THE FUTURE IS HERE: TECHNOLOGY TRENDS ARE SHAPING NOW

Hanan Ismail, Ph.D., co-founder, Garbalizer, Lebanon

That logistics services in the field of business as a concept based on managing the flow and storage of goods, services and information efficiently and effectively from the stage of the raw material to the stage of final consumption in a way that achieves customer satisfaction and increases the profitability of the product. It has facilitated its application in the processes of vertical disintegration at the level of industry and the horizontal and vertical integration on the global scale, that is, it contributed to laying the foundations of the globalization of production and trade, and even in shaping the new pattern of the international division of labor.

The logistics system includes many activities: such as purchasing, storage, transportation, handling, packaging, customer service and scheduling of product requests, and perhaps the most important characteristic of managing these activities in the logistical framework is the necessity of coordination and integration between these activities, in order to provide products and customer services at the right time and place. In the case and in the desired manner, in order to support the competitive position of the organization and increase its profits.

Emerging technologies are changing the global logistics landscape. And the evidence is everywhere: logistics companies are exploring autonomous fleets and shutdowns, looking for big data for transportation management and predictive analytics. The start-up outsourcing firms are using a high-tech, low-asset business model. Online brokerage platforms provide real-time information from the moment of receipt to delivery.

How will these emerging technologies and evolving business models be modified and used in developing countries?

Think about the three rapidly developing trends, whether in logistics or other areas, the omnibus approach (unified), the participatory economy (the sharing economy), and big data. These trends provide the opportunity for the emerging market economy to leap forward rapidly on the development path. It is useful to analyze why these trends are important to developing countries and how they are being modified.

The logistics industry amounts to \$ 4.3 trillion in various countries of the world and supports the physical movement of goods within and across borders, and a World Bank study released Friday in its periodic bulletin said, logistics services include a range of activities, including transportation, storage, mediation, express delivery, terminal operations and even data and information management. The degree of efficiency of transporting goods through these systems to their final destinations is a major factor in providing commercial opportunities to the country. Caroline Freund, Director of Macroeconomics, Global Trade and Investment at the World Bank Group, notes that "logistics services represent the backbone of global trade, and with the increasing spread of supply chains globally, the quality of logistics services in a country enables it to determine its potential participation in the global economy. "High-income countries, especially in Western Europe, continue to consistently emerge as global leaders in the field of logistics services. In fact, high-income countries on average scored 48% better on the

logistics performance index than low-income countries, among the 30 best performing countries."

The World Bank Group's Center for Infrastructure and Urban Development in Singapore, which work across all of the Group's global practice sectors, conduct these analyzes to help us determine how development trends are affecting the region. In this case, the Learning Lab examined how emerging technologies and evolving business models could have a transformative impact on logistics systems, not only in the economies of developed countries such as Singapore, but also in developing countries in the East Asia and Pacific region and other regions.

Omni channel

With the growing use of the internet and smartphones, shoppers in developed countries have started to increasingly use physical and internet channels to browse various goods, order their purchase, receive them, and return them.

And the Omni channel approach enables the modern shopper to have a seamless shopping journey: anytime, anywhere, seamlessly from device to device. This approach helps to move inventory at a faster pace, saves sales, allows inventory to be shown across various channels, and encourages the consumer to increase his spending by between 15% and 30% compared to the traditional shopper. With the growing commercial justification for retailers to switch to the omnichannel approach, logistics companies strive to provide services anywhere, anytime.

But omnichannel logistics will need effective management to avoid increasing traffic congestion in many developing country cities. While omnichannel may mean allowing in-store virtual reality or a seamless transition from the mall to the airport, it may also mean (in some developing countries) locker services such as those provided by Popbox and Boss in Indonesia.

These lockers, which look like vending machines, function as a self-service location for picking up and returning shipments. This service allows for greater delivery flexibility than traditional logistics companies. It also reduces overcrowding by reducing the number of deliveries and by limiting delivery times during off-peak hours.

Treasury services can be transformative, especially in countries where the last stage - delivery at the door - is the most difficult. Indonesia provides a good example of this pattern

The sharing economy

The sharing economy is already having a transformative effect in many sectors, including logistics. In recent years, we have seen the removal of assets by logistics companies and the emergence of logistics platforms that allow sharing and standardizing services.

Today, a logistics company may operate without owning a single truck or warehouse. For example, companies like Flex connect businesses that need flexible storage capabilities with warehouse owners who have those spaces. Flexport is a shipping company that brings together several carriers on a single platform that allows shippers to make adjustments to the relevant variables until they reach the appropriate adaptation for the shipping process. Shipwire provides a logistic marketplace for value-added services that allows companies to send inventory to any warehouse and store it until requested, by providing integrated order entry systems that organize the receipt and delivery of goods.

By using shared platforms, a sharing economy can match supply and demand at a fraction of the cost that traditional intermediaries face. This increases the efficiency of freight operations and reduces their costs. There is a sharp increase in demand for logistics services and platforms that connect suppliers and consumers, taking advantage of the increased ability to reduce costs.

This concept can be particularly useful in countries with fragmented logistics systems, such as Vietnam, where local players such as AHMOV aim to address the severe fragmentation and inefficiency of the logistics systems in that country.

Shared logistics platforms can also have a transformative effect, achieving economies of scale and efficiency in countries such as Indonesia and the Philippines that have large rural areas and many remote communities.

Big data

Companies in every sector are leveraging big data to generate insights based on accurate data in their decision-making process. Big data enables identification of bottlenecks and opportunities for interventions. In the realm of logistics, big data provides solutions to a wide variety of problems, from short-term and real-time path optimization to strategic network planning, which is the prediction of long-term demand for transportation.

Nowadays, the data provided by GPS trackers is being used to understand bottlenecks. Smart containers allow companies to offer value-added services such as cargo insurance; Monitor the status of goods in transit (use of route identification and cargo tracking capabilities); Use predictive analytics to respond smarter and faster to meet extremely short delivery time.

In Southeast Asia, taxi cab company data provides access to heat maps to help policy-makers find solutions to congestion issues. In Cambodia and Myanmar, Thailand-based Drvr is using big data to solve the fuel theft issue. Truck drivers in these two countries often stop in the middle of the journey to drain fuel from their vehicles for personal use, prompting logistics companies to cut their drivers' salaries. Drvr uses big data to track and uncover these trucks, which helps prevent thefts and reward drivers with integrity.

The increased use of cell phones - especially in markets like Myanmar which is experiencing a jump in internet connectivity - will motivate more of these companies to take advantage of logistical data.

Looking ahead, scenarios for achieving greater impact through the use of logistical technologies are surrounded by great ambiguity. Many trends are not yet mature, but these trends may have a transformational effect in developing countries. Their adjustment could help emerging markets make rapid progress towards strengthening their economies and moving towards a much higher level of economic development.

References

- 1. Dr. Mohamed Hassan, Publishing and Distribution Department / Dr. Mohamed Hassan. University House, Alexandria, Egypt, 2009.
- 2. Official Zaky Qaryaqas, Abdul Ghaffar Hanafi, Modern Administration in the Department of Supply and Stock / Zaky Qaryaqas, Abdul Ghaffar Hanafi. University Youth Foundation. Alexandria, Egypt, 2004

7.

- 3. Ronaldo H. Palo, Logistics Department: Planning, Organizing and Controlling the Supply Chain / Ronaldo H. Palo. Translate, Turki Ibrahim Sultan, Osama Ahmed Muslim. House of Mars, Riyadh: Saudi Arabia, 2006
- 4. Abdul Sattar Muhammad Al-Ali, Modern Department of Stores and Procurement: Supply Chain Management / Abdul Sattar Muhammad Al-Ali. First edition. Wael Publishing House, Amman, Jordan, 2018
- 5. Abdel Ghaffar Hanafi, Department of Materials and Supply: Procurement and Stores / Abdel Ghaffar Hanafi. Part One. The HouseUniversity Youth, 2018
- 6. Abdel Qader Fathy Lasheen, Modern Concepts in the Management of Transport and Logistics Services / Abdel Qader Fathy Lasheen. The Organization The Arab Administrative Development, Research and Studies, Egypt, 2017
- 7. Obeid Ali Ahmed Al-Hijazi, Logistic as an alternative to the comparative advantage / Obeid Ali Ahmed Al-Hijazi. The knowledge facility, Beirut, 2018
- 8. Muhammad Abd Al-Alim Saber, Logistics Department / Muhammad Abd Al-Alim Saber. First Edition. The Collective Thought House, Alexandria: Egypt, 2019

БУДУЩЕЕ ЗДЕСЬ: ТЕХНОЛОГИЧЕСКИЕ ТЕНДЕНЦИИ ФОРМИРУЮТСЯ ПРЯМО СЕЙЧАС

Подумайте о трех быстро развивающихся тенденциях, будь то в логистике или других областях: комплексный подход, экономика совместного использования и большие данные. Эти тенденции предоставляют возможность развивающейся рыночной экономике быстро продвинуться по пути развития.

Новые технологии меняют глобальный логистический ландшафт. И доказательства есть повсюду: логистические компании изучают автономные автопарки и простои, ищут большие данные для управления транспортировкой и прогнозной аналитики. Новые аутсорсинговые фирмы используют высокотехнологичную бизнес-модель с низким уровнем активов. Онлайн-брокерские платформы предоставляют информацию в режиме реального времени с момента получения до доставки. Министерство образования Республики Беларусь Полоцкий государственный университет

УСТОЙЧИВОЕ РАЗВИТИЕ ЭКОНОМИКИ: МЕЖДУНАРОДНЫЕ И НАЦИОНАЛЬНЫЕ АСПЕКТЫ

Электронный сборник статей IV Международной научно-практической online-конференции

(Новополоцк, 26 ноября 2020 г.)

Текстовое электронное издание

Новополоцк Полоцкий государственный университет 2020 1 – дополнительный титульный экран – сведения об издании

УДК 338.2(082)

Устойчивое развитие экономики: международные и национальные аспекты [Электронный ресурс] : электронный сборник статей IV Международной научно-практической online-конференции, Новополоцк, 26 ноября 2020 г. / Полоцкий государственный университет. — Новополоцк, 2020. — 1 электрон. опт. диск (CD-ROM).

Впервые материалы конференции «Устойчивое развитие экономики: международные и национальные аспекты» были изданы в 2012 году (печатное издание).

Рассмотрены демографические и миграционные процессы в контексте устойчивого развития экономики; обозначены теоретические основы, практические аспекты управления человеческими ресурсами; выявлены и систематизированы драйверы инклюзивного экономического роста в Беларуси и за рубежом; раскрыты актуальные финансовые и экономические аспекты развития отраслей; приведены актуальные проблемы и тенденции развития логистики на современном этапе; отражены современные тенденции совершенствования финансово-кредитного механизма; освещены актуальные проблемы учета, анализа, аудита в контексте устойчивого развития национальных и зарубежных экономических систем; представлены новейшие научные исследования различных аспектов функционирования современных коммуникативных технологий.

Для научных работников, докторантов, аспирантов, действующих практиков и студентов учреждений высшего образования, изучающих экономические дисциплины.

Сборник включен в Государственный регистр информационного ресурса. Регистрационное свидетельство № 3061815625 om 23.05.2018.

№ госрегистрации 3061815625

ISBN 978-985-531-720-4

© Полоцкий государственный университет, 2020

2 – дополнительный титульный экран – производственно-технические сведения

Для создания электронного сборника статей IV Международной научно-практической online-конференции «Устойчивое развитие экономики: международные и национальные аспекты» использованы текстовый процессор Microsoft Word и программа Adobe Acrobat XI Pro для создания и просмотра электронных публикаций в формате PDF.

Компьютерный дизайн обложки *М. С. Мухоморовой* Технический редактор *С. Е. Рясова, А. А. Прадидова* Компьютерная верстка *Т. А. Дарьянова*

Подписано к использованию 27.01.2021. Объем издания: 18,8 Мб. Заказ 019.

Издатель и полиграфическое исполнение: учреждение образования «Полоцкий государственный университет».

Свидетельство о государственной регистрации издателя, изготовителя, распространителя печатных изданий № 1/305 от 22.04.2014.

ЛП № 02330/278 от 08.05.2014.

211440, ул. Блохина, 29, г. Новополоцк, Беларусь тел. 8 (0214) 53 05 72, e-mail: i.pozdnyakova@psu.by