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New Development of Online Retail in China and the Associated (Accounting) Challenges

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ABSTRACT Technological advances and improved logistics efficiency, in conjunction with the widespread use of smartphones, have enabled retailers and technology companies to dramatically change Chinese consumers' purchasing behavior. This paper aims to discuss the current developments in online retail in China and to explore the associated challenges, particularly in regards to accounting. This paper adopts an exploratory case-study approach to investigate the marketing practice of online retail during the "Double 11" shopping festival in China. The results show that the adoption of new marketing practices in the Chinese online retail industry is likely to encourage sales; however, they are also introducing certain challenges, such as the need for collaboration between online and offline stores and the application of accounting standards, including recognition of revenue and categorization of insurance expenses. The findings of this paper have implications for both existing stakeholders and firms that are looking to adopt similar online retail practices.

INDEX TERMS Business intelligence, electronic commerce, financial management, inventory control.

I. INTRODUCTION

Rapid advances in internet-based technology have driven the development of marketing practices, particularly the online retail practice of e-commerce, and associated research. As online retail distances retailers from consumers, experience is replacing quality as the competitive battleground for marketing [1], necessitating perceived website usefulness and consumer experience satisfaction [2], [3] while simultaneously engaging the younger generation [4].

Recent online shopping developments in China have yielded new phenomena worthy of discussion. For example, the 'Double 11' shopping festival has introduced numerous marketing approaches, such as deposits and coupons. However, these new approaches also present several accounting challenges that warrant detailed review. This study contributes with a timely discussion of related marketing practices and their implications for business managers and accounting professionals.

II. FROM OFFLINE TO ONLINE (NEW) RETAIL

In 1927, before the advent of modern refrigeration, the Southland Ice Company at Oak Cliff in Dallas, Texas, operated a

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16-hour ice dock for customers to stock up on ice, gradually extending product coverage to include milk, bread, and eggs. By 1946, the stores became known as "7-11" due to their long operating hours, which offered more convenience than local grocery stores at the time (operating hours later extended to 24 hours). According to Jeff Lenard, the Vice President of the National Association of Convenience Stores in the U.S. [5], this represented the birth of the modern convenience store model (distinct from the traditional bulkbuy supermarket), which provides a shopfront operation in carefully selected locations to provide convenient access to everyday items such as meals, snacks, beverages, and confectionary.

The 7-11 store concept was revolutionary for its time. A similar transformation in convenience shopping is currently underway, with China at the forefront. This transformation is shaped by technological advances and consumer demand that maximizes the concept of convenience beyond physical space and time boundaries and promotes a more direct interaction between retailers and consumers supported by improved logistics efficiency. Mr Jack Ma, founder of Taobao, proposed the 'new retail' concept at the 2016 Computing Conference in Hangzhou, stating that "the traditional e-commerce model will disappear very soon, in the next 10 to



20 years, there is no e-commerce, only 'new retail', that means the online, offline and logistics must be integrated together" [6]. The 'new retail' concept was also endorsed in a 2017 Chinese government report [7]. New retail promotes the integration of online retailers and offline stores, supported by advanced logistic services and big data analytics. With the transformation of omni-channel and data-intensive retail, online stores can attract potential customers to visit their offline stores, and better shopping experiences in offline stores will increase the online retailers' sales volumes. Big data analytics contribute with a precise analysis of both customers' in-store shopping experience and online shopping behaviour.

The previous literature covers many different aspects of online shopping, such as how the transformation of business models from offline to online business to business (B2B) moderates Guanxi during business operations in China [8], how consumers' personal innovativeness and perceived risk are associated with their willingness to use mobile shopping applications [9], and consumers' tendency to purchase habitual goods [10]. For readers interested in the development of online and mobile shopping applications, references [11] and [12] provide a comprehensive review on this topic, as well as mechanisms to cope with the associated changes. This paper extends the work of [13] regarding the trend of next-generation online retailer transformation by discussing the trending business practice of 'new retail' in China: the 'Double 11' shopping carnival. This illustrative practice is used to highlight challenges to the accounting framework in recognizing sales revenue.

Particularly pertinent in China, the number one means 'single', and the 11th of November is therefore considered the most single day of the year, being referred to as "Bachelor's Day". What is the best thing for single people in China to do on the saddest day of the year: the day that reminds them of their single status? Online retailers believe that shopping may be a consolation. In 2009, Taobao capitalized on this by creating the 'Double 11' shopping carnival, which has now spread across both online and offline platforms, including JD, Suning and Amazon China. For Taobao, the first 'Double 11' generated US\$7.8 million in gross merchandise value (GMV), and the volume has since witnessed a new high each consecutive year, with a total of US\$30.7 billion in 2018. The GMV for 11th November in 2017 represented 3.65% of Alibaba's annual GMV (\$691.8 billion) or 0.46% of China's annual GMV (\$5,470 billion) in 2017 [14]. It is reasonable to predict a consistent increase in GMV for 'Double 11' and the achievement of new records in the future. The high GMV of the shopping carnival is important to these retailers' annual GMV. Table 1 records the relevant statistics. This shopping carnival is comparable to the Black Friday and Boxing Day sales in the UK, Australia, New Zealand, and south-east Asia as an important marketing activity for Chinese e-commerce platforms.

Unlike the traditional applications of 'new retail' that incorporate both offline and online store platforms for the

TABLE 1. Gross merchandise value (GMV) statistics.

Year	Double 11	Alibaba	Chinese Social Consumption
2012	3.03	153.01	3,288.31
2013	5.56	245.16	3,726.41
2014	9.30	370.19	4,271.57
2015	14.64	473.64	4,831.59
2016	18.17	537.31	5,003.03
2017	24.91	686.48	5,424.65
2018	32.26	728.38	5,757.35

This table records the gross GMV of 'Double 11' for Taobao and Alibaba and presents comparative Chinese social consumption from 2012 to 2018. Data are captured from various sources [14], [15].

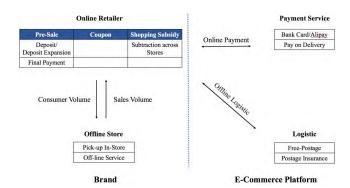


FIGURE 1. Business connections between key stakeholders in the 'new retail' business model.

same retailer, the 'Double 11' shopping carnival encourages alliances between different online retailers to boost sales. Further, the e-commerce platform supplied by Taobao provides an extra layer of product guarantee and transaction safety. Figure I illustrates a common online shopping model for Taobao that incorporates five key stakeholders: the online retailer, the offline store, the payment service provider, the logistics service (delivery) provider, and the enabling ecommerce platform. While the online retailer and the offline store may be two separate business entities operating under the same brand, the e-commerce platform integrates the information provided by the payment and logistic services. Since this differs from traditional marketing, online promotion activities supporting 'Double 11' deserve more attention [16]. While previous literature investigates some aspects of online retailing, such as mechanisms that encourage consumers' continuous use of mobile shopping platforms [17] and the involvement of customers in product design to improve product success [18], there is no research focusing on the marking incentives of online retailing platforms.

III. MARKETING INCENTIVES FOR THE 'DOUBLE 11' AND ASSOCIATED (ACCOUNTING) CHALLENGES

Retailers promote similar marketing incentives with different names during the 'Double 11' promotion each year.

39300 VOLUME 7, 2019



A key feature of the 'Double 11' shopping carnival are the incentives and 'milestones' provided to consumers, including access to shopping modes such as 'pre-sales', 'deposit expansion', 'store-wide coupons', and 'across-store subsidies'. Supported by a unified inventory system shared between the online retailer and the offline store, retailers are able to provide in-store pick-up service for online orders, which significantly reduces logistics costs.

Each of these marketing incentives contributes to sales volume. 'Pre-sale' enables the consumer to pay a deposit early and then to complete payment of the balance on 11th November (the 'Double 11' date). The 'pre-sale' incentive allows retailers to assess the product market demand to accurately plan production and logistics services. 'Deposit expansion' increases the value of the deposit paid by consumers when they order 'pre-sale' products. When consumers complete the balance of the payment, they receive a deduction from the balance that is greater than the original deposit they paid ('deposit expansion'). The amount of this 'deposit expansion' is based on the expansion ratio set by online retailers. This incentive encourages consumers to complete the purchase of their 'pre-sale' orders by anticipating a discount off the full price. If the consumer does not complete the pre-pay transaction, he or she foregoes the deposit, and the pre-ordered stock becomes "dead stock" to the retailer due to surplus production.

The marketing incentives of 'store-wide coupons' and 'cross-store subsidies' are also attractive to consumers. The 'store-wide coupon' is allocated by online retailers and can be used when consumers purchase from participating online retailers. The 'cross-store subsidy' is issued by the e-commerce platform to boost sales across different retailers. It is important to point out that online retailers need to proportion the 'cross-store subsidy' based on the transaction price to recognize the actual sales discount they provide to prospective consumers.

For online retailers, accurately accounting for sales revenue derived from online sales is challenging. This review of these accounting-related complications as raised by 'new retail' is also a response to [19], who call for further studies on the financial sustainability of metaverse retailing.

A. DEPOSIT EXPANSION

Deposit expansion allows consumers to pre-order items and put down a deposit, which will 'expand' if consumers actually purchase those items during 'Double 11'. For example, during the 2017 'Double 11' shopping carnival, consumers could enjoy the 'deposit expansion' benefit at two discrete stages by paying a deposit between the 20th October and 10th November and then by paying the balance purchase price (calculated according to the 'pre-sale price' less the 'deposit' less the 'deposit expansion', if applicable) between 1am and midnight on the 11th November. In the event of a product return, the consumer received a refund of the actual amount paid for the purchased item.

TABLE 2. An example of 'deposit expansion' in 2017.

Stage One: Completed				
Payment Type	\$			
Product Deposit	20.00			
Deposit Real Payment	20.00			
Stage Two: Comple	eted			
Product Balance	166.00			
Deposit Expansion	-10.00			
Cross-Store Subsidy	-14.32			
Balance Real Payment	141.68			

This table records a real transaction involving the marketing activity of 'deposit expansion' in 2017 as conducted by one author of this paper.

TABLE 3. An example of 'deposit expansion' in 2018.

Cost of pre-order \$186.00, direct reduction of \$	\$10.00 applied after				
deposit payment.					
Stage One: Completed					
Payment Type	\$				
Product Deposit	20.00				
Alipay Red Pocket (Coupon)	-0.50				
Deposit Real Payment	19.50				
Stage Two: Completed					
Product Balance	156.00				
'Double 11' Shopping Subsidy	-19.81				
Balance Real Payment	136.19				

This table records a real transaction involving the marketing activity of 'deposit expansion' in 2018 as conducted by one author of this paper.

Since the deposit expansion marketing incentive allows retailers to understand consumers' (potential) shopping needs before 'Double 11', representing a significant advantage for production/retail planning, it has gained in popularity among various retail platforms. For example, in addition to changing the name for such marketing activity from 'deposit expansion' to 'deposit knock-off' in 2018, Taobao promoted more than 500,000 items on its platform and marked them as preorder products eligible for deposit expansion during the 2018 'Double 11' promotion. Another popular white goods online retailer, JD.com, also utilized this marketing activity for home appliances in certain categories, allowing consumers to deposit 1RMB and use it as 1111RMB on 11th November 2018.

During the 2017 'Double 11', one author of this manuscript purchased a product and experienced the 'deposit expansion' feature on the Taobao platform. Table 2 records the transaction details. The author paid \$20 in the first stage of the 'presale' and then the balance of the purchase price at the second stage. This 'deposit expansion' protocol increases the deposit to \$30 (a \$10 increase). If we disregard the 'cross-store subsidy' of \$14.32, the consumer actually pays \$176 (20 + 156) for a product that normally costs \$186. Table 3 reports a similar example of a 'deposit knock-off' as promoted by Taobao during the 2018 'Double 11'.

In this scenario, we argue that 'deposit expansion' is a monetary marketing practice similar to selling 'in-store coupons' during the 'pre-sale' stage. The 'deposit expansion' policy offered by online retailers enhances the attractiveness

VOLUME 7, 2019 39301



of online shopping, encouraging consumers to complete the purchase of online orders.

However, the timing of revenue recognition is a challenge for business managers and accountants. According to Chinese Accounting Standards (CAS 14) and International Financial Reporting Standards (IFRS 15) [20], when a retailer receives a deposit for a product where ownership is not yet transferred, the deposit should be recognized as a liability instead of revenue. When the consumer subsequently pays the balance of purchase price and confirms receipt of the product, the retailer would recognize both the deposit and the balance of the purchase price as revenue (since the consumer has acquired product ownership). There is inherent financial uncertainty in this process, as retailers cannot predict consumers' final purchase decision. One potential solution is to rely on educated prediction (estimates) based on historical transaction data.

B. RETURN POSTAGE INSURANCE

Online retailers utilize 'return postage insurance' to insure the postage claims of posted goods and consumer returns. This insurance is a response to consumers' concerns about product quality and has become an essential component of 'new retail'. In both the 2017 and 2018 'Double 11' shopping carnival, online retailers offered free 'return postage insurance' on selected products.

The process of making a claim is as follows: a consumer contacts the retailer to obtain a delivery address and utilizes the e-commerce platform to disclose the reason for the return and the corresponding identification code. When the online retailer confirms receipt of the returned product, the e-commerce platform refunds the payment to the consumer and initiates the claim process by notifying the insurer. Typically, both the online retailer and the consumer receive their claims for the delivery costs within 72 hours. Since 'return postage insurance' covers the postage of returned goods, it therefore loses its effectiveness after the return is completed.

'Return postage insurance' is an additional term attached to the online order contract involving the online retailer, the consumer, and the insurance company. For online retailers, it is an additional obligation to the main obligation of providing goods to consumers. Therefore, a retailer should not recognize the insurance as a sole obligation for refund, as it will not exist if there is no obligation to transfer the product to the consumer. This indicates that the insurance cost should be deemed part of the 'selling expense' instead of the traditional 'management expense'.

The inherent accounting challenge is that the claim payment provided by the insurance company as compensation is typically lower than the real delivery cost paid by the online retailer. The insurance claim amount determined by the insurance company is based on the lowest postage cost between the locations of the online retailer and the consumer, not the actual amount paid. Such a difference between the actual postage expense and insurance claim creates further financial uncertainty for a company.

C. IN-STORE PICK-UP SERVICE

The option to collect purchased goods at an offline store is beneficial for both consumers (convenience) and retailers (reduced logistics cost). The process of in-store pick-up service is as follows: the consumer confirms and pays for the order then selects a certain offline store as the pick-up venue; second, the online retailer sends a text message to the consumer, confirming the pick-up details with an identification code; third, the brand sends another text message to the consumer when the product is ready for pick-up in the selected offline store; and fourth, the consumer collects the product in-store using the identification code as supplied in the text message. However, in-store pick-up service imposes supply chain challenges, such as the need to share inventory information between online retailers and the offline stores. Online retailers need to display accurate, real-time inventory levels at the offline location to fully inform consumers' choice of a pick-up location.

IV. IMPLICATIONS FOR BUSINESS PROFESSIONALS

'Double 11' is an opportunity for e-commerce platforms to explore the possibility of 'new retail'. The inherent challenges identified in this paper affect not only marketing managers but also other employees such as general business managers. As this research focuses on the accounting challenges in 'new retail', we also discuss the implications of these challenges for accounting professionals (accountants) and accounting standards setters.

The 'Double 11' shopping festival requires careful planning by marketing professionals to avoid giving out too many coupons and 'overdrafting' consumers' future shopping needs. One potential solution is to develop marketing approaches based on social network platforms, such as inviting friends to receive a better coupon [21]. It may be useful for marketing professionals to consider the opinions of accounting professionals in the design of relevant marketing practices so that accounting implications are not overlooked. For example, a general goods return policy could lead to cash flow shortages, and the marketing practice of deposit expansion is associated with potential GST calculation issues.

The promotion of 'new retail' and widespread delivery service encourages consumers to shop online. General business managers should recognize and adapt to such changes and rethink the business model of retailing. First, managers need to build up an efficient inventory system to accommodate consumers' online retailing needs and provide rapid logistics services accordingly. Second, as consumers are now more likely to purchase goods online than offline, managers need to restructure their retail business model, particularly reconsidering the role (including the profit model) of offline stores [22], such as a focus on track and interact with the guests rather than achieving sales on the spot. Third, while the popularity of online retailing lowers the entry requirement for other competitors in the market due to the minimum technology necessary, retailers can also take advantage of the

39302 VOLUME 7, 2019



large-scale consumer data produced by 'new retail', which contributes to further business analytics that assist business development. Such data collection and integration require technological innovation by enterprises, a potential burden for retailers. While retailers may choose not to pursue business intelligence, they should at least consider the safety hazard of any potential consumer data leaks.

As 'new retail' encourages companies to digitalize and unify online and offline sales, it creates new business transactions that require different accounting entries. This paper investigates three frequently used business transactions in digitally enabled shopping developed from 'new retail': 'deposit expansion', 'insurance of purchase return postage', and 'in-store pick-up'. Accounting professionals and accounting standard setters can benefit from the discussion in this paper. Following the recent release of revenue recognition standards both in China (China Accounting Standard 14 – Income) and internationally (IFRS 15 – Revenue from Contracts with Customers), it should be noted that accounting standards are constantly varying with the evolving commercial environment. Accounting professionals should be aware of the similarity and difference between these standards, including the accounting implications of sales in different jurisdictions with distinct accounting standards. In addition, accountants should be willing to provide their professional opinion of future marketing activities during 'Double 11' and the accounting implications (challenges) of the prospective marketing activities. For accounting standard (setters), their role is to establish accounting standards that regulate how companies record business transactions and ensure financial activities are presented in a way that ordinary investors can understand. Considering the rapid development of 'new retail' and online retailers need to develop new marketing activities to capture consumers' attention, it is worthwhile for accounting standard setters to investigate whether the existing accounting standards are applicable to new marketing activities and to update them if necessary.

Business managers should be aware of these dramatic changes in the retail sector and consider how they could improve their logistics system and even business models to accommodate the evolving needs of consumers. They should also familiarize themselves with the significant socioeconomic transformations currently underway in China [23]. Accountants and business managers should work synergistically to keep a close-eye on revenue fluctuation due to changes in business models. Future study should further assess the online retail industry in China and continue exploration of the associated business/accounting challenges under 'new retail'.

REFERENCES

- P. P. Klaus and S. Maklan, "Towards a better measure of customer experience," *Int. J. Market Res.*, vol. 55, no. 2, pp. 227–246, Mar. 2013. doi: 10.2501/ijmr-2013-021.
- [2] L. G. Pee, J. J. Jiang, and G. Klein, "E-store loyalty: Longitudinal comparison of Website usefulness and satisfaction," *Int. J. Market Res.*, vol. 60, no. 1, pp. 1–17, Jan. 2018. doi: 10.1177/1470785317752045.

- [3] J. O. Stanworth, C. A. Warden, and R. S. Hsu, "The voice of the Chinese customer: Facilitating e-commerce encounters," *Int. J. Mar-ket Res.*, vol. 57, no. 3, pp. 459–482, May 2015. doi: 10.2501/ijmr-2015-037.
- [4] M. Hardey, "Generation C: Content, creation, connections and choice," Int. J. Market Res., vol. 53, no. 6, pp. 749–770, Nov. 2011. doi: 10.2501/ijmr-53-6-749-770.
- [5] E. Anzilotti. A Brief History of the 24-hour Convenience Store, Citylab. CITYLAB. Accessed: Feb. 1, 2018. [Online]. Available: https://www.citylab.com/life/2016/02/a-brief-history-of-the-24-hour-store/433953/
- [6] D. Weinswig. Alibaba's New Retail Integrates E-Commerce, Stores, & Logistics: Is this the Next Gen of Retail?. FORBES. Accessed: Feb. 1, 2018. [Online]. Available: http://www.forbes.com/sites/deborahweinswig/2017/04/14/alibabas-new-retail-integrates-e-commerce-stores-logistics-is-this-the-next-gen-of-retail/#2f595a94767c.
- [7] K. Q. Li. 2017 Chinese Annual Government Work Report. CATL. Accessed: Feb. 1, 2018. [Online]. Available: http://www.catl.org.cn/2017-03/17/content_40498347_3.htm.
- [8] R. M. Davison and C. X. Ou, "Guanxi, knowledge and online intermediaries in China," *Chin. Manage. Stud.*, vol. 2, no. 4, pp. 281–302, Oct. 2008. doi: 10.1108/17506140810910935.
- [9] T. Natarajan, S. A. Balasubramanian, and D. L. Kasilingam, "Understanding the intention to use mobile shopping applications and its influence on price sensitivity," *J. Retailing Consum. Services*, vol. 37, pp. 8–22, Jul. 2017. doi: 10.1016/j.jretconser.2017.02.010.
- [10] R. J.-H. Wang, E. C. Malthouse, and L. Krishnamurthi, "On the go: How mobile shopping affects customer purchase behavior," *J. Retailing*, vol. 91, no. 2, pp. 217–234, Jun. 2015. doi: 10.1016/j.jretai.2015.01.002.
- [11] H. T. Keh and E. Shieh, "Online grocery retailing: Success factors and potential pitfalls," *Bus. Horizons*, vol. 44, no. 4, pp. 73–83, Jul. 2001. doi: 10.1016/s0007-6813(01)80050-1.
- [12] D. J. Faulds, W. G. Mangold, P. S. Raju, and S. Valsalan, "The mobile shopping revolution: Redefining the consumer decision process," *Bus. Horizons*, vol. 61, no. 2, pp. 323–338, Mar. 2018. doi: 10.1016/j.bushor.2017.11.012.
- [13] D. R. Bell, S. Gallino, and A. Moreno, "The store is dead—Long live the store," MIT Sloan Manage. Rev., vol. 59, no. 3, pp. 59–66, Apr. 2018.
- [14] C. Team. Ultimate Guide to Alibaba's Double 11 2018; One Day Sales Exceeded US30 Billion. CHINAINTERNETWATCH. Accessed: Feb. 1, 2018. [Online]. Available: https://www.chinainternetwatch.com/ 27359/tmall-double-11-2018/
- [15] Eastmoney. "Chinese Social Retail Consumption. EASTMONEY. Accessed: Feb. 1, 2018. [Online]. Available: http://data.eastmoney.com/cjsj/consumergoodsretailindex.aspx?p=6
- [16] Q. Yan, L. Wang, W. Chen, and J. Cho, "Study on the influencing factors of unplanned consumption in a large online promotion activity," *Electron. Commerce Res.*, vol. 16, no. 4, pp. 453–477, Feb. 2016. doi: 10.1007/s10660-016-9215-x.
- [17] X. Yang, Y. Li, and Q. Liao, "Exploring continued use of mobile shopping channel in China: The effects of active coping and its antecedents," *Electron. Commerce Res.*, vol. 16, no. 2, pp. 245–267, Jun. 2016. doi: 10.1007/s10660-016-9224-9.
- [18] L. G. Pee, "Customer co-creation in B2C E-commerce: Does it lead to better new products?" *Electron. Commerce Res.*, vol. 16, no. 2, pp. 217–243, Jun. 2016. doi: 10.1007/s10660-016-9221-z.
- [19] M. Bourlakis, S. Papagiannidis, and F. Li, "Retail spatial evolution: Paving the way from traditional to metaverse retailing," *Electron. Commerce Res.*, vol. 9, nos. 1–2, pp. 135–148, Jun. 2009. doi: 10.1007/s10660-009-9030-8.
- [20] IASB. IFRS 15—Revenue from Contracts with Customers. IASPLUS. Accessed: Feb. 1, 2018. [Online]. Available: http://www.iasplus.com/en/standards/ifrs/ifrs/15
- [21] TMall. Double 11 Pre-Order Rule of TMall in 2018. TMALL. Accessed: Feb. 1, 2018. [Online]. Available: https://rule.tmall.com/tdetail-8886.htm? spm=a223k.10052707.0.0.7256496dY05vRh&tag=self
- [22] Q. Hao, H. Kasper, and J. Muehlbacher, "How does organizational structure influence performance through learning and innovation in Austria and China," *Chin. Manage. Stud.*, vol. 6, no. 1, pp. 36–52, Mar. 2012. doi: 10.1108/17506141211213717.
- [23] T. Chin and R.-H. Liu, "Critical management issues in China's socioeconomic transformation: Multiple scientific perspectives to strategy and innovation," *Chin. Manage. Stud.*, vol. 11, no. 1, pp. 12–18, Apr. 2017. doi: 10.1108/cms-01-2017-0007.

VOLUME 7, 2019 39303





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39304 VOLUME 7, 2019