Mid Term Submission

Name – Jay Kashyap

Roll No- 21f1002984

- **4** Is the plagiarism % of the document is less than 20%?
- > Yes
- **Lesson :** Executive Summary and Title.



J.K. Textile Traders & Manufacturer

At J.K. Textile Traders and Manufacturer, they're confident you'll be satisfied with their products. That's because they use only the highest quality materials and top-of-the-line technologies. They manufacture all kinds of Machinery parts. Like textile machinery parts, packing machinery parts, etc (Gears, Impellers, Shafts, Cutters, Industrial Cleaning Brushes, etc.). They as well repair all kinds of Machinery parts like textile machinery parts, gearboxes, packing machinery parts, packing & textile machine cutting knives, etc

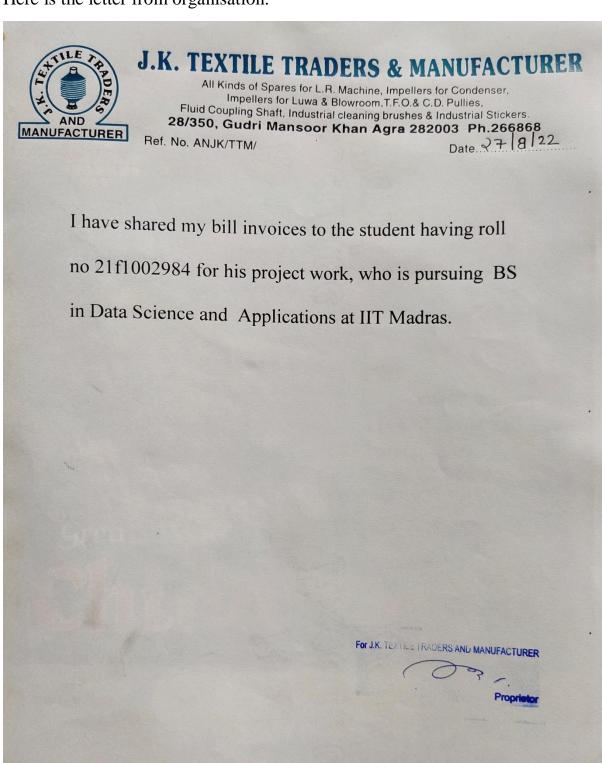
LIST Of CLIENTS

- Ginni International Limited
- Ginni Filaments Ltd
- Unicharm
- Moral Overseas Limited
- Pratibha
- Vardhman
- Nahar Group of Companies: Nahar Spinning Mills Ltd
- Vista

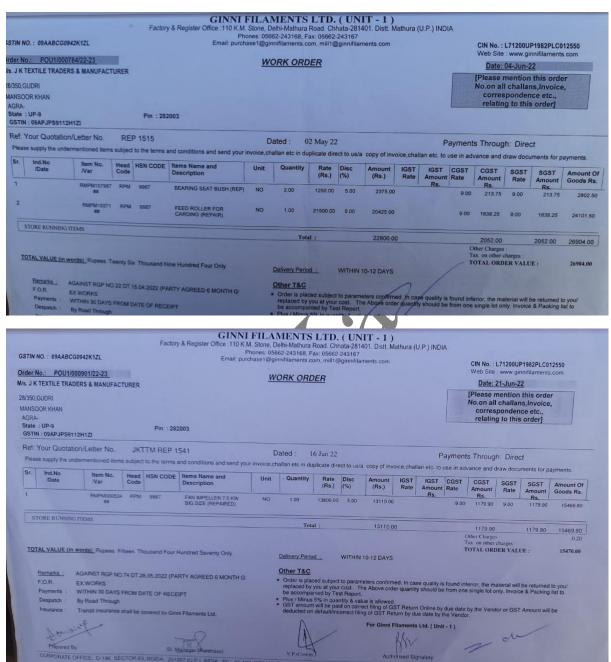
JK Textile Traders and Manufacturer's provide close substitute to the original machine parts with the best affordable price range and top-quality raw materials.

♣ Proof of originality of the Data (Primary Data - survey link, photograph, letter from organisation, etc)

• Here is the letter from organisation.



• Next are few Bill Invoices shared by organisation.



4 Metadata and Descriptive Statistics.

- As we can see above, there are bill invoices only no excel sheet hence it is raw and unstructured data. I had to start from the scratch as the organisation may be old establishing 30 years of foot hold in market, but it is not as big as an organisation who may have a person exclusively for Data Entry, they do not analyse the data, they only keep tabs of it to pay the GST, they are just having the records nothing else.
- The above two invoices are from GINNI FILAMENTS LTD, the format is same for all clients except the header changes according to the client's name, it mainly consists of-
- HSN Code HSN stands for Harmonized System of Nomenclature and is used to classify goods in a systematic manner. It was developed by the World Customs Organization (WCO) and is considered the global standard when it comes to naming goods. It is for Textile and came under Section 11 for classifying goods under GST.
- **Item Name & Description** It is mainly name of any particular part with its unique serial number or name. They are SHAFT, GEAR, WHEEL, ROLLER, IMPELLER, PULLEY, BRUSH, etc.
- Shaft A bar that connects parts of a machine so that power can pass between them.
- Gear A kind of machine element in which teeth are cut around cylindrical or cone shaped surfaces with equal spacing. By meshing a pair of these elements, they are used to transmit rotations and forces from the driving shaft to the driven shaft.
- Wheel A wheel is a circular component that is intended to rotate on an axle bearing.
- Roller A roller is a cylinder that turns round in a machine or device.
- Impeller An impeller is a rotating component of a centrifugal pump that accelerates fluid outward from the centre of rotation, thus transferring energy from the motor that drives the pump to the fluid being pumped.
- Pulley A pulley is a wheel that carries a flexible rope, cord, cable, chain, or belt on its rim.
- Rate It is simply the price of any particular part, weather its is Shaft, Gear, Brush or anything else, the price may vary as in accordance with serial number as its not necessary all shafts are of same price.
- o Quantity Number of parts ordered or purchased.
- O **Discount** It is the reduction in rate and in bill invoices I have seen ,the discount is 5% only for all the user, I asked about it if its 5% for all then instead of giving it explicatively when don't they reduce the price, they said that the clients which are **organisation** itself only to them if it's given as without it they won't buy and get it from anywhere else as they have close substitutes who are giving discounts and 95% of the time they are client, if somebody like us or any new user will go their to buy it then they won't get the discount, that's why discount is mentioned explicatively, but during cleaning the data I removed the discount factor as all bill invoices have 5% discount so it won't count as deciding factor or varying factor for analysis.

- o **GST** It stands for Goods & Service Tax; in bill they are of two types SGST & CGST both are 9% each
- **Amount** It is the final sum after removing the discount and adding the GST amount in the sum in the bill invoice. But in excel sheet the amount mentioned is exclusive of GST as there is no involvement of GST in business analysis, it's something which directly goes to government.

• After cleaning the data, the changes done by me are -

- The removal of **discount** factor as it is same for all bill invoices and didn't vary so it wont help us to conclude anything in data analysis.
- The removal of **GST** as this amount of tax is meant for government only and won't conclude anything in data analysis.
- o The final amount is a product of **Rate** & **Quantity** only.
- Excel Sheet of cleaned data

Δ	Α	В	С	D	E	F	G	
1	Date	HSN Code	Item Name	Item Type	Rate	Quantity	Amount	
2	01-06-2022	9987	Coupling Shaft	Shaft	7520	1	l 7520	
3	01-06-2022	9987	Feed Roll Shaft	Shaft	1050	1	1050	
4	02-06-2022	9987	Flact Comb Shaft	Shaft	5200	1	5200	
5	03-06-2022	9987	Lap Former Shaft	Shaft	5450	1	5450	
6	03-06-2022	9603	Platform Brush	Brush	165	25	4125	
7	04-06-2022	9987	Bearing Seat Brush	Brush	1250	2	2500	
8	04-06-2022	9987	Feed Roller	Roller	21500	1	21500	
9	04-06-2022	9603	Bottle Brush	Brush	55	50	2750	
10	05-06-2022	9987	Bottom Sliding BKT D40	Bracket	1450	5	7250	
11	05-06-2022	9987	Bottom Sliding BKT SB2	Bracket	1450	3	4350	
12	06-06-2022	9987	Motor Gear	Gear	5200	2	10400	
13	06-06-2022	9987	Padder Roller	Roller	3800	2	7600	
14	06-06-2022	9987	Pinion gear	Gear	1750	2	3500	
15	07-06-2022	40101990	Chain Wheel 39-T	Wheel	2125	2	4250	
16	07-06-2022	40101990	Chain Wheel 25-T	Wheel	2050	2	4100	
17	07-06-2022	40101990	Chain Wheel 37-T	Wheel	4850	1	4850	
18	08-06-2022	9987	Beater Pulley	Pulley	5450	2	10900	
19	09-06-2022	9987	Unilap Plate	Plate	6850	1	6850	
20	10-06-2022	40101990	Chain Wheel 34-T	Wheel	1750	2	3500	
21	11-06-2022	40101990	Spur Gear 18T	Gear	1980	2	3960	
22	12-06-2022	8448	Pulley-21	Pulley	1000	10	10000	
23	12-06-2022	8448	Cover Wheel	Wheel	7500	3	22500	
24	13-06-2022	40101990	Feed Roll Gear 42-T	Gear	3290	1	3290	
25	13-06-2022	40101990	Feed Roll Gear 51-T	Gear	3950	1	3950	
26	14-06-2022	40101990	Shaft SE-12	Shaft	1950	1	1950	
27	15-06-2022	8448	Washer Wheel	Wheel	900	900 5		
28	16-06-2022	8448	Can Wheel	Wheel	8000	2	16000	
29	17-06-2022	9987	Gear Box Luwa	Gear	4650	2	9300	
30	18-06-2022	96039000	Bottle Brush 18	Brush	15	100	1500	
31	18-06-2022	9987	9987 Internal Gear		11600	1	11600	
32	18-06-2022	9987 Impeller Blade		Impeller	13950	1	13950	
33	19-06-2022	34029099	Bottle Brush Nylon	Brush	150	20	3000	
31	1 0		aned Data Item Descr	iption Sales 8	Volume 1650	+	12050	

• Item Name with Rate

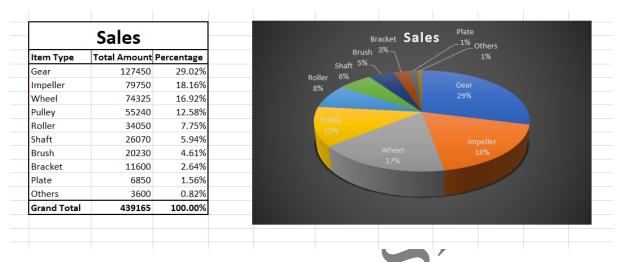
4	l A	B C	D	E	F	G	Н		J	K	L
	Item Type	- Shaft		Item Type	- Whee	el		Item Type -	Gear		
2											
3	Item Name	Rate		Item Name	Rate			Item Name	Rate		
4	Coupling Shaft	7520		Chain Wheel 39-T	2125			Motor Gear	5200		
5	Feed Roll Shaft	1050		Chain Wheel 25-T	2050			Pinion gear	1750		
6	Flact Comb Shaft	5200		Chain Wheel 37-T	4850			Spur Gear 18T	1980		
7	Lap Former Shaft	5450		Chain Wheel 34-T	1750			Feed Roll Gear 42-T	3290		
8	Shaft SE-12	1950		Cover Wheel	7500			Feed Roll Gear 51-T	3950		
9	Shaft Long	1050		Washer Wheel	900			Gear Box Luwa	4650		
10	Shaft C-50 Card	1250		Can Wheel	8000			Internal Gear	11600		
11	Apron Shaft	1350		Bobbin Wheel 38-T	585			Gear Box	11800		
12											
13											
14	Item Type	- Others		Item Type	- Rolle	r		Item Type -	Brack	æt	
15											
16	Item Name	Rate		Item Name	Rate			Item Name	Rate		
17	Hand Grinder	1750		Padder Roller	3800			Bottom Sliding BKT D	1450		
18	Stone Cutting	1850		Bottom Roller	1650			Bottom Sliding BKT SE	1450		
19											
20											
21	Item Type	- Pulley		Item Type	- Brush			Item Type -	Imne	ller	
22	item type	rancy		item Type	Diasi	•		item type	шрс		
23	Item Name	Rate		Item Name	Rate			Item Name	Rate		
24	Beater Pulley	5450		Platform Brush	165			Impeller Blade	13950		
25		1000		Bottle Brush	55			Impeller A-10	6500		
26		2250		Bottle Brush 18	15			Impeller Fan	13800		
 27	Pulley 57-T	2520		Bottle Brush Nylon	150						
28	- '	2480	_	Platform Brush	165						
29	-,		_	Bottle Cleaning Brus							
30				Brass Brush	68						
31											

↓ Detailed Explanation of Analysis Process/Method.

- Only Excel is used as first data is entered manually then cleaned up in the sense that only necessary factors are included.
- Pivot Table plays vital role and help me as it eases the process and gives a clear-cut picture of sales and volumes.
- Pareto analysis is done to see if some product can alone change the whole market course as in general there are 10 categories of product in which 1 category is named as other, it constitutes that product which are sold very less in quantity as well as their revenue contribution is negligible if they are categorize alone that's why a cumulative category formed called **OTHERS**.
- All of us know pareto analysis states that only 20% of product generates 80% of revenue/sales but it is failed in this case in terms of Revenue but if we see volume aspect for pareto analysis then only single product contributes to 71%, that category of product is Brush, its because their price is very low as compared to other category products also they are sold in huge in number, Although in volume they contribute 71% but when it comes to generating revenue they only contributes to 4.61% of the total revenue.
- Therefore, **Brush** category of product can be seen as outlier in our data analysis.

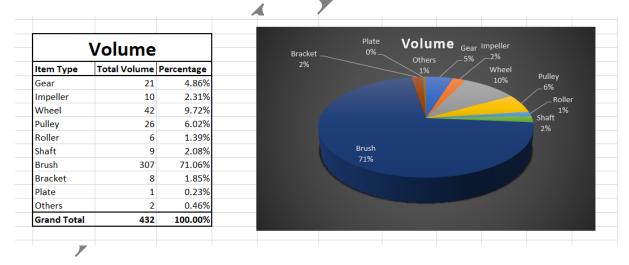
Results and Findings (Graphs and other Pictorial Representation Preferred and with words)

• Sales / Revenue Data with Pie Graph



Revenue does not show pareto analysis, Gear generates the most revenue, there are mainly four products who generate 76% revenue Gear, Impeller, Wheel and Pulley.

• Volume Data with Pie Graph



- In above two graph we can conclude **WHEEL** is maintaining economy as it is the safest product with respect to sales and volume.
- Gear & Impeller are high contributors of revenue with low gross margin contribution of volume.

BY Say Lashyall