



**BOSSARD**  
Proven Productivity

**Assuring Supply Chain Security  
amidst Global Uncertainty**



# CONTENTS

[Our Impact | 3 | 11 | 20](#)

## 1

[Business Supply Chain Challenges | 6](#)

**Issue 1:**

[Delay in Receiving Supplies | 7](#)

**Issue 2:**

[Inventory Oversupply & Overspend | 9](#)

**Issue 3:**

[Poor Decision-Making | 10](#)

## 2

[How Bossard Solves Your Problems | 12](#)

[1. Securing your Supply Chain | 13](#)

[2. Optimising your Supply Chain | 14](#)

[3. Smarter Costing & Decision-Making | 19](#)

[Get Started | 21](#)

# OUR IMPACT



“**Bossard** is one of our **key strategic suppliers** who has played a major part in **improving our productivity and competitiveness.**”

**Pairoj Boonpasart**

Chief Executive Officer, Unilamp Co., Ltd.



**Bossard’s Smart Factory Logistics System ensures our stock availability is always sufficient.**

SmartBin **solves our problems** and eliminates the manual inventory check and **helps us save tremendous time.**”

**Thitiwat Wijaiya**

Supervisor, WH Section, Unilamp Co., Ltd

No business likes surprises.

But the COVID-19 pandemic has proven the biggest surprise of this century.

As a business owner, you know the pandemic's impact.

Your **supply chains** have been **disrupted**.

Your **material costs** have **increased**.

And your **bottom line** has **fallen**.

No business can prevent a surprise like COVID-19 from happening.

But every  
business can  
be prepared.

# Bossard solutions help you stay in control.

Bossard has over 20 years of experience servicing the Asia market.

Our solutions have helped businesses of all sizes:

Avoid procurement disruption

Improve operational efficiency

Reduce hidden costs

If your company produces E&E or medical equipment, machinery, metals, or other items that require a high volume of C-Parts, **Bossard can help.**

In this White Paper, we will address 3 key issues that have triggered supply chain disruption during the pandemic, namely:

- \* Delay in Receiving Supplies
- \* Inventory Oversupply & Overspend
- \* Poor Decision-Making

This White Paper will also cover how Bossard helps overcome or reduce these issues.'



# Business Supply Chain Challenges

## Issue 1: Delay in Receiving Supplies

1 in 3 Companies has complained about increasingly unpredictable supply or fulfillment timelines since COVID-19.

Why is this the case?

### Supply chains disrupted in Asia

The new waves have hit many of Asia's manufacturing hubs, with a spillover impact on supply chains as diverse as electronics and textiles.

"The issue is the unpredictability of what is happening. At different points in time, certain countries or certain regions or certain companies may be affected. And that is hard to plan for. It takes time for the parts of the supply chain to be turned on and off," said Associate Professor Goh Puay Guan, analytics and operations department, NUS Business School.

According to Channel News Asia, as supply chains go offline and back online, observers worry that prices will go up because of disruption to the supplies of components and their final products.

"Definitely the talk out there is about inflation. It is probably unavoidable. The question is to what extent the cost gets pushed to the consumer. Sometimes, companies may absorb some of the cost increase and pass on some to the consumer. So we do not know yet. But certainly, there have been price increases for products. Shipping costs have also gone up. So at some point in time, some parts of this would also get transferred to the consumers," said Assoc Prof Goh.

*"If one component does not arrive, you cannot complete the product unless you can find a replacement."*

*"But it is not as simple as that. To find a replacement, you need product qualification and that will take time. It is too risky."*

### Datuk Seri Wong Siew Hai

Chairman of the Malaysian American Electronics Industry Committee

## Suppliers have gone out of business or suffered reduced capacity

The COVID-19 pandemic has posed significant challenges for supply chains globally. Multiple national lockdowns continue to slow or even temporarily stop the flow of raw materials and finished goods, disrupting manufacturing as a result.

Many organizations have suffered staff shortages and losses due to COVID-19. But overall, it has accelerated and magnified problems that already existed in the supply chain.

EY survey respondents 97% industrial products companies said the pandemic has had a negative effect on them.

Put together, the aforementioned issues contribute to timeline disruptions for suppliers who possess smaller regular production capacity, are organisationally less agile or do not have adequate crisis management plans on standby.

*“When we called the suppliers, there was no response. Some of them told us that they do not know when they can supply to us.”*

~ Chuan Choon Bin,  
Founder of Pentamaster Corp Bhd.



## Issue 2: Inventory Oversupply & Overspend

C-parts are responsible for only 15% of purchasing cost for most companies, but make up 85% of activity & volume.

Why is this the case?

### Inaccurate forecasting

Because they are often the most important & expensive parts to procure, companies usually count their A-Parts around three times a year.

By contrast, C-Part items are often only counted once a year. Consequently, the gap between a company restocking its C-Parts is often large, with procurement being based on rough estimates instead of accurate data-driven projections.

Because companies tend to lack full awareness of their actual supply & demand levels for C-Parts, they can sometimes fall into the trap of over-ordering parts that are actually sufficiently stocked to 'be on the safe side'.

### Panic buying

On the other hand, more frugal companies may choose to lengthen the procurement gap of C-Parts even further.

While this can help reduce total spending for a given quarter or financial year, it also leaves such companies vulnerable to sudden supply shortages in the wake of heightened demand.

If critical C-Parts become unavailable, companies are then confronted with the possibility of lengthy production disruption, failure to meet order deadlines, and negative consequences to the company brand.

With such negative consequences, it can become very easy for companies to panic buy additional C-Parts at both inflated costs and inflated quantity - in the hope that such a disaster might be averted in the future.

## Issue 3: Poor Decision-Making

According to PwC, companies who fail to consider long-term business propositions are 2 times more likely to struggle in a crisis.

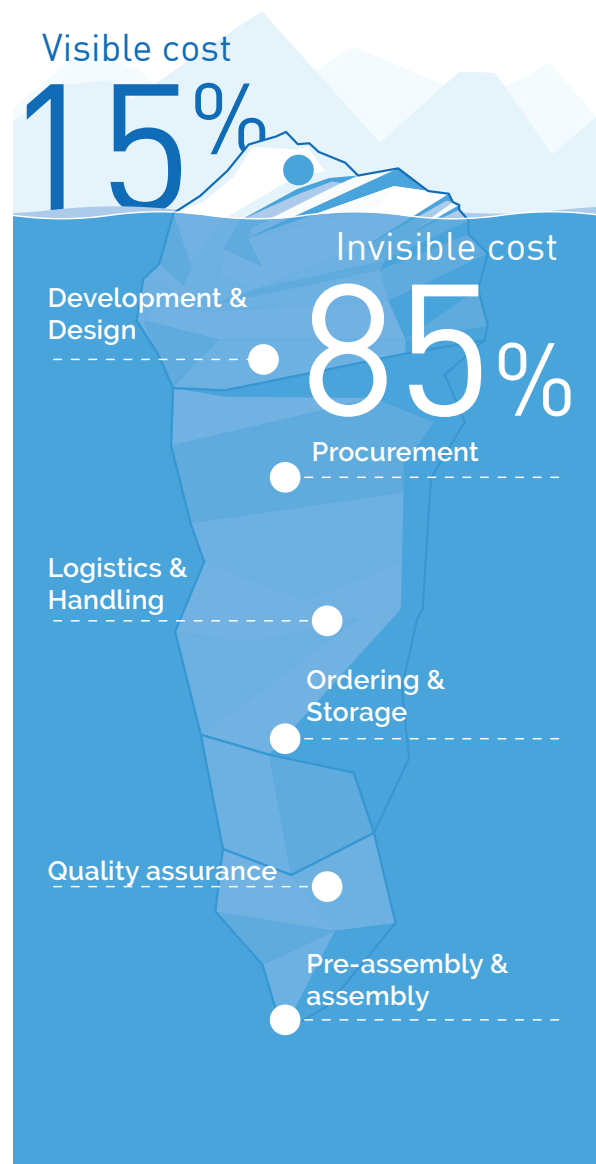
Why is this the case?

### Short-term approach to costing

Nobody enters business to lose money, but falling into the trap of making decisions that offer short-term gains can also result in negative long-term consequences.

Bossard's research - conducted in association with academic researchers - has shown that up to 85% of a company's sourcing costs are 'invisible'.

This means that the majority of a business's incurred costs will only begin to materialise after the initial purchase has been made.



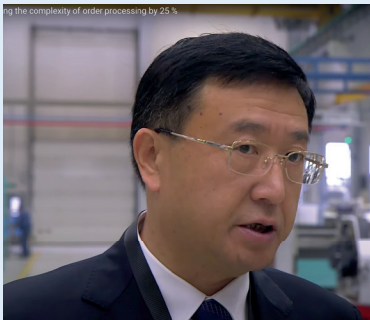
### Failure to hold suppliers accountable

Going with the most inexpensive supply option can result in not only quality deficiencies, but also shackle businesses to self-serving partners who are themselves motivated by short-termism.

Businesses that do not properly monitor their supplier also become vulnerable to exploitation - e.g. when suppliers try to maximise transactions even if the buyer's business needs do not demand it.

Not all poor buyer-supplier relationships originate from malice. Some suppliers simply do not have the necessary expertise or experience to advise businesses on major decisions.

Nevertheless, this can result in excessive resources being devoted to address key issues that could otherwise be channelled to more impactful business areas.



“Bossard has provided a real value added service. In the past two or three years, the types of our parts for the machinery have been reduced.

“We’ve teamed up to solve technical problems that occur during application, and can respond to problems quickly.

#### YD Meng

General Manager, Buhler China Machinery Manufacturing Co., Ltd.



“What makes Bossard different from others is that they have solutions.

For example they have the SmartBin, it’s very quick. Bossard can help us to reduce the cost, it helps us improve productivity.”

#### Qiong Li

Supply Chain Senior Manager, Wuxi Buhler Machinery Manufacturing Co., Ltd.



# How Bossard Solves Your Problems



# 1. Securing your Supply Chain

**Bossard Localisation helps you cut down on material shortages & lead time, while increasing business flexibility.**

How?

1. Source over 1,000,000 screws, nuts, rivets & washer types from our local warehouses
2. Browse from a wide-range of options on Bossard's e-Shop
3. Have faith in internationally-recognised brands on offer

## Local Sourcing As The New Global Sourcing

With most supply chain businesses traditionally reliant on low cost sourcing regions such as Asia, it's with little surprise that local sourcing has found its way into fashion in light of the recent pandemic.

There are several advantages to a local supplier location, the main one being that any vulnerabilities which come with a long supply chain can be minimised such as delivery disruptions or even reducing unnecessary logistics around c-parts procurement.

## Over 1,000,000 C-Part Types Near You

Bossard operates 33 logistics centres across the world. 15 of these centres are located across Asia - from Malaysia, Thailand, and Singapore, to Taiwan, South Korea, India, China and Australia.

Source over our selection of more than 200,000 different standard and branded articles that

are directly from this stock. From Standard Fastening Elements to Specific Fastening technologies, we have the solution for your business.

## From e-Shop To Your Business

Standard parts are the backbone of every invention, sophisticated or not. Bossard offers the complete range of screws, nuts, rivets, washers, bolts, pins and even electrical fasteners in our e-Shop.

With our platform readily available in 23 countries and in 10 languages, you'll be able to boost productivity with our new Bossard Scan App, find the right product with our easy navigation system, learn more about each product with our detailed measurements, features & characteristics and also go through a quick ordering process with our digital self-service area.

## Global Brands That Are Locally Available

After almost 190 years of being in business, the Bossard portfolio includes a wide range of branded products catered specially for the various challenges and applications faced in the manufacturing industry.

From A-Z, our trusted list of reliable products are from suppliers that you have been relying on for years.

## 2. Optimising your Supply Chain

Bossard's range of SmartBin products precisely tracks & manages your inventory for maximum cost efficiency.

How?

1. Error-proof tracking allows for precise stocking
2. Automated ordering system cuts down delivery time & keeps company agile
3. Wireless & 24/7 tracking removes need for excess labour costs

### Always Start With Inventory

Given that the goal of any successful business is to deliver products at the lowest total cost with the highest level of profit, optimisation of the supply chain is key to meet these expectations.

However, any optimized supply chain configuration should take into account various fluctuations in material supply and demand, carrier changes, additional labour costs and other factors that might need regular oversight. Our SmartBin solutions address most of these issues by tackling the most important detail—the inventory.

### The SmartBin

Our SmartBin solutions have been used in many ways to help our customers obtain greater efficiency in procurement. The SmartBin is able to manage anything in your inventory including small and large parts varying in weight.

Additionally, the weight sensors enable continuous online inventory monitoring, with some SmartBin models being able to update all stock and order information in real-time.

Through this system, you get to experience shortened order and delivery time, a lean process that does not require manual intervention, proactive reaction when demand is peaking, a lower Total Cost of Ownership and complete reliability.

Access to the latest technology in various fields by having the right experts has proven to be a great support in new product development.










## Our Systems

### SmartBin Cloud

SmartBin Cloud updates all stock and order information instantly at every use.



### FEATURES

	<b>FULLY AUTOMATED</b>
	<b>WEIGHT SENSOR TRIGGERED BY MOTION</b>
	<b>VISUAL PROOF</b>
	<b>INDUSTRIAL CLOUD CONNECTION (IIOT)</b>
	<b>ERROR PROOF</b> – Automated error recognition
	<b>24 / 7 OPERATION</b> – Continuous inventory update of real-time data at every use
	<b>FULL CYCLE CONTROL</b>
	<b>ARIMS</b> – Access to Operation Dashboard
	<b>LED</b> – Pick-to-light enabled

### YOUR BENEFITS









- Fast, proactive reaction when demand is peaking at every use
- Reliable and secure connection of real-time data
- Use of existing infrastructure
- Transparency and control of data at point of use
- Shortened order and delivery time
- Lean process without manual intervention
- Maintenance-free
- Lower your total cost of ownership

### SmartLabel Cloud

SmartLabel Cloud ensures all relevant product information, real-time order status and delivery date, are visible on-demand.



#### FEATURES

	<b>VISUAL PROOF</b>
	<b>WIRELESS</b>
	<b>MOBILE</b>
	<b>ADAPTABILITY</b> – Use of existing infrastructure
	<b>REAL-TIME INFORMATION UPDATE</b>
	<b>FULL CYCLE CONTROL</b>
	<b>LED</b> – Pick-to-light enabled
	<b>ARIMS</b> – Access to Operation Dashboard

#### YOUR BENEFITS

- Streamlined process thanks to direct ordering at the point of use
- Transparency ensures trust and reliability
- Maintenance-free
- Lower your total cost of ownership
- Increase your efficiency
- Enhance your profitability
- More time for your core activities



## Our Solutions

### ARIMS

Bossard's ARIMS platform allows you to track your orders, manage your inventory interactively and access intelligent analytics all on-the-go.



#### FEATURES



INTUITIVE & SIMPLE PLATFORM



GLOBAL INVENTORY TRANSPARENCY



GRAPHICAL ANALYSIS & REPORTS



REAL-TIME DATA



24/7 MODIFICATIONS



ERP INTEGRATION



MOBILE APP FOR SMART DEVICES

#### YOUR BENEFITS

- Meaningful analysis of big data
- Improved predictability
- Full transparency
- Increased efficiency
- Direct availability of data at the point of use

## Last Mile Management (LMM)

Bossard's LMM system optimizes the flow of materials at the production level and ensures a transparent exchange of information from real-time data to the assembly workplace.



### FEATURES



**ELECTRONIC DEMAND REQUEST**



**MOBILE APP - PAPERLESS**



**INTEGRATION ALL ARTICLES**



**WORK CELLS** – configurable



**ROUTE DEFINITION** – customizable



**SIMPLE INDUSTRY 4.0 TOOL**

### YOUR BENEFITS

- Optimization of the material flow and reduction of movements in internal logistics
- Real-time consumption data for each work cell
- Increased efficiency due to shorter order and delivery times
- High reliability
- Flexibility in reconfigurations

### 3. Smarter Costing & Decision-Making

Bossard's Total Cost of Ownership (TCO) system removes up to 85% of invisible procurement costs.

How?

1. Keep your suppliers accountable & minimise transactions costs
2. Predict future costs with interactive supply chain management platform
3. Optimise products with Bossard Design Expert to reduce production time & costs

#### Bossard TCO helps identify & address your invisible costs

Total Cost Of Ownership [TCO] is a financial calculation that estimates all the costs associated with an asset, directly or indirectly, throughout the asset's entire life cycle.

The end-goal of this calculation is to pinpoint cost drivers and hidden costs.

Here is how Bossard applied TCO to the following case studies:

#### Machining & Tooling Ltd. (MTL)

Machining & Tooling Ltd. (MTL) produces machines, automation solutions, and tooling kits. The company deals with a high number of suppliers, because they rely on a huge variety of parts.

Without a TCO approach, MTL could only estimate total process associated costs. MTL knew that without accurate numbers, they risked overcompensating for cost savings on product prices.

With Bossard's TCO tool, MTL is able to get a quick overview on all relevant process costs. R&D and APE departments now have a more accurate understanding of single process costs and cost drivers, whereas purchasing departments now have a clearer view of total cost blocks.

#### Technical Solutions Corporation (TSC)

Technical Solutions Corporation (TSC) supplies software, equipment, and complete applications related to manufacturing.

TSC works with multiple C-Part suppliers to avoid dependencies. However, its purchasing volume of C-Parts is still about 80% with a value of only 5% per product. The existing tracking system used by TSC relies only on annual data updates done manually by engineers.

Bossard provides TSC with a TCO tool that tracks process costs in real time. Bossard's TCO tool easily integrates with TSC's existing systems, allowing for strategic purchasing, R&D, and assembly decisions to be made based on detailed cost calculations down to the lowest level.



CSYAP and Bossard are working in partnership as we have the same objectives. **Now we are hassle-free in managing our inventory.**

**Yap Chee Yee**

General Manager, C.S. Yap Engineering



“I was impressed by the **SmartBin system** from Bossard, it is **one of the best systems I have ever seen.**

Now that the system is implemented, we are seeing **operational savings** in terms of order management, reduction in parts handling, and inventory cost.”

**Kelvin Low**

Senior Engineer, C.S. Yap Engineering



## Get Started

**Transparency & efficiency are the keys to business success.**

We help reveal your business's hidden potential.

We help your business reduce unnecessary costs.

We help your business navigate turbulent & uncertain times.

We have the global network needed to help secure your supply chain.

We have the data-driven tools needed to help optimise your supply chain.

And we have the methods needed to help you make smarter costing & business decisions.

You're just a few  
steps away from  
increasing your  
business resilience.

Ready to  
pandemic-  
proof your  
business?

---

Visit us.

[www.bossard.com](http://www.bossard.com)