

CSCMP hottopics

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The First Mile in a Time of Continuous Disruption

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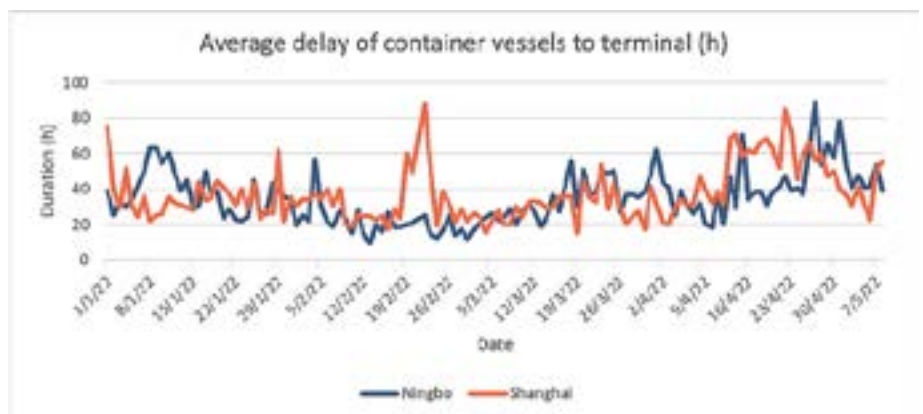
WHAT IS CONTINUOUS DISRUPTION?

Disruptions are not new to supply chains. But what is different about the state of disruption today? We operate in an increasingly interconnected and globalized environment where businesses can easily access new markets, customers, and products¹. This level of connectivity confers numerous benefits to businesses – but that does not come without risk.

With a more interconnected network, disruptions to supply chain are no longer localized. Instead, they often result in a long-range, protracted ripple effect² on supply, demand, and logistics – that is, “continuous disruption”³.

Two years after the onset of the global pandemic, supply chains are still standing on wobbly legs. Between massive logjams and port slowdowns, US and China’s ports have been coping with high variability in port traffic – much of it caused by the downstream impacts brought on by COVID-related restrictions. *Spire Maritime’s* AIS data shows that in the second week of February this year, the average delay of container vessels to terminal was **18.4h per day** in Ningbo and **28.8h per day** in Shanghai. Since 1 April, Shanghai moved towards increasing levels of lockdown restrictions, expanding lockdown coverage across the entire city on 5 April³. The average delay of container vessels to terminal increased throughout the month, standing at **58.0h per day** in Ningbo and **54.7h per day** in Shanghai during the last week of April. Up till May 2022, the year-to-date average delay of container vessels to terminal stands at **35.1h per day** in Ningbo and **37.8h per day** in Shanghai.

Graph: Average delay of container vessels to terminal in Shanghai and Ningbo, from Jan – May 2022



The lockdown in Shanghai saw a slowdown in Chinese production capacities and exports, allowing US’ major container ports the chance to catchup on their cargo backlog⁴. With Shanghai easing up restrictions from 1 June, we can expect ramped up Chinese production and an influx of container vessel arrivals to key destination ports, such as Long Beach and Los Angeles in the US. The knock-on impact of this will see renewed congestion at key US ports over the following weeks and months.

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WHAT IS THE FIRST MILE, AND HOW IS IT AFFECTED BY CONTINUOUS DISRUPTION?

The first mile often begins with purchase orders to suppliers – a multi-step process that requires visibility and management of the contract of agreement between the shipper and manufacturer.

All shippers have order management mechanisms built into their operations, but not all order management practices are designed to support the complexities of the environment that we live in today – a time of continuous disruption.

The stages between placing a purchase order and supplier fulfilment hinge on timely and accurate information exchange in order to be successful. When information is not tracked and communicated effectively, there can be serious downstream consequences such as late deliveries, incomplete orders, customer dissatisfaction⁵ – potentially impacting the businesses' ability to retain their customers.

Global shippers would be familiar with this perfect storm of events: skyrocketing online orders at the height of the pandemic, factory closures at key production hubs and container vessel delays. In all times, but even more so in times like this, key decision makers need to have access to the latest critical path view on a single integrated platform at both the order and SKU level. Stakeholders also require on-hand insights to make timely, data-driven decisions. When insights are shared through all stakeholder on a single visibility and execution platform, with all vendors are connected, businesses can be best prepared in times of continuous disruption and stay in control of their supply chains.

Therefore, it is critical for key stakeholders to have complete visibility of their supply chain, both at the order and SKU level, right from the first mile. Ensuring a smooth fulfilment of the first mile shipment is crucial to the next steps of the supply chain journey, because it sets a precedence for the steps that happen after⁶.

WHAT CAN BUSINESSES STAND TO GAIN BY INVESTING IN THE FIRST MILE?

For many businesses, the first mile has yet to catch up with the pace of transformation in the last mile⁷. The majority of retail and 3PL service providers today still run on a stark contrast between their first mile and last mile, often relying on spreadsheets and manual ways of working that present a roadblock to achieving efficiency, control and transparency⁸. This is problematic because the lack of control and visibility over the first mile creates potential knock-on effects on the last mile – adding costs, risks, and undermining performance across the rest of the more optimized supply chain⁹.

Whether you are a shipper or a 3PL service provider, there are significant and measurable outcomes that can be realized through a comprehensive order management solution. Our industry is dense with innovations that provide advanced order management capabilities, enabling key stakeholders to obtain visibility over their supply chain and manage their inventories, orders, and fulfilment across a global network of vendors and suppliers.

Based on Gravity's customer research, we have analyzed the benefits of a streamlined order collaboration, communication, and vendor management process, spanning across the following aspects of risk management, operational excellence, profitability and working capital¹⁰:

1. Risk management

- A more robust risk chain across the supply chain and lower risk of delivery failure means fewer lost sales

2. Operational excellence

- Improved resource utilization helps to reduce labor and equipment related costs
- Improved service level agreements help to upkeep consistency
- Improved productivity to deliver more efficient FTE utilization rates

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3. Profitability

- Improved pricing and markdown optimization and improved full price sell-through rates lead to a markdown reduction

4. Working capital

- Supplier and vendor management
 - A smarter supplier selection process and improved contract compliance lead to a potential reduction in the Cost of Goods Sold (COGS)
- Production management
 - Improved On Time In Full (OTIF), increased speed-to-market, better quality and traceability controls lead to a potential increase in revenue

Especially in times of continuous disruption, we have found that businesses which invest in building a resilient first mile are better placed to:

- mitigate and proactively respond to potential risk (by taking early action with informed decision making);
- upkeep their customer commitments (by providing customers with full visibility and accurate updates on their orders); and
- scale their business (by being able to cope with increasingly complex supplier and vendor networks and rising orders)¹¹.

CONCLUSION

All parts of the supply chain are essential to maintain resilience in times of continuous disruption. In this article, we focused on the importance of building an outward-facing, order-focused supply chain – something that is no longer a “nice to have” but now a necessity for any business to stay competitive and relevant. Are you prepared to risk customer loyalty and growth by not having control of your first mile?

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All parts of the supply chain are essential to maintain resilience in times of continuous disruption.



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¹⁰ Gravity Supply Chain's own customer research

¹¹ Gravity Supply Chain's own customer research

DATA FOR GRAPH: AVERAGE DELAY OF CONTAINER VESSELS TO TERMINAL (H)

Time frame: 1 Jan 2022 to 8 May 2022

Definition: Total duration time between the entrance of the container vessel in the port to the entrance in the terminal

Date	Ningbo	Shanghai
1/1/22	38.9	75.2
2/1/22	25.4	39.4
3/1/22	32.9	29.7
4/1/22	29.7	51.7
5/1/22	34.5	30.7
6/1/22	41.5	24.4
7/1/22	49.8	35.8
8/1/22	62.8	22.2
9/1/22	63.3	25.0
10/1/22	54.7	25.5
11/1/22	60.2	35.5
12/1/22	49.1	32.1
13/1/22	39.1	30.9
14/1/22	45.0	29.6
15/1/22	28.6	28.0
16/1/22	30.4	43.9
17/1/22	49.8	34.0
18/1/22	37.2	35.0
19/1/22	38.9	44.6
20/1/22	23.7	40.8
21/1/22	28.8	37.5
22/1/22	22.4	31.1
23/1/22	21.9	40.1
24/1/22	23.9	29.1
25/1/22	44.7	43.3
26/1/22	26.1	23.0
27/1/22	25.8	27.4
28/1/22	43.2	26.1
29/1/22	38.8	62.1
30/1/22	36.1	22.2
31/1/22	33.5	35.3
1/2/22	19.2	30.8

Date	Ningbo	Shanghai
2/2/22	25.3	34.1
3/2/22	21.8	34.5
4/2/22	56.6	37.1
5/2/22	29.8	34.4
6/2/22	21.6	40.4
7/2/22	18.7	30.6
8/2/22	27.4	40.4
9/2/22	23.5	19.9
10/2/22	15.3	18.8
11/2/22	27.9	25.6
12/2/22	15.0	24.7
13/2/22	9.0	24.8
14/2/22	19.8	22.8
15/2/22	16.1	24.5
16/2/22	26.9	17.0
17/2/22	18.1	28.8
18/2/22	18.7	23.8
19/2/22	19.9	60.0
20/2/22	20.7	49.0
22/2/22	25.3	87.9
23/2/22	14.8	51.4
24/2/22	12.5	19.6
25/2/22	16.9	38.8
26/2/22	25.2	31.5
27/2/22	14.1	21.4
28/2/22	17.1	28.7
1/3/22	11.8	22.0
2/3/22	17.0	26.5
3/3/22	21.2	24.2
4/3/22	24.2	15.8
5/3/22	26.2	22.5
6/3/22	21.8	27.8

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Issues of *CSCMP Hot Topics* may include early results from ongoing research being conducted for CSCMP or other organizations; new supply chain practices, thought-provoking ideas, or emerging trends; discussions of changes in the broader business and regulatory environment that may impact the supply chain and logistics field.

Date	Ningbo	Shanghai
7/3/22	24.2	20.0
8/3/22	28.8	19.8
9/3/22	20.1	29.9
10/3/22	26.9	24.2
11/3/22	31.7	32.7
12/3/22	27.6	33.4
13/3/22	18.6	32.4
14/3/22	24.1	28.4
15/3/22	36.3	29.8
16/3/22	27.1	35.2
18/3/22	55.4	35.8
19/3/22	29.8	15.3
20/3/22	50.6	45.0
21/3/22	36.7	35.5
22/3/22	37.9	32.9
23/3/22	50.4	53.6
24/3/22	48.6	28.7
25/3/22	50.4	43.5
26/3/22	27.0	29.7
27/3/22	37.2	20.5
28/3/22	37.1	24.9
29/3/22	35.3	27.6
30/3/22	38.5	17.4
31/3/22	48.1	41.9
1/4/22	61.9	31.6
2/4/22	43.1	20.9
3/4/22	41.1	19.8
4/4/22	25.0	29.3
5/4/22	39.1	34.1
6/4/22	30.7	30.9
7/4/22	26.2	31.5

Date	Ningbo	Shanghai
8/4/22	32.1	47.8
9/4/22	20.5	39.7
10/4/22	18.4	32.0
11/4/22	37.8	38.5
12/4/22	20.4	31.7
13/4/22	47.3	69.0
14/4/22	29.6	70.9
15/4/22	70.5	58.4
16/4/22	34.4	62.1
17/4/22	37.9	60.3
18/4/22	38.7	66.3
19/4/22	30.6	68.6
20/4/22	38.1	62.8
21/4/22	41.4	51.9
22/4/22	47.8	85.7
23/4/22	39.3	71.9
24/4/22	40.8	45.7
25/4/22	37.1	58.7
26/4/22	62.8	66.0
27/4/22	88.7	55.8
28/4/22	53.5	59.9
29/4/22	65.6	47.0
30/4/22	57.2	50.1
1/5/22	78.1	40.4
2/5/22	52.3	36.6
3/5/22	40.8	30.0
4/5/22	47.7	41.4
5/5/22	40.8	31.0
6/5/22	41.0	22.4
7/5/22	53.3	51.1
8/5/22	39.0	55.0



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