

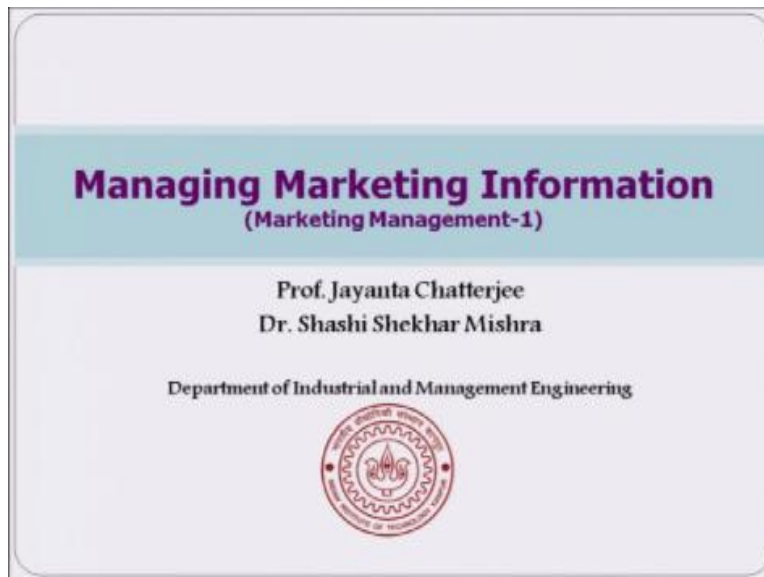
**Indian Institute of Technology Kanpur**  
**National Programme on Technology Enhanced Learning (NPTEL)**  
**Course Title**  
**Marketing Management – 1**

**Lecture: W3-L1**  
**Capturing Marketing Insights**

**by**  
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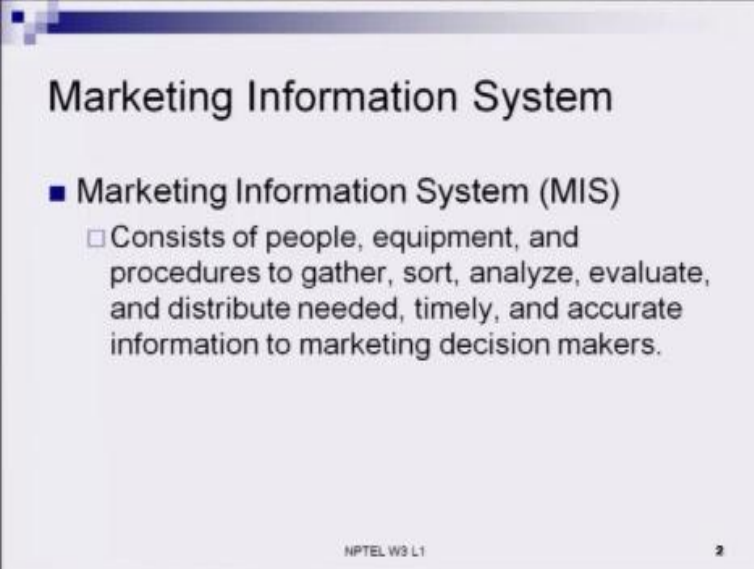
Prof. Jayanta Chatterjee: Hello, welcome to the third week of our course on marketing management part 1.

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Prof. Jayanta Chatterjee: The overall theme of this week will be marketing information system and leading to market research, theories, techniques, processes, tools, and examples. Traditionally in textbooks we talk about marketing information system is defined as people equipment procedures to gather, sort, analyze, evaluate, and distribute, needed, timely and accurate information to marketing decision makers.

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**Marketing Information System**

- **Marketing Information System (MIS)**
  - Consists of people, equipment, and procedures to gather, sort, analyze, evaluate, and distribute needed, timely, and accurate information to marketing decision makers.

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Prof. Jayanta Chatterjee: Now even though traditionally it has been called marketing information system, truly in today's perspective I feel it should be renamed as marketing information and knowledge system. Because as you have listened and discussed last two weeks on your forum and with us the main objectives of marketing which are knowing your customers, knowing your competitors and knowing your company's own core competencies in the perspective of overall business environment and strength weakness opportunity thread.

So you see knowing those three C's, knowing your customers the most important, knowing your competitors, and knowing yourself your own core competencies these 3 C's are fundamentally knowledge constructs. Because what we want to know is that who will be our customers, why will they buy from us in preference to other competitors? Why will they continue to buy from us and how can we motivate, inspire, persuade them, to become our advocates, to recommend our products and services to others.

How can we delight them so much that they will share their positive opinion about us with others? These are four fundamental questions, the four purpose of marketing to know who are our likely customers, to know why will they buy from us, to know why will they continue to buy

from us, and to know how we can delight them so that they will become our advocates, customer advocacy the highest aim of successful marketing, so in a way you see this we have this string of four sets of knowledge that we want to acquire.

So knowing is the primary theme of this week's session and this is of course a fundamental theme which runs through the whole course. Now it will be interesting to also talk a little bit about the distinction between data information and knowledge at this stage. As the definition on the screen shows that we have to have organized effort to collect data about buying statistics, about price statistics, about different seasonal variances, and so on. These data about the market, about the buying statistics, not buying statistics, customer statistics, all these data will have to be put in context.

So data when it is put in some context like for example, if, if you get a series of numbers it may not mean anything, that is the data. But if you put it in the context that this shows the sales per day for a particular product in a particular region, then it is put in a context and starts making sense that the sales are going down, sales are going up, and then when we compare with another set of data another context that how it compares with two major competitors then we know that our market share is going down, going up, or what is happening.

So data put in some context becomes information, so information is therefore more meaningful, it is it gives us pointers for action. Now therefore this meaningful information when it is interpreted for action, so you see to become information to become knowledge it must integrate interpretation of that information so that we then have an action plan. So ultimately we want to act because marketing is all about action, to arrive at valid, good, logical, right way of acting we need to know, to know we need to have information which we can interpret to know and to have information we need to have data which we want to put in context. So next few view graphs are regarding marketing information system.

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Prof. Jayanta Chatterjee: Which I, as I said really should be renamed as marketing information and knowledge system and this diagram which is a very traditional diagram can be seen in many text books kind of shows the different parts of such a system, so on top as you see you have on top you have marketing managers and other information users. So this is where the output has to go for analysis, planning, implementation, organization, and control and this is the block that we are discussing today.

So obviously it starts with an assessment of what we want to know and to organize our information that is coming we need to have these databases and information analysis and marketing intelligence and marketing research the four building blocks, and as you see these arrows they mean they are interacting with each other. So each one leads or lends itself to the next block and the other blocks, so all four are interactive and we will discuss a little bit about each one of them now, and we will continue to expand on.

So this diagram is a kind of view, you should keep it in front of you because as we go through this week it each block will become more and more explicit to you. And then we have of course, the output will have to go, so one side we have assessment of the information need, and other

side we have after this block whatever is coming out is fed back to the users, to the managers for their decision-making. So as you can see the purpose of this is to generate a template for action or action plan and the data gathering sources are of course the market itself and your channel partners, study of your competitors, public sources, newspapers, magazines, other media and of course the overall macro environment forces need to be kept in perspective. So marketing information system therefore interacts with information users to assess information needs, develops needed information from internal and external sources. Now these internal sources are of many types.

For example, internal records, marketing intelligence, market research, and examples are internal record, examples can be sales, data, cost data, cash flow data, production schedule, shipment, inventory, competitor activities, customer demographics, psychographics, buying behavior, customer satisfaction data, service problem record and so on. All of these we will be discussing all these points like what is sales and costs that are kind of all most common sense, but a little bit about the importance of cash flow or free cash flow I had discussed last week in one of the sessions.

But otherwise many of these other activities like what is demographic, what is psychographic, what is the meaning of buying behavior, how do we interpret customer satisfaction all these we will be discussing during this week in greater detail. So marketing intelligence which comes from external sources that also has some meaning, that it is the every day information about development in the marketing environment which help managers to prepare for action. So this is in a way marketing information system that it interacts with information users to assess the need.

And then it develops the needed information from internal, external sources by analyzing the data that has been collected. Helps user analyze that information that means data when it has been converted to information that means it has been put in some context, then that analysis and interpretation leads to there is an in between stage here which we should normally consider that means this analysis of information leads to knowledge which prepares the action plan, the decision framework for what to do.

And then of course if your good MIKS Marketing Information and Knowledge System should have a good distribution system for that information so that the right information is available to the right player at the right time. If you remember in the very first week we had discussed the objective of all modern organizations to be market oriented and if you remember we had said market orientation means sense, share, and respond. Actually this is an embodiment of that same concept that is sense from the market place, from your internal sources, from your own front-line employees, service engineers, sales engineers, or sales representatives.

Sense, what is happening in the marketplace, what the market wants, what the customers are complaining about, what customers would love to have, sense, sense. Then internally share that sensed data in the context of what you want to do, where you want to be and so on, and that gives us information which then further is interpreted to respond for further action. So sense, share, respond and to is what is meant by market orientation and the engine to arrive at that market orientation is what this MIKS is all about.

So what kind of information we would need is obviously that means what enables us to respond, what enables us to take action, and important point of course here is there is there a some I would say limitations which we have to know that not all the information can be update. So a marketing information and knowledge system should not lead to paralysis by analysis, that means you cannot actually keep on collecting data, keep on generating information till you have everything.

All kinds of possibilities, eventualities which can be analyzed with the massive amount of data that you are wanting to collect that is, will be a wrong approach. Because ultimately you have to take action, so in today's scenario where the velocity of the business has accelerated enormously we have to act and often therefore we have to take some kind of an evolutionary approach to this marketing knowledge system, that means we have some good amount of data which can be put in context to get information, and with the interpretation of that may be incomplete information we should act, and based on the feedback that we get from the marketplace on that action.

We should be able to quickly respond and modify so we have an iterative process like we, we interpret, we do, then we check, and then again act and sort of go it in a, in a cycle. So sometimes

we have to act upon incomplete or insufficient data and therefore we have developed techniques of how to do that and those are the things that we will discuss when we discuss more about market research. Like for example if we have possible one million customers then we cannot go and talk to those one million customers before we finally design and manufacture the product, or make the, what plan for the service or floor plan for the service.

So we have to actually maybe talk to a hundred people or thousand people to know what million people will do, and we have therefore scientific techniques that we have developed to guess. Yeah, I would put within comma this word 'guess'. So intelligent guessing is part of this marketing information and knowledge system, so therefore machines cannot do really speaking this MIKS entirely. You need the human intuition and the human ability to interpret insufficient data very quickly and you should utilize that in your MIKS, so that is what I recommended to take an evolutionary approach, have a rough set, do develop a plan of action, go and act in the market place get quick feedback, feed that back into the system.

So do it in integrative loops before you actually do the entire nation wide or complete roll out. So to summarize today's session sources of information are.

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The slide is titled "Developing Marketing Information". Below the title, on the left, is a section titled "Sources of Info" which lists three items: "Internal data", "Marketing intelligence", and "Marketing research". To the right of this list, there are two bullet points: "Internal data is gathered via customer databases, financial records, and operations reports" and "Advantages include quick/easy access to information". At the bottom left of the slide, it says "NPTEL WS L1" and at the bottom right, there is a small number "6".

## Developing Marketing Information

### Sources of Info

- *Internal data*
- *Marketing intelligence*
- *Marketing research*

- Internal data is gathered via customer databases, financial records, and operations reports
- Advantages include quick/easy access to information

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Prof. Jayanta Chatterjee: Internal data, marketing intelligence which means observation of the competitors extra I will, I think I have a slide on that and marketing research and internal data is gathered by customer databases, financial records, operation reports and obviously this is if done properly this can give you very good valuable insight, right from the information that you have you can get an agenda for action. Of course as I said that this is not entire set so there is some incompleteness that will be there in the data that can be generated from your internal sources, then of course we can have.



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The slide is titled "Developing Marketing Information" in a large, bold, black font. Below the title, on the left side, is a sub-section titled "Sources of Info" in a bold, black font. Under "Sources of Info", there is a list of three items: "Internal data", "Marketing intelligence", and "Marketing research", each preceded by a small blue square bullet point. To the right of this list, there is a vertical blue line. To the right of the line, there is a list of two items: "Marketing intelligence is the systematic collection and analysis of publicly available information about competitors and trends in the marketing environment." and "Competitive intelligence gathering activities have grown dramatically.", each preceded by a small blue square bullet point. At the bottom left of the slide, the text "NPTEL W3 L1" is visible. At the bottom right, the number "7" is visible.

## Developing Marketing Information

### Sources of Info

- *Internal data*
- *Marketing intelligence*
- *Marketing research*

- *Marketing intelligence is the systematic collection and analysis of publicly available information about competitors and trends in the marketing environment.*
- *Competitive intelligence gathering activities have grown dramatically.*

NPTEL W3 L1 7

Prof. Jayanta Chatterjee: Marketing intelligence, systematic collection of the competitors activities, collaborators activities, and customer opinion and so on. So competitive intelligence gathering has now become in most organizations a full-time function and very knowledgeable people are deployed.

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The slide is titled "Developing Marketing Information". It features a section titled "Sources of Info" with a bulleted list: "Internal data", "Marketing intelligence", and "Marketing research". To the right of this list, there is a definition of "Marketing intelligence" and two additional bullet points: "Competitive intelligence gathering activities have grown dramatically." and "Many sources of competitive information exist." The slide footer includes "NPTEL W3 L1" and the number "7".

## Developing Marketing Information

### Sources of Info

- Internal data
- Marketing intelligence
- Marketing research

- Marketing intelligence is the systematic collection and analysis of publicly available information about competitors and trends in the marketing environment.
- Competitive intelligence gathering activities have grown dramatically.
- Many sources of competitive information exist.

NPTEL W3 L1 7

Prof. Jayanta Chatterjee: Because they are the trend spotters, they are the people who can see the changes in the pattern, and there are software techniques etcetera for this business intelligence or market intelligence, there is lot of new tools that have come about to make the interpretation of maximum amount of data which is called big data, that analytics tools are available. But as I would again try to emphasize that however big maybe your information gathering system, however big maybe your the data size and your power of your interpretation tools and your analytics.

At the end you need human intuition to understand that what is valid, which is more important than other that is still very, very difficult to do through machines. The artificial intelligence software is coming back again and is becoming less ambitious I would say.

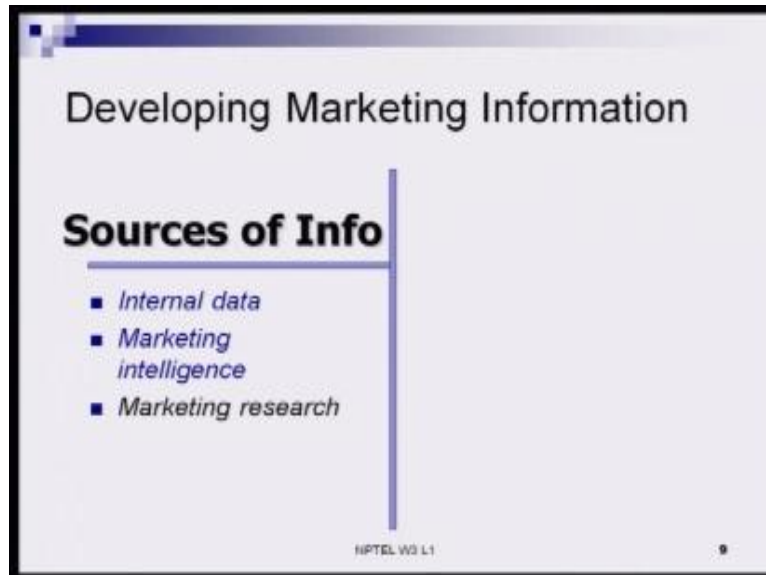
And therefore less expensive providing very good results but at the end you do need a human pilot to drive this complex process.

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Prof. Jayanta Chatterjee: Sources of competitive intelligences are your own employees, the front-line employees, your service people, your sales people, your channel partners, also you can participate in trade shows and observe what your competitors are exhibiting, what they are talking about and, and you can do some benchmarking and of course there are consultants, independent bodies who were available to do this benchmarking. Finally therefore to give you the whole construct.

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Prof. Jayanta Chatterjee: The internal data marketing intelligence and we are not discussing market research in this session because that is the main theme of the rest of the week, we will discuss it in much more detail.

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**Developing Marketing Information**

**Sources of Info**

- *Internal data*
- *Marketing intelligence*
- *Marketing research*

■ *Marketing research* is the systematic design, collection, analysis, and reporting of data relevant to a specific marketing situation facing an organization.

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Prof. Jayanta Chatterjee: And which is basically systematic design collection, analysis and reporting of data.

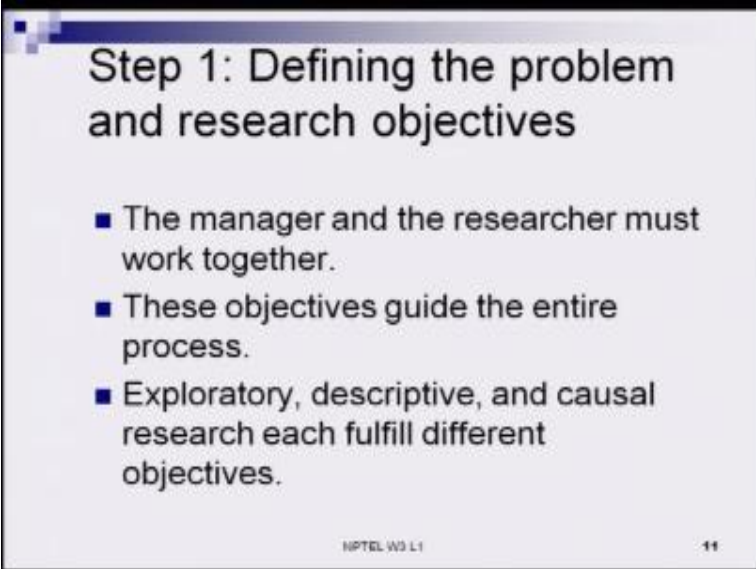
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Prof. Jayanta Chatterjee: Relevant to our requirement. So these are the steps in the market research process but of this will be expanded, at this stage it is only being shown to you for introductory purpose that it is as usually define, develop, implement, interpret. As I started today's session by saying that ultimately the purpose of this whole MIKS marketing information knowledge system is to enable the organization to sense what is happening, what is being wanted, what is the deficiency, what needs to be fulfilled.

All this sensing shared within the organization and interpreted for action, sense, share, respond, that is what the process that needs to be enabled by MIKS.

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**Step 1: Defining the problem and research objectives**

- The manager and the researcher must work together.
- These objectives guide the entire process.
- Exploratory, descriptive, and causal research each fulfill different objectives.

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Prof. Jayanta Chatterjee: So these are some of the fundamental processes.

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**Defining the Problem & Research Objectives**  
*Example: XYZ Airlines Case*

- The marketing manager contacted a major telecommunications company to find out the cost of providing Internet service on International flights.
  - The telecommunications company said that the device would cost the airline 60,000 a flight.
  - The airline could breakeven if it charged Rs. 2500 and at least 40 passengers made use of the facility during the flight.
- The marketing manager then asked the company's **research manager** to find out how air travelers would respond to this new service.

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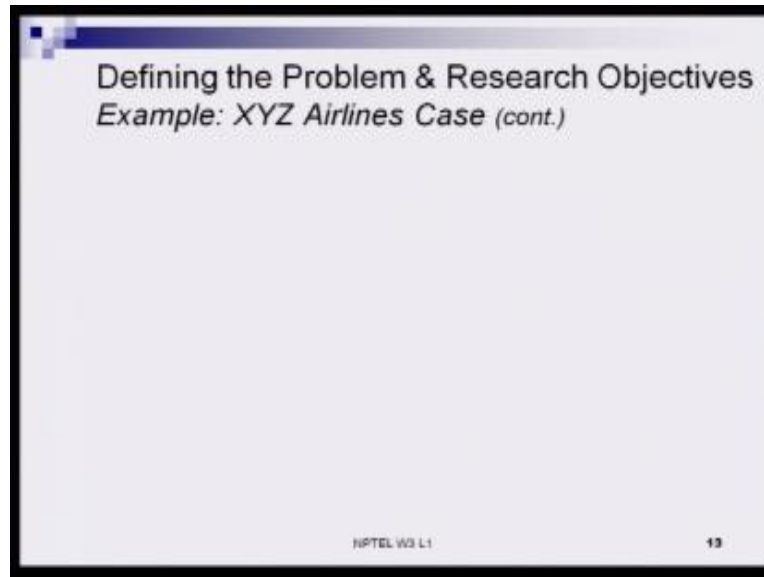
Prof. Jayanta Chatterjee: Of marketing research, I will now take up in the rest two, three minutes, a short example, so for example say this XYZ airlines they want to see that whether they should introduce that they should give internet service in flight, in-flight internet service. They found, they contacted some telecom company and found that it will cost them about Rupees 60,000 per flight to have and manage and run such a system.

So the airline could break even, even if it charge rupees 2500 and at least 40 people used such a system then you know they will get about 100, 1000 rupees, cost will be sixty thousand rupees and including other costs then this will break even. So the requirement is forty passengers per flight who will pay 2500 for in-flight internet service, the question is, is this, this is what MIKS is all about, we want to know will there be 25 customers?

Will this make any difference, should we at all think about this, it may appear to be a very good idea but how important is this idea in the perspective of all other possibilities. So what is the standard method, we will ask the marketing manager, we will ask the research manager that we want to know that if we want to do this.



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Prof. Jayanta Chatterjee: Whether we will have enough people buying in what, at what price it should it be 2500, should it be 1500 what all should it bear?

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**Defining the Problem & Research Objectives**  
*Example: XYZ Airlines Case (cont.)*

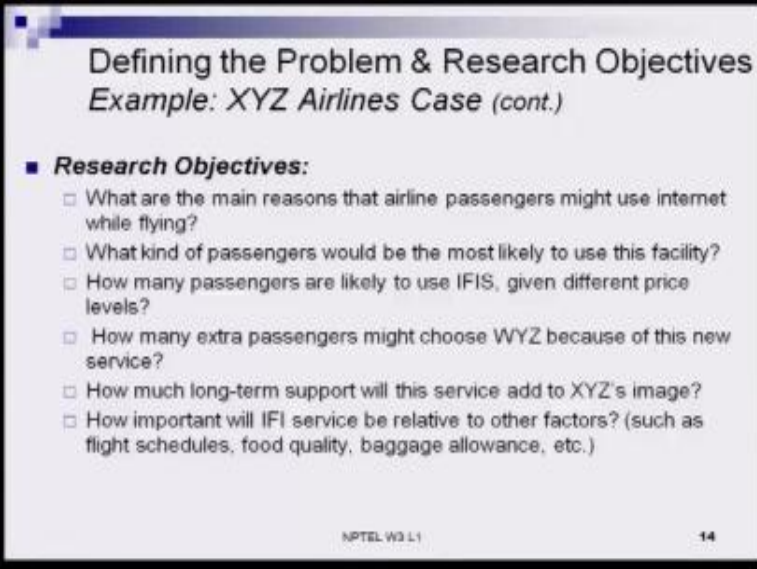
- XYZ Airlines looking for new ways to serve the needs of air travelers ⇒ the idea of offering Internet service to passengers
- **Research Problem ?**
  - "to find out everything about air travelers' need" – too broad!
  - "to find out if enough passengers aboard a global route flying between East and West would be willing to pay Rs.2500 to use IS so that the company would break even on the cost of offering this service" – too narrow!
- **Research Problem** is finally defined as: "Will offering an in-flight internet service create enough incremental preference and profit for XYZ Airlines to justify its cost against other possible investments that the company might make?" 13

Prof. Jayanta Chatterjee: So first we have to define the problem and research objective, so therefore this is what we do first, we try to define the research problem, if we want to say to find out everything about air travelers need, the statement is too broad, or if we say to find out their global route flying between East and West would be willing to be pay Rupees 2500 to use internet service.

So that the company would break even on the cost of offering this service, this also appears to be too narrow very specific, we may actually lose out by not asking some other peripheral questions which can give us much better insight. So the research problem finally can we defined as, will offering an in-flight internet service create enough incremental preference and profit for xyz airline.

To justify its costs against other possible investments that the company might make, okay. So this is the first step, to define your research objective, to know what you want to know.

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**Defining the Problem & Research Objectives**  
*Example: XYZ Airlines Case (cont.)*

■ **Research Objectives:**

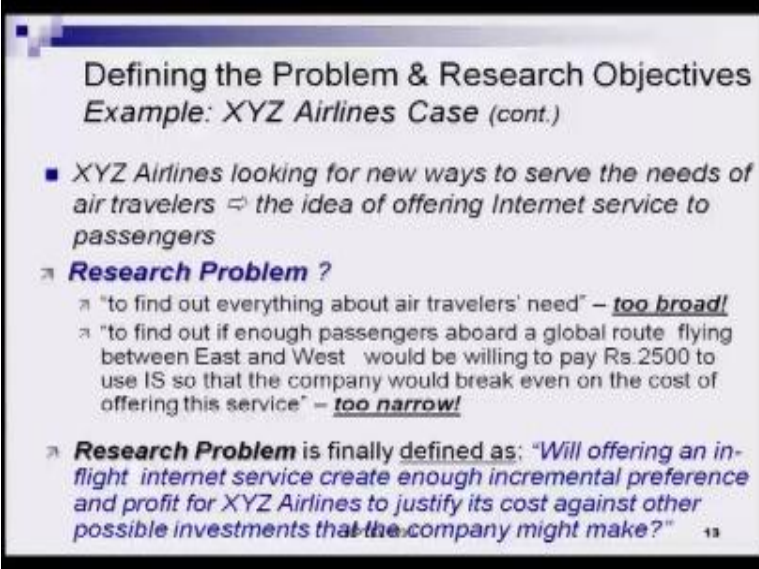
- What are the main reasons that airline passengers might use internet while flying?
- What kind of passengers would be the most likely to use this facility?
- How many passengers are likely to use IFIS, given different price levels?
- How many extra passengers might choose WYZ because of this new service?
- How much long-term support will this service add to XYZ's image?
- How important will IFI service be relative to other factors? (such as flight schedules, food quality, baggage allowance, etc.)

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Prof. Jayanta Chatterjee: Then we can make this research objective to know, then we have to develop a series of questions, which is here we ask now I am just showing a very simple example, in the subsequent sessions we will see more details about this construction of the research objective, making the question here, making a valid question here, what are the checks and balances that we should have all these.

This is only to whet your appetite, just to give you a teaser or sort of a prelude to what we want to do the rest of the week, okay. So this is how we actually develop a set of detailed questions to ask.

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**Defining the Problem & Research Objectives**  
*Example: XYZ Airlines Case (cont.)*

- XYZ Airlines looking for new ways to serve the needs of air travelers ⇒ the idea of offering Internet service to passengers
- **Research Problem ?**
  - "to find out everything about air travelers' need" – too broad!
  - "to find out if enough passengers aboard a global route flying between East and West would be willing to pay Rs.2500 to use IS so that the company would break even on the cost of offering this service" – too narrow!
- **Research Problem** is finally defined as: "Will offering an in-flight internet service create enough incremental preference and profit for XYZ Airlines to justify its cost against other possible investments that the company might make?" 13

Prof. Jayanta Chatterjee: To know our research problem, answers to the research problem.

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**Defining the Problem & Research Objectives**  
*Example: XYZ Airlines Case (cont.)*

■ **Research Objectives:**

- What are the main reasons that airline passengers might use internet while flying?
- What kind of passengers would be the most likely to use this facility?
- How many passengers are likely to use IFIS, given different price levels?
- How many extra passengers might choose WYZ because of this new service?
- How much long-term support will this service add to XYZ's image?
- How important will IFI service be relative to other factors? (such as flight schedules, food quality, baggage allowance, etc.)

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Prof. Jayanta Chatterjee: We develop, break it down into whole series of questions and then we get, go to the market, go and talk to the passengers, talk to the our own employees and so on to find out the answers to those questions. So as I mentioned in the beginning rest of the week we will go far deeper into these different very intricate and very exciting subjects that how to know what we want to know.

And to assess what is there to know with respect to all other pursuits that we may have. So if you think about it, if you know what you want to know in many ways you know where you want to go, and once you know your destination then planning your journey becomes far easier as long as of course you know where you are today, thank you.

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