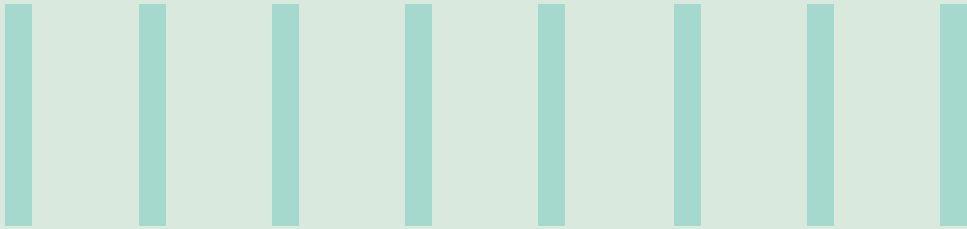




NEXT FRONTIER OF MARKETING - “I” THROUGH “AI”



The letter 'I', when referring to one's ego or self, carries little relevance in marketing parlance. But the same letter, when referring to 'intelligence' and combined with an 'A', creates a word that has become one of the most potent tools and game-changers in the highly dynamic field of marketing.

Artificial intelligence or AI helps identify, engage and understand customers – the most important individuals (another 'I' itself) in today's business world. These individuals form the fulcrum of all marketing activities. But before exploring how the two terms 'intelligence' and 'artificial intelligence' have become so vital for marketing, one must first understand the foundation of marketing strategies.

In the 1950s, a marketing mantra was introduced, naming four elements as the pillars of any marketing framework, i.e., product, price, place, and promotion. Today, with the emergence of digital marketing, companies need to rethink the relevance of these 4 elements or 4 Ps. Some pertinent questions to be considered are:

- What does the new digital marketing strategy look like now?
- Are the 4 Ps enough or should other factors be considered for newer markets?
- How can organizations operationalize the newly defined strategy?
- What is the strategic impact of technologies like AI on the marketing operational model?

To answer any of these questions, one must know the four Ps of marketing. Here's a brief refresher.

The 4 Ps of the marketing framework

Product, price, place, and promotion are the old workhorses of the marketing world. A popular adage goes, "Put the right product in the right place, at the right price, and at the right time." Given the increasing mix of services and products seen today, the first pillar can be altered slightly to include both products and services.

Let's do a quick review of the four Ps:

1. Product and service – This is the actual value being delivered to customers in the form of a physical product or a tangible service. This framework element deals with understanding what a customer actually wants from a product or service. Some key questions to ask are:

- How does this product/service help the customer?
- What customer need is being fulfilled through this product or service?
- What should be the characteristics of the organization's offerings?
- How should the offering be branded?

The responses to these questions are critical to form the foundation of the marketing approach by understanding basic customer needs and desires.

2. Price – Customers are sensitive about the money they plan to invest in a product/service. There is always a difference between the real value of an offering and its perceived value. Identifying the right value of the product/service is critical to the success of a product. Some important questions to ask are:

- Will a small decrease in price (and hence margins) help corner more market share?
- Will a small increase in price improve profitability without impacting the customer base?

Understanding one's competition and customer segments can help fix the right price, which is crucial for product/service success.

3. Place – Strategic and operational placement of the product/service is

the third dimension in defining the marketing strategy. Companies need to understand where their offerings fit in the overall competitive landscape. They should also clearly articulate where customers can find or look for their products/services. Some major questions to consider are:

- Should we focus on traditional offline stores through a mix of distribution channels?
- Should customers be targeted through online cataloguing?
- What would be an effective mix of offline and online channels for higher customer reach?

The answers to these questions can help companies decide how to beat the competition through strategic placement and easy access to product/services.

4. Promotion – This is the mechanism of reaching out to audiences. It begins from creating awareness to successful selling and building loyalty towards the brand. Advertising, promotional strategies and public relations are included here. One of the objectives is to create successful customer journeys starting from the initial stage of unawareness or suspicion to the final stage of cementing purchasing confidence. This can be achieved through constant interactions on why a product/service is the most appropriate for them. Some salient points to evaluate here are:

- How should the prospective customer be targeted based on time and channel preferences?
- Is there a seasonality in the marketplace that can be exploited?
- Are there any external factors that can be leveraged to improve campaigning and conversion efforts?
- What should the communication strategy be?
- What techniques and technical platforms can improve marketing competitiveness?

The answers to these questions can help formulate a robust promotional strategy for any organizational offering.

How digital is redefining organizational strategy

The 4P marketing framework originated before the time of digital marketing. Concepts that are popular today – like search engine optimization, search engine marketing, content marketing, social marketing, nurturing leads, guiding customer journeys through digital tools, and using web/email/mobile/advanced analytics for pursuing marketing goals – did not exist then. Over the past few years, organizations have come to understand that digital marketing has its own nuances.

Since there is a predominant focus on access through multiple channels in digital paradigms, some may consider digital marketing as one of the techniques within the 'Promotion' pillar of the 4P framework. On the other hand, others consider digital marketing to be more strategic in nature and are looking for opportunities to merge traditional and modern marketing techniques for better results.

Here is how digital is changing the overall organizational strategy:

- 1. Redefining the business model** – The organizational focus is shifting from products and services to customers. In this business model, the customer is at the center of the organizational thought process. All other aspects work to facilitate customer-centricity through different mechanisms. Thus, organizations must rethink their competitive advantage as well as operational boundaries around products/services, places and time zones.
- 2. Remodeling business processes** – Putting the customer at the center of organizational thought coupled with affordable technological solutions is enabling automation, internal process optimization and operational efficiencies. Departmental structures are undergoing drastic changes to achieve agility and speed. Data has become the real asset driving business decisions and value creation instead of being used simply for optimization.
- 3. Restructuring competition** – There are no defined industries anymore as

the concept of symmetric industry is gradually shifting to asymmetric fluid industries. There is little to differentiate industry partners from rivals because partners on one field are often competitors in another space. Competition boundaries and operating spaces are in constant flux because small organizations are challenging incumbents within their own segments.

Clearly, digital is disrupting the status quo. These changes are bringing about a cultural shift in strategic and operating environments. However, one prominent change is the placement of customers at the heart of organizational strategy. This element of 'People' is absent in the previous framework but is a critical part of digital marketing today.

Thus, digital marketing cannot be relegated to a technique within 'Promotion'. It has an overarching impact on marketing strategy across all facets of product, price, place, and promotion. Limiting the scope of digital marketing to a mere promotional technique hinders the realization of the full potential of digital technologies.

Digital-first 5P marketing

Adding a fifth element, people, makes the 4P framework more comprehensive, allowing it to cater to the strategic needs of traditional as well as digital marketing. In the expanded framework, the 'People' element lies at the center while the rest of the four Ps take up the periphery. Activities done with the four Ps are designed to cater to the core.

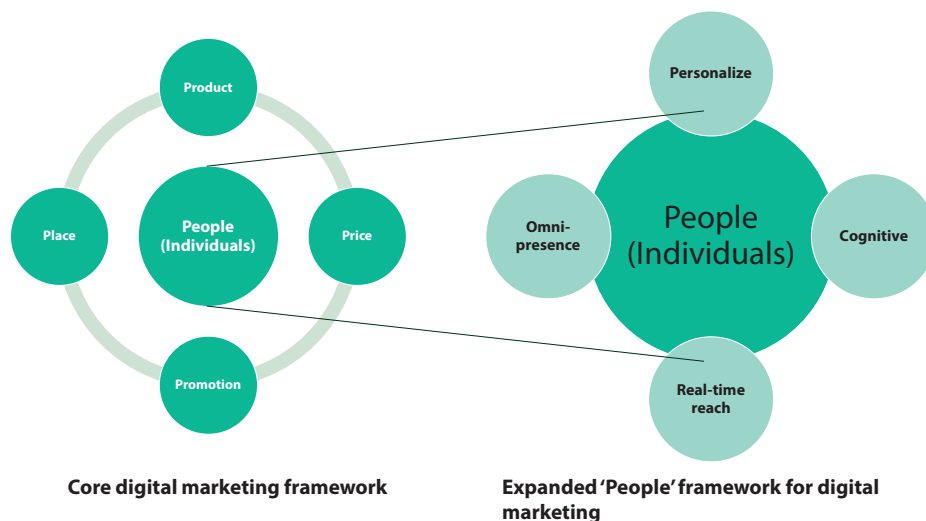


Fig 1: The expanded 5P framework for digital marketing

Since catering to 'People' is a complex activity, this fifth element includes the following sub-pillars:

1. **Personalize** – This refers to one-to-one marketing strategies where every customer is identified and served according to their individual traits. It rejects mass marketing techniques and pushes the degree of personalization beyond personas to curating individual experiences.
2. **Cognitive** – With data being available for dissection, organizations must upgrade systems and processes from a reactive to predictive approach to understand prospects and customers. In simpler words, they must shift their focus from 'what happened' to 'what will happen'. Moreover, they should aim to reach the prescriptive stage by controlling 'how can we make this happen'. Finally, they should reach the cognitive stage of perception, judgement and human-like reasoning.
3. **Omni-presence** – As multiple channels of interaction emerge, prospects tend to jump between channels without following pre-defined customer journeys. This makes experience pervasiveness and journey continuity across channels vital. Even a fractional break in the experience is enough to push the customer towards a competitor.
4. **Real-time reach** – People-centric marketing must respond to customer needs in real-time. Customer actions need to be followed regularly with a degree of predictability so that their demands are understood and responded to in real-time without any lag.

Having defined the traditional 4P marketing framework and the expanded 5P framework for digital marketing, it is time to understand AI and its influence on modern marketing strategies.

Impact of AI on the 5P marketing framework

AI, a subject of scientific interest for decades, is fast making inroads into the field of marketing. Marketing in the digital age is all about data. Text, voice, images, and numbers form data that is critical for effective marketing and for AI as well. Data is at the core of marketing and AI, binding these distinct fields together.

Previously, AI was considered an ally of marketing. Today, it is being integrated as the foundation of marketing activities and platforms. The main reason for this is that marketing schedules are no longer annual in nature where activities are planned monthly or weekly. Marketing has become a real-time affair comprising continuous decisioning, engagement and activities involving many complex variables and voluminous data. Today's marketers reach out to millions of customers; they must track every individual's interaction with the organization, nurture relationships by masterfully executing consumer experience and engagement strategies, ensure omni-channel presence and communication, and leverage intelligent and predictive decisioning. Most of these capabilities are beyond the scope of humans and traditional IT systems.

Many of the current AI solutions for marketing are delivering operational efficiencies. But AI still has a long way to go. In marketing, AI is yet to reach the stage of 'autonomous marketing' where awareness, engagement, personalization, decisioning, and re-targeting continue to happen in real-time without human intervention.

The intersection of AI and marketing occurs at the strategic and operational levels. At the strategic level, it ties in with the 5P framework by transforming all five pillars – People, Product, Price, Place, Promotion – as follows:

1. **AI for people** – Just as digital technology redefined the business model by bringing people to the center of organizational strategy, AI can redefine how the customer engages with the brand. Customer experience is the holistic view of a person's interactions and relationship with an organization through all touch points. Customer experience management is the key differentiator to gain competitive advantage in a hyper-competitive market. In today's marketplace, the focus is on the experience of buying, not the actual product or service being sold. Moreover, customer expectations do not end after completion of a sale. It extends into post-sale service expectations and encompasses fast resolution of issues, personalized attention and proactive monitoring. This gives organizations an opportunity to enhance the customer relationship by providing exceptional customer service and retargeting opportunities.

Hence, the key to providing delightful buying experiences lies in the domain of personalization. Here is how AI can drive the people aspect of digital marketing:

- Provide deep personalization capabilities that support one-to-one marketing based on customer preferences to meet their stated/unstated needs
- Use clustering and classification techniques for customer segmentation and profiling
- Capture holistic customer identity from anonymity to gaining a 360-degree of their needs and drives
- Enable prescriptive capabilities across customer journeys to define the next stage of customer interaction, facilitate real-time provisioning of the right organizational resource with the right content to the customer

- Enable predictive customer service and retarget opportunities through analytics and market research on target audience or marketplace segmentation
- Support the targeting, marketing and monitoring of customer sentiment on social media
- Automatically respond to and escalate grievances through smart automation, thereby curbing the spread of misinformation that can cause adverse brand impact on social media channels

2. **AI for product** – New product development is often cumbersome and time-consuming. Even existing products need to be refreshed occasionally to ensure they continue delivering value. Among other benefits like reducing the development time of new products, AI also helps:

- Sift through irrelevant ideas quickly and narrow focus on market relevant ideas during the first stages, thereby reducing effort spent on non-viable ideas
- Accelerate validation during the concept development and testing stages so teams can proceed to marketing research and business analysis
- Understand customer feedback and sentiment to enable quick changes in the appearance, customization and quality of existing products
- Alter the marketing strategy for a specific product so that it can be targeted to the right people at the right time in the right environment
- Identify additional value realization opportunities for a product to increase market share. For example, bundling

it as a package with another service or product that becomes more attractive and beneficial to the target audience

- Support branding, automated and personalized recommendations, product availability, and proactive warranty management

Similarly, for services, AI can achieve predictability towards the market share and efficiency in the ideation stage. For existing services, AI can help optimize, alter, monitor, and predict usage management.

3. **AI for price** – In a digital and mobile online world, it is very easy for customers to verify and compare product prices. Price sensitivity is a basic trait in all customers because they want to ensure value for money. Here is how AI models give companies an edge over the competition. AI can:

- Support dynamic pricing strategies based on competitive environment, availability of products in the market, global economic factors, and localized dynamics
- Develop price matching services that track the online marketplace and create associated dynamic discount strategy models
- Conduct market analysis to get insights into free or value-added elements that can improve overall product positioning and packaging as per customer needs
- Identify and suggest relevant payment methods and credit capability analysis to provide user-specific dynamic options

4. **AI for place** – Virtual malls are fast replacing traditional physical stores thanks to digital transformation. This is changing customer preferences of

place and location-based shopping. Now, organizations are catering to local, regional and global demands. While this presents huge revenue opportunities, it also adds significant complexity due to the introduction of multiple global factors into the marketing mix. Organizations will need to identify the most lucrative channels and make decisions regarding what locations should be targeted from an advertising and selling perspective. Further, such decisions will be based completely on data.

As a tool, AI can help organizations:

- Predict and optimize their location choices
- Leverage community dynamic analysis to cater to multiple communities by elevating offerings
- Upgrade logistics capabilities to sync with global advertising and delivery pipelines
- Crunch and optimize data to feed recommendations on optimization opportunities

5. **AI for promotion** – The marketing function always directs its effort toward keeping the customer on a guided journey through awareness, persuasion and selling activities. In B2B, there is generally a defined journey that follows the marketing/sales funnel. In B2C, this funnel is more fluid. The focus shifts from optimizing stages of the journey to interacting with the customer during micro moments to maximize value exchange. Here, there are no predefined steps like defining the next best action based on predictions. There is only a milli-second response time for the brand to propel their prospects on a customer journey. In such a scenario, depending on humans to intervene and make decisions creates bottlenecks.

AI addresses these limitations through instant predictive actions. It helps:

- Efficiently target the right people through the right channel for better public relationships, branding and media management
- Enhance inbound marketing techniques like search, email and social media marketing through automated monitoring, management and prediction
- Unlock in-store geo-based opportunities through direct marketing using the right content
- Leverage preferential and behavioral data to guide user-specific marketing communication strategies
- Improve the effectiveness of lead scoring, thereby increasing the rates of opportunity conversion

AI marketing platforms: Ancillary AI to data-centric platforms

While AI has been around for decades, it was mostly limited to academic research. The recent mass adoption of AI is being facilitated by other technology innovations (like unprecedented growth in processing power) and the reducing cost of change.

Despite being a relatively new entrant in the corporate world, AI is already generating tremendous value for data-dependent organizations, making it indispensable to any marketing platform provider. More than being a technical feature, the value of embedding AI within such platforms lies in its ability to pervade the entire marketing landscape, bringing sustainability and growth.

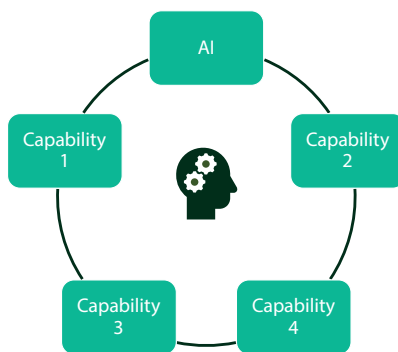
Broadly, there are two categories of solutions that incorporate AI into marketing. These are:

1. **Marketing tools with ancillary AI**
 - This refers to a platform, suite or point solution that leverages AI as an additional capability, supplementing the core marketing capabilities of the platform. For all solutions built at scale using non-data-centric technologies, ancillary AI is the most viable approach. The core framework of the solution remains intact and continues to respond to the challenges of today's world using the older processes. Simultaneously, the optional AI engine uses algorithms to churn out additional responses, thereby bringing agility, predictability and efficiency.

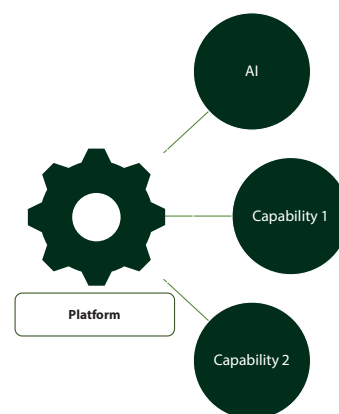
AI's architectural placement in the marketing platform in this ancillary role

causes some restrictions in enabling bottom-up data processing and seamless support across functions. Thus, a holistic view of marketing capabilities, end-to-end unified real-time operations and 360-degree customer view is not possible in this solution. Further, support for non-linear B2C customer journeys and deep personalization backing one-to-one marketing are difficult to achieve.

On the bright side, organizations may continue to see breakthroughs at individual capability levels in the areas of predictive scoring, partial forecasting models, personalization, recommendations, dynamic pricing index, intelligent alert systems, chatbots, look-alike modelling, campaign analyzers, anomaly detection, and voice, text and image processing capabilities. These make an impressive list of capabilities that can be achieved by ancillary AI.



Ancillary AI marketing suite



Ancillary AI marketing platform

Fig 2: Ancillary AI in the marketing platform

2. Data-centric marketing platforms – The explosion of data on the internet and the arrival of big data is forcing companies to re-invent their data processing capabilities. Big data includes the entire collection of structured and unstructured digital data in the form of text, voice, images along with all inputs being generated from billions of sensors deployed on machines. Traditional data processing systems are incapable of processing such large datasets characterized by their volume, variety, velocity, variability, and veracity .

The main data types influencing marketing strategy are products/ services, business processes, customer factors, and external factors. Operational data comes from multiple sources like retail, online sale/service, social media, consumer factors (transactional, demographic, behavioral, psychographic, ethnographic), campaigns, surveys, mobiles/wearables, call centers, and third parties. To foster predictability from these various data types, specialized tools and techniques are needed to store, analyze, process, and visualize data scientifically.

Artificial intelligence was founded on the belief that human intelligence could be defined so precisely that a machine can replicate it. Machine learning (ML) and deep neural learning (DNL) allow machines to constantly adjust the output based on the machine’s own experience, thereby enabling continuous improvement of certain skills over time. Natural language understanding (NLU) and

natural language processing (NLP) can make sense of voice and text. Thus, big data tools and advanced analytical capabilities powered by AI/ML/NLP/ DL algorithms will enable ideation and execution of marketing strategies in addition to guiding new product innovation. When marketing platforms are built using such robust data processing frameworks at the core, it can revolutionize the entire value chain.

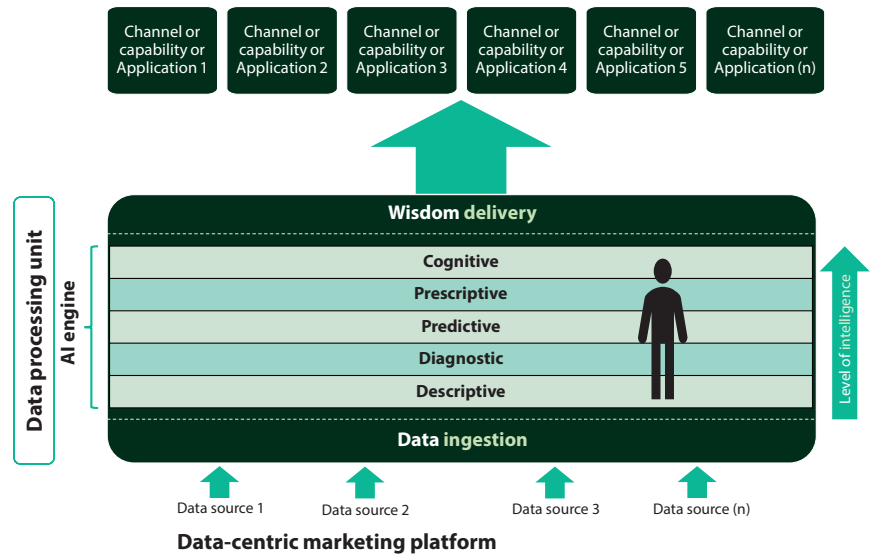


Fig 3: Role of AI in data-centric marketing platforms

Certainty within uncertainty

Human experience and ingenuity based on gut feel and common sense demonstrated success in marketing over centuries. But human intelligence is an outcome of our biological evolution and, hence, limited by it. These limitations make it impossible for humans to track, understand and engage the millions of 'I's (customers/individuals). Machines, unrestrained by biology, can process information within seconds. However, they lack intuition and common sense. AI bridges the gap, allowing machines to process information at unimaginable speed and make intelligent decisions on the fly.

Aside from ethical considerations, data quality is the only constraint in the growth of AI. Data is AI's biggest strength and its

biggest weakness. This is because the quality of data defines the quality of learning and subsequent performance of AI models.

With AI coming into marketing mix, the following trends could emerge in the near future:

- Marketing organizations will include more computer scientists, neuroscientists, cognitive linguists, and algorithm developers instead of core marketers
- Most of the marketing budget will be dedicated to technology development alone
- Decision trees based on rules and hierarchies of brand and product campaigns shall become proprietary and protected IP
- Organizations may shift a majority of marketing services internally due to proprietary marketing algorithms
- Just like stock trading, high frequency media buying and selling may happen
- Consumer attention will become the most valuable commodity on the planet. All efforts will be focused on grabbing and maintaining customer attention during the entire customer journey
- A 360-degree customer view will be a reality by providing deep personalization capabilities to organizations, thus supporting one-to-one marketing and real-time engagements with consumers
- Organizations integrating AI and ML into the corporate culture will emerge leaders, leaving the rest far behind in the race

Conclusion

In the 1980s, when computers and PCs were introduced in the business world, organizations had to redefine their corporate strategies and business operation models. Over the past few years, the influx of digital has done something similar, disrupting existing marketing models. The evolution of the 4P marketing framework to the expanded 5P marketing framework reflects the power of digital at putting people (customers) at the center of organizational strategy. Now, with the adoption of AI and ML-based methodologies, marketing is undergoing yet another change across strategic as well as operational levels. From being a supplemental capability, AI is now becoming an indispensable and ubiquitous feature of the technological landscape and a core driver of business success.

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Deepak Thukral is a Principal Consultant with Infosys and have overall 20 years of experience in IT industry ensuring value delivery to enterprises through transformative consulting, development as well as effective service management initiatives. He is associated with Infosys Salesforce practice and leading consulting assignments in digital transformation, Banking, Retail, CRM, IoT (Internet of Things) and e-commerce domain for multiple clients. He has led large global development and service delivery teams and worked as Program Manager in Banking, Retail and Insurance space. He is a Certified Agile Practitioner and has worked on various international assignments across all phases of software development in offshore as well as onshore models with various roles and responsibilities.

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