





# Restart and debottleneck your business operations to adjust to changes in operations, workforce, supply chain and sales

You restart your business with changed procedures and part-changed workforce, under uncertain conditions. Hence the business is unlikely to fall together immediately as it used to be. Be prepared to problem solve through consecutive challenges both internally – operations and workforce – as well as in the market – for your supply chains and customers. Communicate effectively and frequently to inform and empower your teams to normalize your business at the earliest in the best possible manner.

## **Background**

Once your workplaces have been prepared for prevention and control of COVID-19 and potentially other infections and safe operations, it is time to restart operations and get your business underway to recovery. As both internal and external factors have changed, be prepared for a fair amount of adjustment to get all your business processes working again harmoniously.

Internally, your workforce will see some change- overs and may be expected to be concerned about infection risks and job and income security given uncertain economic and business outlook. Adhering to social distancing, higher hygiene standard and restricted work rotation may cause genuine concerns among workforce. These new requirements also change workflows that may require further debottlenecking through application of well-proven operational practices, including 5S (). It is appropriate time to save costs by looking into options to reduce the use of materials, energy and water, and minimize the generation of wastes, effluents and emissions, through Resource Efficiency and Cleaner Production(RECP) ().

Externally, your business is part of a supply chain, and hence dependent on operation of your downstream customers, to sustain demand for your products and services, and of upstream suppliers, to meet your business' requirements. Both at side of suppliers and customers, disruptions are evident, on account of constrained logistics caused by lock downs or from declined demand or even business closures. Solutions are to be found in cooperation with current and possibly new customers and suppliers.

# **Approach**

A way forward is illustrated in the figure overleaf. Recover your business by focusing on operations and workforce and customers and suppliers that you are dependent on. There is no sequence, all four aspects need to be addressed and resolved in an



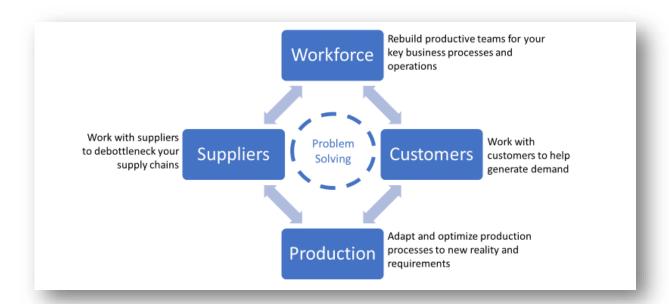




interconnected manner. Work towards the recovery targets and timelines you set during recovery planning. Keep everyone informed and empowered about recovery plans, targets and achievements, and foster cooperation and teamwork to solve issues as these arise.

<sup>1</sup>5S is a set of workplace management techniques that focuses on improving and maintaining processes, equipment, workplaces and people. 5S stands for consecutively: sort, set in order, shine, standardize and sustain (<a href="www.apo-tokyo.org">www.apo-tokyo.org</a>).

<sup>1</sup>Resource Efficient and Cleaner Production (RECP) is aimed at increasing the efficiency of use of materials, water and energy, and – thereby – reduce the generation of waste, effluents and emissions, which contribute to improved working conditions and enable higher worker productivity (www.recpnet.org).



## Workforce

#### Rebuild productive teams for your key business processes and operations.

The COVID-19 pandemic and lock down have caused drastic change in what are considered acceptable practices for people to be together, privately as well as everywhere in society – schools, shopping, travelling, socializing and indeed working together. Moreover, acceptable standards for hand hygiene and coughing behaviour have tightened up. Naturally, each of us, including your workforce, will be equally uncertain about what is indeed safe and anxious about not wanting to get infected or become a carrier. Acceptance of new standards will require owner/operator, management, technical staff and supervisors to clearly communicate the new distancing and hygiene standards and lead by example in adopting these at all time.





As you rebuild workforce, consider amongst others the following:

- ✓ How many staff, workers and/or contractors would you need for restart, for recovery and for revitalizing your business?
- ✓ Do you have the right qualifications and skills across you workforce?
- ✓ Do you have a healthy mix of experience?
- ✓ How to motivate your workforce to do better and do differently?
- ✓ Do you have sufficient flexibility in your workforce to respond to different scenarios that may unfold?

For a variety of reasons, some who worked earlier at your company may not want to return to work with you. At the same time, your staffing requirement will have changed due to initially lower production and changes in workplaces. Overall, most likely you will be faced with some degree of mismatch between labour available to your company and actual labour required – in regard to number and qualifications of workforce at all levels, from unskilled daily labourers up to technical and/or managerial positions. In case of staffing shortfall, you might need to prioritize recruitment from local area and team up with local training institutions, such as engineering colleges and/or industrial training institutes. Moreover, consider to match more experienced staff with newcomers, through a buddy system. With high uncertainty prevailing, you may need to look for workforce that is more flexible and could be utilized productively in more flexible manner.

Standard Operating Procedures (SOP) provide step by step clarity of activities and controls that are needed in specific roles and positions. Spending time and effort on their development pays off when strictly implemented and deviations continuously monitored and reported.

Do pay attention to promote workplace cooperation and create effective and productive teams in all business areas. Motivated and productive teams are based on trust and mutual respect, enabled by effective two-way communication. So do take time to inform your teams about the plans and concerns of your business, take concerns of your workforce into consideration and entrust them to find practical solutions that work on a day-to-day basis. Communications and team work will get you ahead. In all efforts you will need to find way to communicate and cooperate whilst maintaining social distance of some 5-6 feet.

## **Production**

Adapt and optimize production processes to new reality and requirements





As you are obliged to do the utmost to prevent further spread of COVID-19 on the shop floor and other business areas, all staff, workers, factory hands and other supports can no longer roam around as freely as might have been the case before. Therefore, workstations/work places and movement corridors need tighter control and demarcation on the ground, be signposted and/or even physically separated with dividing screens or curtains. This though may work against efficient movement and processing of your workflow, and hence impact productivity and quality.

#### Once production has started up you can hence benefit from repeat questioning:

- ✓ Can we take out something that is not needed or interferes with smooth operation – for example, a tool, spare part, scrap or even a movement or operation?
- Can we do more with less materials, water and/or energy?
- ✓ Can we operate with less wastage as scrap, solid or liquid waste or as air emission?

You will benefit from using and wasting less, which are at the core of what is known as productivity management, in particular 5S, and resource efficiency (also known as cleaner production). 5S and resource efficiency are complementary, with 5S principally focused on minimizing the production effort (machine and operator time, workflow movement etc.) and resource efficiency focused on minimizing the use of physical process inputs, particularly materials, chemicals, energy and water.

#### 5S adoption

5S is a five-step workplace organization technique to create and maintain an intuitive and efficient workspace, through:

- ✓ Sort: keep only necessary items in the workplace;
- ✓ Set in Order: arrange items to promote efficient workflow;
- ✓ Shine: clean the work areas so it is neat and tidy, and deviations from normal can be easily identified;
- ✓ Standardize: set standards for a consistently organized workplace; and
- ✓ Sustain: maintain and review standards for further continuous improvement.

During start up you will most likely benefit most from the 2<sup>nd</sup> and 4<sup>th</sup> approach – Set in Order and Standardize. All items needed for the assigned task should be easily within reach to avoid unnecessary and possibly strenuous movements that slow down workflow and may cause operator fatigue and hence errors leading to defects. It normally involves removing items that are not routinely or regularly needed to





smoothen the main workflow. The established best way for performing each task and the specifications to be achieved is then documented in Standard Operating Procedure – if adhered to consistently, the SOPs would give your business the best possible outcome (productivity, quality, etc.) with the least necessary effort (labour, time, machinery, tools etc.) – which is the core idea of lean manufacturing, as also promoted through the government's initiative of Zero Defect – Zero Effect or ZED scheme (see: <a href="https://zed.org.in/">https://zed.org.in/</a>).

#### Resource Efficiency:

Resource efficiency is aimed at doing more with less physical inputs, particularly inputs of materials, chemicals, auxiliaries, energy and water. This reduces costs, as you have to pay to procure these inputs, and minimizes impacts on the environment, as you produce less waste to be thrown, flushed or blown away. Resource efficiency can be achieved in multiple ways, starting from simple operational measures to use of advanced clean technologies.

When restarting your operations, you may particularly benefit from systematically:

- ✓ Switching off anything that is not being used. Start switching off lights, taps, fans and air-conditioning in spaces that are not used, either manually or with simple sensors. Make sure no motors, pumps, conveyor belt, or alike is running without any actual workload. Get ride of anything that runs idle with a simple switch or self-closing valves on hoses.
- ✓ Eliminating all leaks and spills. Even though leaks and spills of (intermediary) product, oil, steam, water, compressed air etc. are common place in many industrial units, this should not be confused with being normal. Every leak or spill involves a monetary loss to your enterprise. Encourage everyone to identify and tag spills and leak areas, and get these repaired. It will also improve the work environment, reduce hazards and improve worker productivity.
- ✓ Segregating scrap in any form and actively reuse where possible. If you have cut off pieces, they might be useable next time you need a small piece of the same material. If for example some paint or other auxiliary is left over from a job, you can possibly use it next time. Provided, of course you segregate the left overs, take same care of it as you do for your raw materials and know what your inventory of left overs is.
- ✓ Substituting with more efficient devices. Any time a light, motor, fan, nozzle or alike is broken and needs replacement, look for one that is more efficient. It may





be slightly more expensive upon procurement, but will save you for long time to come.

## **Supplies**

#### Work with suppliers to debottleneck your supply chains

Your business is critically dependent on receiving the required inputs – materials, components, auxiliaries, tools, etc. – at the right time with suitable quality and consistency and at predictable and acceptable price point. Missing one supply could halt your operations. Supplies involve a web of suppliers and logistics partners. Each of these supply partners will have its own specific impacts from lock down and hence a specific recovery journey. All suppliers though will need to come on board and restart in a coordinated manner for a smooth resumption of your business.

Anticipate to take some hurdles to get your supplies all set in place. Some suppliers may no longer or not yet operate, due to bankruptcy and close down, extended lock down or shortages of personnel, materials and/or working capital. Others might be running, yet impose price hikes or changes in delivery and/or payment terms. Or supplies might be available at your supplier but not be able to reach you due to movement restrictions for freight, in particular interstate or international, or disruptions in warehousing and forwarding. Or your business may be short of working capital to procure adequate amount of supplies.

There are unfortunately no one size fits all solutions to debottleneck your supply chain. It is wise to start in any case early with contacting your suppliers and finding out how they have been affected by the crisis and if they experience any shortfalls to get back into supplying you. You might just be able to help them out with one of your business connections or by accommodating minor changes in specifications. As a second option, consider alternative suppliers, particularly for critical supplies (such as tailor-made components) or supplies from distant suppliers. When exploring alternative suppliers, start in your own area or work with some of your other suppliers that might have similar capabilities as it might be easier to buy a new item from an existing supplier than start afresh with a new supplier. Can you bundle the transport of incoming supplies with those from neighboring industries, or can you accommodate different logistical channels? If in tight cash flow position at your own end, discuss with your suppliers. Your suppliers need you as much as you need them and maybe they can accommodate a change in payment terms that would support your cash flow.







Most businesses, even MSMEs, procure many different supplies from a large group of suppliers. It might be daunting to just start debottlenecking. Hence consider your own priorities to get your business rolling again. Among your usual supplies, start with the ones that are essential, proceed thereafter with those needed, and only thereafter consider the supplies that were desirable. Don't waste your effort on anything that is avoidable at this stage. And review, within your changed business context, is everything you previously deemed necessary, still indeed necessary or have some become desirable?

# Supplies

#### Work with customers to help generate demand

You ultimately need customer demand for your products and services to bring back business viability. With supply chains and markets thoroughly disrupted by lock down and other movement restrictions, demand is unlikely to pick up at the levels you were used to in the past.

As with supplies, anticipate that business has also changed for your customers.

In B2B segment in particular, your customers may no longer or not yet operate, due to close down or lock down, or them having shortage of personnel, material, financing or otherwise. Your existing customers may also insist on price discounts or changes in delivery and payment terms, such as a credit sale instead of cash sale. And how credit worthy is your customer, can you still get paid for your product deliveries? Your customer might want your products, but can you get your products there in light of disruptions in logistics, warehousing and distribution.

Every sale would be to some extent unique hence it is wise to first touch base with your customers — individually with your large or anchor clients or perhaps through focus group with larger customer base or dealer network. Are your customers ready to resume operations and use your products and services, or would they benefit from your support to swing back into business? Even in crisis recovery time, keep scouting for additional customers. Can you change some parameters of your products (e.g. packaging size or form, dimensions, etc.) to win new customers for your business? What options do you have to improve your cash flows through different sales conditions? Bring these options to your customers, can you entice and convince them for improved sales conditions e.g. on cash basis.

Also take a step back and look at the final (consumer) goods that your company contributes goods or services into. Would it be plausible that consumer sentiment



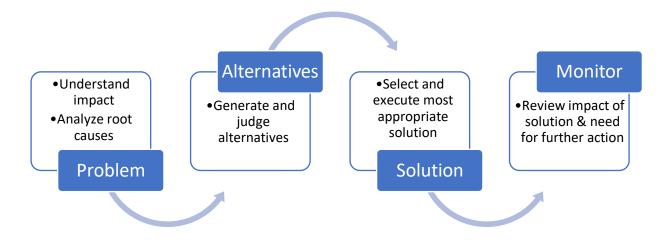




has changed in the face of global crisis conditions? In which category were you supplying before – Essential, Needed, Desirable or Avoidable and for which consumer segments? Are any changes plausible and would be at the advantage or disadvantage to your business? Consider possible ways you could help your products move higher on the preferences for final consumers – can you substantiate a claim that your products are more needed now then before?

## **Problem Solving in Practice**

The crisis conditions carry a high degree of uncertainly and unpredictability, hence it will not be possible to predict and plan your restart in detail ahead. It seems unavoidable to start in mission mode and be prepared to identify and quickly resolve challenges and problems as these arise. As tempting as it might be under crisis conditions to jump straight from a problem to the first offered apparent solution, one is best advised to follow a solid approach to problem solving to reduce the risks of not addressing root causes and indeed support continuous improvement and innovation



#### A systematic approach for problem solving involves four logical steps.

✓ First, properly define and analyze the problem, in particular the severity of its impacts on your business and then a comprehensive root cause analysis — do not assume a problem is caused by a particular cause, until you have considered and ruled out alternative root causes. This can be done with what is known as five times "why" question. First time the why question will give you an apparent or observed cause e.g. a malfunctioning valve. On subsequent reiterations why the valve malfunctions, you may come to the actual root cause, e.g. mechanical





failure of the valve due to rust and dirt or disturbance of your process resulting in changed viscosity of your product.

- Second, generate and judge alternatives. With the root source in mind, what are possible ways to eliminate or control this root cause. Explore different ways to achieve an outcome and then assess what has a higher probability of success, and what is necessary to make the change?
- ✓ Third, select and execute the most appropriate solution. What is most doable and affordable to your business? Plan what activities are needed and who will need to do what by when.
- ✓ Fourth, monitor and review the impact of the executed solution. Has the identified solution been adequately resolved or is there a need for further action?

It is important that each step is considered and result captured to allow for learning and review. Whilst it might appear a long process, in fact the above is more a mindset and routine. For day to day smaller problems it can be completed quickly during a team discussion. If major changes and investments are involved though the problem-solving needs further time, effort and details.

**Disclaimer:** Information intended for general advice