

Digital Marketing Utilization Index in Digital Marketing Capability

Subjects: [Management](#) | [Engineering, Industrial](#) | [Statistics & Probability](#)

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The digital marketing utilization index (*DMUI*) measures an organization's ability to utilize digital marketing to create value for the company through the utilization of the readiness of the innovation ecosystem, digital marketing technology, and digital transformation.

digital marketing

capability

ecosystem

index

digital transformation

digital marketing usage

digital capability

managerial innovation

dynamic capability

Business Strategy

1. Introduction

The COVID-19 pandemic, besides having an impact on increasing consumer habits in consuming media, also had an impact on increasing the number of internet users, the use of digital devices, and also increasing online activities. Datareportal ^[1] shows that internet users in the world reached 4.66 billion or 59.5% of the total world population of 7.83 billion. Internet users in Indonesia reached 202.6 million (73.7%) or an increase of 27 million (16%) compared to the previous year, while active users of social media in Indonesia reached 170.0 million (61.8%) or an increase of 10 million (6.3%) compared to the previous year.

Companies as producers, facing a new marketing paradigm, have to adapt to the unprecedented changes in the marketing landscape ^[2]. The new marketing landscape has brought companies to conditions that require them to not only exist in the conventional competitive arena but also, at the same time, exist in the digital-based marketing arena. Manufacturers prepare themselves to provide the right answer to the needs and interests of consumers, producers also learn how to reach and engage their consumers through valuable information. Therefore, to seize opportunities or opportunities in the new marketing landscape, companies need to adjust their strategies in the digital marketing arena to gain new customers and maintain their customer loyalty and support. For that, companies must have digital marketing capabilities.

Digital marketing capability is the company's ability to plan and implement digital marketing ^[3]. This capability refers to the processes, structures, and skills that are the foundational assets of a company enabling it to succeed in the digital age. In other literature, digital marketing capability is the company's competence to use the internet and other information technologies to facilitate deep interactions with customers. These interactions give

customers access to company resources and information as well as provide companies with information about their customers [4][5]. Based on these explanations, it can be concluded that digital marketing is not only about the adoption of digital marketing technology, but also about how companies can plan, implement, and manage their digital marketing. Companies must have digital marketing capabilities because they can improve business performance. According to the findings of Field [5], companies can achieve impressive results by increasing their digital marketing capabilities, their campaign costs falling by 30% and revenues increasing by 20%. Even when companies use advanced technology and human resources with superior supervision skills, campaign performance can improve by 30%.

The research model to improve the company's digital marketing capabilities has been established [6]. The model states that a company's digital marketing capabilities can be improved through the readiness of an innovation ecosystem, adoption of digital marketing technology, and digital transformation.

The innovation ecosystem readiness shows the level of readiness of the company's innovation ecosystem in responding to changes in the company's external and internal business environment. Companies that are able to build the innovation ecosystem readiness will tend to have better digital marketing capabilities compared to other companies. The digital marketing adoption shows the level of use of digital marketing technology within the organization. Companies that are able to adopt effective digital marketing technology will tend to have higher levels of digital marketing capabilities. Finally, digital transformation shows the process that companies carry out to integrate technology in their business processes. This process is closely related to leadership capabilities and technological capabilities. Companies that are able to develop digital transformation will tend to have a better level of digital marketing capability than other companies.

2. Digital Marketing Utilization Index in Company Digital Marketing Capability

This section will present the findings of previous research on digital marketing adoption, digital transformation, and innovation ecosystem readiness factors that can improve the company's digital marketing capabilities as a constituent component of *DMUI*, which was developed based on Masrianto's research [6] as illustrated in **Figure 1**.

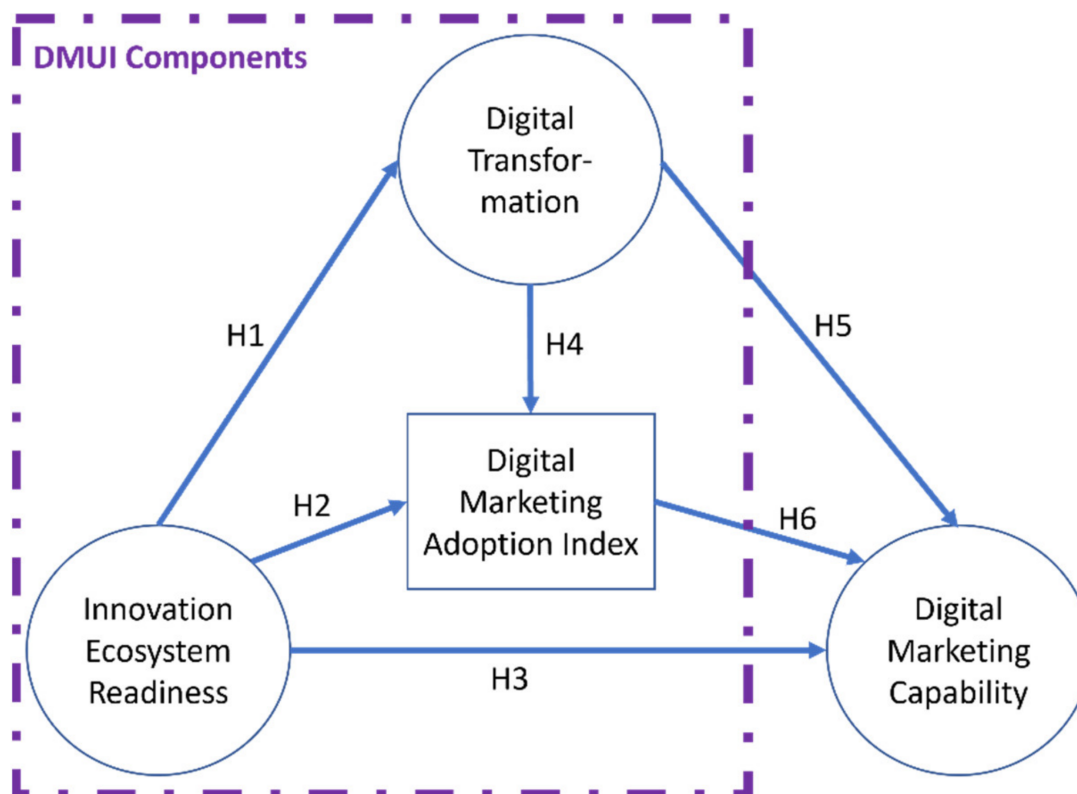


Figure 1. DMUI Components.

2.1. Digital Marketing Adoption

Digital marketing is an exciting new concept for many businesses today because it forms a new way of how customers and businesses communicate, share information, and buy and sell with each other [7]. Digital marketing has attracted the attention of marketers [8] because digital marketing facilitates interactions between companies and customers as well as interactions between customers so that emotional and psychological bonds between customers and companies are maintained [9].

Digital marketing is a marketing technique using digital media that can reach consumers at the right time, personally, and is relevant to their needs. Digital marketing is often also referred to as 'online', 'internet marketing', or 'web marketing'. The term digital marketing has become the most common term, especially after 2013, along with the growing use of communication and information technology.

According to Gibson [10], as stated by Bala and Verma [11], and Srividhya [12], effective and efficient digital marketing can be achieved by using digital marketing methods and strategies that have a website component and using the internet as a platform to communicate and carry out a variety of derivative strategy activities. The use of digital marketing techniques or methods by companies includes: (1) website, (2) commerce, (3) social media marketing, (4) email marketing, (5) SEO, (6) SEM, (7) digital PR, (8) digital advertising, (9) digital CRM, (10) content marketing, (11) affiliate marketing, (12) online newsletter, (13) display advertising, (14) mobile marketing, and (15) digital analytics.

2.2. Digital Transformation

Digital transformation is a process of change that leverages the leverage of technology and digital capabilities to create added value through business models, operational processes, and customer experiences [13]. Therefore, digital transformation aims to improve entities by triggering significant changes in their properties through a combination of information technology, computing, communication, and connectivity [14]. Westerman [15] stated that digital transformation is a process to create a company's digital competence, which is determined by seven factors, namely (1) creating an attractive customer experience, (2) utilizing the power of operational processes, (3) finding new business models, (4) developing a transformation vision, (5) involving employees to make the vision a reality, (6) managing the transformation process, and (7) building technology leadership capabilities. All of these factors are a process to create a company's digital competence through the development of digital capabilities and leadership capabilities.

2.3. Innovation Ecosystem Readiness

The innovation ecosystem's readiness is a measure of the ecosystem's readiness to adopt innovations developed from the research titled "Firm Technology Adoption Model (F-TAM) among SME's: An Interactive Eco-System Perspective" [16][17]. The research concluded that ecosystem interactions influence the rate of adoption of enterprise innovations. Based on that research [6], the internal and external factors from innovation ecosystem readiness that will influence company digital marketing capability are (1) perceived ease of use, (2) perceived usefulness, (3) managerial innovativeness, (4) organizational readiness, (5) customer need, (6) competitive pressure, (7) innovation infrastructure, (8) opinion leadership, (9) observability, and (10) flexibility.

2.4. Digital Marketing Capability

The ability of a company to plan, implement, and manage digital marketing is referred to as its digital marketing capability. It refers to a company's ability to use the internet and other information technologies to facilitate in-depth customer interactions. Through these interactions, customers gain access to company resources and information, while the company learns more about its customers. The processes, structures, and skills that a company needs to succeed in the digital age are also defined as digital marketing capability [3].

Digital marketing capability is a multidimensional construction consisting of three important and complementary resources: IT resources, human resources, and business resources [4]. Furthermore, the level of a company's digital marketing capability is determined by six factors, namely (1) connecting various data sources, both online and offline, to determine target customers and get the perfect picture of customers, (2) build integrated and automation tools such as integrated advertising website and analytics technology, (3) identifying consumer needs in each customer channel, (4) conducting effective collaboration with partners and marketing technology providers, (5) conducting training and upgrading of employee skills and eliminating employee knowledge gaps, and (6) making an adaptable organization [5].

2.5. Digital Capability Index

Many studies on digital capability indexes have been conducted in the context of country, industry, company, and society, such as the Technology Readiness Index (TRI), a multiple-item scale to assess people's readiness to interact with technology [18]; Network Readiness Index (NRI), as a major international assessment of countries' capacity to exploit the opportunities offered by ICTs through the pillars of technology, people, governance, and impact [19]; E-Government readiness index, involving website assessment, telecommunication infrastructure, and human resource endowment [20]; Digital Readiness Index (DRI) which measures a country's readiness to achieve a digital economy through seven holistic components such as basic needs, business and government investment, ease of doing business, human capital, start-up environment, technology adoption, and technology infrastructure [21]; Indonesia industry 4.0 readiness index, an industrial readiness index in Indonesia to transform towards industry 4.0, which is formed through five dimensions, namely: people and culture, management and organization, products and services, factory operations, and technology [22]; Digital Readiness Assessment (DRA), digital maturity across seven focus areas: strategy, innovation and growth, customer experience, supply chain and operations, technology, risk and cyber security, finance, legal and tax, people and organization [23]; the Digital Acceleration Index (DAI) uses six dimensions, namely: targeting and personalization, campaign planning and execution, cross-channel integration, analytics, organizational setup and agency model, and asset production and content strategy [24]; digital marketing maturity assessment tool using RACE framework [25]; and Indonesia's SME Digital Readiness Index (ISDRI), using five dimensions in the assessment to measure how ready a business is to face digital change: people, process, strategy, technology, and integration [26].

Nevertheless, the digital capability index in the context of the company, which specifically discusses the company's digital marketing capabilities based on the pillars of innovation ecosystem readiness, adoption of digital marketing technology, and digital transformation, has never been done, or the index hereinafter referred to as the Digital Marketing Utilization Index (*DMUI*) had not yet existed. *DMUI* measures an organization's ability to utilize digital marketing to create value for the company through the utilization of the readiness of the innovation ecosystem, digital marketing technology, and digital transformation.

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