

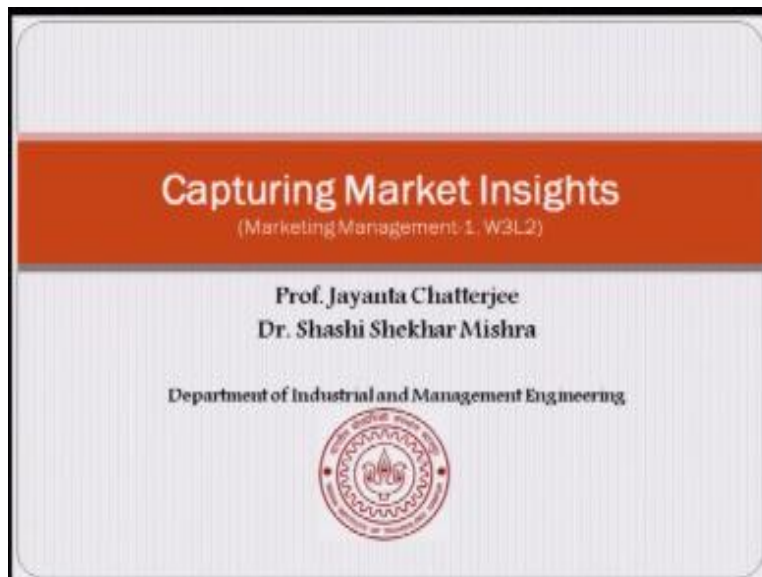
Indian Institute of Technology Kanpur
National Programme on Technology Enhanced Learning (NPTEL)
Course Title
Marketing Management – 1

Lecture: W3.I.2
Capturing Marketing Insights

by
Prof. Jayanta Chatterjee
Dr. Shashi Shekhar Mishra
Dept. of Industrial Management and Engineering
I.I.T. Kanpur

Dr. Shashi Shekhar Mishra: Hello and welcome to another session of this course marketing management part 1.

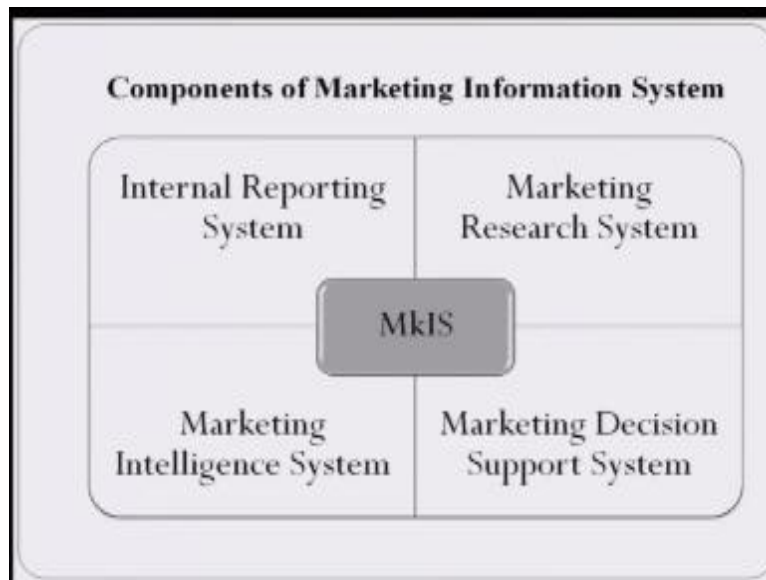
(Refer Slide Time: 00:19)



Dr. Shashi Shekhar Mishra: Since this is week 3, lecture 2 we are going through the third module of the course on capturing market insights and this is lecture 2. So I am going to talk about today the different components of marketing information system, I believe in the last class you have already gone through the introductory part of this marketing information system and a little bit about marketing research process.

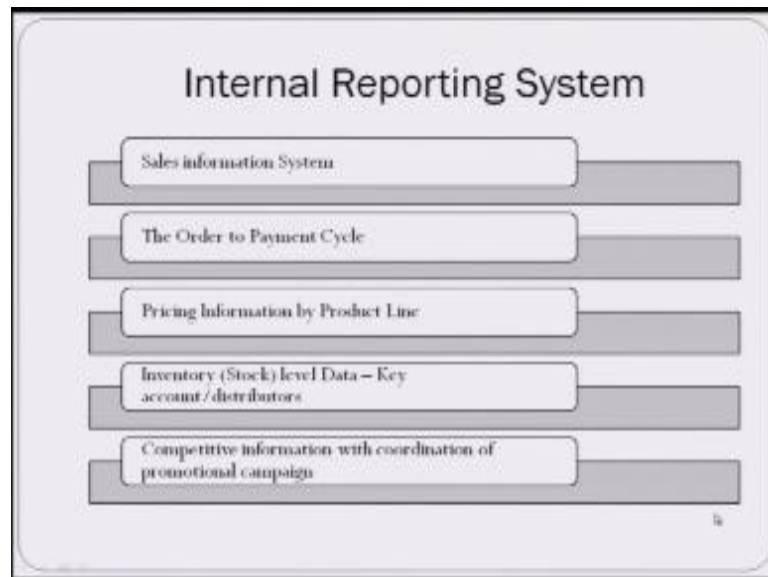
So I am going to talk about components of marketing information system, broadly Prof. Chatterjee has already talked about in the previous class the components of marketing information system.

(Refer Slide Time: 01:03)



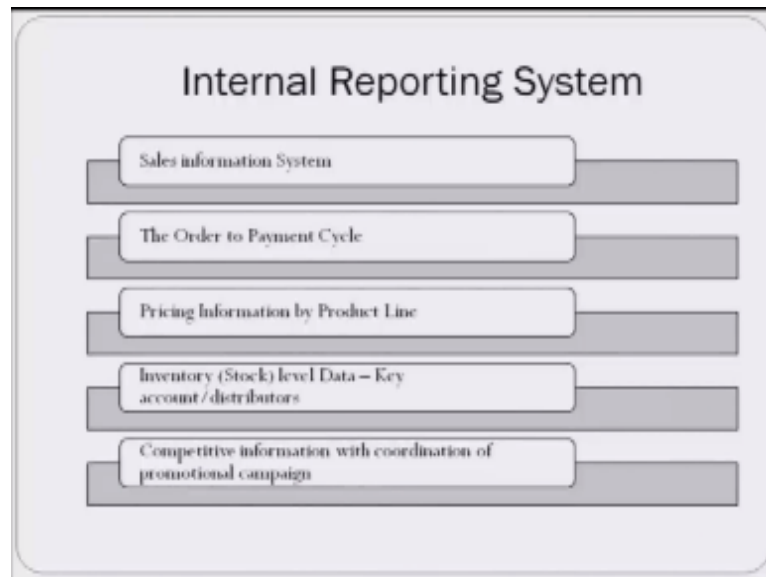
Dr. Shashi Shekhar Mishra: And from there as you know there are broadly these four components are there which are the part of this broad marketing information system which consists of internal reporting system or your internal databases. Then you have marketing intelligence system and after that we have marketing research system, and marketing decision support system. So I am going to cover these two things the first two, the internal reporting system and marketing intelligence system.

(Refer Slide Time: 01:33)



Dr. Shashi Shekhar Mishra: Now when we talk about this internal reporting system we have the company, the organization try to utilize the data which is readily available insights, inside the organization. So during its, the usual processes of delivering the value to the customer the organization itself collects lots of data from its customers, its partner, its suppliers and all the other different types of information from the different kind of stakeholders to that organization.

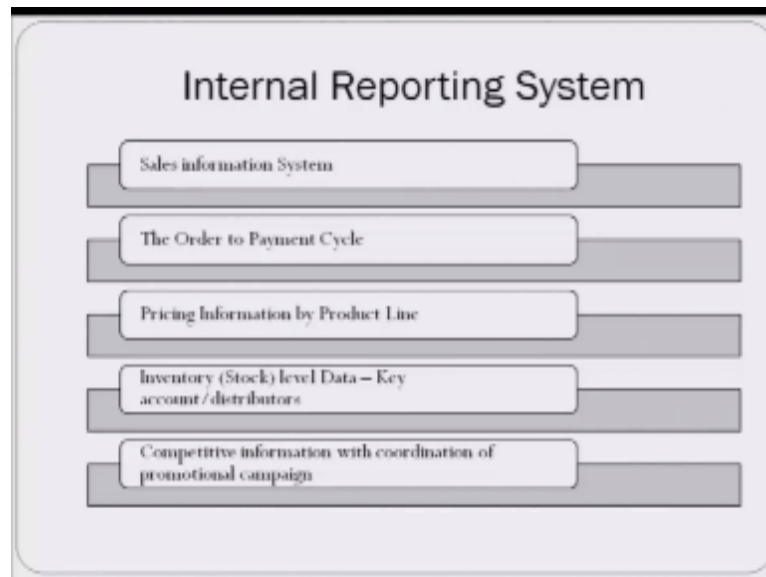
(Refer Slide Time: 02:09)



Dr. Shashi Shekhar Mishra: Important sources of information inside this internal reporting system are the sales information system which is a very, very important source of information for the organization. The organization generally trains their sales force and their sales management to basically not only sell the product in the market, also understand the goings in the market, what are the things that are basically happening in the marketplace, what are the things that are happening at the distributors.

And so all these things they get first hand information through this sales information system. Generally these days you will see the organizations employ some kind of software tools even together and formalize this kind of a sales information system inside the organization.

(Refer Slide Time: 03:03)



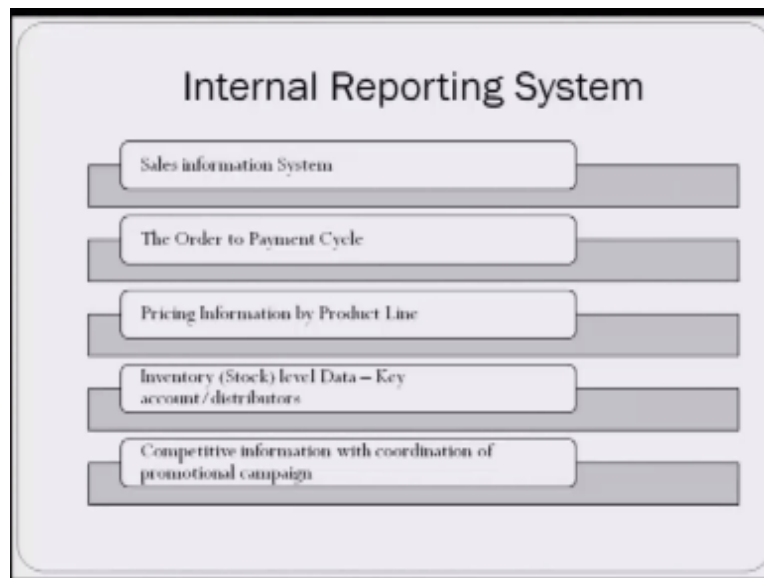
Dr. Shashi Shekhar Mishra: Then you have this order to payment cycle where, from the ordering when the customer places the order about the product then probably the time it is being delivered to the customer and the payment time when the customer has actually paid for the product or the services that he has got from the company, that is this order to payment cycle, that is another very important source of information and it gives you a lot of insights that what is happening to the company, basically what kind of customers it is serving, what is its position in the market in terms of the cash flow.

So lot of information related to that comes from there, then you have pricing information by product line. So you have the pricing information about your product lines, also in this integrated with this pricing information about your product line is the information from the competitor's product prices also. So that gives you a very clear picture about what is actually happening in the market and basically that can also to an extent help you in understanding the consumer response towards your product.

Then you have the inventory stock level data, that is something which is very important, what are the stocks levels at your distributors end, what are basically in B to B market that -- this is

something very important is that what are basically the stocks of the inventory level at your customers level or the key accounts level.

(Refer Slide Time: 04:31)



Dr. Shashi Shekhar Mishra: Then you have competitive information with coordination of promotional campaign, how you are – once you have designed your promotional campaigns what is the response of the market, what is the response of the customers, how much they have liked that promotional campaigns, how it has affected to them, so post campaign responses are also collected inside this information – internal reporting system.

Prof. Jayanta Chatterjee: And one of the things that I have seen that usually all the blocks of this internal reporting system become very clear if you put it in the context of B to B marketing or industrial marketing. But actually it can be very well used for B to C or consumer product marketing as well because consumer products are really speaking sold through wholesalers and distributors.

So it, in a way these reporting items also tell us about our competitive strength, for example if you are actually a distributor of HUL then you will pay upfront to HUL as soon as the stuff

leaves from HUL gate towards your warehouse. So that means that HUL actually works with the negative working capital.

Dr. Shashi Shekhar Mishra: Yes.

Prof. Jayanta Chatterjee: They have –

Dr. Shashi Shekhar Mishra: In fact you have to pay in advance sometimes.

Prof. Jayanta Chatterjee: Absolutely. And therefore it shows that becomes a very important part, if tomorrow HUL sees that there is a huge resistance to that and people are distributors are not agreeing to that sort of term that means it will immediately tell us that is very valuable.

Dr. Shashi Shekhar Mishra: Porter's not there.

Prof. Jayanta Chatterjee: Yes that they do not have that in terms of the Porter's five forces that we have discussed, that they are losing their bargaining power with respect to the major buyers.

Dr. Shashi Shekhar Mishra: Yeah absolutely, yeah very nice example and in fact the competitive position can also be understand whether, what kind of this payment cycle you have so company like HUL which is a very strong market position in the some of the FMCG products sector so there basically what happens is because of the market pool they can afford to have this kind of negative.

Prof. Jayanta Chatterjee: Working capital.

Dr. Shashi Shekhar Mishra: Working capital thing, on the other side if there is a new competitor, local competitor and if he tries to enforce that kind of policies.

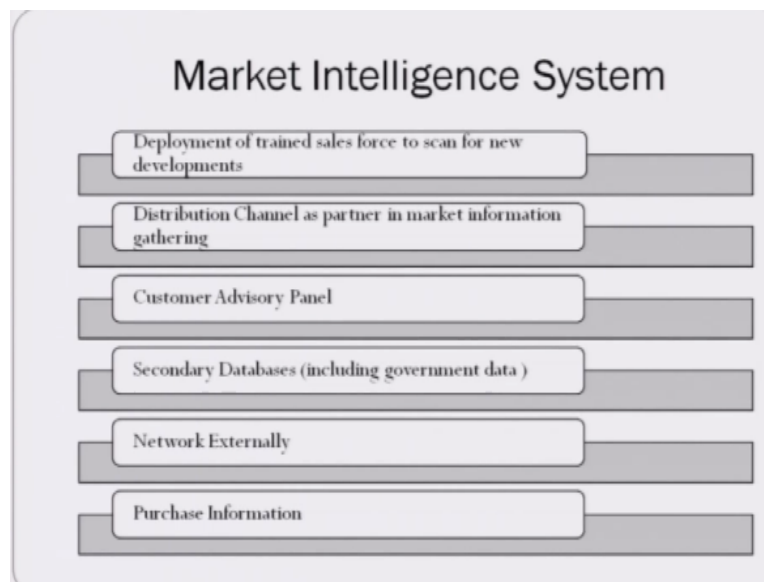
Prof. Jayanta Chatterjee: It will not work.

Dr. Shashi Shekhar Mishra: It will not succeed so that means there is a basically there has to be a push and there probably the policies with which they do the business with their distributor has to be entirely different.

Prof. Jayanta Chatterjee: Right.

Dr. Shashi Shekhar Mishra: Yeah, the next thing is into this marketing information system is the second component is this market intelligence systems, so basically again the importance of the sales force comes into the picture that sale force is something which is there in the field.

(Refer Slide Time: 07:31)



Dr. Shashi Shekhar Mishra: And it gives you the first hand information what is happening and in fact since professor Chatterjee has talked about B to B marketing you will understand the role of the sales force is very important in the sense this is something which comes to you, brings to you also the information like what is going to be the future demands about the product so you will not have demand forecasting methods, quantitative methods in B to B market unlike probably B to C market, probably people will more rely on the sales force estimation of their customers.

Prof. Jayanta Chatterjee: Correct.

Dr. Shashi Shekhar Mishra: Requirement because they can go to the customer ask them what is what is your existing capacity and how you are going to expand your capacity for the next year and when you basically have these two things you combine that data at the individual sales region so you get basically the entire sales demand from a particular region. On the other side what happens is when you basically collect the data from all the regions you can collectively say what is going to be the demand or what is going to be the likely demand in the future for that product for the company.

So the next thing is that distribution channel part information gathering, distribution channel partners like wholesalers, retailers, they also give you very important inputs. When there is a probably over emphasis I would say on and probably the, the role of the customers in providing the feedback but if you see, if you see the information collected from a retailer there is a sort of basically a collective or a gathered information from their side also and that has to also be taken into account along with a customer related data or the customer feedback related data.

So that is another important thing, then you have these days probably companies are also employing this customer advisory panel where you, you have your set of customers, your customers on your panel which consistently keep on giving you the information or the feedback about the product, and sometimes what happens is these people become the expert in the products so probably that information is very useful. However the company should be also be very, what I would say is that they should be very sensitive to this kind of information is that some kind of biases that come from the, this kind of advisory panel should be avoided while accounting for the marketing planning.

Prof. Jayanta Chatterjee: Yeah actually the what happens is that this customer advisory panel, I have dealt with this subject in depth, it is very important to not only be sort of be captured by your important customers because you know in literature it has been called the tyranny of the served market so if you are creating a advisory panel you would feel tempted to invite your most

important customers, the biggest customer, the largest customers, but you have to be very careful to construct this that there should be representation from your possible customers.

Dr. Shashi Shekhar Mishra: Possible customers

Prof. Jayanta Chatterjee: If it is feasible get some main customers of your competitors into that advisory panel, get people who are today not your customers are in on the fringe but being served by very small competitors, but invite them in because they might give you some very important trends, so you know there is a whole lot of interesting theory developed by Clayton Christensen on this disruption, the creative disruption, creative destruction or what he called the you know the innovator's dilemma. The issue there is that many times it is seen in business history that very large companies they ignored the trend that was happening at the fringe, at the lower end of the market

And so when PC's came large computer manufacturers like DEC, or Vange, IBM they ignored it initially, they said this is just some hobby this has nothing to do with our computers which are meant for industries, banks, and critical applications, and as a result they completely sort of ignored that rapid development that was taking place there even though it was and ultimately many of those large computer makers like Deck or Compaq they actually disappeared.

Dr. Shashi Shekhar Mishra: Yeah.

Prof. Jayanta Chatterjee: And these small makers, you know like Apple which started in the garage became a behemoth, world's most valuable company. So therefore never ignore the small customers or could-be customers or fringe customers. So construct this customer advisory panel very carefully, otherwise the large customers will always say, you know make things better, bigger, smarter, faster. But always the competition does not come from there.

Dr. Shashi Shekhar Mishra: Yeah so you will remain intact into the existing needs of the market.

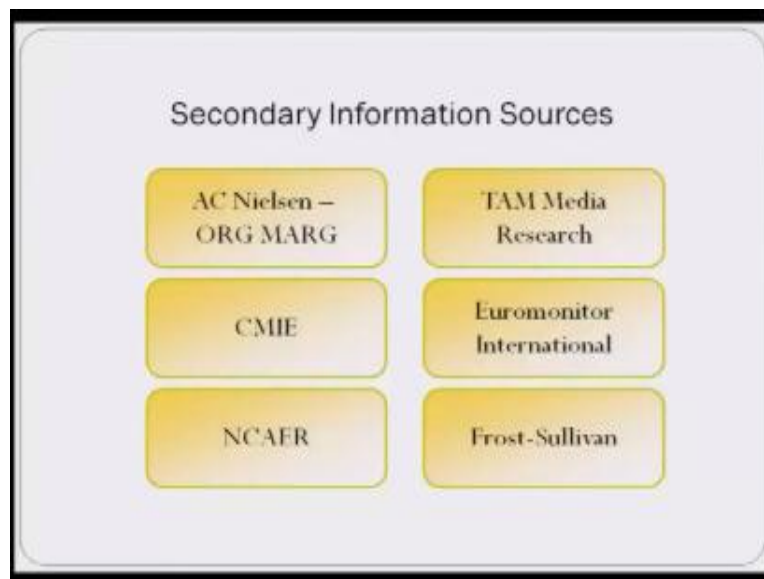
Prof. Jayanta Chatterjee: Yes.

Dr. Shashi Shekhar Mishra: And sometimes what you are saying is very true to the B to B markets because they will try to influence the product design, your product design according to your need and probably to the dis-benefit or disadvantage of your customer, their customers, so.

Prof. Jayanta Chatterjee: Correct.

Dr. Shashi Shekhar Mishra: That is very true. So then you also have the sources of the information in the form of secondary databases and this, this includes basically the data which is being generated from the government side, demographic data, the data about the economic aspects of the country. So all those things are very important like you can see the there are quite a few companies besides these which I have mentioned.

(Refer Slide Time: 13:33)



Dr. Shashi Shekhar Mishra: Which probably are into generation of the second information data, the second information can be used as a second information sources like AC Nielsen, CMIE, Euro monitor, Frost and Sullivan, they all come with the overall market data also, they come out with their own assessment of the customer needs and trends. So these are basically another

sources of important data source, which can be integrated with other information which is available inside the organization.

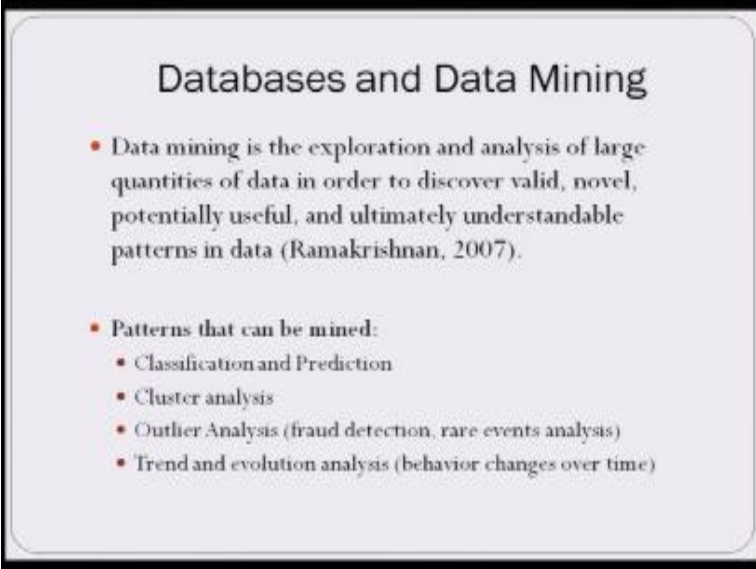
Then you have the basically there is another option for gathering the marketing intelligences, you basically network externally, you go to the different agencies which are into this specific job of intelligence gathering in the market, related with this network externally is one of the very, very debated practice in the modern marketing is probably, you must have known this is dumpster diving.

Where the company actually goes into the garbage of other companies and they try to see what is from those garbage, they try to basically collect it and they try to understand what is happening there.

Prof. Jayanta Chatterjee: It is almost a industrialist disparage.

Dr. Shashi Shekhar Mishra: Yeah, yeah its origin comes from the spying where probably countries have used this dumpster diving for basically tracking the nuclear programs of the other countries, Israel has done and they have done a lot of things in this area. So then you also have the purchase information from the customer side. So this is broadly what comes under the marketing intelligence system.

(Refer Slide Time: 15:11)



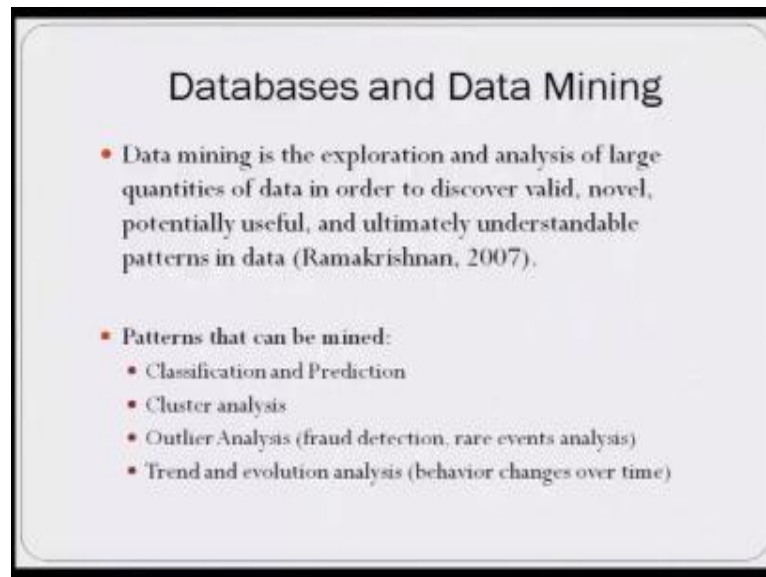
Databases and Data Mining

- Data mining is the exploration and analysis of large quantities of data in order to discover valid, novel, potentially useful, and ultimately understandable patterns in data (Ramakrishnan, 2007).
- Patterns that can be mined:
 - Classification and Prediction
 - Cluster analysis
 - Outlier Analysis (fraud detection, rare events analysis)
 - Trend and evolution analysis (behavior changes over time)

Dr. Shashi Shekhar Mishra: And then you have another thing that that is emerging as probably one very prominent area and this market gathering the market inside is this data bases and the data mining. So data mining is the exploration and analysis of large quantities of data in order to discover valid, novel, potentially, useful, and ultimately understandable patterns in the data and the large data that you gather from the customer's side.

Can be used for finding out different kind of patterns in the consumers buying behavior, in general consumer behavior is that you can figure out is classification and prediction. So based on the consumer's behavior you can classify the customers and you can predict about there a based on the previous behavior of the customers you can predict about the future behavior. Then you have a very popular technique among the market here is this cluster analysis.

(Refer Slide Time: 16:13)



Dr. Shashi Shekhar Mishra: Where you try to cluster the customers, based on the certain attributes, and then you have outlier analysis this is becoming outlier analysis does not look so prominent but now it is gaining so much of importance where you try to find out among the given data set and among the different points, which is the data point that is different from the other data points.

Now the importance of this outlier analysis is if among basically the different kind of transactions if a particular kind of transaction exhibit a certain or consumer exhibit certain kind of a behavior in its transactions, then probably that could be a probably a signal for the fraud detection and it is also basically a source of rare event analysis. So this is another very, very probably good or emerging application of this database.

Database base, probably the analysis and the data mining, then you have trend and evolution analysis which is about the behavior pattern changing over the period of time. So you can understand how basically the things are changing at the consumers end over the period of time and accordingly you need to modify, this is something which is very natural that over the period

of time the customer's needs and their wants are going to be, are going to shape up in a different ways and that a company needs to basically tap and probably track very closely.

So that you can change in your offering or probably you modify your offering according to the changing needs or the requirements of the customers. So I will take you through some of the examples of this data mining.

(Refer Slide Time: 17:56)



Dr. Shashi Shekhar Mishra: In the marketing area, like as shown in this picture you can see that just looking at this the market basket of a customer you can understand couple of thing like if a person is purchasing and going through this probably a big retail format. So you will see that where should that detergent be placed in the store to maximize their sales, you can understand what should be the product placement inside the retail store. I mean what is basically the association of different kind of products.

So if a consumer purchases a product A and B is a product C is going to be purchased along with this A and B, so that those are some of the very important things that you can understand and probably, how does the probably the role of the brand comes into the picture that whether the

brand increases the propensity of purchase intention or not. So these are some of the things which can be understood via data mining and one example of this is like, here I have given that if a consumer A purchases two similar products A and B to a customer which who also purchases this product A and B then what based on this similarity you can understand that if this, this consumer two basically purchases this drink, then obviously you can recommend to this customer because their preferences are quite same, so you, you can recommend this customer also this, this product to consume and which actually increases the probably the chances of the sales for the company.

From the real life example, as you can see if you basically purchase a particular kind of product in the Amazon like I have a basically try to purchase a book on dynamic capabilities by David J Teece which is about the kind of dynamic capabilities that organization should acquire in to sustain in a very volatile business environment. So you will see that with that kind of book, probably there other similar type of book which are on the topic, I get recommendation from Amazon that customers who bought this item also bought the similar kind of books.

So this is basically one predictive type of modeling which is being used to increase the sales, then the other thing is like if the product attributes are same, so if a consumer has purchased in the past certain kind of product. So supposedly there is one type of drink that he has purchased and you have another similar products of the similar type, so based on the proposed date the company can tell or probably suggest to the customer that you should go for this kind of product because most likely you are going to like this product based on your previous preferences.

Sometimes it is very helpful for the customer also, because their time of such for the product goes down and probably it is very helpful for them, or they probably feel that the company is also doing a good job for them also.

Prof. Jayanta Chatterjee: This is profusely used today by all the e-commerce people.

Dr. Shashi Shekhar Mishra: Yeah.

Prof. Jayanta Chatterjee: So, whether on Flipkart or on Jabong or on Snapdeal.

Dr. Shashi Shekhar Mishra: Yeah.

Prof. Jayanta Chatterjee: You will find that if you buy something for kitchen then they will suggest some other kitchen equipment which may go hand and hand.

Dr. Shashi Shekhar Mishra: Yeah, so I will just give you a briefly what we have talked about in the previous two example is, while the previous one was on the similarity of preferences of the customer this is on the similarity of the product attributes the recommendation is happening and there are various way probably you can mind the data and come out with a patterns that can be used by the marketer to probably increase the sales in the market, and also probably solve some of the problems which companies face like the frauds which happens in the business transactions, and some of the other users could be the rear event analysis and all those things.

So with this probably I will wrap up this session and when we meet in the next session we will talk about marketing research process, and then we will take you through the different phases of this marketing or six steps of the marketing research process and then we will go into the each of those steps in a much more detailed way. Thank you.

Prof. Jayanta Chatterjee: Thank you.

Acknowledgement
Ministry of Human Resource & Development

Prof. Satyaki Roy
Co-ordinator, NPTEL IIT Kanpur

NPTEL Team
Sanjay Pal
Ashish Singh
Badal Pradhan
Tapobrata Das
Ram Chandra
Dilip Tripathi
Manoj Shrivastava
Padam Shukla
Sanjay Mishra
Shubham Rawat
Shikha Gupta
K. K. Mishra
Aradhana Singh
Sweta
Ashutosh Gairola
Dilip Katiyar
Sharwan
Hari Ram
Bhadra Rao
Puneet Kumar Bajpai
Lalty Dutta
Ajay Kanaujia
Shivendra Kumar Tiwari

an IIT Kanpur Production

©copyright reserved