COVID-19 has redirected the focus of industries towards enhancing risk & resilience strategy. Many organizations face fundamental challenges and find themselves struggling for survival. As a result they are scaling back investments for the year to come. Many will have an increased focus on reducing operational costs without impacting operations. The key to securing success will be unlocking best-in-class performance while embracing the transition to resilient and sustainable business practices.

**CHALLENGES**

Before COVID-19, the industrial and manufacturing sector was largely focused on securing quick and visible wins in supply chain and delivery, data insights and technology, risk management and by creating value through cost reductions and efficiency gains. This has now become even more important. The impact of the lockdowns on industrial clients has created an even higher demand for rearranging capital planning, producing best-in-class products, and fostering a fit-for-future workforce.

**SOLUTIONS**

**Shared workforce responsibility**

The future is, as always, uncertain and requires a flexible and adaptable approach to production, maintenance and R&D. This means an organization’s workforce must have these same characteristics. COVID-19 has shown that having a large workforce can be a heavy burden on a company’s financial position and cashflow. Using smaller, focused, flexible teams, including subject matter experts from external consultants, especially for non-core activities, helps ensure efficiency and robustness in the teams on site and in the office. Moreover, it demands a shared responsibility for performance and success from both the hosting organization as the subcontractor. In times of uncertainty this can lead to greater efficiency and a cost reduction of up to 20 percent.

**Investment strategy and focus**

The massive change in supply and demand in several sectors (with the strongest impacts seen in Automotive, Aerospace, Aviation, Chemicals, Mining and Oil & Gas) indicates that long-term capital investments are being postponed or cancelled. Inevitably only those investments that are already under contract and planned will be executed. This lines up with the ongoing search for

**OUR EXPERTISE**

- Scenario planning
  - OPEX Planning
  - CAPEX Delivery & Strategy
  - Regeneration & Decommissioning of Assets
  - Re-shoring and re-sourcing
  - Feasibility Studies
  - Business Continuity
- Workforce strategy
  - Site Based Teams
  - Capability Planning
  - Optimized Workplace Solutions
  - Health Planning
- Site support
  - Site Infrastructure
  - Site Supervision
  - Construction Management
  - Digital EHS&S Processes
- Optimizing assets
  - Resource Management
  - Energy Optimization
  - Future Proofing
  - Optimal Maintenance Operations
- Sustainability & Resilience
  - Life-cycle planning
  - Minimizing environmental impact

**CONTACTS**

- Martijn Karrenbeld (Global)
  Martijn.karrenbeld@arcadis.com
- Stuart Mason (US)
  Stuart.mason@arcadis.com
- Steven Smith (United Kingdom)
  Steven.smith@arcadis.com
- Dirk Descheemaeker (Belgium)
  Dirk.descheemaeker@arcadis.com
- Frans van der Meer (The Netherlands)
  Frans.vandermeer@arcadis.com
Reduction of operational risks

With the focus on improving (financial) performance and delivery, there is also a need for reduction and aversion of clear risk markers in day-to-day operations. For the industry, this means reducing the costs on non-vital activities while focusing on the core activities. Furthermore, companies should focus on smaller capital projects that have clear implications and higher certainty of ROI. This leads to the quicker delivery of solutions to turn-around problem projects.

Site based teams

Difficult times call for flexible measures. Non-core services in asset and operational management and financial monitoring are best dealt with by outsourcing specific tasks to consultants and experts who know the industrial realm and market by heart. Arcadis has all-round and always available staff, that ensure global coverage and support for all challenges and impediments at hand.

Arcadis’ Program, Project and Cost Management services, together with our Design & Engineering capabilities are world class and available on-site and off-site at any given hour.

Innovate and improve

Arcadis delivers continuous improvements through innovation. Arcadis is renowned for delivering best-in-class performance, innovative practices, and new tools. We ensure assets and operations are cost and time efficient, while transforming operations towards more resilient and sustainable outcomes. Our experience with many large innovation and change management programs provides the basis for a smooth, quick, and successful transition. Together with our Excellence Centers in Romania, India, and the Philippines, Arcadis can guarantee a competitive fee with high quality and the best in class data and technology support.

cost efficiencies and conquering niche markets, asking for speed, flexibility and focus in maintaining and obtaining market share. With current race for a COVID-19 vaccine, the R&D activities of pharma companies have taken on unprecedented importance.

The pandemic has placed a temporary drag on globalization and hampered accessibility of certain supply chains and markets. As a result, many production and manufacturing organizations need to rethink their short and medium-term strategies. On existing supply chain dependencies could lead to shortages in commodities and semi-finished products. It may well be prudent to explore re-shoring strategies that could prevent future shortages and uncontrollable managerial governance structures.

Optimized production facilities

Risks of COVID-19 exposure of workers, together with the increase in automation, data-driven technology, and computer vision, provides space for unpredictable changes to production facilities. With capital expenditure (CAPEX) strategy originally set on higher growth targets and margins, now is the time to review and refocus on spending and investments. The accompanying operational expenditure (OPEX) planning is key to developing better maintained and operated industrial facilities. Prioritization of budgets and focus should be aimed at becoming more resilient and efficient. Providing a solution to the current unstable and uncertain situation will clear a path to accelerated growth when the market and economy settle into a new normal. This also implies the probability of adjusted strategies, including the temporarily closing of facilities and re-opening strategies, following market trends and demand.

Smart and sustainable technology

Research from investors and NGOs shows that one of the responses to COVID-19 is placing paused or postponed technology and sustainability programs back on the agenda. This is supported by initial signs that companies with a strong digital and sustainable strategies are faring better during this crisis and are better equipped to quickly recover.

For the industrial sector, this means focusing on digitalizing core services and exploring e-commerce, automation, and artificial intelligence. In particular, enabling smart program management and maintenance via artificial intelligence and data analytics shows great potential for many industrial facilities. Eventually, the winners will be the organizations that convert to Industry 4.0 in the fastest and most resilient ways.

Another topic of vital importance is the growing need to integrate sustainability into daily operations and practices. These shifts are partly the result of expectations from financial institutions and investors, more and more of which are demanding that investee companies meet their minimal requirements for sustainability standards and (bond) certificates. Investors prefer companies with better engaged with employees and end-users and high environmental, social, and governance standards.
H&S compliant work environment

From ISO Standards to the new protocols and guidelines related to COVID-19, assuring the H&S compliant work environment on and off-site is essential to guaranteeing the wellbeing of workers, colleagues, their families and society. Arcadis has deep experience and knowledge with Global Digital EHS&S Teams across all industrial sectors and asset classes.

CAPEX and OPEX strategies

Due to changing market conditions, the reduction of available investments and shifting strategies, industrial organizations must prepare for a new global order. Defining, strategizing and allocating short, mid and long-term operational and capital expenditure and programs is now essential in setting up for survival and future success.

One of the trends is for organizations to consider a change in off and re-shoring production and manufacturing. Supporting in coordination and planning of these impactful transitions is at the core of Arcadis’ asset management capabilities.

Asset management & planning

Successful asset management includes understanding of critical assets, having proper resources (financial, technical, supply chain) management, being able to optimize process management for repairing, refurbishing, remediation or renewing of assets and steering towards future proofing assets. Arcadis has great experience in supporting for all phases of the asset lifecycle. With a strong focus on digital and sustainability, we have developed multiple tools and applications to support your organizations and teams in integrating these themes into the daily operations.

EXAMPLES

CAPEX program delivery support, Belgium

Arcelor Mittal
For several years Arcadis has supported on site on all civil and technical projects. The team is specialized in Building Engineering, Mechanical and Electrical Engineering and Steel Construction Engineering.

CAPEX support, USA

GlaxoSmithKline
Supporting GSK in North America, we help deliver their capital program for R&D and manufacturing. Our 30 people on-site provide continuous involvements to deliver projects within budget and on time.

Smart technology program, United Kingdom

Logistics Asset Manager
Arcadis is involved in building surveying for aviation cargo centers. Services include program management for smart buildings, piloting of building schemes and business case propositions, including smart end-user solutions for HVAC and MEP needs for office buildings.

CAPEX delivery support, United Kingdom

Honeywell
Across United Kingdom and Continental Europe Arcadis has been preferred partner to deliver capital projects for Honeywell as Project Manager.

Site based teams, Belgium

Chemical Organizations
Arcadis supports many Chemical and Life Science organizations with multiple on-site services to innovate and improve production processes, included successfully completing permitting processes and master planning, engineering project contracts, installment and assurance of proper procedures, process and standards.

Site based teams, across continental Europe & China

Multiple Data Centers
Arcadis is involved for multiple data and financial investors in the process of designing, developing and managing data centers. From the feasibility studies, cost management and optimal design, across Europe Arcadis provided on-site and remote support in delivering cost efficiently and to plan.

Arcadis resources where and when you need them

![Arcadis Offices Map](image)

Arcadis. Improving quality of life