Singles’ Day Report: Key messages from warehouse operators

40-hour observation report of a famous apparel logistics company in China

November 2017
Key takeaways

- **Preparation for Singles’ Day** normally takes longer than a month.

- To secure excellent logistics reviews from online shoppers with reasonable logistics costs, brand owners should prepare the mega sale campaigns together with warehouse operators and other partnered logisticians by **sharing their sale data and plans**

- Brand owners should **join pre-sale campaigns** run by e-commerce platforms. The campaigns help the warehouse operators to reserve enough warehouse resources for Singles’ Day and pre-pack a certain amount of parcels in advance

- **Sophisticated IT support** is an important factor for smooth warehouse operation during Singles’ Day period.

- The mega sale campaigns caused sudden influx of B2C order information to the system, which often led to system crash. To prevent B2C system crashes from crashing the entire IT system, **B2C and B2B information systems are advised to be separated**.

- **Shortage of skilled workers** is obviously one of the greatest challenges. Traditional HR agencies are capable of sourcing for enough temporary workers, but they make no guarantee on the quality and skillfulness of the workers.

- The development of **labour-sharing platforms and warehouse automation solutions** may resolve the labour shortage issue **in long-term**
Any tips on preparing for Singles’ Day?

- Preparation for Singles’ Day normally takes longer than a month.
- To secure excellent logistics reviews from online shoppers within reasonable logistics budgets, brand owners can start with sharing their data and sale plans with warehouse operators.
- Warehouse operators can then prepare for the big day accordingly, for instance, by reserving additional warehouse spaces for inventory, packing boxes and pre-packed parcels, hiring extra workers, sourcing for packing supplies, etc.
Any tips for new comers?

• Brand owners should join pre-sale campaigns run by e-commerce platforms. During the pre-sale period, online shoppers have already put the goods into their virtual shopping carts. Some brands require the shoppers to pay a deposit as a guarantee.
• From the business perspective, the campaigns help brand owners to forecast the demand and minimize the risks of over-stocking or under-stocking.
• From the logistics perspective, the campaigns help the warehouse operators:
  • To reserve enough resources for Singles’ Day
  • To pre-pack a certain amount of parcels in advance for shipping out on Singles’ Day, once the order confirmations are received
• Again, brand owners should share their pre-sale plans and data forecast with logisticians.
Sophisticated IT support is definitely one of the most important factors for smooth warehouse operation during Singles’ Day period. Online shoppers could place orders within 24 hours starting from 00:00am, 11 November. They fought for the goods offered by their favourite brands. Servers of all stakeholders, including e-commerce companies, e-commerce solution companies, warehouse operators and delivery companies, were extremely busy. If any server is not up-to-date or if the IT support team cannot fix all technical problems in a timely manner, massive order information cannot be properly transmitted among all stakeholders. In addition, the mega sale campaigns caused sudden influx of B2C order information to the system, which often led to system crash. To prevent B2C system crash from crashing the entire IT system, B2C and B2B systems are advised to be separated.
Here is a brief explanation of the information flow in B2C e-commerce:

1. An online shopper places an order to a brand owner via an e-commerce platform.
2. The e-commerce platform sends the order information to an order management system (OMS) operated by an e-commerce solution company on behalf of the brand owner.
3. The OMS would transmit the order information to the warehouse management system (WMS) of the corresponding logistics company assigned by the brand owner.
4. Once the logistics company receives the order, warehouse workers will sort, pick and pack the goods. The packed parcel is sent to the shopper by an express courier. The information of the parcel status will be synchronized real-time on the WMS, the OMS and the e-commerce platform.
5. When the shopper receives the parcel, he/she will confirm the receipt via the e-commerce platform. Brand owner will receive the payment.
What is the most important factor in ensuring smooth warehouse operation on Singles’ Day? (cont’d)

- Malfunction of WMS will severely affect the operation in a warehouse and the entire information chain
  - **Time lag in receiving inbound order information from OMS to WMS**
    - If WMS do not receive any confirmed order information in time, warehouse workers cannot kick start the operation. Labour resources are idled.
    - Thanks to pre-sale campaigns, some orders can be pre-packed. If there is no timely inbound order confirmation, warehouse operator cannot confirm whether the pre-packed orders are ready to go. The packed parcels would consume a lot of warehouse spaces.
  - **Time lag in synchronizing information between WMS & OMS**
    - Even when a parcel is ready for delivery, OMS has not received any confirmation from WMS and cannot update the information on the e-commerce platform.
    - Shoppers cannot track their parcels and give bad reviews on the logistics performance to the brand owner.
    - Some shoppers may tend to cancel orders, because of the uncertainty of parcel status.
  - **Time lag in receiving cancelled order information from OMS to WMS**
    - Warehouse workers have no idea of the order cancellation and keep on their work, wasting efforts unnecessarily.
    - If the goods has been delivered to the shopper, return shipment and handling incur extra costs.

- The longer the time lag, the higher the costs incurred
- Poor warehouse information system will definitely ruin the reputation of the logistics operator. In the worst case scenario, clients will terminate or not renew the contract with the logistics operator.
- Besides, due to the malfunction of warehouse information system, frontline resources are being idled and the morale of operating staff is getting lower.
Definitely!

I believe a modern logistics company should be equipped with a sophisticated WMS, which is capable of handling the massive traffic influx on Singles’ Day or other mega online sale campaigns. This is a basic requirement nowadays. Besides, the IT team of the logistics service provider should:

- Quickly respond to any emergency situations and proactively inform the clients if anything is going wrong
- Have a good market sense and online shopping experience in China, instead of simply having back-end technical supporting skills
- Have up-to-date IT knowledge, and align the logistics systems with the changes of e-commerce platforms in a timely manner
Shortage of skilled labour is obviously one of the greatest challenges. We hired thousands of temporary workers through human resources agencies. The workers come from various provinces, including Anhui, Henan, Hebei, and even Xinjiang. Most of them have no working experience in a warehouse and need to have on-site training, e.g. sorting, picking, packing, etc. Some started training two weeks before 11 November. Generally speaking, productivity of the temporary labours for Singles’ Day is lower than that of the temporary workers during normal periods by roughly 30%. However, the cost of the additional temporary labours for Singles’ Day is 50% higher.
• Common problems of the temporary workers:
  • They are not familiar with the warehouse environment and frequently make mistakes, e.g. time wasted on finding their way in a huge warehouse, pressing wrong buttons on the system, holding up order information, etc.
  • Case: Here shows the standard procedures for one of our clients’ parcel packing. It takes time for the temporary workers to accurately follow standard procedures.

Picture source: Fung Business Intelligence
How can logistics companies improve the productivity of temporary workers?

- We installed dashboards on the major aisles, showing the best workers of the day. The ranking effectively increases the workers’ morale and working incentive.
- By the end of the Singles’ Day project, the best workers will receive a reward.
- We provide a good working environment for workers

Dashboard

The mat helps reducing the tiredness of packers

Clean water corner

Picture source: Fung Business Intelligence
Any long-term solutions for resolving the labour shortage issue? Do you think labour-sharing platforms would help?

- Traditional HR agencies are capable of sourcing for enough temporary workers, but they make no guarantee on the quality and skillfulness of the workers. It was difficult to track the performance of temporary workers in the past.

- Thanks to technological breakthrough, WMS captures all the data along the production line, including the accuracy, speed and completion rate of individual workers.

- If logistics companies and HR agencies cooperate and fully analyse the data, idle labour resources can be uberized for warehouse operations via labour-sharing platform.

Workers wearing colourful vests come from different provinces and speak in different dialects

A barcode was assigned to each worker for measuring task completion rate
Many e-commerce companies use AGV to reduce labour costs and increase efficiency. Do you think AGV also suit the warehouse operation of third-party logistics companies?

- Indeed, automatic guided vehicle (AGV) increases the productivity of the picking process, reduces picking errors and lowers labour costs. AGVs are useful tools for handling B2C e-commerce logistics.
- However, AGVs do not fit all business models. For instance, the picking process of B2B business is less time-demanding than that of B2C business. Also, B2B business involves a lot of non-repetitive processes and requires flexible handling.
- If a warehouse handles both B2B and B2C businesses, the operator has to determine whether the initial investment on AGV is justified in terms of B2C order volume handled. Also, costs of warehouse space reallocation for B2B and B2C has to be taken into account.
A lot of wrapping papers and plastic bags were consumed on Singles’ Day. To be environmentally friendly, brand owners and logisticians should keep refining the processes to reduce waste, consider using other alternatives and plan for proper recycling schemes.

The completion rate of order handling and the complexity of packing process are correlated. In general, packing shoes is faster than packing clothes.

Other than competent IT support and sufficient labour supply, the presence of experienced logisticians is a valuable asset in warehouse operations, especially during mega online sale events.

To do list of logisticians:

- handling emergencies, e.g. malfunction of information system
- managing order fulfillment
- answering mid-night calls from clients and colleagues
- training temporary workers
- managing thousands of workers
- ...

Picture source: Fung Business Intelligence
Eve of Singles’ Day: A warehouse “parade” with over 1,000 workers

“Happy moments on Singles’ Day”

“This is my first time folding clothes in my live,” a temporary packer told Fung Business Intelligence

The most productive period is the hour right before meal break

Over 1,000 workers are having dinner in a temporary tent

A nap at midnight

Clients’ GMV has been rolling fast since 00:00:00, 11 November
Happy moments on Singles’ Day (cont’d)

Mission complete

Ready to go

Empty shelves

Client A

Client B

Mission complete

Picture source: Fung Business Intelligence
Appendix: Fast fact of Singles’ Day in 2017

Record-breaking order number of the largest two e-commerce platforms in China

Gross merchandize value
Number of orders/pieces
Delivery lead time for the first order on Singles’ Day

Icon source: Internet
Source: Tmall.com, JD.com
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Management Theories and Business Models

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