

10 REASONS WHY YOU SHOULD INVEST IN RESILIENCY

RESILIENCE360



10 Reasons Why You Should Invest in Resiliency

1**Prevent Cargo and Inventory Loss**

Know where to invest in risk mitigation

2**Avoid Supplier Failure**

Strengthen your supplier management to reduce impact from external factors

3**Reduce Premium Freight**

Unlock your potential for timely rerouting instead of expediting shipments

4**Reduce Buffer Stock**

Consider external influences when revising your buffer stock policy

5**Avoid Production Outage**

Prepare in advance to mitigate losses that cannot be recovered

6**Avoid Lost Sales**

Leverage network visibility and early alerts to shift goods efficiently

7**Be Compliant and Follow Regulations**

Demonstrate operational transparency, efficiently and consistently

8**Consider Health, Safety and Environment**

Increase the safety of your employees and fulfil corporate social responsibility

9**Maintain Order Volume and Customer Loyalty**

Enhance post-disruption recovery

10**Limit Reputational Loss**

Build up trust with your shareholders during a crisis

Prevent Cargo and Inventory Loss



Consider investing in loss prevention technologies

“ We spend millions on research and development, scientist salaries, manufacturing, background checks, and the latest in high-tech facility security. Then what do we do? We turn it all over to a guy making \$25 an hour driving a truck who probably doesn't know what he's hauling. It's amazing – absolutely amazing. ”

Chuck Forsaith, corporate director of supply chain security for pharmaceutical drug maker Purdue Pharma Technologies Inc.



Example calculation

Some warehouses in Mexico are highly exposed to theft risk. However others are not! When several organizations increased visibility to achieve greater intelligence, it required relatively low effort to achieve high results:

Unprotected loss forecast for Mexico €1,750,000²⁾
 protected loss forecast of €46,000²⁾ and countermeasure costs of €79,000²⁾
 = **€1,625,000 savings per year**

It is Important to know

WHERE

to invest in risk mitigation

In a resilient supply chain, lost cargo is reduced by

38%

on average across all sectors¹⁾

1) Source: "Keeping ahead of supply chain risk and uncertainty", Accenture, Oracle

2) Source: British Standards Institute

Avoid Supplier Failure

Cross-sector research shows that

58%

of a company's production components are outsourced³⁾



Risk Assessment

- Identify your hotspots and potential risks for new suppliers
- Look for alternatives
- Know your time to recovery

Risk Response

- Prepare for worst-case scenarios with ready-to-execute plans
- Minimize the financial and reputational impact of each risk

Incident Monitoring

- Monitor your supplier base and be the first to know
- Act before competition
- Create competitive advantage

Supplier Failure Reduction

Recognize 20%-30% of supplier failures due to external factors in advance and react in time.⁴⁾

EXTERNAL INFLUENCES

civil unrest weather
strike port congestion natural disaster
road blockage cargo theft war new regulation



Example calculation

A company with a revenue of €10 billion is spending 1% of revenue (€100 million) each year on expedited shipment costs⁵⁾

€100 million

* 20% influences external to the company

* 5% influences discoverable with Resilience360

= **€1,000,000 savings per year**

A DHL client survey shows

20%

of delays are caused by external influences⁶⁾

An automotive customer of DHL Resilience360 gained between

48 - 72 h

discovering incidents affecting his network and could thereby more cost efficiently mitigate the risk⁷⁾

Unlocking Potential

- Be informed about blockages along the way
- Look for rerouting potential before delays occur
- Consolidate your mitigation effort
- Acquire alternative capacity before competition



Reroute 5% of your shipments without the need to expedite⁶⁾



Example calculation

A company producing production machines is holding 50,000 units of buffer stock for one component. After checking its risk exposure within its supplier locations, logistics facilities and related lanes, it reduces the danger of disruptions by putting mitigation measures in place. Thereby, it can reduce buffer stock by 20%.

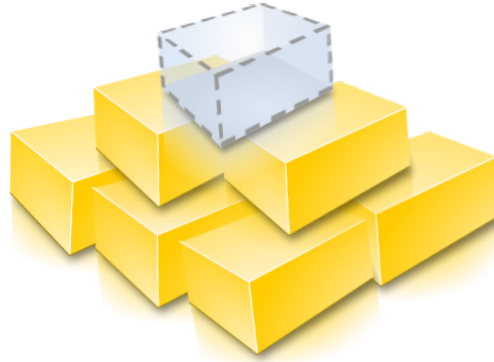
Item value €200

* Units of buffer stock: 50,000

* Reduced by 20%

* Interest rate: 8%

= **€160,000 savings per year**



Strategic Decision Making

- Know safe routes
- Minimize uncertainties in your supply chain
- Increase the willingness of your employees to reduce buffer stock
- Analyze and map historic incidents

Surveys show that a resilient supply chain can reduce its buffer stock by

14%

on average across all sectors⁸⁾

The on-time delivery rate of resilient supply chains improves by

47%

on average across all sectors⁹⁾

After using Resilience360 to create a lane risk assessment, a FMCG customer of DHL was able to reduce logistic lead time by

30%

on a particular route and reduce buffer stock accordingly¹⁰⁾

Avoid Production Outage

In 2013, BMW lost

5,000

cars due to a production outage in South Africa¹¹⁾

In 2013, North America's oil production lost

400,000

barrels per day due to the polar vortex¹²⁾

In 2011, Western Digital had to stop production and lost

200

million US dollars after the Thailand tsunami¹³⁾

In DHL's experience of production outages

10%

are caused by external factors that can be avoided¹⁴⁾



Example calculation

A port strike delays a 2,000 kg sea freight shipment by two days; with no buffer stock at hand, three production lines are impacted. The company decides to send an additional shipment by air:

Sea freight €1.5 per kg; air freight €5 per kg
 Three impacted lines (€3,000/h) for two days (12 working hours):
 $€3,000 \times 2 \text{ days} \times 12 \text{ hours} \times 3 \text{ lines} = €216,000$
 Airfreight mitigation cost: $€5 \times 2,000 \text{ kg} = €10,000$
= €206,000 avoided cost

Losses cannot be fully recovered

- Production outage is difficult to insure
- Regulations against overtime and weekend shifts limit recovery potential

When supply chain management really matters

- Know your hotspots and prepare in advance
- Monitor your supply chain for incidents
- Map your alternative suppliers
- Record supplier-related incidents and include them in your assessment



Example calculation

A hurricane stops delivery of a newly launched games console – an impact equating to loss of an entire day's sales and, as a similar product is available, 20% of potential customers simply choose a competitor's product.

With adequate risk management tools, the games console company could have predicted the hurricane two days earlier, enabling a pre-emptive increase in buffer stock

Price per unit €499

* Units sold per day 33,000

* Operating income per unit 13%

* Churn rate 20%

= €428,142 avoided loss

Resilient supply chains help

- Leverage network visibility to shift finished goods efficiently
- Trigger business continuity management to reduce impact
- React fast, correctly and compliant

The global average
out-of stock rate is

8.3%

for retail industry¹⁵⁾

DHL's experience
shows

10%

of lost sales caused by stock
outs can be avoided¹⁶⁾



TAPA Risk Management
 ISO28004 Security Management Systems for the Supply Chain
 ISO9001 Quality Management Systems*)
STANDARDS
 ISO22301 Business Continuity Management Systems
 ISO31000 Risk Management

The benefits of being compliant with international standards¹⁷⁾

- Cost savings: Compliance helps optimize operations and improve the bottom-line
- Enhanced customer satisfaction: Better quality through compliance raises satisfaction and increases sales
- Access to new markets: Compliance helps prevent trade barriers and opens up global markets
- Increased market share: Compliance can boost productivity and competitive advantage

*) Risk management will be an important part of ISO9001 from 2015

17) <http://www.iso.org/iso/home/standards/benefitsofstandards.htm>

Consider Health, Safety and Environment

HEALTH



- Be aware of health crises to protect your employees and the supply chain¹⁸⁾
- Protect employees worldwide to ensure their safety and keep business running in times of crisis
- Reduce uncontrolled risks and increase the willingness of employees to expatriate

SAFETY



- Organize your safety activities centrally with locally relevant content
- Create tailor-made training scenarios on our highest risks scores, per location
- Improve training scenarios by using historic incidents

ENVIRONMENT



- Engage in Corporate Social Responsibility initiatives; end child labor and other unethical work practices
- Reduce expedited shipments as this also reduces your carbon footprint
- Get better network visibility and find ways for suppliers to consolidate shipments

The costs caused by influenza epidemics to the US economy is estimated to

167

billion per year¹⁹⁾

According to studies, the ROI on safety management can be

300%

or more.²⁰⁾

Considering worldwide greenhouse gas emissions,

17%

are created by the logistics industry²¹⁾

Maintain Order Volume and Customer Loyalty



Order volume decreases by

6%

in the year following a major supply chain disruption²²⁾

Enhance post-disruption recovery

- Prepare business-continuity plans based on the risks your are exposed to
- Be able to react before your competition
- Gain trust by providing top management with proactive risk management processes and state-of-the-art communication matrices

Companies will look for

ALTERNATIVES

supplier exchange products
stop production

Investing in resiliency reduces customer attrition by

28%

on average across all sectors²²⁾

Reduce your order volume loss by

2%

on average across all sectors²³⁾



Average reputational and
shareholder value drop of

10%

after a major supply chain
disruption²⁴⁾

Enhance Visibility

- Ensure prompt post-disruption assessment
- Be able to immediately communicate impact analysis
- Demonstrate compliance adherence to show you are in control when your supply chain is disrupted

You need to build up

TRUST

with your shareholders

Reduce the loss of
shareholder value by

2%

on average across all sectors²⁵⁾

Natural disasters, adverse weather, political unrest, cargo theft – all of these events can cause disruption in the supply chain.

DHL Resilience360 is a cloud-based platform that helps companies manage these risks by mapping their end-to-end supply chain, building risk profiles and identifying critical hot spots, to ultimately initiate mitigation activities. In near-real time, the solution provides alerts on incidents that could disrupt the supply chain. With this new risk management tool, Deutsche Post DHL supports both small and large companies in maintaining and protecting their business operations.



<http://www.dhl.com/Resilience360>



<http://www.youtube.com/watch?v=88KSrhOYX7k>



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Thank you &
stay resilient!