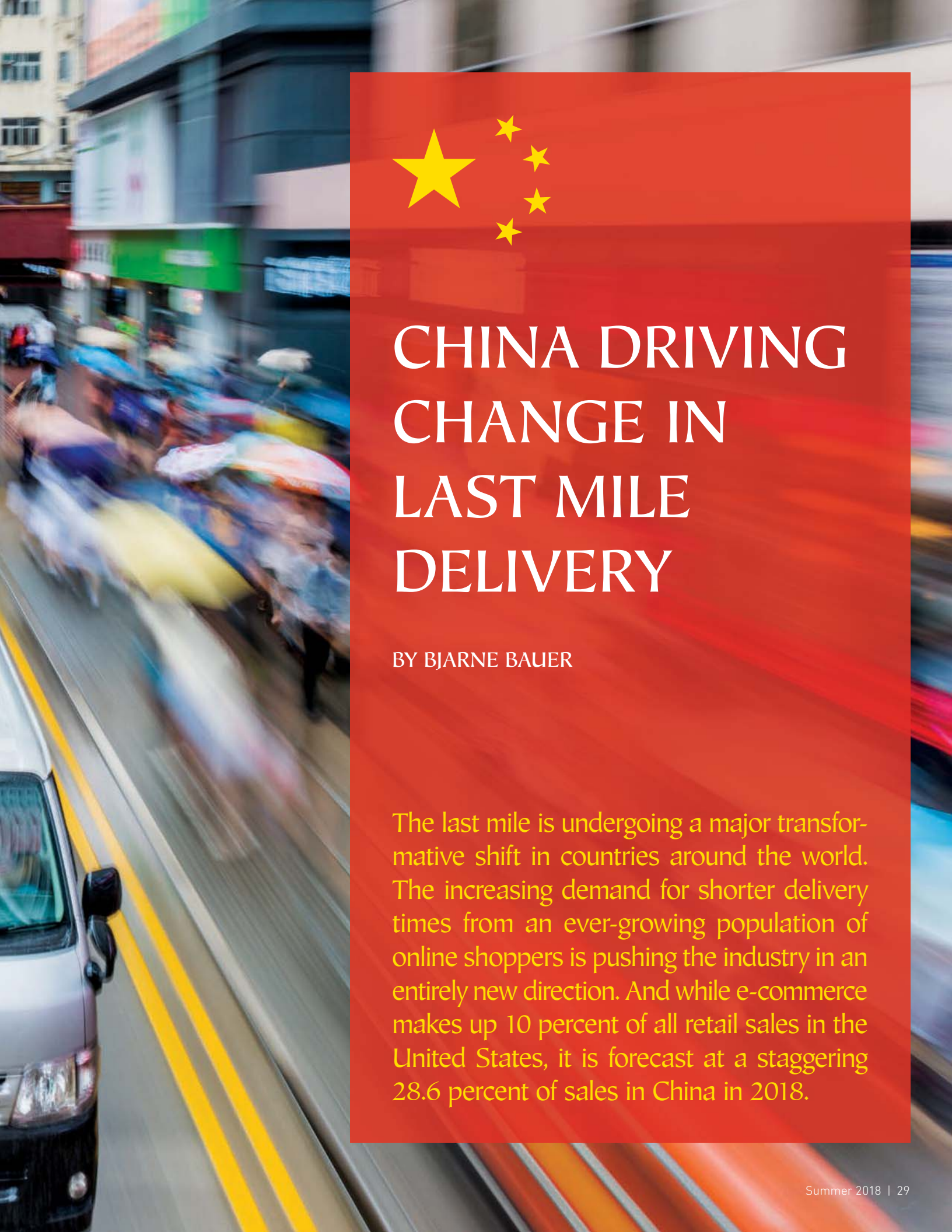

CHINA DRIVING CHANGE IN LAST MILE DELIVERY

BY BJARNE BAUER

The last mile is undergoing a major transformative shift in countries around the world. The increasing demand for shorter delivery times from an ever-growing population of online shoppers is pushing the industry in an entirely new direction. And while e-commerce makes up 10 percent of all retail sales in the United States, it is forecast at a staggering 28.6 percent of sales in China in 2018.

The developing nature of the Chinese economy, alongside an unparalleled openness to new technologies, means it is extremely well-placed to become a world-leader in last mile solutions. Although it is quite difficult to replicate these conditions in other countries, the direction taken in China could point to the future for other more developed nations. This article will explore some of the factors shaping last mile solutions, as well as some examples of the resulting innovations.

DRIVING FORCES

As in other areas of the world, a key driving force for innovation is the development of Internet giants whose foundation business is e-commerce. The company that can develop the best last mile solution before the rest could potentially take swathes of the market, as nothing draws the modern-day consumer like convenience. Alibaba and JD.com are the big players competing for this prize in the Chinese market.

A second element in the picture is labor, which accounts for 50 percent of delivery costs. With parcel volume set to more than double between 2016 and 2020, a labor shortage will occur within the distribution industry, and thus labor costs are set to rise yet further. It is essential for the industry that labor costs are reduced, should the current trend of increasing parcel volume and faster delivery times be sustained.

Fragmentation within the logistics industry could drive the most radical future changes. A large number of businesses offering similar services means that the current system remains relatively inefficient. Greater integration, or eventual merging of these services, could lead to a highly efficient system that fully exploits the huge resources already in use.

INNOVATIONS

Alibaba and JD.com are working to break the traditional divide between online and offline retail, an approach coined 'new retail'. One of the key facets of the strategy adopted by the two companies is the targeting of convenience stores. Convenience stores are a growing industry in many countries around the world, and not least in China. The two Internet giants have adopted a franchise strategy to open potentially millions of rebranded convenience stores using the already established, family run stores spread across China. This strategy opens up a variety of options for both companies in terms of their current core businesses and divergences into new industries. As one part of their last mile strategy, it provides millions of conveniently located pick-up points that could vastly reduce the required delivery workforce. Instead of two or three delivery men on electric scooters, all of the parcels for a given area could be left at convenience stores for customer collection. This is hardly innovative thinking and could start to look rather ironic as we approach a full circle, back to collecting goods in stores. However, it has to be said that it makes sense. Arguably, consumers have never had a problem with traveling to traditional stores. The inconvenience came in the form of not being able to find exactly what one wanted for a reasonable price. By using online retail as the platform for decision-making, and physical stores for the collection process, e-commerce businesses may have found the perfect solution. The success of this strategy will become apparent in the coming couple of years, as the two companies expand their reach.

Labor costs are a major concern for all actors in the distribution process. Couriers are facing a major problem in that they have already hit their limit in terms of delivery volume. A traditional courier can typically deliver 100 parcels per day, which is one delivery every five minutes over an eight-hour day. This means that the current format for courier deliveries is a bottleneck, a source of inefficiency. This has led to the introduction of 'crowd delivery', in which any member of the public can opt to deliver parcels in their area in return for a small payment (e.g. six yuan per parcel). It seems at present that this concept only has the capacity to function as supplementary to the main couriers, but it may have the potential as a key element of future last mile solutions.

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An area of focus outside of China is intelligent routing, which allows distributors to use big data to time and map deliveries more effectively. However, the application of this idea is a little challenging within the Chinese system, wherein multiple electric scooter couriers serve a given area in an extremely effective manner. The short distances traveled mean that intelligent routing would have little impact. Instead, an increasingly common provision comes in the form of pick-up stations. Mirroring the function of JD.com's and Alibaba's convenience stores, these unmanned stations could be the key to overcoming skyrocketing labor costs. A single delivery driver could drop large numbers of parcels at a single station, allowing for a vast increase in delivery volume. However, ensuring that the stations are both widely adopted by the public and profitable to run is proving a challenge for the various start-ups that have entered the market.

The issue of fragmentation within the industry is perhaps the most China-specific challenge, and it is further complicated by the cross-industry competition that means each actor in the supply process is competing to control other parts of the chain. E-commerce companies fear that they will be forced to pay higher rates should they allow other businesses to control distribution and, especially, the last mile. Likewise, traditional express companies fear that handing over control of the last mile to a third party may impact their profits, while they are wary of e-commerce companies establishing their own networks. Similarly, start-ups that specifically address last mile issues face a challenge to break into an already busy field. Should these start-ups gain some success, they soon will see the benefit of expanding their reach to wider distribution, putting them in direct competition with the larger express companies.

It is conceivable that one major company will arise, putting an end to the currently fragmented system. However, this company may not be one of the current group vying for the predominant position. Instead, the eventual winner may be a company that can provide a solution for integration, such as Cainiao. Rather than directly entering the distribution industry, Cainiao provides a software-as-a-service solution for the established players. Using big data solutions, it can integrate a variety of services, such as pickup, across-town transportation, storage, secondary packaging and last mile delivery. It also offers a major advantage to express companies in the form of sales forecasting using big data collection. By collecting data from a wide range of sellers and distributors, Cainiao can more accurately predict sales volume, thus allowing companies to ship items for a week, where they previously may have made daily deliveries.

Cainiao may also provide a partial solution to a labor-related problem. The current lack of standardized procedures increases labor costs in a number of areas, such as parcel collection, where fees can be negotiated on an individual basis. Cainiao's integration of services attempts to bring greater transparency and standardization to this process, making all transactions visible on a centralized system.

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As elsewhere in the world, the last mile is undergoing a transition period in China. Although various potential solutions are emerging, it is the prospect of a new integrated business model for the industry that could be the most innovative solution. A deeper integration and consolidation of resources could provide great advances in last mile delivery. And, perhaps this model will set the standards for countries around the world in the near future. ▽