Artificial Intelligence (AI) .. Marketing touchpoints

Khalida Abi, Salah Zakraoui, Ahmed Benahmed

▶ To cite this version:

Khalida Abi, Salah Zakraoui, Ahmed Benahmed. Artificial Intelligence (AI) .. Marketing touchpoints. International Journal of Economic Performance - , ,2021 04 (03), pp.322-342. hal-03505864

HAL Id: hal-03505864
https://auf.hal.science/hal-03505864

Submitted on 31 Dec 2021

Artificial Intelligence (AI) .. Marketing touchpoints

Khalida ABI *	Salah ZAKRAOUI	Ahmed Benahmed
Abi-khalida@univ-eloued.dz	Zekraoui-salah@univ-eloued.dz	benahmedahmed20@yahoo.fr
El Oued University (ALGERIA)	El Oued University (ALGERIA)	El Oued University (ALGERIA)

Abstract:

Data analysts behind the "Marketing" desk keep trying to find links between identified data, but they can't easily find patterns in complex and huge amount of data, in order to generate insights. "There is where Artificial Intelligence brightly shines and supports many more functions intelligently in marketing department ... in real time..."

The main objective for these papers is to put the magnifying-glass above the underlined part in the Previous §, To examine scene for marketing academics, managers and activists. Within trying to develop a marketing understanding of (AI) and its current potentials, in the way where we highlight its latest use-cases in the marketing context.

Key words: Artificial intelligence (AI), AI Marketing, Marketing, Advertising, Online Advertising campaign **.**

JEL Classification Codes: M310, M150, M370

---

* Corresponding author

I. Introduction

In July 2020, " **Neuralink**" one of the words that made buzz in *"Elon Musk"* 's conference, to show-out his new brain-machine interfaces **"Neuralink V 0.9"** invention. After the livestream, there were conflicts through social media platforms about robots and AI power. When people were wondering about that, we were wondering if really, we know to where AI-Marketing leaders arrived right now?

There are around **1.6 million** scientific articles published on artificial intelligence in all disciplines; science & health, biology, medicine, engineering, business, finance, economics ..., As a marketer, when you read one of these articles, you'll be found confused over very technical terms and details.

This article stems from the following problematic, what is AI from Marketing perspective? And what provides for marketers? We tried to build a basic conceptual paradigm about what is AI through lens of marketer. To what extent has Artificial Intelligence (AI) penetrated the world of marketing?". This article is about sorting the contributions of artificial intelligence in Marketing area based on what AI can do for marketers (selling process, advertising, branding), then to customer as a final target to this journey. we'll show some contemporary and detailed use-cases in where Artificial Intelligence (AI) has impact on Marketing industry and Advertising function.

II. 1),AI ..Marketing definition

If you asked people about the opposite of AI? someone will answer ""human intelligence" or "human mind", when the more technology-Penetrators are going to answer that "the opposite of artificial intelligence is low- programming level".

Artificial intelligence always been considered as a sub-field of computer science. And has been there a general tacit-agreement that it is the "capability of computers to simulate human intelligent behaviors and skills, like making decisions, learning, Reasoning, Perception, Interaction, speech recognition, analyzing ...".

Under a professional lens, Artificial Intelligence (AI) has become a hot topic at all meetings tables in almost all fields since a long time; science & health, biology,

medicine, engineering and finance… etc. And naturally, There were a numerous attempts to define it within these different fields**, (Elaine Rich, 2009),(John McCarthy, 1956),(Russell and Norvig, 2012),(McCarthy, 1955), Even leader entities tries like (Amazon, 2020) , (Merriam-Webster, 2020), (OECD, 2019), (IBM, n.d.).**

Artificial intelligence existence on various fields, provided a variety conceptions and definitions based on the nature and the objectives to be achieved in each field, The accountant does not look at him like marketer does, engineer, either, literature professor, neither computer-scientist… ,Every one of those have his own definition to AI, depending on the last improvements of A.I in his life and his interests Area, someone see it in robots, others in cars manufacturing, Hollywood movies paradigm, computation.., Marketers surely have their own conception and perception to AI.

A simplified definition comes from **Lindsay Tjepkema**; Marketing Director at (emarsys.com, 2016) defines AI marketing ;

"Artificial intelligence marketing (1) is a method of leveraging customer data and AI concepts like machine learning to anticipate your customer's next move and improve the customer journey"

Another general definition that can be adopted for marketing;
"a system's ability to correctly interpret external data, to learn from such data, and to use those learnings to achieve specific goals and tasks through flexible adaptation"
(Kaplan & Michael Haenlein, 2019,)

After reading some of "AI" marketing top definitions, we would mention some joint used words (AI is a ; process, method, system, science, , technology, human-like intelligence; machines, software..) Generally, marketers conceptualize AI as an approach or technology that can be used in gaining insights from data processing for such marketing-defined objectives, furthermore, AI-definitions provided by marketing experts , are;

-theoretical definitions often

-technology-neutral definitions

-focused on business AI-promise, are descriptions to "what AI can do?" more than being answers to "What it is AI?"

- these overbroad definitions provide a general preview of artificial intelligence benefit at the superficial layer of marketing as a sphere (Academic and professional discipline), Without going into more profound facts from both sides. (T.Thiraviyam, 2018) proposed a better technical definition that expresses the content of this article;

"Artificial intelligence (AI) marketing is a method of leveraging customer data to anticipate the customer's next move and improve the customer journey. AI offers the way to bridge the gap between data science and execution by sifting through and analyzing huge dumps of data which was once an insurmountable process". But this definition is about expiring, Because it denied the actionable roles that AI could play in marketing sooner or later, and limites it on data processing.

From Marketing manager perspective, making a valuable decision -as the acme of marketing efforts in fast changing environment- involves a mobilization of human, material, technological, cognitive and informational resources, etc. Artificial intelligence algorithms can provide endless support for Marketing decision-makers, by offering the right recommendations or it can even make the right decision and the execute it independently in some operational tasks [*see targeting in programmatic advertising example*]

These definition endeavors are threatened by the "AI Effect", when machines can accomplish a task "X" which was impossible to be done before - "Face Recognition" for example -, this task will be discounted soon from "intelligent task" classification, this phenomenon is known as AI Effect. As (Tesler L.G, 1991) Explain it, "AI is anything which hasn't been done yet".

Finally; as a marketer, you might need to know the three AI Evolutionary-curve stations; Artificial Narrow Intelligence (ANI)is that level where it can do something very specific , Artificial General Intelligence (AGI) is with more higher autonomy (Sterne, 2017, p. 26), Artificial Super Intelligence (ASI), there where it becomes totally independent to do tasks much better than human would (**going beyond the capabilities of humans across any task),** Do not worry we are not there yet.

all you really need to know is that "artificial intelligence" is an overarching term, And is not absolutely-definable word, and the previous definitions are relatively valid ,abstract or technically naked, it can't help you to conceptualize what artificial intelligence really is?, neither its subfields; computer vision, natural language processing, neural networks and facial recognition ..These technologies have an increasing impact on your life assisting and career too, we will mention the most related among them to Marketing field, are:

1.1)   Machine learning vs deep learning;

Machine Learning and **Deep Learning** are AI sub-fields to provide software with the ability to learn, but the difference is in what to learn and to which depth. (Sterne, 2017) proposed practical definition; *"**Machine learning** is a computer's way of using a given **data** set to **figure out how to perform** a specific **function** through **trial** and **error**."*

*-**Machine learning** is a subset of AI that enables machines to automatically learn and improve from experience. Specialized systems are created for this purpose and no explicit programming is needed to add new definitions to the database.*

__Deep learning__ is a subset of machine learning comprised of extremely large neural networks and a massive collection of algorithms that can mimic human intelligence (T.Thiraviyam, 2018).

The short way to understand these two AI subfields is comparing them like (**John Koetsier**) did in his post **(2-minute explainer: AI vs. machine learning vs. deep Learning, 2016)**;

"__Artificial intelligence:__ Replicating part, all, or more than human intelligence.

__Machine learning:__ Enabling computers to learn, usually "on their own," often with big datasets.

__Deep learning:__ Building multiple layers of abstractions on datasets to construct higher-level meaning ".

with a good simplified example;

"AI might be a system for recognizing dogs in pictures. Machine learning would feed the system hundreds of thousands of pictures of dogs. Deep learning would help the system recognize patterns (shapes that form a more complex shape that we call legs, multiple instantiations of legs on a creature, four legs is one signifier that you might be looking at a dog)".

1.2)   Natural Language Processing & Generation (NLP) and (NLG);

Natural Language Processing1 (NLP) is what happens when software read your language, (speech, text, message, tweets emails...), NLP processes turn text into structured data.

Natural Language Generation (NLG) is what happens when software write language (text, message, tweets, emails.). NLG processes turn structured data into text. thus, it can't be distinguished from human written ones (Narrative Science, 2017).

These tow AI subfields are more complicated, let's take this example; imagine that a robot has written this article to transmit you scientific fact that I try to do (natural language Generation) , after reading tons of related articles (Natural Language Processing),That is not the AI-Marketing next generation, this is "Now" , the (GPT-3)new language generator software have written an article of 1000 words titled "Are you scared yet, human?", to convince you logically and with strong arguments that artificial intelligence is firmly peace for humans.

"NLP" is extremely useful in marketing and *"It enables the tailoring of marketing campaigns based on linguistic context such as social media posts, emails, customer service interactions and product reviews"* (OECD, 2019).

III.   AI .. marketing touchpoints

Marketing has witnessed a new tools and orientations every day due to AI, , marketers now can think about bringing the impossible to "possible" zone, But to take advantage on the potential that AI holds in improving sales and marketing, we should understand more about the collaboration between AI and Marketing. In other way, we attempt to answer the question " In which aspect of marketing AI can be applied?

In this article we are looking to AI as a that river Penetrates, contact and wets every crack in all fields to simplify it, every industry and every department. Marketing as a life-artery for every company today, Digital Marketing - as a high version of marketing - is meeting AI in so many – points. At first, we should admit that we can't mention all interaction points between them, secondly, we need to tabulate these points, In the figure below we tried to identify collaboration points clearly but indefinitely, because the future between them cannot be limited, and accepts so many more scenarios.

These touch-points are chosen carefully in the way where it highlights the role of AI in marketing functions supported with current examples and an exhaustive example

about "programmatic advertising" scenario, this means that some other obvious and common AI advantages were neglected intentionally or mentioned casually in the content like; process automation, increasing ROI, E-branding, marketing decision support ..., or maybe there is more cases we're not aware of or envisioning yet.
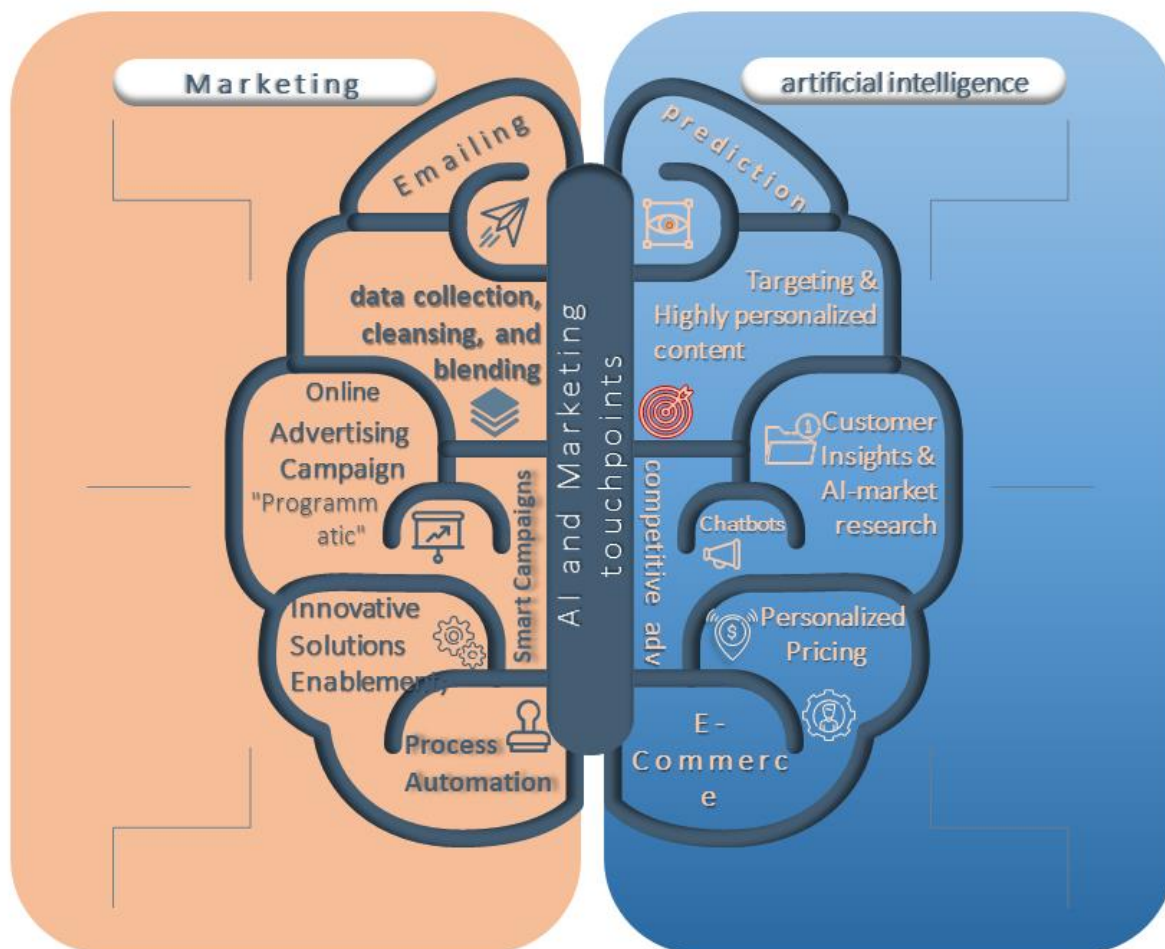

Figure 1): AI-Marketing touchpoints schema; made by author.

1. Prediction;

We should admit that Data drives all marketing processes, and the fast transitivity and big storage capacity of data in AI as a critical element, plus deep learning algorithms and predictive analytics could drive to high precision predictions and actionable

insights, These predictions depends on effective sensors besides other factors; quality of data and its reliability, digital maturity and technological pursuits of the company etc... indeed, sensors lead to a comprehensive environmental study then to accurate predictions. these predictions could be applicable for so many objectives, the demand forecasting and sales volume predictions, expenses estimation, budget plans, online advertising CTR prediction (see role in ads).

In order to boost the reliability of sales predictability for example, AI Algorithms can perfectionate the extracting insights from data, because it can see the bigger picture with subtle correlations that can be overlooked by marketing analysts; historical and real time data, internal and external data, micro-economic and macro-economic data points sales figures, CRM, warehouse data, prices, public holiday, competitor prices, etc. Moreover, it constantly analyzes past experiences; opportunities, successes, misses, win rates and other criteria to formulate predictions and recommended forecast (Birnes, 2020), then learning to improve these outputs (predictions) continuously , it gets smarter every time.

In **"Amazon"**, Predicting what you want to buy can push them to ship the items to a warehouse near you "Anticipatory Shipping Model" , in case you want to buy it , you will get it sooner and cheaply (Neel Mehta, Parth Detroja, & Aditya Agashe , 2018) .

2. Innovative Solutions Enablement;

Many big companies' investment in AI make one's way up from a while (Tesla, google, Facebook, IBM... etc...), this revolution is a better proof of the huge A.I contributions, for general and special purposes.

Through more careful recommendations, fast processing, comprehensiveness, continuous improvements. AI promises to improve performance levels and process automation, AI software will provide companies with the timely innovative solutions needed to solve various challenges, to fix small mistakes and overcome more complicated situations progressively. Moreover, it can be useful for preparing and setting accurate solutions under expert support surely, till now but not for ever.

At this point we cannot deny one of the most famous problem-solving cases using AI technology. "Tesla" has a deep interest in Artificial intelligence. They are currently using e-cloud for fully self-driving cars objectives. A couple years ago, "Tesla" brand and

vehicles were facing troubles in the engine's operation under overheat circumstances. the troubleshooting done for all running vehicles due to data recorded in e-cloud and A.I hardware (cloud enabled solution), Which contributed on fast processing the problem and to avoid scratching the brand **"Tesla"- marketing direct gain -**, the following parts of this article are full of examples regarding to performance and solution ways under AI support.

3. Personalized Pricing

AI algorithms can determine the highest price that shopper can pay, thousands of data points can be considered by A.I. kind of; customers' shopping patterns, competitors' prices, profit margins, market and environmental data, etc. After analyzing tons of Data-points continuously and define how consumers will respond to price disorders under real-time market conditions.

in other word, AI technologies attempt to learn and provide suggestion based on its simulation to costumer behavior towards prices changes, and to provide appropriate prices that respond to this behavior, without violating eternal economic laws (supply and demand, margin) (Gentsch, 2019, p. 38)

"Amazon" for example, uses "Dynamic pricing" as a strategy for any shopping experience where the price of product/service changes based on particular scenarios, to beat the lowest competitive price from others, **"Amazon" AI software changes product prices 2.5 million times a day, meaning that an average product's cost will change about every 10 minutes** (Mehta, Parth Detroja, & Aditya , 2018) . Suppose that **"Amazon's** algorithms"** noticed that millions of customers are buying a certain camera, in addition to other unincluded accessories; Tripod, Spare Batteries, extra Memory Cards ... Etc. Then, say you buy the same camera from "Amazon"? Using the pattern that is found, Amazon could suggest you buy the accessories with a competitive price.

4. Emailing Campaigns:

With the growing online customer base, marketers can't send personalized ad mails to each one of them. But AI can make it easier to personalize email ads by applying collected user data and preferences (Padhiyar, 2019)**. moreover, AI can also;

- Personalize copy at the individual level.
- Clean up email lists.
- Optimize send time to Deliver Emails at the Right Time (likely to boost conversion rates).
- Automatically create email newsletters (Kaput, 2020).

5. Customer Insights and AI-driven market research

In the early 1970s, Peter Drucker said; "There is only one valid definition of business purpose: To create a customer", which means customer is the soul of any business, so each firm has to well listen to costumers' attitudes and behavior -to adjust its Marketing actions to match with customer (user) needs and trends which necessitate a high customer knowledge - attempting to guarantee its existence especially in this fast-changing environment.

One of the most famous tools to boost company's perception to customers and market is market researches with a long full of successes record, but is barely focused on tactical and operational issues and quantitative research more than qualitative research (Tan Tsu Wee, 2001) Also it was criticized for its slowness(time consuming) in very fast changing climate even though the big effort, labor and potential harnessed (expensive), usually requires a special team of professionals (advanced knowledge) to generating reports and to writ surveys, conducting in-depth interviews, focus groups.. etc.

Exactly the contrary on the case of AI-driven market research (encompassing Marketing researches), where User can collect and process more data even from free sources like social media platforms -There are a number of survey platforms to help in launching a demographically varied and personalized survey with real time responses and less cost- (Gentsch, 2019), Not just with faster processing and real timing results, but more deeply and accurately. Tremendously big number of customers and market data can be analyzed automatically, furthermore AI algorithms can find invisible insights that reflect consumer future attitudes, decisions and trends. More the data perspective is comprehensive -covers all aspects of the customer and market in a 360° perspective - more the outcomes are accurate. Like "predictive supply chains" as a new result of AI-driven market research, it arrives to anticipate needs and optimize the supply chain to meet demand before they materialize (aithority.com, 2020).

7. Targeting &Highly personalized content:

 AI Algorithms know you well !!; demographic, economic and psychographic status; attitudes, lifestyle data, in addition to other online behavioral variables, browser history, purchase history etc.. , are all aggregated on "Customer Profiles", Machine-

Learning (ML) algorithms can automatically analyze it and learn from customer's preferences and determine wich variables are most predictive of conversion (Sterne, 2017, p. 149), in order to play the right content and to provide a tailor-made recommendations.

This algorithmic personalization, enables companies to display high personalized content that matches with consumer needs, desires to even breaths. Moreover, AI algorithms can decide what you will see, which content? which form? which time? If this ad is going to interest you or not? Targeting under these conditions with considering all these variables will be flawless, when manually doing this in is not possible. This is why "**Netflix**" makes you a perfect movies suggestion that uniquely Match your profonde needs.

Ad targeting is a pivotal action, for optimizing spend, and testing variations, improving Ad-campaign performance. platforms like Google, Facebook, Amazon, provide a huge range consumer data to help you target audiences. AI can collect the real-time data of your past audiences (such as activities, interests, demographics, search history, buying history etc.) **[see figure 2]**, And Ad performance indicators in the other hand, analyzes them to identify the best target audience for the ads/brands, which means the target that likely going to buy from you (Padhiyar, 2019).

Further, **"GumGum"** for example, is contextual intelligence platform can scan text, images and videos,   when evaluating your online content (website), to help place Ads in the spot that visitors will see it clearly using deep learning tech. https://gumgum.com/

8. Role of AI in Advertising;

8.1) Where exactly is the problem and how AI can help in ADS??

No one can deny the benefits of digital marketing especially in E-advertising compared to traditional version, but if we scrutinize on details regarding to back-office digital-marketing processes now. We will find out thousands of times more advantages brought by AI. because-Sending a right content (message) out to the right person at the right moment on the right place (device) in the right circumstances(context)_(Sterne, 2017) and tracking its impacts (on buying reaction) is a priority concern for marketing

professionals and advertising managers, and AI made this objective less difficult and less complicated.

To understand more we have chosen the example of programmatic advertising, let's describe the process from the beginning,

8.1.A) The old scenario weakness;

If the online advertising banner was like the cherry on the top of the cake, be sure that its campaign cake is of 12 Floors at least, Because if we tried to define the main practical steps to run an online Marketing/Advertising campaign -with denying details and differences between them- probably we'll come up with 4 or 5 main stages; planning, targeting, running campaign, tracking and monitoring, development.

A complex goals and decisions faced by marketers to implement this online Ad campaign, such as;

how to get data and to take full advantage of it, campaign objectives definition? what metrics to measure results? selecting the best channels to advertise in? Budget? ... daunting tasks

Also, the success of Ad campaign is relied on many factors, mainly on, targeting and personalization -whether the campaign is self-launched or rolled by an external agency- , Campaign Manager arrives to critical question "how to choose the target audience for our ads/brands campaign? "how to tailor the proper content with the right audience? Can you imagine a vegetarian having to watch advertisements for full beef burger for the hundredth time??this is repellent, and a and pointless expenditure for advertiser. -even within digital revolution and the data availabilities from different platforms- This step keeps a high complexity and importance in guaranteeing success and higher Ad performance.

To make these critical decisions, marketer may need reports, analytics from company website, Comparative reviews of a previous Ad campaigns, or even marketing research, surveys ..., To define and develop customer personas (customers/potential customers model) whom are most likely to be interested in his company's product/services. These reports are a result of hard diligent job from other campaign team members, these taches should be done in the perfect way in short durations.

8.1.B) Programmatic … A multi benefits advertising scenario;

We are all aware that Google and Facebook and other social media platforms need all information of ours, it record the words we wright, the searches we perform, websites we visit, activities, interests, demographics, search history, buying history.

Based on various tracked information about a user like; previous searches and buying history, Deep Learning Algorithms can profile visitors under categories with similar personas (a mass of people who can be identified and targeted for similar Digital-imprint, trends, traits and habits) this called digital segmentation (www.azati.ai, 2020)

programmatic advertising Algorithms evaluate users based on their behavior, demographic data, cookie data, and other criteria, and through comparing of whether the visitor is pertinent to your target or not, It determine which ad should be shown to each visitor (Deshpande).Viz, in real time "programmatic Advertising" ecosystem can select the online advertising campaign that Includes the characteristics that more likely interest your visitor to take the desired actions on it, which brings an increase of conversion and, consequently, of ROI. **[see figure 2]**

Machine Learning can help marketers to build campaigns that actually grow smarter over time, and the result is hyper-personalization at scale, a world where marketers can deliver a tailored advertising content to the personal user profile in real-time. Moreover, it's allowing for instantaneous effective optimization toward that specific user. the program can assess the search and immediately choose advertisement then purchase the appropriate Ad space to display it in a matter of milliseconds (Sterne, 2017, p. 147), all this is done in the background while website is loading for the visitor, this is like killing three birds with one programmatic ad stone for user and publisher and for the brand at the same time.

In other marketing words, artificial intelligence helped overcome difficulties during the process of identifying and **profiling** the customer and more insuring what-when-how to **target/retarget** him efficiently, in addition to real time viewed performance indicators. (OECD, 2019)

An Example of How Programmatic Advertising Works IRL:

Advertiser"Totally Tubular" wants to sell more"surfboards"

It hires a programmatic advertising platform that is able to identify online consumers by things like:

- demographics (male / female / 18 – 45),
- geography (3 min from a beach),
- interests (surfing, saltwater, California),
- behaviours (consume surfing content on their lunch break),
- time of day (7-10PM)
- weather (sunny)
- device (smartphones)

The platform then uses real-time data to identify the best online audience(s) for the campaign and buys digital ad inventory through an auction based on everything available across multiple devices, in places the audience cares about.

Advertisements are personalized based on each consumers unique interests and behaviors.

Intelligent connections are made, insights are generated, and performance is optimized.

Figure 2): Example of How Programmatic Advertising Works.

Source;   -   https://www.acuityads.com/blog/2017/12/15/what-is-programmatic-advertising/ December 15, 2017, 2020

9. E- COMMERCE:

To highlight the AI commercial touch we need an example, CRM is an essential pillar in the commercial activities for any organization, there you can see everything about your costumers. personal customer information and demographic data, their buying histories and habits, usual cart items.

Since consumer loyalty was a main CRM objective, data analysts tried to find links in data, they knew that Synthesizing and linking these variables together can lead to discover new trends in consumption patterns, this is known as "analytics science". But how? ... This is what AI powered CRM can perfectly do through using the same traditional CRM's data , AI can help marketers to precisely define customer's satisfaction, and facilitate segmentation, new generation of CRM can learn from

historical patterns to score the best leads for sales and to predict their trends and behaviors (www.commercient.com, 2019).

In a broader sense, Through analyzing real-time and historical data set of each customer's interactions from different points (website, E-CRM, Social media platforms ..), AI enables marketer to make an accurate lead scoring and sales prospect ;

- capturing all useful needed data for e-commerce process.
- automating some exhausting routine process, (emailing, recommendations...
- To make suitable product recommendations. Amazon, serves tailored product recommendations on nearly every page on their site (home page, product pages, etc.), also it recommends complementary items to users who've viewed or purchased similar items (Marsden, 2019).
- To enhance customer experience through searching for products using images or conversational language **[see the 10. Conversational Commerce §].** A recent update of Pinterest's Chrome extension is one of the best e-commerce applications examples, allowing users to select a product in any online image, and then request Pinterest to show similar images using image recognition AI software (usmsystems.com, 2020).

All of these Processes are within "personalization", thus, AI allows e-commerce actors to formulate better decisions for business growth. It is estimated that in the next year an additional 394 billion U.S. dollars could be gained in this sector in the United States through the adoption of AI. (Statista.com)

10. Conversational Commerce (Chatbots)

Since we are speaking about consumers loyalty and satisfaction, and his relationship with brand, we should mention the new trends in the modern marketing industry, **"Conversational Commerce"** is a new form of ecommerce where brands and consumers communicate through live! representatives and AI assistants in order to explore offerings, make transactions and receive services or help with their purchases.

Chatbots can have a critical role in improve the relationship between brands and users, because it provides to brands a new sensor through more interactive mediator, where contact surface between Company and Customer will be larger, smoother and more accurate, which allows AI algorithms to;

- ✓ analyzing customer's emotions within a simple phone-call, messaging and chat apps.
- ✓ interacting with prospects in real-time and provide recommendations.
- ✓ increasing sales prospect through removing limitations with user and reducing the steps required for purchasing. For example, "Messenger" has partnered with "Uber" to make it possible for customers to order an Uber driver without leaving the messaging app **(shopify, 2020)**.
- ✓ through NLP algorithms role in interpreting and simulating what users say Via their smart devices, AI powered Chatbots can capture their preferences and buying intents, and automatically answer multiple requests at the same time.

Thus, to simplify the buying journey for customers, **Amazon**'s virtual assistant, called "**Alexa**", -as a leading conversational e-commerce tool- using this **Alexa** voice on **Amazon**'s **"Echo device"**, customers can place a complete order and even can inquire about their balance, make a payment, or check recent transactions **(shopify, 2020)** .

IV.   Methodology

Amidst the cognitive defect in determining the dimensions and essence of artificial intelligence, this paper tries to provide the minimum level of "AI-knowledge" model that Marketer/academic should have these days, to conceptualize some marketing important aspects of Artificial intelligence; to understand the advantages that AI can bring to Marketing and advertising; Furthermore to push the "AI Marketing integrating necessity " red button in every marketer/manger mind, through providing a more detailed view of its applications scenarios in marketing process.

In order to understand how AI can actually support all marketing and advertising aspects, we have used a secondary data available from sources such articles, books, leader organizations report. Authors and professionals' opinions and reviews

V.   Conclusion;

If you see that marketing efforts are based on Thumbing a lift on the way of "customer journey", in order to persuade him to commit an appropriate reaction at the end and over again, through precise studies on the customer himself and his trends and patterns, or rather analyzing customer interaction Catalysts with this effort more than the other, Artificial intelligence can have an immensely role to play in that and more.

Debating now about what artificial intelligence is in marketing and the search for a complete definition, such as the debate over the beauty of **J.Lopez**'s high heel at the **"Oscars"** last year!. This doesn't matter when you can see AI changing up the marketing game in a big way.

Our answer for the previously asked Question, <u>"To what extent has artificial intelligence penetrated the world of marketing?</u> The facts presented push us to reformulate the problematic to turn into "**to what extent marketing can live and breathe without artificial intelligence?**". Or rather, the right question to ask is; <u>**"how much firms Absorb (AI) technologies??**</u> then **does it want to leverage its sub-fields** It is an "Urgent-need" matter, not a tendency.

The real secret behind AI may lie in the cumulative details; <u>processing speed</u>, <u>accuracy</u>, and <u>consistency </u>(Babic, Chen, Evgeniou, & F, 2020), The skills it has mastered and which it will soon acquire (the ability to learn), In addition to a comprehensive and unbiased view of Data , improving outputs intelligently and continuously (predictions, recommendations ..). These features allow it to turn marketing industry upside down. So, collecting and analyzing data sets quickly and automatically, extracting insights and valuable touchpoints, can be just the beginning?

"AI is potentially a very useful tool, but it still requires extensive guidance to thrive. This trade-off is already worth It" (Chakrabarti, 2019). This pursuit of having an accurate "customer-breaths" understanding, requires a strategic vision from CEOs and a deep diagnosis of marketing functional defects, in addition a similar enablement for most related marketing and innovation efforts in term of; Technological resources, budget, hard/software and formation, education, meetings etc.to back shortcomings-rectification and to make various Advantages - AI is powerful horse ... But never under such blind Knight (marketer) - Because, once any company lag in integrating AI technologies or Keeping up with it, can be considered as irrecoverable dramatic loss.

We can see features of E-Advertising in the near future with the AI under engine-cover, ex, when you hear today about ad-campaign made independently by robots! What's after??, How marketing going to be less complicated and more efficient? nonexistent error margins, every action is well analyzed and done with 100% percentage of performance, only then; you can you see the marketer-robots controlling the marketing world; when humans are just watching, can you imagine robot trying to sell product to another customer robot???

Finally, we conclude that something like this variable (AI) cannot be defined, but it still extremely important for every company's survival, as it provides unlimited beneficial updates over days for almost every marketing effort.

VI.   Reference

1. Narrative Science. (2017, Oct 03). *Natural Language Processing vs. Natural Language Generation*.   Retrieved   from   medium.com: https://medium.com/@narrativesci/natural-language-processing-vs-natural-language-generation-1b2d18dd0b67

2. (2016). Retrieved from emarsys.com: https://emarsys.com/learn/blog/artificial-intelligence-marketing-solutions/

3. *2-minute explainer: AI vs. machine learning vs. deep Learning*. (2016, 10 4). Retrieved from   ;   https://medium.com/@johnkoetsier/2-minute-explainer-ai-vs-machine-learning-vs-deep-learning-c5150fd1721e

4. aithority.com. (2020, May 1). *AI Will Change Everything About Market Research*. Retrieved from aithority.com: https://aithority.com/guest-authors/ai-will-change-everything-about-market-research/

5. Amazon.   (2020).   *Amazon*.   Retrieved   from   Amazon: https://aws.amazon.com/fr/machine-learning/what-is-ai/

6. automat.ai. (2020, Nov 11). *AUTOMAT*. Retrieved from www.automat.ai: HTTPS://WWW.AUTOMAT.AI/RESOURCES/WHAT-IS-CONVERSATIONAL COMMERCE/

7. Babic, B., Chen, D. L., Evgeniou, T., & F, A.-L. (2020, July–August). A Better Way to Onboard AI. *Harvard Business Review*, 58.

8. Bhattacharjee, Sandeep. (2019). "Metamorphic Transformation: Critically Understanding Artificial Intelligence in Marketing". Asia Pacific Journal of Multidisciplinary Research. 7. 61 to 70.

9. Birnes, G. (2020, january 10). *https://www.martechadvisor.com/articles/sales-enablement/improved-sales-forecasting-through-ai-and-ml/*. Retrieved 2020, from martechadvisor.com: https://www.martechadvisor.com/articles/sales-enablement/improved-sales-forecasting-through-ai-and-ml/

10. Chakrabarti, S. (2019, August 6). *The potential for AI in market research*. Retrieved decembre 19, 2020, from raconteur.net: https://www.raconteur.net/technology/artificial-intelligence/artificial-intelligence-market-research/

11. Dan dumitriu, mirona Popescu , 2020, "Artificial Intelligence Solutions for Digital Marketing" ,13th International conference Interdisciplinarity in Engineering (INTER-ENG 2019), Published by Elsevier B.V, *Procedia Manufacturing 46 (2020) 630–636*.

12. Deshpande, I. (2019). *martechadvisor.com*. Retrieved 10 23, 2020, from martechadvisor.com: https://www.martechadvisor.com/articles/ads/what-is-programmatic-advertising/#:~:text=Programmatic%20advertising%20is%20the%20process,milliseconds%20through%20a%20sophisticated%20ecosystem

13. Gentsch, P. (2019). *AI in Marketing, Sales and Service How Marketers without a Data Science Degree can use AI, Big Data and Bots.* Springer. Retrieved from https://doi.org/10.1007/978-3-319-89957-2.

14. *IBM*. (n.d.). Retrieved from https://www.ibm.com/cloud/learn/strong-ai?mhsrc=ibmsearch_a&mhq=ai%20definition

15. Kaplan, A., & Michael Haenlein. (2019,). Siri, Siri, in my hand: Who's the fairest in the land? On the interpretations, illustrations, and implications of artificial intelligence,. *Business Horizons,*, *62*(1), pp. 15-25. Retrieved from https://www.sciencedirect.com/science/article/pii/S0007681318301393.

16. Kaput, M. (2020, April 14th). *marketingaiinstitute.com*. Retrieved 10 2020, from marketingaiinstitute.com: https://www.marketingaiinstitute.com/blog/ai-for-email-marketing#:~:text=Artificial%20intelligence%20makes%20email%20marketing,spent%20on%20email%20marketing%20campaigns.

17. Marsden, A. (2019, Oct 29). *25 Use Cases for AI in eCommerce*. Retrieved from constructor.io: https://constructor.io/blog/25-use-cases-for-ai-in-ecommerce/

18. Mehta, N., Parth Detroja, & Aditya , A. (2018, Aug 10). *www.businessinsider.com*. Retrieved 10 2020, from www.businessinsider.com: https://www.businessinsider.com/amazon-price-changes-2018-8?IR=T

19. Merriam-Webster. (2020). Retrieved novembre 17, 2020, from "Artificial intelligence." Merriam-Webster.com Dictionary, Merriam-Webster, https://www.merriam-webster.com/dictionary/artificial%20intelligence. Accessed 16 Nov. 2020.

20. Neel Mehta, Parth Detroja, & Aditya Agashe . (2018, Aug 10). *"Amazon changes prices on its products about every 10 minutes — here's how and why they do it"*. Retrieved from businessinsider.com: https://www.businessinsider.com/amazon-price-changes-2018-8?IR=T

21. OECD. (2019). Artificial Intelligence in Society. Retrieved from https://doi.org/10.1787/eedfee77-en.

22. Padhiyar, R. (2019). *Fundamentals of Digital Marketing. (THEORY, PRACTICE, ASSIGNMENTS & More).* india.

23. *shopify*. (2020). Retrieved from shopify: https://www.shopify.com/encyclopedia/conversational-commerce

24. Sterne, J. (2017). Artificial Intelligence for Marketing: Practical Applications. In *Artificial Intelligence for Marketing: Practical Applications* (p. 26). John Wiley & Sons, Inc. doi:ISBN 9781119406372 (ePDF).

25. T.Thiraviyam. (2018, April). "Artificial Intelligence Marketing". *International Journal of Recent Research Aspects*(Special Issue: Conscientious Computing Technologies), 449-452. doi:ISSN: 2349-7688.

26. Tan Tsu Wee, T. (2001). The use of marketing research and intelligence in strategic planning: key issues and future trends. *Journal of Marketing Intelligence & Planning* , 4, 245–253.

27. Tesler L.G. (1991). . Network Computing in 1990s. *Scientific American, 265*(3), 86-93.

28. Utku Kose, Selcuk Sert. (September 2016). "Intelligent Content Marketing with Artificial Intelligence", Scientific Cooperation for the Future in the Social Sciences , International Conference-2016. Researchgate. at: https://www.researchgate.net/publication/308520444

29. usmsystems.com. (2020, Dec 17). *10+Applications & Example Use cases Of AI in eCommerce*. Retrieved from usmsystems.com: https://www.usmsystems.com/example-use-cases-applications-of-ai-in-ecommerce/

30. Vishnoi, Sushant & Bagga, Teena. (2019). "ARTIFICIAL INTELLIGENCE ENABLED MARKETING SOLUTIONS: A REVIEW SUSHANT KUMAR VISHNOI, TEENA BAGGA, AARUSHI SHARMA AND SAADAT NASIR WANI". Indian Journal of Economics and Business. 17. 167-177.

31. www.azati.ai. (2020, septembre 17). *https://azati.ai/artificial-intelligence-targeted-marketing/*. Retrieved from www.azati.ai: https://azati.ai/artificial-intelligence-targeted-marketing/

32. www.commercient.com. (2019). *commercient.com*. Retrieved from commercient.com: https://www.commercient.com/why-artificial-intelligence-integration-in-crm-is-the-future-for-your-business/

33. Yang, Yin and Siau, Keng L. (2018)., "A Qualitative Research on Marketing and Sales in the Artificial Intelligence Age". *MWAIS 2018 Proceedings*. 41. HYPERLINK "https://aisel.aisnet.org/mwais2018/41" https://aisel.aisnet.org/mwais2018/41