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## Week 1 Lecture-1 Understanding the basics of AI in Marketing-I

Welcome to this course on Artificial Intelligence and Marketing and we will start with module 1. But before that, a brief introduction about this course. This course is divided into 7 parts. In part 1, we will talk about introduction to AI in marketing management and the first 5 modules are dedicated to this part. In part 2, we will talk about developing marketing strategies and plans using AI. So, module 6 to 14 will be covered in the second

In the third part, we will talk about AI for marketing research and module 15, 16 and 17 will be talking about AI for marketing research. In part 4, we will talk about connecting with the customers and module 18 to 25 will be talking about part 4. In part 5, we will talk about building strong brands using artificial intelligence and module 26 to 31 are covered in part 5. In part 6, we will talk about AI for designing, delivering and communicating value and module 32 to 55 are dedicated to understand the role of AI for designing, delivering and communicating value and in part 7 that is ethics in AI and we will talk about the ethical concerns in using AI.

So, module 56 to 60 are covered in this part. So, we will start with first chapter and module 1 that is understanding basics of AI in marketing that is part 1. So, the module in this module, we will talk about the introduction to how AI is being used by the industry along with the case study. What is marketing and the various marketing offerings? What is marketing environment and what are its components? How marketing has evolved over the years from version 1 to version 5? So, to start with the introduction, if big data is the new oil, analytics is the combustion engine. Data is only of benefit to business if it is used accordingly and capitalized.

Analytics and AI increasingly enable the smart use of data and the associated automation and optimization of functions and processes to gain advantage in efficiency and competition. In the recent years, AI has catered for an immense leap in development in business practice. While the optimization and automation of production and logistics processes are focused on in particular in the scope of industry 4, AI increasingly also address administrative, dispositive and planning processes in marketing, sales and management and on the path toward the holistic algorithmic enterprise. Now, let us look at use of AI in Indian industry. Which industry and we will start with answering this

question, which industry use AI massively? Healthcare used AI 37% in 2015 to 2020 and estimated from 2021 to 2025 is 40%.

Then comes transportation with 41% each. The third is manufacturing. Now you see how much increase in the use of AI over a period of 10 years has been happening in manufacturing moving from 14% to 83%. Then comes finance 41% to 59% and advertising from 47% and it has decreased. It is supposed to decrease to 36%.

So manufacturing is the industry that is using AI massively. Now let us look at this example of AI adoption by a cement company. So, this is the story of a cement company. How AI changed advertising effectiveness? So that is the use of AI by Ramco Cements. Madras Cement Limited is the flagship company of the Ramco group in India.

The company is one of the six largest cement operators in India manufacturing ordinary Portland cement and Portland pozzolana cement. The challenges they faced was Madras Cement felt that their potential for growth was hampered by their inability to visualize and leverage the rich data generated from Ramco enterprise resource planning system. Information such as distributor performance, comparison and location mapping of their wagon movement were difficult to visualize. Madras Cement also found it difficult to understand the real issues affecting operations and performance across the region.

Mr. A.V. Dharmakrishnan, chief executive officer of Madras Cements, commented that traditional means of reporting using Microsoft Excel sheets were complex and time consuming, hindering further business decision making. They needed a data visualization solution, one that offered richer, dynamic, interactive graphics that integrated with the Ramco ERP system. The solution Madras Cement used Google Maps to integrate with its Ramco ERP system. By superimposing its data onto Google Maps, the result was a rich data visualization tool that facilitated idea generation and improved productivity. All across India, over 1000 employees access reports and transactions on a daily basis from the Ramco ERP systems and integrated Google Maps.

Management at Madras Cements used Google Map for visual analysis for monitoring benchmarks, identifying discrepancies and deviations. Google Maps serves as a tool to help them develop appropriate strategies for business growth. The field sales team now has the capability to easily view information on their mobile devices, information ranging from competitors, distributor network in their area to the best and worst performing dealers. This not only enabled them to make faster sales strategies on the go, it also helped management improve their market penetration strategy and competitiveness. As they could locate their cement warehouses and key customers on Google Maps, vis-a-vis critical operation information, empowering them to devise effective supply chain

strategies and enhance customer service.

Google Maps helped illustrate data at various levels of detail. For example, which regions were experiencing strong growth, which dealers were performing best or had the most potential for growth. Now let us look at the results. Manufacturing logistic cost low is a critical success factor in the cement manufacturing industry. Google Maps together with their in-house SMS notification system and Ramco ERP solution formed a solid communication infrastructure.

This has helped the Madras Cement reduce penalties, losses and damages arising during the wagon clearance process by up to 70% and improved consignment clearance time by up to 40%. Google Maps also made it easier to identify and analyze performing markets with the potential for growth. Since implementing Google Maps, the company has successfully captured 20 to 30% of market share of these markets. While the same information can be put in the Excel sheet or word, Dharmakrishna shared that he can better appreciate the data which is visually represented on Google Maps. Now let us look at the artificial intelligence.

So this is AI word cloud. Before that, let us look at what is marketing. So marketing is about about identifying and meeting human and social needs. And as American Marketing Association defines it, marketing is the activity, set of institutions and processes for creating, communicating, delivering and exchanging offerings that have value for clients, customers, partners and society at large. So now let us look at these offerings.

So what are these market offerings? The various types of market offerings are one, events, second is experience, third persons, properties, organizations, information, idea and services. So these are the eight offerings that we are talking about 1, 2, 3, 4, 5, 6, 7, 8. So these are the eight offerings that we are talking about.

Now let us look at what are services. As economists advance, a growing proportion of their activities focuses on production of services. Services include the work of airlines, hotels, car rental firms, barbers and beauticians, maintenance and repair people and accountants, bankers, lawyers, engineers, doctors, software programmers and management consultants. Many market offerings mix goods and services such as fast food, meal. Events are marketers, they also promote time-based events such as major trade shows, artistic performance and company's anniversaries. Global sporting events such as the Olympics and the World Cup are promoted aggressively to both companies and fans. What is experience? By managing several services and goods, a firm can create stage and market experiences.

Vault, Disney, World's Magic Kingdom allows customer to visit a fairy kingdom, a pirate ship or a haunted house. There is also a market for customized experience such as week at a baseball camp with retired baseball greats, a four-day rock and roll fantasy camp or a climb up Mount Everest. Persons like artists, musicians, CEOs, physicians, high-profile lawyers and finances and other professionals all get help. From celebrity marketers, some people have done a masterful job of marketing themselves like David Beckman, Oprah Winfrey and the Rolling Stones. Management consultant Tom Peters, a master of self-branding has advised each person to become a brand.

Properties are intangible rights of ownership to either real property that is a real estate or financial property that are the stocks and bonds. They are brought and sold and these exchanges require marketing. Real estate agents work for property owners or sellers or they buy and sell residential or commercial real estate, investment companies and max market securities to both institution and individual investors. Organizations organizations work to build a strong favorable and unique image in the mind of the target public. In United Kingdom's Tesco every little helps.

Marketing program reflect the food marketers attention to detail in everything it does within the store and in the community and the environment. The campaign has vaulted Tesco to the top of the UK supermarket chain industry. Universities, museums, performing arts organizations, corporations and nonprofit all use marketing to boost their public image and compete for audience and fund. Information, the production, packaging and distribution of information are major industries. Information is essentially what books, schools and universities produce, market and distribute at a price to parents, students

Ideas, every market offerings include a basic idea. Products and services are platforms for delivering some idea or benefit. Social marketers are busy promoting such ideas as friends don't let friends drive drunk and a mind is a terrible thing to waste. The next is the marketing environment and it consists of the task environment and the broad environment. The task environment includes the actors engaged in producing, distributing, and promoting the offerings.

These are the company, suppliers, distributors, dealers and target customers. In the supplier group are material suppliers and service suppliers such as marketing research agencies, advertising agencies, telecommunication companies etc. Distributors and dealers include agents, brokers, manufacturers, representatives and others who facilitate finding and selling to customers. So that is the task environment.

Next comes the broad environment. So marketing management has two broken down into two task and broad. We have talked about task in the last slide. Now we are talking of the broad environment. It consists of six components, demographic environment, economic environment, social cultural environment, national environment, technological environment and political legal environment. Marketers must pay close attention to the trends and development in these and adjust their marketing strategies as needed.

New opportunities are constantly emerging that awaits the right marketing savvy and ingenuity. Now we will look at the evolution of marketing. Although there are different thoughts on when marketing came to exist as a discipline, the majority of a specialist agree that it began during the time of industrial revolution somewhere around the rate 18th and early 19th century. Since then, it has been continuously evolving.

From marketing 1 to 2 to 3 to 4 to 5. So there are two main factors that can be considered as the drivers of marketing evolution. So marketing technology and customer needs. So one is marketing technology and the second is consumer needs. The intersection of these two factors is the major reason why marketing as a business philosophy has been evolving. According to Philip Kotler, marketing has evolved in several stages where each stage has different philosophy, objective, dominant focus and practices.

So now let us look at the various, how marketing has evolved and what are the various stages. So in marketing 1, it was a concept that first emerged in the 1930s. This is the first stage of marketing consists of several models, production, product, selling and marketing. The main objective of this stage was to sell products. It is the most basic fundamental phase of marketing where the main focus relies on the product and its features.

The industrial revolution proved the perfect catalyst for the expansion of marketing 1. It provided a situation where there was a boom in the needs of the consumers and thus there was a drastic increase in both the demand for the product and the competition among the businesses. The marketing relied on emphasizing and focusing on the unique selling proposition to distinguish one product from its competitors. They focused on the functional aspect of the product to sell the products to customers as their core focus was to address the immediate needs of the customers without considering the aesthetic value. Its distribution was by traditional channels such as television and radio.

It would be cited that its message was unidirectional because it did not provide feedback to the client and the elements of measurement are very few and variable. The next came marketing 2. Prompt advancement in technology, liberalization, globalization, privatization led to a modification in the social business life. The economic condition

and the demand for the goods in the market enhanced the buyer's power. The combination of web 2 technology and the marketing practice resulted in the commencement of marketing 2.0.

It is marketing 2 is defined as the utilization of web 2 and the collaborative resources it offers to open interactive communication channels between the consumers and the businesses. It introduced a new model of information system which linked the customer to the businesses in a much more effective manner. It starts with the customer and introduces tools like WordPress, Facebook, YouTube, Wikipedia, etc. With all the information collected through the different instruments of web 2, the businesses collect and systematically organize the data. The following steps are to be followed while collecting

The first is information gathering, second is database, third is pre-processing, fourth is processing, fifth is classification and useful information extraction. After information goes through all these stages, it reaches the marketing manager where it is utilized for developing strategies based on consumer demographics and the current needs in the market. It also helps to identify and satisfy the needs of the consumers highlighting their feelings. The stage is focused on the four Cs of communication that is clarity, coherence, control

and

credibility.

So this, this is the figure. So customers web 2 tools, marketing 2 information system, information gathering, database, processing, pre-processing, processing classification, useful knowledge, attraction and then it goes to the marketing manager who takes a decision. At the end of this stage, the focus was slowly shifting to the emotional benefits of a product treating the consumers as a human who has a mind and emotion that can impact sales. Marketing 3 is known as value-driven marketing application. The rapid appearance of marketing 3 originated from the development of new wave technologies and the employment of computers and the internet. The amalgamation of this change in technology and the shifts of the focus from consumers to the emotional needs and wants of the customers helped increase and advance marketing to unprecedented heights.

It focuses on the types of technology that interacts with individuals and groups. For marketing 1, the catalyst was the industrial revolution and in this case, the catalyst was the rapid globalization process, the concept of coexistence of human and technology and the emergence of a creative society. The idea of a globalization is directly linked to technology as globalization involves the exchange of goods and services, technology and flow of investment, people and information. It introduces a new perspective that aims to change the lives of the customers. This change is made possible by formulating a mission statement that contains a moving story at the execution stage and influences

consumers.

So, marketing 3 comprises of two main steps. The first is the planning phase. Now, let us look at the consumers in the planning phase. So, recognition of mission priority over financial results, changing the consumers' perceptions, attitude and behaviors. The second is the business, defining corporate values, creating platforms where employees can make a change.

The second phase is the implementation phase. Again, we will look at this implementation phase from the two perspectives. One is that of the consumer and another is that of the business. So, consumers using the discussion as a new type of advertising, communicating brand personality based on values. And for business demonstrating values through daily behavior within the company focusing on aligning values with behaviors. So, marketing 3 has these two phases, planning and implementation.

Again, at both these stages, we are looking at the two perspectives. So, to conclude, in this module, we briefly discussed about how AI is helping in utilizing data and giving meaning to it. Then we have discussed a case study on how Ramco Cement is adopting AI. We have understood what is marketing, marketing environment and discussed its components. Finally, we have discussed about the transition that has happened in marketing from version 1 to 3 and version 4 and 5 will be covered in the next module.

These are the books from which the material for this module was taken. Thank you.