Meta- Synthesis on Artificial Intelligence (AI): Imperatives for Branding

Nagaraju Kolla, M. Giridhar Kumar

Abstract: Customers Can Establish 85% Of Their Relationship With The Organisations Without Interacting With A Human (Gartner Predicts, 2011). This Is Possible When The Machines Think And Act Like Humans. Artificial Intelligence (AI) Produces The Machines So That They Can Think & Act Like Human Beings. AI Has A Wide Range Of Applications But This Research Confines To AI Prospects And Implications On Brand Management. This Paper Aims To Identify Which AI Technologies Are Impacting Brand Identity; Explores AI Applications In Brand Promotions; And Investigates The Influence Of AI On Brand Equity. Meta Synthesis Was Used And The Major Findings Of The Research Include: AI Can Redefine The Brand Identity Framework (Smart Product, Smart Organisation, Brand Character And Symbols). Artificial Intelligence Optimizes The Brand Promotion And Reformulates The Brand Equity Factors.

KEYWORDS: Artificial Intelligence (AI), Brand Identity, Brand Promotions, Brand Equity Meta –Synthesis.

I. INTRODUCTION

The word Artificial Intelligence was named by John McCarthy (1956) and he defines AI as a process of science & engineering which can make the intelligent machines (Computer processing of body language (n.d)). Machine learning and deep learning both are the subsets of artificial intelligence. In machine learning computers can learn from examples, past data, and practice. Where as in deep learning computers can learn from representations (Deng, Li & Yu, Dong, 2013).

Kaplan and Haenlein (2019) have classified AI into three types: human-inspired AI, analytical AI, and humanized AI. Analytical AI is the most commonly used artificial intelligence and which works through cognitive intelligence. The specific applications in branding are logo recognition, intelligent virtual assistance etc. Human-Inspired Artificial Intelligence works with both cognitive and emotional intelligence. Human-Inspired Artificial is useful for understanding the customer emotions. For instance, Walmart identifies unhappy customers with human inspired artificial intelligence (Bgr, 2017).

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Humanized Artificial Intelligence is not available right now and includes the features and capabilities of analytical AI, human-inspired AI. Asian consumers are most interested to adopt the AI devices than developed markets consumers like US, the UK, and France (Pwc, 2018). Consumers' preference to AI devices reflects the obsession of voice interaction with electronics, at the same high level time trust on online privacy and security (Pwc, 2018).

Research objectives: Explore AI influence on brand identity. Understand how organisations are utilizing AI technologies in brand promotion. Investigate how AI is influencing the brand equity ultimately.

II. PROPOSED METHODOLOGY

The present research applies meta- synthesis for testing the propositions (P1-P3). Meta synthesis is a qualitative research approach which evaluates the past research contributes for the enrichment of human discourse (Noblit & Hare, 1983). Based on the purpose of research meta-synthesis is of three types: theory building, theory explication, and descriptive meta-synthesis (Finfgeld, 2003). Theory building focuses on conceptualization of phenomena, whereas theory explication reconceptualise the phenomena and descriptive meta-synthesis analyse the phenomena. The present research applies theory explication meta-synthesis for exploring AI impact on brand identity and brand equity, and descriptive meta-synthesis for brand promotion.

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**Diagram-1: Meta synthesis and its classification**
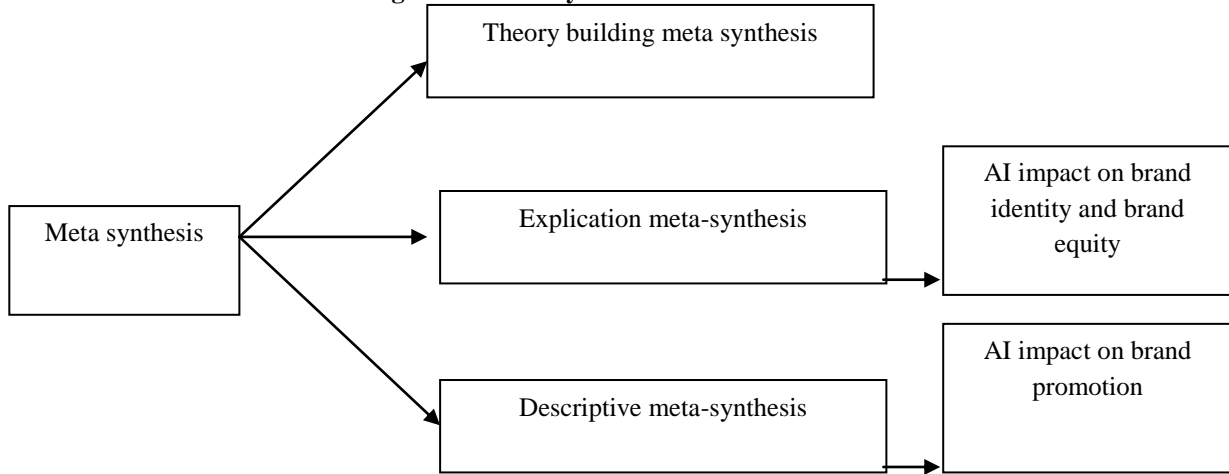
Source: *Author compilation*

BLOCK DIAGRAM

The research formulates the following propositions*:* P1: Artificial intelligence redefines the dimensions of brand identity. P2: Artificial intelligence optimizes the brand promotions. P3: Artificial intelligence redefines the facets of brand equity. And the propositions are depicted in the diagram-2.

Digarm-2: Black diagram of AI on branding
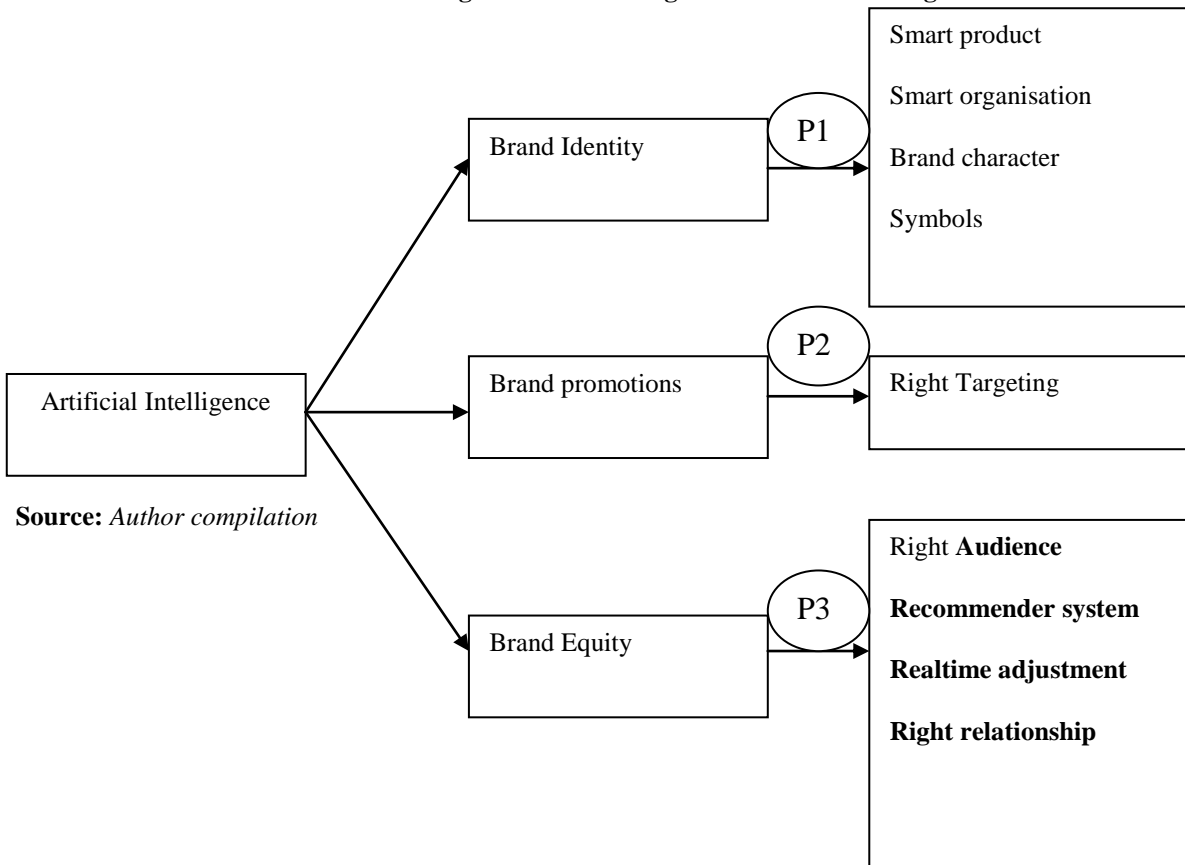
Source: *Author compilation*

III. RESULT ANALYSIS

P1: Artificial Intelligence Redefines the Dimensions of Brand Identity(BI)

Since the 1990's brand identity is the subject of academic interest (Balakrishnan, 2009; Kapferer, 2008; Keller, 1993; Melewar and Jenkins, 2002). There have been several motivations for studying brand identity: Well-crafted brand identity gives the meaning to a brand (Aaker, 1995; Kapferer, 2008), guides the positioning and promotions(Aaker, 1995; Berens et al., 2005;

Kapferer, 2008; Martínez & Pina, 2005; Melewar et. al., 2005), differentiate the competitors brands(Aaker, 1995; Berens et al., 2005); Aaker & Joachimsthaler, 2000; Kapferer, 2008; Martínez & Pina, 2005; Melewar et. al., 2005), develops the trust (Berens et al., 2005; Martínez & Pina, 2005) acts as a stable references for consumers (Aaker, 1995; Kapferer, 2008), and build the brand equity (Aaker, 1995; Heinonen and Strandvik 2005; Kapferer, 2008, Yoo, Donthu, & Lee 2000).

"Brand identity is a aspirations what the brand strategist wants to create in the form of brand promises" (Aaker, 1995). Brand identity is a "Vision of how that brand should be perceived by its target audience (Aaker & Joachimsthaler, 2000)". Core idea of the brand which can be communicated to its stakeholders forms the brand identity (De Chernatony, 2008). Semantically all these definitions talks about envisioned brand inputs. Hence we can define brand identity as a group of envisioned brand inputs.

The envisioned group of brand inputs i.e. brand identity were conceptualized with no.of dimensions (Table-1). But there is no common agreement on brand identity and its dimensions hence the research continued as blind man white element syndrome. Wide range of academic world and branding professionals were accepted Aaker model (1995) of brand identity. Hence the present research takes the dimensions of Aaker (1995) and explores the AI impact on every dimension of a brand identity i.e. product, organisation, personality and symbols.

Table-1: Dimensions of Brand identity

Authors	Dimensions of brand identity
Aaker (1996)	"Product, Organization, Person & Symbol"
de Chernatony (1999)	"Vision, culture, relationships, positioning, personality, presentation"

Source: Author compilation

Product: The product and its related attributes influence on brand identity. The product as a part of brand identity includes: country of origin of the product, product features product scope, quality, users of the product and uses of the product (Aaker, 2000). But this framework was shined in the age of industry 1.0, 2.0 and 3.0 i.e. in the age of consumers and no involvement of consumers in production. AI and other technologies have taken the industry to next level that is Industry 4.0. It has relabelled consumer as Prosumers (Kotler, Kartajaya, & Setiawan, 2016) i.e. professional consumers and production is as Prosumption i.e. customer involvement in the production) and product into smart product. For instance, Family Hub (AI enabled) brought the 2018 International Consumer Electronics Show (CES) best of innovation award to the Samsung. Family Hub is a smart refrigerator which enables the household members to see who is ringing the door bell, to check the sleeping baby in the next room, to watch the refrigerators inside when they are in market/remote, find the great bargains in the market and save them directly to the shopping list or loyalty card etc (Samsung news release, 2018). AI plays a major role in production of smart products of this kind.

Organisation: AI can influence every function of the human resources from recruitment (Chat bots) to employee attrition (Predictive retention). Good brands require great organisation culture (organizational attributes, local workings versus global activities). AI gathers the virtual motives of employees such as 'views', 'likes', 'shares' and 'comments' from the digital world and predicts the culture of an employee. This way normal organisation becomes the smart organisation.

Personality: Brand Personality (BP) talks about the human nature of the brand (Aaker, 1997). BP creates the self-expressive benefits, acts as a bond between customer & brand, and helps in the expression of attributes and benefits of a product (Aaker, 1995) (Kolla, Nagaraju & Devi, K.V.G. & Varaprasad, R. 2017). Digital technologies (AI enabled) produce the brand generated content and user generated content (UGC). UGC is a content that is made available by customers over internet. UGC acts as a brand character and which can influence the consumers.

Symbols: Brand symbols represent the visual imagery of the brand (Aaker, 1995). Analytical AI is a most commonly used artificial intelligence works through cognitive intelligence. The specific application of analytical AI is logo recognition of brand. Digitally recognizable brand logo helps in understanding the digital transactions of logo in UGC (user generated content) and BGC (brand generated content). The digital transaction data of logo helps in understanding and predicting the consumer behaviour.

Table-2: Artificial Intelligence & Brand Identity (BI)

BI	AI based BI
Product	Smart product
Organisation	Smart organisation
Personality	Brand character
Symbols	Symbols

Source: Author compilation

P2: Artificial Intelligence optimizes the brand promotions

Organisations promote their brand through integrated marketing communications (IMC). IMC is a framework that integrates all the marketing communication of a brand to deliver clear, consistent, & compelling messages about a brand and thereby build the lasting relationship with customers and other stakeholders (Kotler, 2000). IMC includes: advertisement, direct marketing, internal marketing, personal selling, public relations, and sales promotions. But days for traditional media of advertisement have gone and new trend of promotion have started in recent times such as search optimization, social media ads etc.

But the limitation of digital promotion is 70% of ads are targeting the wrong audience (trapica.com). Through advanced AI ads can target right audience.

For instance, keyword discovery which is a vital element of digital promotions gets perfection with AI algorithm. A search engine which recommends the products for customers optimizes their performance from AI and AI also optimizes bidding for every keyword.

P3: Artificial Intelligence Redefines the Facets of Brand Equity (BE)

One of outcomes of the brand building is brand equity. BE is a major component of financial value of a brand. BE is a value which is added to brand and that may be positive or negative (Aaker, 1995). High BE generates the more purchase intentions and can influence positive word of mouth (Cobb-Walgren et al., 1995). So far there is no accepted consensus on facets of brand equity: Aaker (1991) "Brand awareness, associations, loyalty, perceived quality and other proprietary assets"; Srivastava & Shocker (1991) "Brand value and brand strength". An award winning research of Keller (1993)(Consumer based brand equity) have changed the perspective on brand equity and eliminated all kinds of confusions over the brand equity. Hence the present research considers the Keller (1993) dimensions of brand equity and explores the AI impact on them .i.e. awareness, associations, attitudes, attachment, activities.

Awareness: Positive equity happens when brand awareness becomes the brand salience. Brand salience is not about the TOMA and is the degree of customers' awareness about a brand in different purchase situations. Brand salience takes place when brand promotion targets a right customer. AI solves this problem and makes the brand to *target the right customers.*

Acquisio(https://www.acquisio.com),Cognitiv(https://cognit iv.ai/),Trapica(https://www.trapica.com/),Quarizmi (https://quarizmi.com/) etc are applying the AI in promotion of brands for ads optimization.

Associations: Associations are the features, benefits and values of brand which can differentiate with the competitors and creates relevance to the customers. A recommendation system understands the features, benefits & values of customers and recommends the purchase intent (Hahsler & Michael, 2018). Recommender systems may work through popularity (most popular items are recommended), collaborative filtering (user activity based recommendations), content-based filtering (description of the items that have been rated by the user), and hybrid approaches which works through combination any combination of above stated algorithms (Aggarwal, 2016). For instance, *recommendation systems* which show the ads, movies etc use the customer characters and brand associations.

Attitudes: AI enables the customers to order product by means of voice, text etc and it also enables the dynamic pricing: real-time price adjustments. Hence AI can change the customer purchase at last mint also.

Attachment and activities: Technology is changing the degree to which organisation interacts and establishes the relationship with customers (Kim et al., 2009). Earlier organisations have responded to customers by means of auto responses and auto notifications. AI have augmented the customer relationship through automate services, smart content curation and predictive analytics. This makes the organisation to maintain relationship with right customers for customer life time value and loyalty.

IV. CONCLUSION

Artificial Intelligence (AI) prospects and implications on brand management have been examined with meta-synthesis. The meta- synthesis of the research have redefined the dimensions of brand identity, and reframed the brand equity. But still there is much hype on Artificial Intelligence (AI) and its impact on brand management. This research was examined influence of AI on brand identity (Aaker, 1995), brand promotions and brand equity (Keller, 1993). Hence, future research can explore the AI impact with various models of brand identity and equity.

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