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OP-ED

The future of cross-border trade: Building an A.I.-centric workforce

By Daniel Covarrubias Daniel Covarrubias CONTRIBUTING COLUMNIST

Cross-border trade and logistics operations are filled with repetitive and predictable sequences, presenting an ideal ground for applying artificial intelligence (A.I.).

The daily patterns driving cross-border trade and logistics provide A.I. opportunities to streamline operations, making them more efficient and less prone to error. However, leveraging A.I. to its full potential requires a critical need for developing specialized human resources. With the emergence of no-code applications, traditionally technical roles are now accessible to a broader range of individuals. This shift allows for upskilling within the sector, diversifying the talent pool, and ultimately driving innovation.

Recognizing the vast potential of A.I. in reshaping cross-border trade and logistics operations is the first step in this digital revolution. But to realize this potential, a new profile of professionals, not only technologically adept but also equipped with a holistic understanding of innovation, is required. These professionals need strong communication skills to articulate the impacts of A.I. technology effectively and to empathetically understand user needs. Their role is vital in bridging the divide between A.I.'s immense potential and its practical, on-ground implementation. Integrating A.I. into these sectors requires an equally

innovative approach to human resources—one that emphasizes upskilling and broadening access to A.I.-related roles.

Let's explore the potential for logistics and cross-border trade companies to harness A.I.'s capabilities and the critical role human resources play in this transformative process.

We will discuss three distinctive profiles of A.I. personnel—the A.I. Producers who develop and integrate A.I. into workflows, the A.I. Practitioners who execute and employ these A.I.-driven applications, and the A.I.-Aware Individuals who understand and appreciate A.I'.s role in our contemporary world. With their unique responsibilities and contributions, these roles represent the foundation of A.I. integration into logistics and cross-border trade operations. As we explore the possibilities of a more efficient, A.I.-driven future for logistics and cross-border trade firms, we highlight effective strategies for training, identifying, and upskilling these A.I. specialists through real-world examples.

The A.I. Producers: Building blocks of an A.I.-driven future

The A.I. Producers will be the driving force behind the ongoing A.I. revolution in the field of logistics and cross-border trade. Made up of highly skilled developers, engineers, and data scientists, A.I. Producers will be primarily responsible for conceptualizing, designing, building, and seamlessly integrating A.I. applications into existing workflows and operations. Their work will be pivotal in ensuring that the intricate flows of cross-border trade can be effectively and efficiently transported, handled, and cleared by the transformative capabilities of A.I.

For instance, consider an A.I. Producer developing a machine learning model to assist with import and export classifications at busy trade hubs like Port Laredo. As a result, A.I., specifically large language models such as ChatGPT, will significantly enhance the speed and accuracy of these tasks automating extensive research and providing multilingual support. This leads to increased accuracy, compliance, and speed, freeing analysts to focus on more complex tasks or classify more products in less time.

With A.I. Producers' expertise and innovative solutions, let's review another essential element of this A.I.-driven paradigm shift — the A.I. Practitioners. These individuals will employ the power of A.I. applications in their daily operations to increase efficiency, reduce errors, and transform their decision-making processes.

The A.I. Practitioners: Leveraging A.I.to drive efficiency

A.I. Practitioners are the professionals on the ground who will utilize these A.I. applications in their daily work routines. They need to possess the basic technical skills to operate A.I. tools, but more importantly, a keen understanding of their industry and

the ability to discern where A.I. can offer the most significant benefits. These professionals will be at the forefront of implementing A.I. into practical workflows. They will be the ones translating the theoretical potentials of A.I. into tangible efficiencies and strategic advantages.

Whether it's a transportation route planner leveraging A.I.-powered algorithms to analyze traffic data, weather patterns, and road conditions, enabling them to devise the most efficient and cost-effective routes for transportation, a tariff classification analyst using an A.I. tool to scan and understand complex customs regulations, a logistics planner employing predictive models to manage inventory, or a customs officer, utilizing an A.I. application that automates document checks, reducing manual processing time and minimizing human errors. This automation expedites cross-border trade processes, freeing valuable time for these individuals to focus on more complex tasks that require human judgment and expertise.

A.I. Practitioners will have the on-the-ground experience to best utilize A.I. As A.I .becomes more integrated into cross-border trade operations, the role of A.I. Practitioners will become increasingly important. By leveraging A.I.'s capabilities, they'll help identify and enhance efficiencies in cross-border trade.

Let's now turn our attention to the larger ecosystem of A.I.- Aware Individuals. Though not directly involved in creating or using A.I., these people are nonetheless a crucial part of an A.I.-centric future of cross-border trade and logistics.

The A.I.- Aware Individuals: The informed spectators

A.I.-Aware Individuals are informed people who understand the importance and relevance of A.I. While not directly involved in the development or utilization of A.I., they need to be mindful of the existence and application of A.I. in the real world. They could be anyone from business owners to policymakers, from academics to the public at large, all of whom need to comprehend the role of A.I. in reshaping industries. This broad understanding helps them make informed decisions, adapt to changes, and anticipate future trends.

For example, a Customs Broker, a transportation company CEO, or a logistics company owner should all learn how A.I. is advancing and will impact their industries. While they might not directly operate A.I. tools and applications, they need to understand how A.I. will enhance supply chain transparency, speed up customs procedures, and predict shipping times more accurately. Such awareness equips them to navigate an A.I.-centric landscape more effectively, seize potential opportunities, and align their strategies with the changing technological landscape. This level of A.I. cognition is crucial for making informed decisions and staying competitive in an increasingly A.I.-driven world.

Having analyzed the distinct roles of A.I. Producers, A.I. Practitioners, and A.I.-Aware Individuals, let's discuss the process of identifying, training and fostering these A.I.-centric profiles. This is crucial for connecting the theoretical aspects of A.I. to its real-world applications and the impact it will have on the cross-border trade and logistics industry's daily operations.

Identifying, training, and developing these profiles

Identifying these A.I. profiles within an organization or among potential hires is the first step toward building an A.I.-ready workforce. The ideal A.I. Producers will have a strong background in computer science, data analysis, and A.I. — preferably coupled with an understanding of the logistics and trade industry. On the other hand, A.I. Practitioners will be those already immersed in the day-to-day operations of cross-border trade, willing and eager to adapt to new A.I.-powered tools. Finally, A.I.-Aware Individuals are curious, open-minded individuals who, while not working directly with A.I., understand its relevance and potential impact on their roles and the world.

Once these profiles are identified, targeted training programs can help these individuals hone their skills and adapt to their roles in an A.I.-integrated future. A.I. Producers will need advanced training in A.I. technologies, their application in logistics and cross-border trade, and ethical considerations around A.I. use. A.I. Practitioners will require training on specific A.I. tools relevant to their roles, while A.I.-Aware Individuals will need general education about A.I.'s impacts and potential.

Universities, too, have a significant role to play here. They need to shape curricula that produce the A.I. talent necessary for the future of logistics and cross-border trade. It's also worth noting the importance of infusing interdisciplinary studies that combine ethics, logistics, trade, and technology.

In conclusion, integrating A.I. into logistics and cross-border trade promises a future of increased efficiency, competitiveness, and transparency. However, this future can only be realized with the right workforce — the A.I. Producers, A.I. Practitioners, and A.I.-Aware Individuals. Their collective knowledge, skill, and engagement will form the pillars of this A.I.-driven future. As we navigate this rapidly evolving landscape, let's not only focus on the technology but also on cultivating the human talent necessary to unlock A.I.'s full potential.

Dr. Daniel Covarrubias is the Director of Texas A&M International University's A.R. Sanchez, Jr. School of Business' Texas Center for Economic and Enterprise Development.

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