Reduction of Time And Costs in Globalization: An Analysis of A Hadith on Market and Time Convergence

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Abstract

This research aims to analyse a hadith of al-fitan and ashrat al-sa'ah, which describes the phenomena of market and time convergence. Globalization has driven market and time convergence across various industries and activities, resulting in reduced time and costs—one of the positive impacts of globalization. However, these phenomena may also lead individuals to encounter negative elements due to the rapid pace of globalization. This paper primarily focuses on the analysis of the hadith and its positive implications, offering guidance for Muslims navigating this fast-paced environment as directed by the Quran and Sunnah. Employing a qualitative research design with a content analysis approach, data were thematically examined using descriptive and analytical techniques. The findings underscore the Prophet's (PBUH) reference to market and time convergence as the signs preceding the Hour. Consequently, this study establishes that market and time convergence in the era of globalization is an inevitable and impactful phenomenon.

Key Words: AI, Globalization, *Hadith*, Islam, Technology

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Introduction

Globalization is a multifaceted process characterized by the increasing interconnectedness of economies, cultures, and societies across the globe. It encompasses dimensions, including economic, political, cultural and technological aspects, leading to the integration of national economies and the movement of goods, services and ideas across borders (Steger 2023; Sepashvili 2024). The process is driven by advancements in technology which facilitate the movement of labour, products and ideas across borders (Das 2024).

The collection of prophetic traditions known as *ahadith al-fitan* and *ahadith ashrat al-sa'ah* describe the signs indicating the approach of the Hour. It is crucial to note that these signs did not appear during the lifetime of the Prophet Muhammad (PBUH) because they represent events that were destined to unfold in the future, hence, reinforce the authenticity of his

prophethood. Today, in our globalized world, many of these signs closely mirror the new challenges of globalization that Muslims encounter, highlighting the need for them to revisit the teachings of the Quran and the Sunnah to effectively address these issues. Among the signs of the Hour is a phenomenon known as market convergence.

Market convergence refers to the process where different sectors or markets begin to integrate and operate more similarly due to various factors such as globalization, competition, and customer preferences. For example, in the financial services industry, financial convergence allows participants to penetrate various market segments, creating financial conglomerates that enhance competitive advantages (Rysin et al. 2021). Customer-specific synergies can lead to market convergence, particularly when firms sell multiple products to the same customers, influencing profitability and market dynamics (Schmidt et al. 2016).

Literature Review

Globalization is a complex and multifaceted phenomenon that scholars define in various ways, reflecting its broad impact across economic, political, social, and cultural dimensions. Sowers (2024) emphasizes economic globalization as the integration of economies through trade, investment, and financialization, highlighting its historical evolution and contemporary challenges. Riak and Bill (2022) note that globalization reshapes traditional social structures and is characterized by intensified global relations and interconnected processes. Esmaeili and others (2017) describe globalization as a transformative force that collapses borders and affects all aspects of human life. Binnie and Gaytán (2024) highlight the role of technological advancements in facilitating the movement of goods, ideas, and people across borders. Overall, globalization's meanings vary significantly among scholars, reflecting its dynamic and evolving nature.

Zwart and Zanden (2018) illustrate that globalization has deep historical roots, with its origins traceable to various periods of human interaction and trade. The first significant wave began in the late 15th century, following the voyages of Columbus and Da Gama, which established extensive trade networks that transformed economies and societies globally. According to Zinkina and others (2019), an Afro-Eurasian network emerged between the ninth and seventh millennia BCE, facilitating the exchange of innovations and technologies, marking the beginning of archaic globalization.

Leffler (2016) expresses that the early modern era saw the rise of intercontinental trade, particularly between Europe and Asia, which intensified in the 16th century, leading to commodity price convergence and increased economic interdependence. This historical perspective highlights the multifaceted nature of globalization's origins, shaped by trade, technological diffusion, and socio-economic transformations across different periods.

Loots (2024) and Meissner (2024) state that the history of globalization is marked by distinct waves and significant geopolitical events that have shaped economic integration over time. Since 1870, four major waves of globalization have been identified: the First Wave (1870-1914), characterized by rising trade and investment; the Second Wave (1945-1989), which followed a period of deglobalization; the Third Wave (1990-2007), noted for hyper-globalization and increased participation of emerging economies; and the Fourth Wave (2010-

2020), influenced by the digital economy and rising nationalism. Nurdiansyaha (2022) asserts that each wave reflects shifts in political and economic dynamics, with globalization often seen as a response to historical events, such as the Cold War and the Great Depression.

Results and Discussion

Market and Time Convergence in a *Hadith*

The *ahadith* of the Prophet offers comprehensive guidance that is relevant to everyone in different aspects of life. The Prophet Muhammad (PBUH) addressed not only the issues of his time but also events from the past and those that would emerge in the future. The prophetic narrations provide insights into the impending occurrence of globalization, as he expounded upon future events close to the advent of the Hour. Among these prophecies, there is a reference to the issue called *tataqarab al-aswaq and yataqarab al-zaman* in a *hadith* that sheds light on the circumstances prevalent in our contemporary era:

حَدَّثَنَا عُثْمَانُ بْنُ عُمَرَ، أَخْبَرَنَا ابْنُ أَبِي ذِئْبٍ، عَنْ سَعِيدِ بْنِ سِمْعَانَ، عَنْ أَبِي هُرَيْرَةَ، أَنَّ رَسُولَ اللهِ ﷺ
قَالَ:لَا تَقُومُ السَّاعَةُ حَتَّى تَظْهَرَ الْفِتَنُ، وَيَكْثُرَ الْكَذِبُ، وَتَتَقَارَبَ الْأَسْوَاقُ، وَيَتَقَارَبَ الزَّمَانُ، وَيَكْثُرَ الْهَرْجُ
قِيلَ: وَمَا الْهَرْجُ؟ قَالَ: الْقَتْلُ

Translation: It was narrated from Abu Hurairah that the Messenger of Allah (PBUH) said: The Hour will not occur until there appears strife and frequently lies, converging markets, converging time, and frequently commotion. It was said, what is commotion? He said, murder. (*Musnad Ahmad bin Hanbal*, hadith no. 10724)

Scholars have diverse interpretations regarding the meaning of time convergence, with many opinions presented. The most compelling of these interpretations suggests that time convergence may refer to either physical convergence (*al-taqarub al-ḥissi*) or conceptual convergence (*al-taqarub al-ma'nawi*). The conceptual convergence refers to the diminishing blessings of time, which has been evident since a distant era. This view has been adopted by scholars such as Al-Qadi Iyad, Al-Nawawi, Ibn Hajar, and others.

Physical convergence implies that the duration of the day itself shortens in a tangible manner, causing the hours of day and night to pass quickly. This phenomenon has not yet occurred, but its possibility cannot be ruled out. It is supported by the notion that the days of the Dajjal will be prolonged to the extent that a day will feel as long as a year, and similarly for a month and a week. Just as days can be extended, they can also be shortened, indicative of a disruption in the world's order and the approaching end of the world. Another *ḥadith* that indicates the same matter:

حَدَّثَنَا عَبَّاسُ بْنُ مُحَمَّدٍ الدُّورِيُّ، حَدَّثَنَا خَالِدُ بْنُ مَخْلَدٍ، حَدَّثَنَا عَبْدُ اللهِ بْنُ عُمَرَ الْعُمَرِيُّ، عَنْ سَعْدِ بْنِ
سَعِيدٍ الْأَنْصَارِيِّ، عَنْ أَنَسِ بْنِ مَالِكٍ، قَالَ: قَالَ رَسُولُ اللهِ ﷺ: لاَ تَقُومُ السَّاعَةُ حَتَّى يَتَقَارَبَ الزَّمَانُ،

فَتَكُونُ السَّنَةُ كَالشَّهْرِ، وَالشَّهْرُ كَالْجُمُعَةِ، وَتَكُونُ الْجُمُعَةُ كَالْيَوْمِ، وَيَكُونُ الْيَوْمُ كَالسَّاعَةِ، وَتَكُونُ السَّاعَةُ كَالضَّرَمَةِ بِالنَّارِ.

Translation: Anas bin Malik narrated that the Allah's Messenger PBUH said: The Hour will not occur until the time is accelerated, a year being like a month, a month like a week, a week like a day, a day like an hour and an hour like the kindling of a fire. (*Sunan al-Tirmidhi,* hadith no. 2332)

One of the prominent examples of market convergence can be seen in the media industry, often referred to as media convergence. This concept involves bringing together various media systems and techniques, allowing for the sharing of content across different platforms. This phenomenon has significantly changed how people engage with media, providing a wide range of channels and products. Media convergence takes shape in several ways, including the seamless integration of different mediums, which allows audiences to access news, music, and videos all in one place (Jenkin 2006).

Technological integration is clearly visible, as seen in the way fitness tracking features are now built into smartphones and wearable devices. There is also a blend of culture and products, with storylines and characters from video games making their way into movies. A convergence in market and consumer bases is evident, as sports organizations broaden their reach into the e-sports industry (Jenkin 2006).

Reduction of Time and Costs in Globalization

Since the introduction of satellite communication systems in the early 1970s, the cost and time associated with communication have drastically decreased, regardless of distance (Kamal Hassan 2011). Satellite messaging systems allow for the transmission of messages over 5,000 miles at a cost comparable to that of 500 miles, thanks to advanced technology that optimizes bandwidth and reduces operational costs (Houtman et al. 2012). The design of satellite systems specifically for long-distance communication enhances their cost-effectiveness compared to traditional fiber-optic cables (Barnett 1988).

The advent of various communication technologies such as instant messaging, email, video conferencing, and social media has significantly enhanced the efficiency and accessibility of communication in daily life. These technologies facilitate rapid information exchange, foster social connections, and support diverse communication styles across cultures. Instant messaging applications have streamlined communication, enabling real-time interactions that were previously impossible (Andzani & Irwansyah 2023). Video conferencing and social media platforms have transformed how individuals maintain relationships, particularly for migrants who rely on these tools to preserve family ties (Cuenca & Carrión 2024). The rise of cloud computing has further supported collaborative efforts, enhancing professional communication (Li et al. 2024).

With the internet now taking precedence over traditional telephone services, the costs of calls have dramatically declined. Applications like Telegram and WhatsApp's have significantly transformed communication, especially in the context of internet accessibility. These platforms facilitate both synchronous and asynchronous interactions, making them

preferable over conventional phone usage. For instance, Telegram has been highlighted for its effectiveness in instructional content delivery, allowing for video sharing and learner engagement, which is particularly beneficial in educational settings post-COVID-19 (Nkanu et al. 2023). WhatsApp's usage surged during the pandemic, with increased messaging frequency and altered communication patterns observed (Seufert et al. 2022).

These applications are crucial for migrants, providing essential information and connectivity during their journeys (Frouws et al. 2016). This technological evolution has fostered greater understanding among diverse communities worldwide. Globalization and advancements in communication have helped bridge gaps, uniting people across borders and breaking down geographical barriers.

The rise of smartphones and tablets has revolutionized communication, enabling real-time conversations and access to vast information resources. Utilizing smartphones and tablets, people can easily communicate, access information, or conduct research on any topic of interest. Social media platforms on these devices foster community engagement and information sharing (Ikhwan & Karlina 2023). Research indicates that students utilize smartphones for studying and accessing educational content (Boles et al. 2024).

Market convergence significantly reduces costs and time by enhancing efficiency in communication and trading processes. Asynchronous algorithms in peer-to-peer markets allow agents to compute independently despite communication delays, resulting in a 40% faster convergence rate (Dong et al. 2021). The implementation of soft-computing techniques, such as the fickle minimum route advertisement interval timer (FMRAI), can drastically decrease network convergence time, improving overall network stability (Devikar et al. 2018). This rapid convergence not only minimizes transaction costs but also enhances market responsiveness, ultimately benefiting all participants involved.

Vast distances will be covered in a short amount of time through advanced vehicles compared to the time of the Prophet; traveling from one location to another often took weeks or even months with the numerous difficulties and hardships faced along the way. Allah (SWT) describes various modes of transportation that existed prior to the advent of modern technology in Surah Al-Nahl 16:8:

وَالْخَيْلَ وَالْبِغَالَ وَالْحَمِيرَ لِتَرْكَبُوهَا وَزِينَةً وَيَخْلُقُ مَا لَا تَعْلَمُونَ

Translation: And (Allah has created) horses, mules, and donkeys, which you may ride or use as ornaments; and He creates what you do not know.

Artificial Intelligence (AI) has reduced cost and time in various aspects of communication, particularly in the context of network operations. Mobile network operators (MNOs) are leveraging AI to operate their networks more efficiently and cost-effectively. The deployment of AI in 5G and beyond networks has the potential to significantly reduce operating expenses (OPEX), time, and labor for network planning and management (Shafin et al. 2020).

Artificial intelligence (AI) has significantly reduced both the cost and time associated with communication across various sectors. A shorter time is needed to complete any task compared to other time periods. By leveraging technologies such as natural language

processing (NLP) and chatbots, organizations can streamline interactions, enhance customer service, and optimize resource allocation. For instance, AI-driven chatbots in fintech provide real-time support, reducing response times and operational costs (Udeh et al. 2024). Furthermore, AI applications in call centers have demonstrated a capacity to lower operational costs by replacing traditional human operators with AI-based solutions (Thajib 2023).

The advancement of technology in communication has not yet reached its pinnacle; rather, it marks the beginning of something remarkable. Continuous improvements and innovations are expected to emerge daily. The technologies that have been developed today will quickly become outdated tomorrow. The way a person utilizes technology is still entirely within their control. Muslims should harness technology for positive purposes that benefit the Muslim *ummah*. It is imperative that technology is not employed to cause harm or disrupt societal harmony. Every action, whether good or bad, will ultimately be presented to its doer and met with appropriate rewards, as Allah (SWT) says in Surah Al-Zalzalah 99:7-8:

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فَمَنْ يَعْمَلْ مِثْقَالَ ذَرَّةٍ خَيْرًا يَرَهُ وَمَنْ يَعْمَلْ مِثْقَالَ ذَرَّةٍ شَرًّا يَرَهُ

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Translation: And whosoever does an atom's weight of good shall see it (written in his record). And whoever does an atom's weight of evil shall see it (written in his record).

Conclusion

Advancements in technology and communication have profoundly transformed lives, and the integration of various technologies, from satellite communication to mobile applications, has not only made communication more accessible and cost-effective but has also bridged geographical divides and fostered greater understanding among diverse communities. As society navigates this era of rapid technological evolution, it is crucial for individuals, particularly within the Muslim *ummah*, to harness these innovations for positive purposes. By utilizing technology to promote harmony and knowledge, one can fulfill his responsibilities to himself and the broader community. Every action taken, whether beneficial or harmful, will be accounted for, serving as a reminder to act with intention and integrity. Looking to the future, the potential of technology remains vast, inviting exploration of its possibilities while grounding actions in ethical principles that align with Islamic values.

Acknowledgement

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