCG	F05	Babaji	Babaji Cre	190
FMCG	F06	Vedic	Vedic Oil	350
FMCG	F07	Gear	Gear Oil	400
FMCG	F08	Gear	Gear Crea	300
FMCG	F09	Gear	Gear Shan	460
FMCG	F10	Gear	Gear BB C	999

SKUs

SKU	H	C	M	Total St
F01	391	77	50	518
F02	200	42	30	272
F03	76	36	18	130
F04	96	23	20	139
F05	99	26	13	138
F06	62	16	6	84
F07	55	11	10	76
F08	23	6	2	31
F09	15	7	2	24
F10	39	10	2	51
L01	257	60	74	391
L02	257	34	51	342
L03	151	16	28	195
L04	108	14	27	149
L05	117	16	13	146
L06	132	12	6	150
L07	152	14	3	169
L08	44	8	2	54
L09	54	7	1	62
L10	33	3	2	38

Opening Stock

STK TRNS	C														
SKU	01-Apr	02-Apr	03-Apr	04-Apr	05-Apr	06-Apr	07-Apr	08-Apr	09-Apr	10-Apr	11-Apr	12-Apr	13-Apr	14-Apr	15-Apr
F01	10	21	15	17	13	19	15	12	16	15	13	8	13	11	19
F02	5	7	6	9	7	8	7	6	7	9	5	9	6	10	6
F03	8	6	7	5	5	7	4	5	5	6	4	7	6	6	4
F04	6	6	6	4	6	4	6	4	3	5	4	4	4	4	3
F05	3	5	4	4	3	2	4	4	5	5	4	4	4	3	4
F06	3	4	3	3	3	2	4	2	3	3	3	2	3	3	2
F07	2	2	3	2	2	2	2	2	2	3	2	3	3	2	3
F08	2	1	1	1	2	1	2	2	2	2	2	2	2	2	2
F09	1	2	2	2	1	1	2	2	1	2	2	2	2	2	2
F10	2	2	2	2	2	2	2	1	1	1	2	3	2	3	2
L01	9	7	11	6	12	6	12	10	10	10	5	10	10	7	6
L02	6	4	5	4	5	5	6	4	5	4	5	3	6	4	3
L03	3	3	4	3	3	4	4	3	5	4	4	3	3	3	4
L04	4	4	4	4	4	3	2	3	3	2	3	2	3	2	3
L05	3	4	4	4	3	4	5	3	3	3	4	4	4	5	5
L06	3	3	3	3	2	4	2	3	3	3	3	3	2	2	3
L07	4	4	3	2	3	3	4	3	3	3	3	4	4	3	3
L08	2	2	2	2	2	2	1	1	1	2	2	1	1	1	2
L09	2	1	2	2	1	1	1	2	2	1	2	2	2	2	2
L10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M01	6	8	4	7	6	8	5	10	6	8	8	7	5	8	7
M02	3	6	5	4	4	6	6	4	7	5	5	6	5	4	6
M03	5	3	4	4	4	5	3	4	3	3	4	4	3	5	5
M04	5	4	3	4	4	4	4	3	3	3	5	5	4	3	3
M05	2	2	2	2	3	3	2	4	3	4	3	3	3	3	3
M06	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
M07	2	2	1	2	2	2	2	1	2	2	2	2	2	2	1
M08	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1
M09	1	1	2	1	1	1	2	2	2	2	1	2	2	2	2
M10	2	2	1	1	1	1	2	1	1	2	1	1	1	1	1

Business Data Management Week 7,8

Course Instructor Led Live Session



Week 7,8 Learning Objectives

- Sales and Revenue Analysis
- Production Planning and Analysis
- Profitability Analysis
- Raw Materials Requirement Analysis
- Human Resource Requirement Analysis

Ace Gears – Functions - Intro

ACE GEARS COMPANY

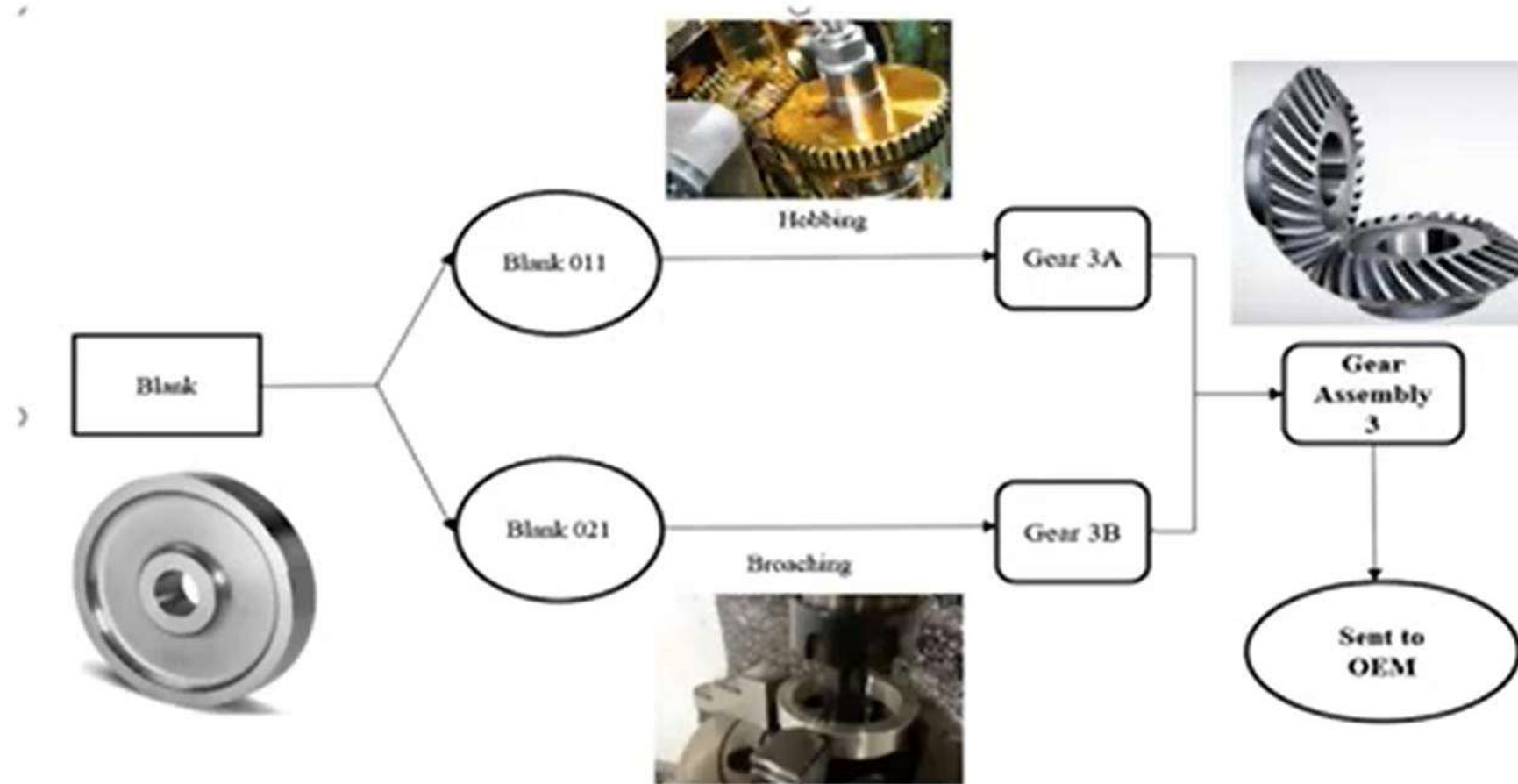
- ❖ **ACE Gears** Manufactures Gear Assemblies and supplies them to OEMs (OEM-Original Equipment Manufacturer) and Tier-1 suppliers across India.
- ❖ At present, it produces 10 Gear Assemblies

Gear Type	Number of Assemblies
BS4 Engines Only	2
BS4 and BS6 Engines	6
BS6 Engines only	2

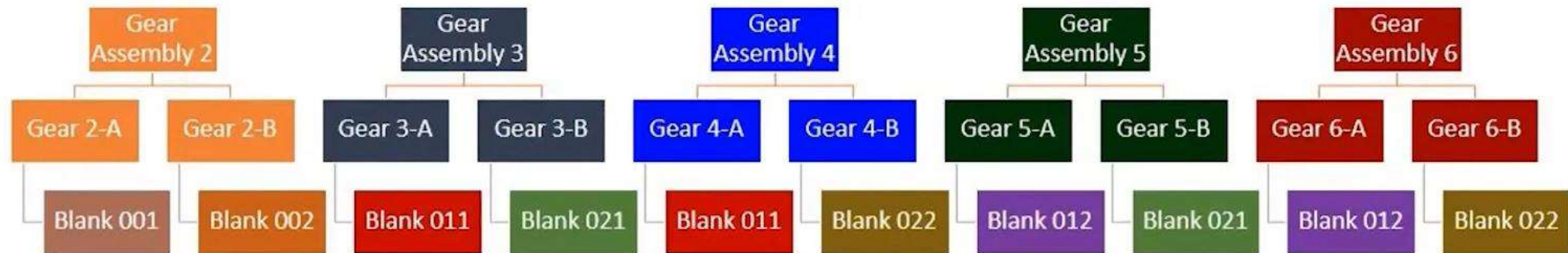
ERP Systems



ACE Gears – Manufacturing Process



Product Structure (Bill of Materials)



Data used

- Regional Sales Data, Hobbying & Broaching Data, Gear and Blank Data and Cost

REGIONAL SALES DISTRIBUTION Q3-20	Oct 2019					Nov 2019					Dec 2019				
	Overall	North	East	West	South	Overall	North	East	West	South	Overall	North	East	West	South
Gear Assembly 1 (BS4)	14400 nos	0 nos	11200 nos	0 nos	3200 nos	13320 nos		10850 nos		2470 nos	5760 nos		4150 nos		1610 nos
Gear Assembly 2 (BS4)	13824 nos	9865 nos	1125 nos		2834 nos	12048 nos	8150 nos	985 nos		2913 nos	6048 nos	4980 nos	355 nos		713 nos
Gear Assembly 3 (BS4/6)	2880 nos			2880 nos		6000 nos			6000 nos		5040 nos			5040 nos	
Gear Assembly 4 (BS4/6)	3600 nos	1755 nos		1845 nos		4440 nos	2560 nos		1880 nos		2960 nos	1725 nos		1235 nos	
Gear Assembly 5 (BS4/6)	2080 nos		2080 nos			1920 nos		1920 nos			1170 nos		1170 nos		
Gear Assembly 6 (BS4/6)	10040 nos	3350 nos	1780 nos	1260 nos	3650 nos	15659 nos	4750 nos	2840 nos	1760 nos	6309 nos	11500 nos	3760 nos	1640 nos	1210 nos	4890 nos
Gear Assembly 7 (BS4/6)	5634 nos	1260 nos	950 nos		3424 nos	5124 nos	1185 nos	1100 nos		2839 nos	5664 nos	1350 nos	980 nos		3334 nos
Gear Assembly 8 (BS4/6)	1200 nos				1200 nos	2160 nos				2160 nos	3360 nos				3360 nos

October 2019 - Production Load Schedule - Hobbing Workstation							
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Date		1	2	3	4	5	6
Quantity		400	800	800	800	800	400
Date	7	8	9	10	11	12	13
Quantity		0	0	0	0	0	0
Date	14	15	16	17	18	19	20
Quantity		400	800	800	800	400	800
Date	21	22	23	24	25	26	27
Quantity		0	0	0	0	0	0
Date	28	29	30	31			
Quantity		400	800	800			

October 2019 - Production Load Schedule - Broaching Workstation							
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Date		1	2	3	4	5	6
Quantity		0	780	780	780	780	780
Date	7	8	9	10	11	12	13
Quantity		0	0	0	0	0	0
Date	14	15	16	17	18	19	20
Quantity		0	780	780	780	780	780
Date	21	22	23	24	25	26	27
Quantity		0	0	0	0	0	0
Date	28	29	30	31			
Quantity		0	780	780			

Gear and Blank				
GEAR	MATCHING PART NO.			
Gear 2-A	Blank-001		Blank Cost	
Gear 2-B	Blank-002		Part Number	Per Unit Cost
Gear 3-A	Blank-011		Blank-011	105
Gear 3-B	Blank-021		Blank-012	35
Gear 4-A	Blank-011		Blank-021	47
Gear 4-B	Blank-022		Blank-022	25
Gear 5-A	Blank-012			
Gear 5-B	Blank-021			
Gear 6-A	Blank-012			
Gear 6-B	Blank-022			

Overall Equipment Effectiveness

OEE CALCULATION

$$\text{OEE} = \text{Availability} \times \text{Performance} \times \text{Quality}$$

The diagram illustrates the calculation of Overall Equipment Effectiveness (OEE) as the product of three factors: Availability, Performance, and Quality. Each factor is represented by a bracketed fraction with its components color-coded to match the factor's name.

Availability	Performance	Quality
$\frac{\text{Run time}}{\text{Planned production hours}}$	$\frac{\text{Actual Machine Speed}}{\text{Design Machine Speed}}$	$\frac{\text{\# of Good Products}}{\text{Total Products}}$

OEE Numerical

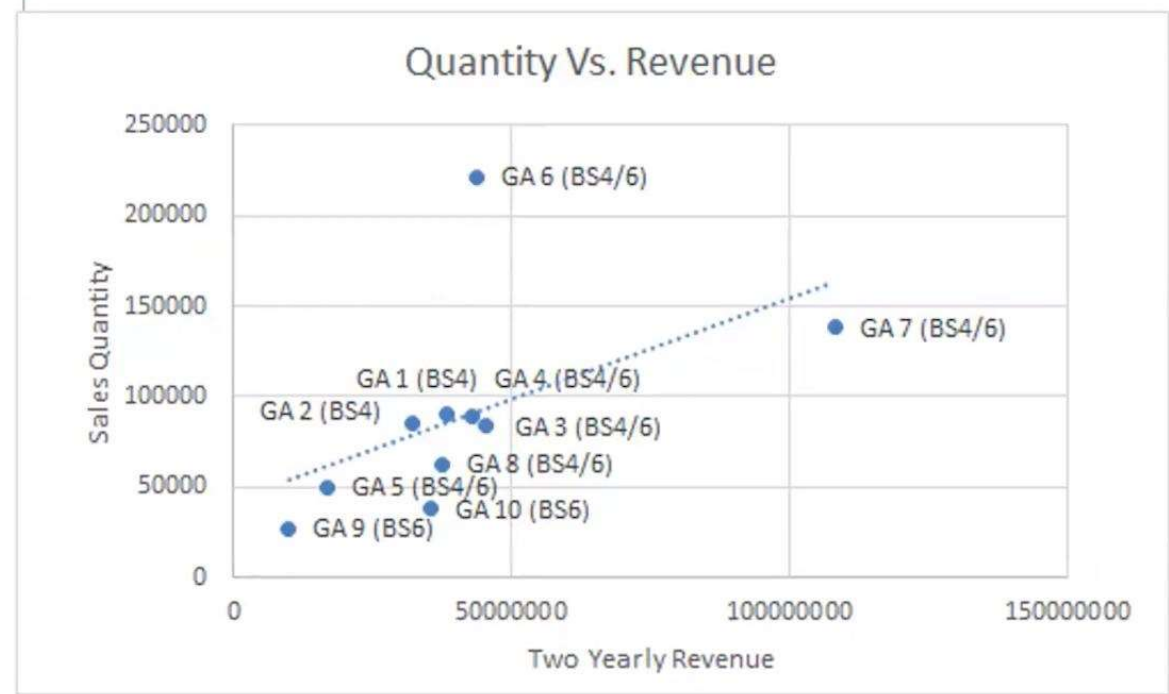
Item	Data
Shift Length	8 hours (480 minutes)
Breaks	60 Minutes
Downtime	47 Minutes
Ideal Cycle Time	1.0 seconds
Total Count	19,271 widgets
Reject Count	423 widgets

<https://www.oeec.com/calculating-oeec/>

Refer for Calculation

Reading Scatter Plots and Outliers

GEAR ASSEMBLY SALES QUANTITY VS. REVENUE



What can be inferred from this graph?

What goes into making GAs and why are some GAs cheaper than others?

GA6 - High Volume Product

GA7 - High Revenue Product

One Year Scatter Plot
Amplify Cluster

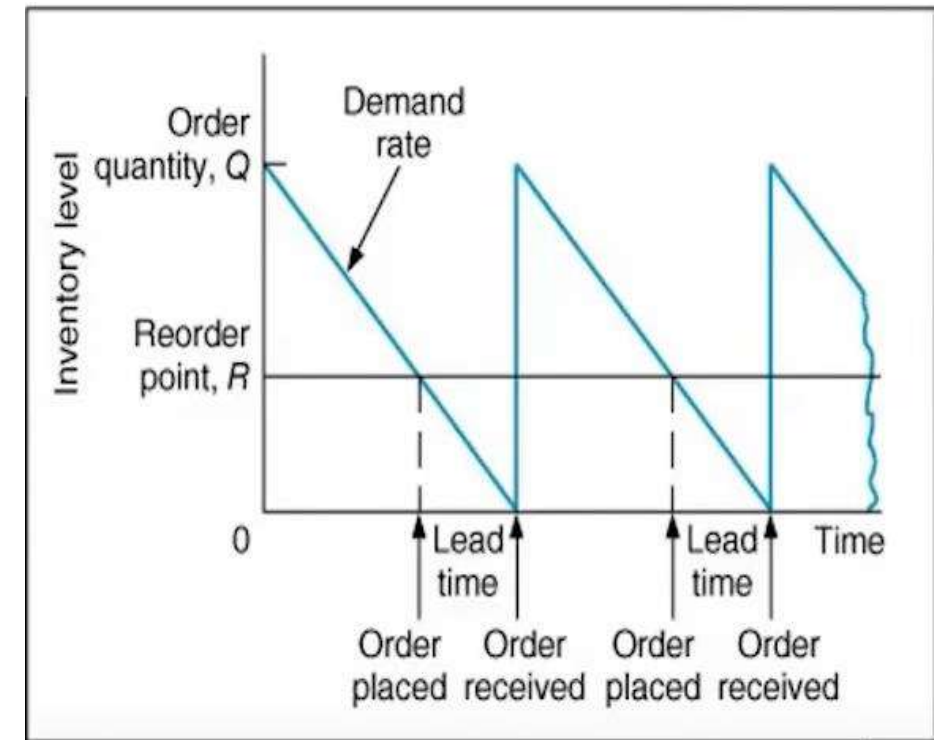


Purchase/Inventory Strategies

Category	Value	Control	Record Maintenance	Purchase/ Inventory Strategies
A	High	Tightly Controlled	Accurate	Just-in-Time, Planned Orders
B	Medium	Moderately Controlled	Good	Planned Orders (Safety Stock)
C	Low	Minimally Controlled	Simple	Economic Order Quantity

Safety stock = (Maximum usage) – (Average usage).

Reorder Point (ROP) = Demand during lead time + safety stock



Business Data Management Week 9

Course Instructor Led Live Session



HR ACTIVITIES



Concepts to study

- Recruitment Process
- Manpower Planning
- Importance of Recruitment
- Specialization and Skill Matching
- Employee Feedback
- Recruitment Challenges
- Career Aspirations and Mobility
- Practical Case Study
- Attrition Rate
- Internal Sourcing
- Promotion and Lateral Movement
- The Bench System
- Job Descriptions
- Sourcing Channels
- Channel Analysis
- Onboarding

Business Data Management Week 10,11

Course Instructor Led Live Session



Important terms discussed

- A/B Testing
- Nudge Theory
- Credit Risks

Credit – Lending Money



A close-up photograph of a white credit application form. A black and gold fountain pen is resting diagonally across the top right of the form. The title "CREDIT APPLICATION" is printed in large, bold, black capital letters. Below the title, there are several lines for text entry, each preceded by a label: "Company Name:", "Contact:", "g Address:", "Address:", "State:", "State:", and "Zip Code:". The form is placed on a brown surface.

CREDIT APPLICATION

Company Name: _____

Contact: _____

g Address: _____

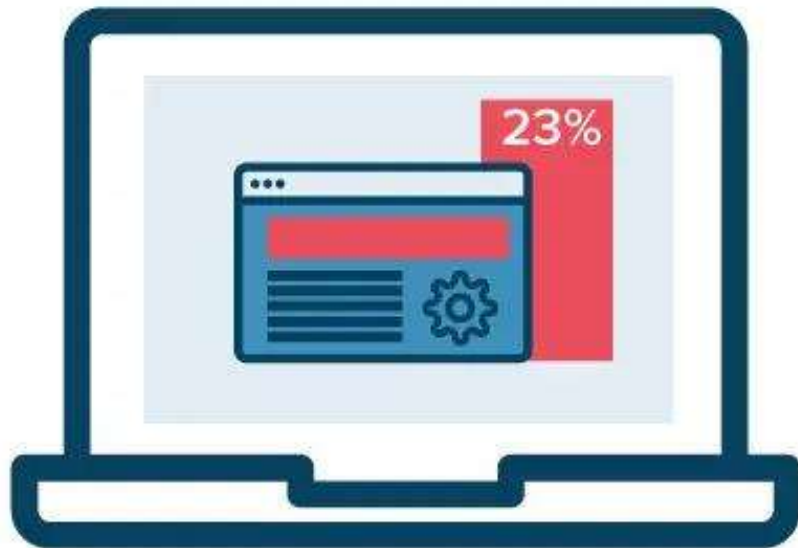
Address: _____ State: _____

State: _____ Zip Code: _____

FAY

A/B Testing

A



CONTROL

B



VARIATION

A/B Testing

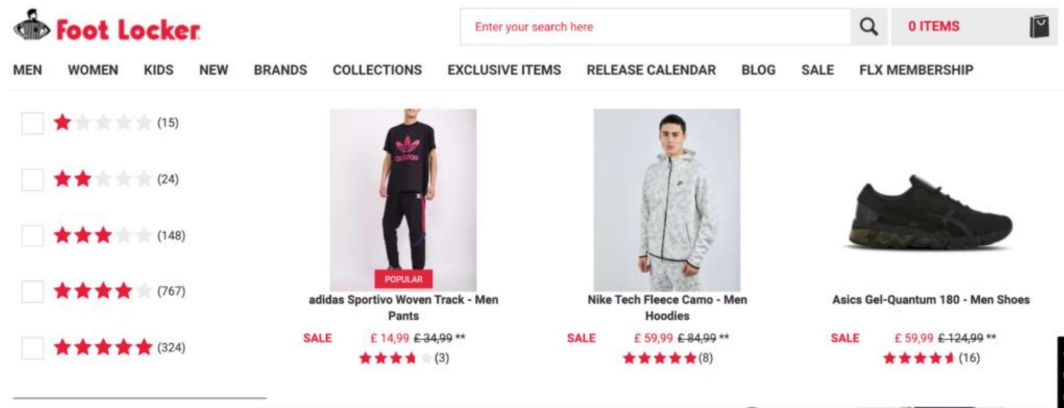
Steps:

1. Hypothesis
2. Testing period
3. Analysis
4. Implementation

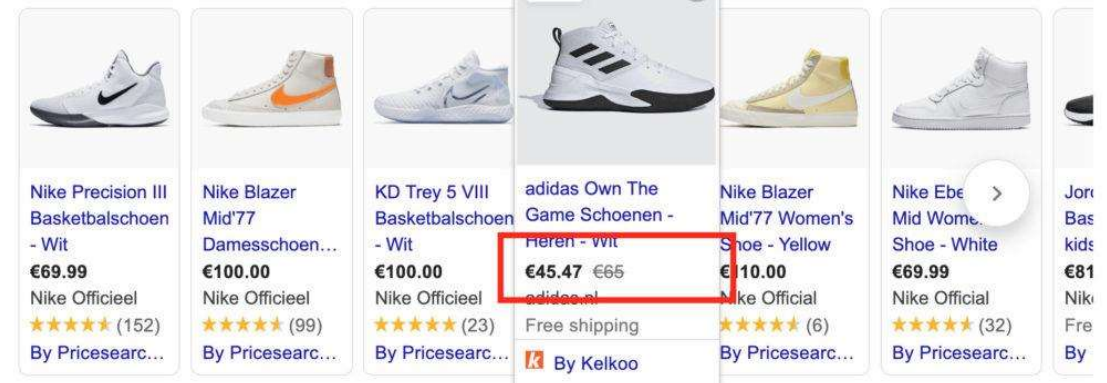


Nudge Theory

- <https://cxl.com/blog/nudge-marketing/>



See basketball shoes women





• Image Source : [Link](#)



• Image Source : [Link](#)

Credit Risks

- Compliance
- Eligibility
- Fraud Risk
- System Issue



Credit Risk

['kre-dit 'risk]

The possibility of a loss resulting from a borrower's failure to repay a loan or meet contractual obligations.

 Investopedia