

Front End Loading in new product development  
**“Supply Chain Beyond COVID-19”**  
— Visualisation and Quantitative risk assessment —

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### **COVID-19 & Supply Chain**

It is no secret that many global companies have experienced hindering raw materials and procured parts by plant shutdowns at supplier companies from the effects of COVID-19. In addition, the spread of the infection has been widespread, and there is still no end in sight. Despite the unprecedented crisis of COVID-19, we are in a situation where we can be chased by the spread of further infection now.

Due to these disastrous results, those firms are now forced to review our operations in Asia, Europe, and North America besides domestic ones. It is also true that global companies that rely on unique raw materials that they can only procure in a limited number of countries are experiencing significant delays in strategic projects. In today's superficially globalised world, companies have traditionally focused on reducing costs and improving supply chain efficiency, but there is little room for further progress at present. Because, given the complexity, the presence of multiple intermediaries, and the delivery schedules through different countries, it is no exaggeration to say that only a few companies have a deep understanding of their supply chain.

### **Supply Chain Beyond COVID-19**

Of course, many companies understand the characteristics of their key partners and their positioning in their long-term strategy. On the other hand, there are moves to pre-adjust emergency procurement to minimise the impact of long-term outages of partners, albeit in small numbers. Many manufacturers are preparing to secure raw materials in an emergency. However, these are assumed only for short-period business interruptions. Surely, some companies would secure alternative suppliers for emergency supply shortages. Such a recovery plan can only be seen as an ad hoc and independent plan to defend itself rather than a collaborative recovery in an interdependent supply chain. However, there are few examples of planned rehearsals being implemented to ensure alternative supplies. The supply chain continuity plans that many companies are considering are only for a few key suppliers, and the reality is that they are often a formality. Few companies are reviewing supplier coordination, and even fewer plan to do so jointly. Companies have focused on maintaining long-term competitiveness in their supply chains but are in a situation where they cannot overcome the uncertainties of the impact of

COVID-19.

In light of this, it may be fair to say that while this disaster has raised awareness of supply chain risk, there is nothing that we can do to avoid it. It will be late after things happen, so it is vital to introduce risk management from the beginning of building the supply chain and create a mechanism to set hooks on the way and issue warnings. And if key partners and suppliers carry out emergency procurement planning and exercises together, they should be more likely to keep the right amount of supplies when they need them. Establishing an emergency communication process with key partners and suppliers is the first step and the basis for success. And working together to develop a supply chain continuity plan while understanding each other's priorities should increase resilience in an emergency. Besides, you can verify the effectiveness of your plan by conducting joint rehearsals. Also, it can demonstrate to their employees, customers and other stakeholders that they are a highly competitive firm. That will improve their ability to survive through those.