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ASEAN-RUSSIA COOPERATION: THE DIGITAL DIMENSION

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Abstract: The paper gives insights into the potential of ASEAN-Russia dialogue in the digital area. Starting from an outline of benefits and disadvantages the Fourth Industrial Revolution brings ASEAN, the author proceeds with exploring digital support that the association gives its multilateral economic initiatives, as well as ASEAN's efforts to intensify digital cooperation as a self-sufficient direction across Southeast Asia. Finally, the paper assesses directions and measures that can strengthen ASEAN-Russia ties. Although extant research on ASEAN-Russia dialogue reveals the extent of progress and remaining problems, as well as defines major substantive issues and areas with true potential, mainstream views on its strategic directions remain stagnant in the paradigm of energy, arms transfers, agriculture and space exploration. The academic value of the article is that it takes a step forward in specifying and assessing real possibilities of ASEAN-Russia interaction offered by the increasing digitalization. In the author's opinion, as in the present international circumstances the room for maneuver in ASEAN-Russia relations is narrowing, an emphasis on instrumental components of cooperation, among which cybersecurity-related measures are of crucial importance, may be rewarding.

Keywords: ASEAN, Russia, Fourth Industrial Revolution, digital regionalism, cooperation, digital competences, cybersecurity

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ЦИФРОВОЕ ИЗМЕРЕНИЕ СОТРУДНИЧЕСТВА АСЕАН И РОССИИ

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Аннотация: В работе проводится анализ потенциала диалога между АСЕАН и Россией в сфере цифрового сотрудничества. Определив выгоды и факторы уязвимости АСЕАН в результате Четвертой промышленной революции, автор рассматривает меры, посредством которых Ассоциация осуществляет цифровую поддержку своих многосторонних экономических инициатив, равно как усиления АСЕАН по активизации цифрового сотрудничества как самоценного направления на пространстве Юго-Восточной Азии. В конце дается оценка направлений и мер, реализация которых может укрепить связи между АСЕАН и Россией. Хотя множество исследований сотрудничества между АСЕАН и Россией выявляют степень достигнутого сторонами успеха и остающиеся проблемы, равно как определяют основные содержательные вопросы и перспективные сферы, преобладающие взгляды на его стратегические направления не выходят за рамки энергетики, поставок оружия, сельского хозяйства и освоения космоса. Научная ценность статьи такова, что она определяет реальные возможности взаимодействия между АСЕАН и Россией в условиях нарастающей глобализации и дает им оценку. С точки зрения автора, поскольку в современных международных условиях пространство для маневра в отношениях АСЕАН и России сужается, акцент на инструментальной составляющей сотрудничества, в первую очередь, мерах, связанных с кибербезопасностью, может принести хороший результат.

Ключевые слова: АСЕАН, Россия, Четвертая промышленная революция, цифровой регионализм, сотрудничество, цифровые компетенции, кибербезопасность

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Although much has been said and written about ASEAN-Russia relations, their evolution, state and prospects, progress is still slow. Most discouragingly, the present realities incentivize both Russia and ASEAN to concentrate on priorities not directly connected to the other partner: Russia is busy resolving the Ukraine issue, while the association focuses on its key Asia-Pacific multilateral economic project – the Regional Comprehensive Economic Partnership. As a result, the remaining gap between ASEAN and Russia, which has always been huge, is likely to further broaden.

In the present circumstances, available options to develop cooperation are few at best. Nevertheless, it does not mean that they are completely absent. Approaching the task from an ASEAN perspective, the emphasis that the association places on developing the digital niche of its economic regionalism is worthy of note. Part of this task includes obtaining instruments that ASEAN and its member states still lack. This is where the association may find cooperation with Russia promising and rewarding.

The Fourth Industrial Revolution and Its Implications for ASEAN

The Fourth Industrial Revolution (FIR) is a trendy buzzword penetrating virtually all present-day academic and applied science branches. For the first time, its conceptual foundation was presented (as the 4.0. Industry) at the Hannover Messe by the German experts Henning Kagermann, Wolf Dieter Lukas, and Wolfgang Wahlster. Later on, the FIR's conceptualization was elaborated on by Klaus Schwab and other scholars¹. In the practical realm, in 2012, the German Government endorsed the program Industrie 4.0. as part of the High Tech 2020 Strategy with the emphasis upon the Internet of Things (IoTs) and “smart manufacturing”. Other countries followed suit. This is exemplified by Made in China 2025 (the PRC), Smart Factory (the Netherlands), Usine du Futur (France), Future of Making Things (Great Britain), Fabbrica del Futuro (Italy), Made Different (Belgium) etc. In 2015, the Russian Federation endorsed the National Technological Initiative (NTI) as a pioneering effort. It was subgrouped in four directions: AeroNet (pilotless aviation systems), AvtoNet (pilotless ground transportation), MariNet (digital navigation and pilotless sea vessels), and NeuroNet (digital instruments and neurotechnologies to treat diseases like Alzheimer's and Parkinson's).

The discussion on the Fourth Industrial revolution cannot be divorced from the implications it generates, the key of which are outlined below. First, the Internet becomes part of key processes in the management

of enterprises, global value chains (GVCs) and critically important sectors like energy, infrastructure, and agriculture. In other words, while previous technological systems were feedback control systems, now they are open-loop ones. As a result, the remote control – and who maintains it – becomes a critical vulnerability factor. If so, for many countries, the maintenance of digital sovereignty understood as the capacity of innovation and its ability to shape and enforce legislation in the digital environment and promote values and principles in areas such as data protection, cyber security, and ethnically designed artificial intelligence is the uppermost priority.

Second, the Fourth Industrial Revolution magnifies the scale factor. As digitalization penetrates both production and consumption, countries that export their industrial capacities and electronic marketplace platforms abroad enjoy the competitive advantage. This can be best exemplified by China's mega-strategy the Belt and Road Initiative (BRI). The construction of infrastructure and the subsequent establishment of supply-production chains and transactions in renminbi along the BRI economic corridors, coupled with the influential Chinese diasporas and the PRC's generous money injections in its soft power in the BRI partner countries, increases the PRC's possibilities to shape the parameters of industrial cooperation to eventually set its standards. Simultaneously, Chinese marketplaces expand their external activities linking foreign consumers to Chinese producers in both B2C (business-to-customer) and B2B (business-to-business) sectors. Chinese electronic payment systems gain popularity all over the world. This enables the PRC to expand and solidify its economic reach, capturing a broad range of new and diversified options.

Third, new social challenges are imminent, the key relating to the middle-class transformation. This is not only about prospects for widening income gaps and the irrelevance of many professions. The distribution of socially-provocative content may well be a substitute for a highly qualified and socially meaningful activity. An essential social implication concerns a future evolution of capitalism. Possibly, new dividing lines may appear, this time segregating people into those allowed to shape social solutions through their digital credentials and those who are not. While the former will use digitalization to their best advantage, the latter will be deprived of digitalization-related benefits.

Concerning the aftereffects of the Fourth Industrial Revolution for ASEAN, arguably, the presently digitalizing world presents the association with considerable challenges. As a result, a vicious circle appears: while the association may obtain tactical benefits, strategically, it is doomed to lose.

The expected advantages are a product of several factors. Prospects for self-employment in Southeast Asia's countries are relatively optimistic. The commercial sector will be a beneficiary, as costs of many businesses can be reduced. Digitalizing their activity, SMEs, and individual entrepreneurs will have very low, if any at all, start-up costs. Manufacturing companies can obtain extra advantages by building up direct links between brands and customers. For brand producers, this obviates the need to invest in brick-and-mortar infrastructure and share revenues with local retailers while maintaining complete control of the sales channels.

No less importantly, digital instruments enable ASEAN countries to forecast natural disasters to relieve their consequences effectively. As Southeast Asia is a seismic-prone area, natural disasters of all sorts are a common occurrence there. Technologically advanced instruments of radiolocation and survival equipment allow performing search and rescue operations. Simultaneously, unmanned drones can provide casualty victims with food, clean water, and medical supplies in hard-to-reach areas.

Nevertheless, as opposed to short-term aftereffects, long-term strategic implications are likely to be disturbing. The remaining huge infrastructural gaps between the ASEAN states, concerning, for instance, possibilities to operate region-wide e-commerce platforms and resolve the last-mile delivery problem, undermine rather than substantiate ASEAN's efforts to establish the ASEAN Economic Community. A de-industrialization of Southeast Asia's "tigers" and "dragons" is likely owing to prospects for reshoring and nearshoring of manufacture units. Assuming that the 3D printing can markedly cheapen the production of additional components near the industrial "nucleus", competitive advantages of Southeast Asian countries as providers of cheap and relatively qualified person-power will decrease.

The context in which ASEAN forges its response to the Fourth Industrial Revolution's side effects includes mounting problems in its relations with extra-regional partners. The most representative example is the People's Republic of China, whose Digital Silk Road, as part of the mega-strategy the Belt and Road Initiative, aims to set the standards of cooperation in the digital sector from the perspective of "hard" and "soft" infrastructure. In the former respect, the trans-national infrastructure's construction by the PRC is logically linked with its digital support no less logically provided by Chinese companies. In the latter, of note is China's focus on facilitating operational activity of Chinese companies by 5G-related possibilities. In contrast, the Indo-Pacific Economic Framework, signed in May 2022, offers its participants possibilities for cooperation in the digital

sphere few, if any at all, practical incentives like market access². As the IPEF is part of the US-led initiative Indo-Pacific region that makes no secret of its anti-China aims, ASEAN and its member states become an area of Sino-US unfolding digital competition.

In sum, digitalization-related challenges are manifold, and the ASEAN member states should address them collectively rather than on an individual basis. To remain relevant in the present-day highly competitive world, the association has to take counter-measures. Among them, making Southeast Asia a digitally attractive production and business area across which active and diversified cooperation can be promoted is crucially important.

ASEAN-Led Regionalism: a Digital Perspective

Undoubtedly, ASEAN's impressive multilateral economic projects earn praise. Although the ASEAN Economic Community is not free from shortcomings, global investors regard Southeast Asia as an area that has at least selected components of a single market or a single production base. The Regional Comprehensive Economic Partnership, signed amidst the COVID-19 pandemic, is of symbolic value³. It demonstrates ASEAN's and its partners' commitments to open trade, which stands in contrast to a rise of protectionism in other regions. Those factors combined suggest that ASEAN grasps the specificity of the present international context.

The digital dimension of ASEAN's policy is part of this vision. The association started its digital journey in the early 2000s, but the process gained momentum after 2015 due to several reasons. Firstly, to achieve the goals outlined in the ASEAN Economic Community Blueprint 2025 is problematic without digital support of ASEAN-led multilateral projects. Secondly, this support, as well as the development of digital initiatives not directly linked to the already operational ASEAN-centric economic regionalism, is ASEAN's response to China's Digital Silk Road as part of the BRI. Thirdly, the association realizes that high vulnerability of its critical infrastructure leads to events similar to simultaneous power cuts in major cities of Venezuela, which did not pass unnoticed in Southeast Asia⁴.

Motivated by those factors, ASEAN launched numerous digital initiatives. Among the most important, ASEAN Agreement on Electronic Commerce, ASEAN Digital Integration Framework Action Plan (DIFAP) 2019-2025 and ASEAN Digital Masterplan 2025 are of special note. Although they are laudable attempts (as, at least, they address a very important topic), many questions remain open-ended. For instance, does the associa-

tion aim to establish a digital single market and production base, and how does it correlate with the AEC pillars? How should ASEAN digitally upgrade its already operational initiatives, like, for instance, AFTA? How should ASEAN and its member states handle issues relating to taxation and social protection of employees as platform economy practices gain traction? How often will ASEAN have to amend the provisions of its initiatives taking into account an exponential increase in necessary effort and paperwork? As long as those questions remain open-ended, the AEC-related success is far from guaranteed.

At the grass-root level, the on-going digitalization of global value chains (GVC) in Southeast Asia is worthy of note. Currently, a parallel development of the producer GVC (based on industrial capital, the scale effect, R&D etc.) and the consumer GVC (based on trade capital, the assortment effect, marketing etc.) is taking place. Southeast Asian GVC are constantly diversifying owing to the aftereffects of the US-China trade contradictions, changing consumer demands (related mostly to a traceability of products, personification, convenience and fast delivery) and the evolving “Shopper Asia” paradigm. In those circumstances, integrated solutions rather than products increasingly matter. This is exemplified by an emphasis of developing delivery fleet in strategies implemented by major Southeast Asian marketplaces – Alibaba, JD.com and others, – as well as by Southeast Asian startups like Go-Jek, Ninja-Van, Deliveroo and aCommerce⁵. A timely step for companies is to adopt the direct-to-customer approach by establishing “peer value chains” and integrated planning and GVC-monitoring systems. Although those tasks increase in urgency, ample evidence suggests that very few companies from ASEAN states are ready to undertake them.

Predictably, the COVID-19 pandemic has accelerated digitalization-related trends. Some them include to e-commerce logistics. Although the trans-national component of e-commerce across Southeast Asia is still underdeveloped, the years 2020-2022 saw a rising demand of Southeast Asian consumers for goods from Japan and South Korea⁶. This adds an extra impetus to digital instruments of business activity in and beyond Southeast Asia, namely, an integration of e-marketplaces and logistic companies, as well as a digitally-enabled joint logistic system that can be used by global and local operators.

Strong interest to developing data centers in Southeast Asia is another noticeable trend. An increasing digitalization of business practices makes issues relevant to data centers an important component of business planning. Southeast Asia has an advantage of scale owing to its population

growth and urbanization. Southeast Asia is a region with bright commercial prospects, as many companies operate there. Most importantly, the COVID-19 pandemic has resulted in shifting many workflows processes online. Logically, the importance of digital infrastructure in Southeast Asia has increased.

Remarkably, Singapore is the top data center in the Asia-Pacific region, ahead of Hong Kong, Seoul, Tokyo, Shanghai and Beijing⁷. Singapore's advantages are obvious, as it has well-developed infrastructure and an access to fiber cables, well-trained person-power and a business-friendly regulation (in Singapore, the GST rate for international services and exports is zero). At the same time, a limited area and, by implication, prohibitively high prices for commercial real estate, does not allow Singapore to build many data centers.

Although Southeast Asia looms all the larger as an area for establishing data centers, several obstacles are in place. Ideally, data centers should be located in regions with cold climate while Southeast Asia's heat coupled with deficiencies of outdated cooling systems makes operating data centers highly expensive. More than that, according to available estimates, over 95% of data centers in Southeast Asia use environmentally-unfriendly air-based cooling⁸. Unless those shortcomings are addressed and eventually eliminated, Southeast Asia's prospects as an attractive global data center hub will be undermined.

At the same time, another point matters. Digital opportunities have an important side effect, namely, an exponential increase of digital-related threats. If so, cybersecurity looms all the larger in the priorities of ASEAN and its member states, including their government and corporate sectors. This is a potentially promising area of cooperation between ASEAN and the Russian Federation.

A Russian Perspective

The economic foundation of ASEAN-Russia relations has never been firm, and elevating the ASEAN-Russia cooperation to the level of Strategic Partnership has not given it an extra impetus. For those relations to increase momentum, three basic factors are necessary. First, Russia-ASEAN dialogue must move beyond big companies and embrace MSMEs. Second, Russian and Southeast Asian companies must increase their physical presence in each other's markets. Lastly but very importantly, the parties should provide their projects, however modest they may be, with digital support. Arguably, the latter direction may be potentially rewarding.

Looking from an ASEAN perspective, increasing digital cooperation with Russia allows the association to sustain its technological independence. Considering the aftereffects of the Digital Silk Road and the Indo-Pacific Economic Framework, for ASEAN to implement truly independent technological policy becomes a matter of survival as a self-sufficient international actor. In these circumstances, it is important that Russia offers its partners integrated solutions based upon R&D produced and supervised in cooperation with its partners rather than “black-box” products.

For the Russian Federation, cooperation with ASEAN in the digital sphere has no less apparent advantages. In 2018, the Russian military-industrial complex enterprises were tasked to reach 50% of its production in the civil sector to maintain a stable base and operate independently from the state budget⁹. This logic means an increase in the share of technologically-advanced production in Russia’s overall export. To develop effective technological platforms, Russia needs a scale factor, which neither its domestic market nor the EAEU combined market can provide. Consequently, ASEAN, with its 661,8 (as of 2020) million population¹⁰, becomes a valuable partner. Perhaps most importantly, Russia finally has come to realize that it must be a self-sufficient international actor with strong competitive advantages rather than cooperate on terms offered by other actors (whose priorities, as the experience of Russia-EU and Russia-US relations suggests, fundamentally differ from those of the Russian Federation).

From an instrumental perspective, Russia and ASEAN can cooperate along several directions. One of them relates to engineering education. As engineering technologies change every three years, the fundamental STEM (science, technology, engineering, and mathematics) base of Russian technical universities allows them to remain on their cutting edge. As present and future breakthrough technologies and innovative solutions are interdisciplinary, Russian engineering universities prioritize a systemic approach to technical education with a broad multi-disciplinary, trans-disciplinary and interdisciplinary focus. Arguably or not, this approach was behind Russian programmers' success, who regularly win the ACM International Collegiate Programming Contest, a top-level competition among engineering students¹¹.

Arguably, the most resourceful instrument is Russia’s ready-to-offer assets. Among them, the Russian IT company Kaspersky Lab deserves mentioning. The company has offices in several Southeast Asian countries, including Malaysia, Singapore, Indonesia, and the Philippines. Malaysia and Singapore are bridges to the rest of Southeast Asia. These offices serve

as command centers for developing IT infrastructure in Malaysia, Singapore, Indonesia, Vietnam, Thailand, and the Philippines.

Malaysia is a particular case in point. Kaspersky Lab's office in Malaysia has a demonstration laboratory that operates as a training center for the IT personnel and its partners. Kaspersky's clients in Malaysia include both corporate and government sectors. The company has teamed up with Malaysian Ministry of Education and Ministry of Defence for a long time. More than that, it is a member of the International Multilateral Partnership against Cyber Threats (IMPACT) set up by the Malaysian government.

The example of Singapore also deserves consideration. As one of the most technologically advanced countries globally, Singapore is home to the INTERPOL Global Complex for Innovation (IGCI), with which Kaspersky Lab cooperates in identifying and preventing cyber threats. It is worthy of note that the Kaspersky Lab dissociates its activity from any politicization that goes beyond combating cyber security crimes¹².

Kaspersky Lab has also launched a specialized website that monitors IT developments in Southeast Asian countries. Focusing on Malaysia, Indonesia, Thailand, Singapore, and the Philippines, its activity aims to promote Russian IT products in the Asia-Pacific markets.

Although Kaspersky Lab is the prime example, it is just part of Russia's assets. Among other Russian companies operating in Southeast Asia with a focus on cyber security, Group IB deserves mentioning. In July 2019, the company established its headquarters in Singapore¹³. Apart from distributing cutting-edge technologies in the cyber security sphere, the company cooperates with local universities in person-power training. More than that, Group IB develops partnerships with companies from Vietnam and Thailand and collaborates with the Singapore-based Interpol Digital Crime Center. Another example of Russian cyber security activity in Southeast Asia is presented by the data leak protection company Infowatch in Malaysia and Indonesia.

Apart from the afore-mentioned companies, the e-commerce platform "RSTrade" that embraces more than 81 thousand companies¹⁴ is of special note. Other examples include the specialized service Pick for employment opportunities, the company Vostok VR whose focus area is virtual reality etc.

Notwithstanding those factors, several limitations may downplay the influence of digital cooperation with Russia in ASEAN's priorities. Most importantly, Russia cannot provide the ASEAN states with the "hardware" component of the digital resilience understood as the construction of infrastructure objects to further supplement them with the digital software. At

the present point in time, Russia can provide its ASEAN partners with partial cost-effective solutions along with a relatively narrow range of spheres – mostly in artificial intelligence, cyber security, and data cloud storage.

Furthermore, as long as Russia remains under international sanctions with no end in sight, the spectrum of its economic maneuver is bound to narrow. Besides, Russia's reputation is tarnished by media reports of its intrusions in the internal affairs of other states, including by means of digital instruments. Apart from it, researchers point out that Russia has resorted to hybrid warfare since 2014, with non-military methods and approaches, including cyber espionage¹⁵.

No less importantly, in a broad international context, cooperation with Russia is still not a self-sufficient direction of ASEAN's policy. Despite regular solemn declarations, the instrumental component of ASEAN-Russia cooperation remains as underdeveloped as it used to be. As a result, the parties regard each other as a secondary priority at best.

Nevertheless, the Fourth Industrial Revolution will bring to the world challenges and opportunities that only powers with effective instruments can successfully deal with. Concomitant with this outlook are prospects for digital cooperation between ASEAN and the Russian Federation given the latter possesses valuable digital assets. If even modestly successful, it will bring about results of a broader scope and higher dynamics than they have lacked so far.

Conclusion

Practice has amply demonstrated that ASEAN and Russia are partners that are far apart from each other, no matter how their official relations are referred to: the Full Dialogue Partnership, the Strategic Partnership or anything else. In those circumstances, an instrumental approach is necessary, as the parties should identify priority areas based on coordinating their prospective plans.

Performing this task, Russia should take the initiative, as the association and its member states have plenty of alternative options. This is a function of the “down-top” vector, as, for instance, Chinese, Japanese or Korean companies have been working in Southeast Asia for a long time and have created the necessary scale effect. In contrast, as the scale factor enormously increases in significance, Russia's position is not advantageous.

In those circumstances, Russia can offer its Southeast Asian partners only instrumental directions of cooperation where Moscow has special

competitive advantages. Among the latter, considering ASEAN's interest in developing its digital competences, cyber security-related projects may be of special interest to the association. Nevertheless, as digital-related issues are highly sensitive, future progress, if any at all, will inevitably be slow and gradual.

ИНФОРМАЦИЯ ОБ АВТОРЕ

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