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THE METAVERSE IN SOUTHEAST ASIA: TEETHING PROBLEMS

Evgeny A. KANAEV [1]
[1] IMEMO RAS, Moscow, Russia,
e.a.kanaev@gmail.com, https://orcid.org/0000-0002-7988-4210

Abstract: The article illustrates salient features of the Metaverse-related developments in Southeast Asia seen through the prism of major regional consumption trends, as well as the evolution of the Metaverse around the world. Starting from an outline of determining factors behind the consumption growth in Southeast Asia, the paper proceeds to specifying reasons behind the popularity of the Metaverse across the world in general and the Asia-Pacific region in particular. Then the study turns to the evolution of the Metaverse in Southeast Asia with a special focus on the gaming industry. The author argues that although obstacles to the Metaverse development are in place and will probably remain serious, its regional prospects are generally positive. The paper extends the focus on previous research on the Metaverse and consumption trends in Southeast Asia that have been carried out in a fragmented manner. As the topics discussed in their synergy have not been in a research focus in Russia and other countries, the study takes a considerable step forward in developing an integral approach to the digital transformation of social, economic and commercial processes in Southeast Asia, which accounts for its relevance, novelty and originality.

Keywords: *Southeast Asia, ASEAN, regionalism, consumption, data localization, 5G Internet, Metaverse, e-sport*

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МЕТАВСЕЛЕННАЯ В ЮГО-ВОСТОЧНОЙ АЗИИ: ТРУДНОСТИ РОСТА

Евгений Александрович КАНАЕВ [1]
[1] ИМЭМО РАН, Москва, Россия,
e.a.kanaev@gmail.com, https://orcid.org/0000-0002-7988-4210

Аннотация: В статье проиллюстрированы ключевые особенности развития Метавселенной в Юго-Восточной Азии сквозь призму основных региональных тенденций в области потребления, а также глобального характера эволюции Метавселенной. Определены факторы,задающие параметры роста потребления в ЮВА, уточнены причины популярности Метавселенной в мире и отдельно в Азиатско-Тихоокеанском регионе. Выявлен характер эволюции Метавселенной в ЮВА с особым вниманием к игровой индустрии. С точки зрения автора, хотя на пути развития Метавселенной существуют препятствия, которые, по всей вероятности, будут оставаться серьезными, региональные перспективы, в общем и целом, благоприятные. Данный труд расширяет ракурс проведенных ранее исследований Метавселенной и потребительских тенденций ЮВА, которые носили фрагментированный характер. Поскольку затронутые в статье темы в их взаимной увязке не были предметом специального исследования в России и других странах, исследование делает значительный шаг в выработке интегрального подхода к цифровой трансформации социальных, экономических и коммерческих процессов на пространстве ЮВА, что обуславливает ее практическую значимость, новизну и оригинальность.

Ключевые слова: *Юго-Восточная Азия, АСЕАН, регионализм, потребление, локализация данных, 5G интернет, Метавселенная, киберспорт*

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The establishment of ASEAN Community, with the ASEAN Economic Community (AEC) as its central pillar, is a fundamental component of ASEAN's competitiveness. At the same time, the AEC is a multidimensional project that embraces many areas at various levels. An important part of ASEAN's policy is to increase market attractiveness of Southeast Asia, which means, among other directions and outcomes, to constantly raise consumption in ASEAN member states.

In the context of these plans, digitalization-enabling instruments increase in significance. From this perspective, to trace the influence of the Metaverse with its economic, social and more broadly, developmental implications on Southeast Asia is a timely and relevant exercise.

Southeast Asia: a Brief Outline of Major Consumption Trends

Assessing ASEAN’s prospective plans, mainly, the ASEAN Economic Community (AEC), it is fair to say that making Southeast a highly integrated and cohesive economy, as well as resilient, inclusive, people-oriented and people-centered, as outlined in the AEC 2025 Blueprint[1], is hardly possible without raising its consumption potential and upgrading consumption-related instruments. Although income gaps are wide and rising income disparity is among top concerns in ASEAN member states[2], mass consumption in Southeast Asia is and will probably remain high. Several points are noteworthy in this regard.

First, Southeast Asia has large working population that is expected to grow in number and consumption potential. As portrayed by Bain&Company, the working population (from 15 to 64 years old) will grow by 23 million people by 2030[3]. Taking into consideration that China's working population is projected to shrink by 27 billion people within the same period, big companies, including multinationals, are likely to exploit the markets of ASEAN member states. The chain effect will include further rise in disposable incomes and, by extension, increased consumption.

Simultaneously, middle and upper-middle class growth as part of increase in population is a conspicuous trend across Southeast Asia. According to the same source, households with high incomes will increase from 12 million to 41 million between 2021 and 2030. Concerning upper-middle income households, their number will account for 49 million and 71 million respectively[4]. Logically, it will lead to a concomitant increase in consumer purchasing power in ASEAN member states.

Second, Southeast Asian consumption will be stimulated, or least facilitated, by improved logistics with a special focus on its trans-boundary component. Although there are significant gaps between ASEAN member states (Singapore and Malaysia occupy first and 26th places respectively, while Cambodia and Laos are both in 115 position[5]) nevertheless, growing evidence suggests that the problem can be overcome. Southeast Asian consumers prioritize convenience, which means simplified return of previously purchased goods and instruments to trace the purchase delivery status. In light of this, retailers and marketplaces partner with transport companies and develop their own delivery fleets. At present, it is too early to undertake assessments of how and to what specific extent it will stimulate consumption sentiments and shape consumption habits across Southeast Asia. What is evident, however, is that this trend, which is likely to sustainable, long-term and, most importantly, increasingly focusing upon trans-border exchanges, will inevitably encourage consumption in ASEAN countries.

Third, the association and its member states develop resourceful projects of economic regionalism. The ASEAN dimension includes ASEAN Digital Data Governance Framework (2018), ASEAN Agreement on Electronic Commerce (2019), ASEAN Digital Masterplan 2025 (2021) and ASEAN Data Management Framework (2021), to mention just a few examples. Individually, ASEAN countries increasingly focus upon the digital transformation of their public, government and corporate sectors. Examples include Making Indonesia 4.0, e-Government National Strategy (Malaysia), MSME assistance through SETUP (the Philippines), eGov Masterplan (Singapore), National E-Commerce Development (Vietnam) and other initiatives[6]. The focus on digitalization both directly and indirectly contributes to the digital transformation of consumer sentiments across Southeast Asia and, by extension, brings cutting-edge digital practices into a public spotlight.

The corporate sector of ASEAN member states is undergoing digital transformation with considerable consumption-related implications. In the B2B segment, ample evidence is provided by Bukalapak. The platform is the leader in Indonesia's B2B segment with a focus on micro-enterprises. Remarkably, in Indonesia MSME account for 99% of all businesses[7]. Bukalapak's business model successfully combines marketplace instruments (the platform owns BukaMall Official Stores and cooperates with Unilever, Bata, Berrybenka etc., as well as develops ties with leading Indonesian e-wallet providers OVO and DANA) and allows micro-business, mostly owners of mom-and-pop shops, to scale up their commercial opportunities. Apart from it, BukaPengadaan, a B2B-focused marketplace, connects businesses and customers to their mutual advantage. Notably, the platform operates its own supply distribution chain and uses delivery channels owned and managed by other parties, as well as hires local logistics providers to organize timely last-mile delivery.

In the B2C segment, the company Pomelo is a relevant example of excellence. Established in 2013 in Thailand as an online fashion brand, the company expands its online and brick-and-mortar presence, as well as promotes products of other companies. Notably, the company sell local brands on its digital resources and in its brick-and-mortar stores, as well as develops cooperation with famous international brands. Pomelo employs cutting-edge digital technologies, which is exemplified by its cooperation with Smartly and Partnerize, as well as by its close attention to the resource Branch.io. The company combines online and offline marketing instruments, for instance, Tap Try Buy[8], which makes its services convenient and, its activity, by extension, financially rewarding.

The factors discussed above provide critical mass of digitalization-related instruments to make the purchasing journey of Southeast Asian consumers increasingly digitally oriented. In these circumstances, interest in the Metavese is perfectly logical. The more so since the Metaverse is increasing in popularity around the world.

The Metaverse as New Global Reality

The Metaverse, as well as the Metaverse-related instruments, is a trendy buzzword around the world. Revealingly, the Internet has undergone a remarkable transformation: from the Internet of Data (information exchange) to the Internet of People (mostly, social media) and finally to the Internet of Things (interconnections between physical objects). Arguably, as the development of the 6G Internet gains momentum, the advent of the Internet of Place, Senses, Emotions etc. will not take long to appear.

Conceptually, the Metaverse is not a sophisticated device or technical application. It is a synergy of scaled and interoperable physical, augmented and reality that can be entered by an unlimited number of users and shaped according to their preferences. All the Metaverse-related events take place in the real-time format, they do not depend upon external factors. Theoretically, the number of the Metaverse users is unlimited. The metaverse has its "user infrastructure" content and experience, for instance, virtual property, fiat money and other attributes of the physical world, created by its residents. On the whole, the Metaverse is a qualitatively new step in creating the reality in which the humankind lives. At present, it is impossible to make a comprehensive assessment of its economic, social and, most importantly, psychological implications.

As the Asia-Pacific region remains the driver of the global economy, its government and corporate sector pays close attention to the development of the Metaverse. Among the reasons, prospects for commercial feedback are tremendously impressive. While in 2023, the Asia-Pacific Metaverse market was expected to stand at 95,024.6 million US dollars, in 2030, these figures will account for 769,930.1 million US dollars[9]. Other reasons include, but are not limited to, qualitatively new horizons in industrial development, breakthroughs in organizing and managing people-to-people interactions, etc. Simultaneously, as suggested by ample evidence, Asia-Pacific economies will benefit from unlocking and exploiting the potential of the Metaverse. Several points are of special relevance.

First, strong interest in developing the 5G Internet is evident across the Asia-Pacific region. Remarkably, selected Asia-Pacific economies are outperforming European countries in terms of the 5G Internet penetration. Getting to specifics, the actual level of 5G connections in China is 45% of total. By 2030, the 5G connections in the PRC are expected to reach 88% of total. Although this indicator is behind the US, South Korea and Japan (95%, 95% and 95% respectively), it is far above the global average (54%)[10]. Most importantly, the scale factor of China's economy and population will be the game changer. The 5G Internet is part of the PRC national development plans that focus on the establishment of a comprehensive digital ecosystem in the country. In the PRC context, this is especially important due to its expanding disagreements with the US on technological issues. In its turn, India is keen on unlocking its 5G potential, although the share of its 5G connections is still relatively small[11]. India implements several socially, economically and commercially resourceful 5G-related programmes: the Digital India (2015), the Production Linked Incentive Scheme for Telecom and Networking Products (2021) and others. Interest in developing the 5G Internet is evident in other Asia-Pacific countries.

Second, which is different from the 5G Internet and which must be mentioned individually, the Metaverse is increasingly grasping attention of the PRC government and corporate sector. This is all the more important since China's approach to the Metaverse is ambiguous. On the one hand, non-fungible tokens (NFT), on which the Metaverse is technologically premised, are prohibited in the PRC (as they can be used as quasi-cryptocurrencies). On the other hand, the Metaverse-related grass-root activity is flourishing. To avoid problems with regulatory bodies, Chinese NFT platforms register as digital collectables, while their users must follow identity verification procedures. As of July 2022, according to China's National Press and Publication Administration, there were around 700 collectables in the PRC[12]. Even more revealingly, Chinese digital powerhouses, exemplified by Alibaba, Tencent and ByteDance, develop the Metaverse-related applications[13]. Lastly, Shanghai hosts the Annual World Artificial Intelligence Conference where discussions focus on innovative practices and products, including those relevant to the Metaverse[14].

Arguably, the PRC authorities clearly understand that the NFT will be a fundamental component, if not the backbone, of the economy of the XXI century. If so, they prefer to monitor the process rather than to dissociate itself from it. Revealingly, the PRC authorities aim to link the Metaverse-related topics with the digital renminbi that PRC has been developing since 2014[15]. In their turn, non-Chinese brands and companies that aim to explore the potential of the PRC market receive a clear signal: their interest is appreciated, but it is China rather than international market players that will set the parameters of the Metaverse-related activity in the country.

Lastly, apart from the PRC, the Metaverse looms all the larger in the priorities of the Asia-Pacific big companies. Examples include Sony's investment in the gaming company Fortnite[16], Samsung's virtual replicas of its physical stores, etc.[17] Major sport and cultural events develop interactive experience using the Metaverse instruments. For instance, China explores possibilities to organize expositions of its museums in the Metaverse[18], the Australian Open expands its Metaverse presence[19], the festival *It's the Ship* combines the offline and the Metaverse-related organization[20]. In the years to come, new examples will not take long to appear.

At the same time, the Metaverse activity is encountering serious difficulties across the Asia-Pacific region. Specifically, that data localization laws differ significantly. While China, Indonesia and Vietnam adhere to a strict approach to data localization (all the data must be stored and processed within their national borders), other countries take comparatively liberal positions. More specifically, the Asia-Pacific region is between the American and the Chinese digital ecosystems, which increases politicization of digital field, including the Metaverse. As an advent of the Splinternet (the split Internet) cannot be totally excluded, the Metaverse-related activity will be seriously undermined.

In sum, interest in exploiting the potential of the Metaverse is increasing across the world and in the Asia-Pacific region as its part. Ample evidence suggests that this interest, although with inevitable fluctuations, will be long-term and sustainable.

The Metaverse: a Southeast Asian Perspective

The afore-discussed factors, namely, demanding consumers, rising interest in digital marketing instruments and increasing popularity of the Metaverse across the world, including the Asia-Pacific region, are behind the rise of Metaverse popularity in Southeast Asia.

Across the region, sentiments about the Metaverse are mostly positive. Surely, assessments vary, but "excited", "interested" and "hopeful" prevail[21]. Southeast Asian consumers expect mostly social, commercial and emotional feedback from the Metaverse. Socially, these expectations are a function of the COVID-19 pandemic, as lockdowns generated many digital solutions aimed to overcome physical barriers and, by extension, facilitate social interactions. Commercially, Southeast Asian consumers regard the Metaverse in the context of facilitating purchases and sales (in the C2C market), as well as intensify other business exchanges. In fact, the Metaverse allows retailers to advertise and sell their products without having to pay rent for physical space and hire full-time and part-time staff. The example of Siam Piwat, a Thai retail giant that partnered with the digital company XSpring Digital, is a convincing case in point. Regarding the emotional dimension, the Metaverse is seen as a breathtaking next step in the evolution of the Internet. The "you compete for my best experience" mindset of Southeast Asian consumers resonates well with the possibilities presented by the Metaverse as an instrument to respond to ever-increasing customer expectations.

In Southeast Asia, the Metaverse is closely linked to e-sport, as instrumentally, mixed reality, virtual reality and augmented reality can respond to the gaming mindset. Several points are noteworthy in this regard.

The market scale and expected revenues matter a lot. According to available estimates, 60% of Southeast Asian gamers are connected with e-sports, while e-sport community tournaments are increasing in popularity across the region. Six Southeast Asian countries, namely, Singapore, Malaysia, Indonesia, Thailand, Vietnam and the Philippines, accounted for 270 million gamers and generated five billion dollars of revenue in 2022. Between 2020 and 2025, the Southeast Asian gaming market is expected to demonstrate 8.6% of compound annual growth rate[22]. No less significantly, the representation factor plays an important role, as e-sport was included in the agenda of many resonant events like 2018 Asian Games, 2019 and 2021 Southeast Asian Olympic Games. In these circumstances, it is hardly surprising that Southeast Asian brands and celebrities use e-sport to their best advantage, while cooperation between video game IP holders and traditional entertainment companies is constantly expanding.

Assessing prospects of the Metaverse, the following factors must be taken into account. The governemnts of Southeast Asian states fully realize the potential of the Metaverse and the Metaverse-related technologies for stimulating economic development and increasing commercial competitiveness. This is substantiated by practical steps. The SRV Ministry of Information and Communication launched Vietnam Game Development Alliance. Malaysia’s Ministry of Youth and Sports develops E-sport Integrated Hub. Higher education institutions across Southeast Asia offer educational programs and projects with a focus on e-sport and e-sport management. Finally, Southeast Asian gamers are popular on relevant online resources. In 2021, Thailand, the Philippines and Indonesia were among the top ten twitting about video games[23]. In light of this, the assessment that the Metaverse and the Metaverse-related products have bight future in Southeast Asia seems to be realistic.

Nevertheless, any Metaverse-related assessments must include its Southeast Asia-specific limitations and challenges. To start, it is unclear how the Metaverse will affect enterprises. While big technologically advanced companies will integrate in the Metaverse relatively easily, MSME will almost certainly find it challenging. This factor is all the more relevant since many Southeast Asian MSME are encountering difficulties while undergoing digital transformation. For many MSME, digital transformation is a pressing task, as they need to improve their customer services, build connectivity and find ecosystem partners, as well as manage operating costs. In reality, however, these businesses are facing challenges while creating a complex and multi-directional ecosystem that focuses on customer engagement. Needless to say that the Metaverse may well add to MSME current grievances.

Another challenge relates to sustainability. The ongoing digital transformation of enterprises, global value chains and industries, as well as data center development, exerts considerable pressure on the environment. The Metaverse has yet to specify on its role in supporting the sustainability narrative. For Southeast Asia, this factor is of special significance, as environmental protection has been a pressing issue across the region for decades.

The last challenge, although not necessarily Southeast Asia-specific, relates to regulatory aspects of the Metaverse-related activity. Non-fungible tokens, data localization, fintech transactions and other processes and areas, with direct and indirect relevance to the Metaverse, are regulated differently across Southeast Asia. Legal implications for data localization generated by the US-China technological contradictions (for instance, the PRC's increasing focus on strict data localization rules) undermine the Metaverse prospects. Lack of clarity on how to adopt the Metaverse-related products to ASEAN-led initiatives of economic regionalism (it is a timely task due to an increase in trade in services as a sustainable global trade and no clearly defined line between goods and services in the digital field) is another problem that must be addressed and eventually resolved by legal instruments.

In sum, Southeast Asia is an area where prospects for the Metaverse development are exciting, as strong and sustainable interest is in place and is likely to increase. Producers, consumers and government agencies see compelling reasons to exploit this niche. At the same time, the commercial potential of the Metaverse, at least for the Southeast Asian corporate sector, should not be exaggerated, as much work needs to be done to make these assessments truly realistic.

Conclusion

The analysis of the current state and the prospects of the Metaverse in Southeast Asia leads to several broad assessments. The ASEAN Economic Community will continue to develop the consumption agenda in ASEAN member states. At the same time, for the association to focus on this task without an intra-ASEAN component – consumption just for the sake of consumption per se – is not enough. It is necessary to devise and develop intra-ASEAN products, no matter goods, a services or technologies. Arguably, it is problematic due to many reasons. If so, the consumption agenda, even stimulated by ASEAN-led digital initiatives, as well as by activities of regional e-commerce powerhouses, may be of limited use to ASEAN prospective plans.

At present, the Metaverse is gradually becoming a major component of industrial and commercial processes across the world. Although many questions remain in place and some of them loom all the larger in the priorities of the government and the corporate sector of different countries, nevertheless, the Metaverse has high chances to reorganize companies, industries, national economies and even large-scale initiatives of economic regionalism.

The latter factor has direct relevance to ASEAN and its member states. Arguably, the Metaverse market, as well as various Metaverse-related instruments, will develop actively in Southeast Asia, as the governments and companies of Southeast Asian states see the Metaverse favorably. At the same time, obstacles, both ASEAN and non-ASEAN-related, will remain serious. To successfully overcome them, the association will need to revise or even to reorganize its major initiatives of economic regionalism, which will take much time and effort under any scenario.

ИНФОРМАЦИЯ ОБ АВТОРЕ

КАНАЕВ Евгений Александрович, доктор исторических наук, ведущий научный сотрудник ЦАТИ, Национальный исследовательский институт мировой экономики и международных отношений имени Е.М. Примакова РАН, Москва, Россия

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INFORMATION ABOUT THE AUTHOR

Evgeny A. KANAEV, DSc (History), Leading Researcher, Center for Asia-Pacific Studies, Primakov Institute of World Economy and International Relations (IMEMO RAS), Moscow, Russia

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