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New Pandemic Planning

Key Learnings from the Field, and Some Business Resilience Thoughts

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Rolf von Roessing, CISA, CISM, CISSP, CGEIT, FBCI is a partner at FORFA Consulting AG. He has 30 years of experience in governance, risk management and compliance; security and business continuity; and crisis management in a range of sectors, including banking and finance, insurance, wholesale and retail, automotive, and healthcare. He has also been teaching as a senior lecturer in M. Sc. courses at Donau-Universität Krems since 2005 and is a member of the Academic Council for these courses. Rolf is an active member and current Global Vice Chair at ISACA, and a Fellow of the Business Continuity Institute. He previously held senior positions at KPMG and Ernst & Young.

Author´s note: in contrast to other White Papers, this article draws heavily on empirical evidence from earlier pandemics to prove the key points. We do not wish to publish assertive statements without proper academic and field evidence. All sources will be made available to readers on request.

New Pandemic Planning

As the SARS-CoV2 pandemic is unfolding, existing plans and countermeasures from previous epidemics have turned out to be forgotten, inefficient or less adaptable than expected. Many organizations now realize that the medical imperative comes with a heavy business impact that may endanger their existence.

At the same time, the onset and first wave of Covid-19 on a global scale provides several key learnings for business continuity and emergency management practitioners. Despite the heavy challenges societies and markets are now facing, experts and organizations should study and internalize these learnings to be better prepared for future pandemic episodes.

Key Learning #1: We are not as resilient as we thought. Locking down regions and whole countries has shown that traditional supply chains are under strain, and that the number of critical dependencies for most organizations has risen sharply in comparison with earlier pandemics. As a result, organizations are much less resilient than they were during earlier pandemics, such as SARS in 2003, the bird flu in 2005, or MERS in 2014.

Key Learning #2: We did not anticipate the trade-off between health concerns and business interests. Existing business continuity arrangements implicitly assumed that governments would primarily work with business to keep the wheels in motion. They did not foresee the categorical and drastic measures taken in the interest of health, taking into account massive economic impacts. Academic research on how to deal with this dates back to the 1970s.

Key Learning #3: Business continuity and pandemic plans have failed. Most plans anticipated temporary staff losses of up to 30%, but not up to 100%. Freedom of movement and choice with regard to work sites was never questioned. In times of curfew and radical quarantine, these plans are of little use.

Key Learning #4: This is a game changer for crisis management. Traditional models and approaches to managing crises are no longer applicable, as motives and expectations have moved away from the principle of “greatest good for the greatest number”. Managing in a state of emergency or even martial law is beyond the experience horizon of most active practitioners.

Key Learning #5: Digital Transformation is key. More often than not, organizations were thrown in at the deep end, having to enter full digital work mode within 24 hours. We observe that those who have progressed furthest through their digital transformation are reaping the return on their investments now.

All considered, we urgently need to revisit business continuity and business resilience. Covid-19 is not a black swan, but it has shown itself to be a gray swan in terms of government actions and the successively more dramatic changes to daily life. Organizations should therefore take a long and hard look at their previous assumptions and beliefs. New approaches to BCM and resilience will be needed to meet the challenges, and these will be table stakes for the remainder of 2020 and – possibly – the years to come.

We are not as Resilient as We Thought

As life seems to have come to a standstill, organizations and societies are facing restrictions that were thought to belong to bygone days: stockpiling, travel bans, curfews and wide-ranging closures of public venues as well as businesses. Governments – reluctantly at first, then very decisively – have imposed unforeseen, but radical measures to contain the spread of the SARS-CoV2 virus.

As this is a global phenomenon, organizations are affected in a variety of ways. First, industries serving the public at large have seen their raison d´être vanish almost overnight. This cluster includes tourism, airlines, hotel & catering and many more dependent sectors. Second, industrial sectors furnishing non-essential consumer goods have been brought to their knees as their traditional sales channels are closed for extended periods of time. Third, larger parts of the service sector have been banned from delivering services involving personal contact.

Regardless of size or actual business activity, organizations are experiencing a systemic failure of their ecosystems. Short-term relief such as subsidized reduction of working hours (*Kurzarbeit*) or other government assistance may help absorb the initial shock, but the long-term consequences of disrupting global supply chains and shutting down whole economies remain to be seen.

Resilient organizations – or whole industrial sectors – are few and far between. As expected, there are economic drivers that favor certain types of organizations in times of crisis: essential services, products for the healthcare industry, online shopping and related logistics, and many others. Apart from these, the vast majority of businesses is undergoing a global test of resilience, one way or another.

Supply chains have become longer and more complex over the past several decades [1], with multiple dependencies and a de-perimeterization of organizations. In a nutshell, almost any organization is dependent on a rather large number of things, ranging from essential goods to cleaning services. As the crisis progresses, many of these supply chain links fail, forcing either replacement or winding down operations altogether.

Gradually, a disconcerting picture is emerging: what used to be deemed “resilient” is now failing in a series of cascading ripples through the global economy. In contrast to earlier pandemics [2][3][4][5], there are no safety margins left. The approach to Covid-19 taken by the WHO, national health authorities and politics is indeed more similar to the containment efforts envisaged for another type of outbreak [6]. Organizations are ill equipped to deal with the sudden failure of larger parts of either their suppliers or their markets.

All considered, we are much less resilient than we thought. As pandemic plans and business continuity arrangements are being put to the test, many organizations realize that their assumptions about societal and business life are no longer valid. Consequently, exposure to economic and political shocks is much higher, calling for a different strategic approach.

The Critical Trade-Off

Covid-19 as the disease resulting from SARS-CoV2 has had a profound impact on countries across the world. Besides the medical challenge, media coverage and the rapid evolution of various “alternative” views in social networks have changed the game. As a result of the rapidly mounting pressure on governments, a medical imperative has emerged that unequivocally and absolutely assigns priority to saving people from contracting Covid-19.

This in turn has led to a strategy of “flattening the curve” of new infections that has been adopted by most countries [7]. This is depicted as an overview in Figure 1 below. Slowing down the spread of infections is the underlying rationale for introducing ever more drastic measures aiming at isolating individuals. Following this approach, the inevitable result for organizations is a – albeit temporary – loss of personnel up to 100%, particularly where no business continuity or specific pandemic recovery plans are in place.

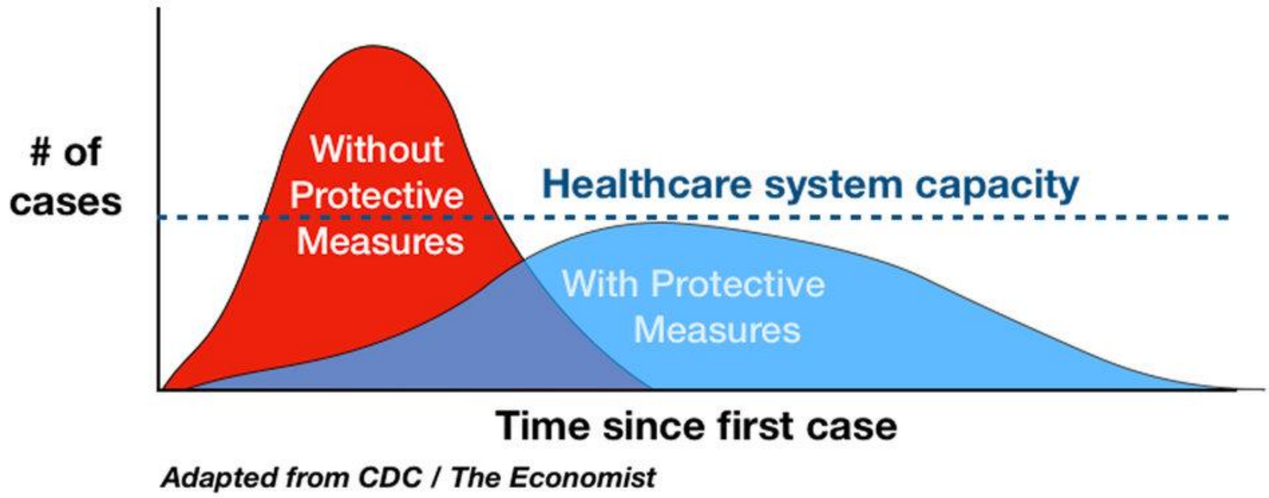

FIGURE 1: PROJECTED INFECTION RATES AND HEALTHCARE CAPACITY

In this paper, we explicitly do NOT endeavor to question this strategy – it is simply taken as fact, requiring a response. However, [8][9][10][11][12][13] – to quote just a few sources – seem to suggest that the current situation is not as unique as often reported, and that the current strategy is significantly different from approaches towards past epidemics.

Protective measures in the medical sense inevitably encompass segregation and isolation of individuals, primarily in order to break the chain of new infections. Rather than tolerating a massive rise in new Covid-19 cases with corresponding recovery rates, the perceived limitations of national healthcare systems is taken as a boundary that logically extends the period in which new cases may occur, while trying to keep the overall case numbers at any given point in time below a certain threshold.

This comes at a price. In order to achieve and maintain the planned slowdown in new infections, most business activities have been significantly restricted, sometimes preventing organizations from doing business at all – at least in their normal mode of operations. There is a trade-off between business interests and healthcare interests, which is now becoming more apparent than in the past. National and global economic outlooks are therefore gloomy, predicting a recession that may last for a considerable time and might widen into a global crisis not unlike the Great Depression in 1929.

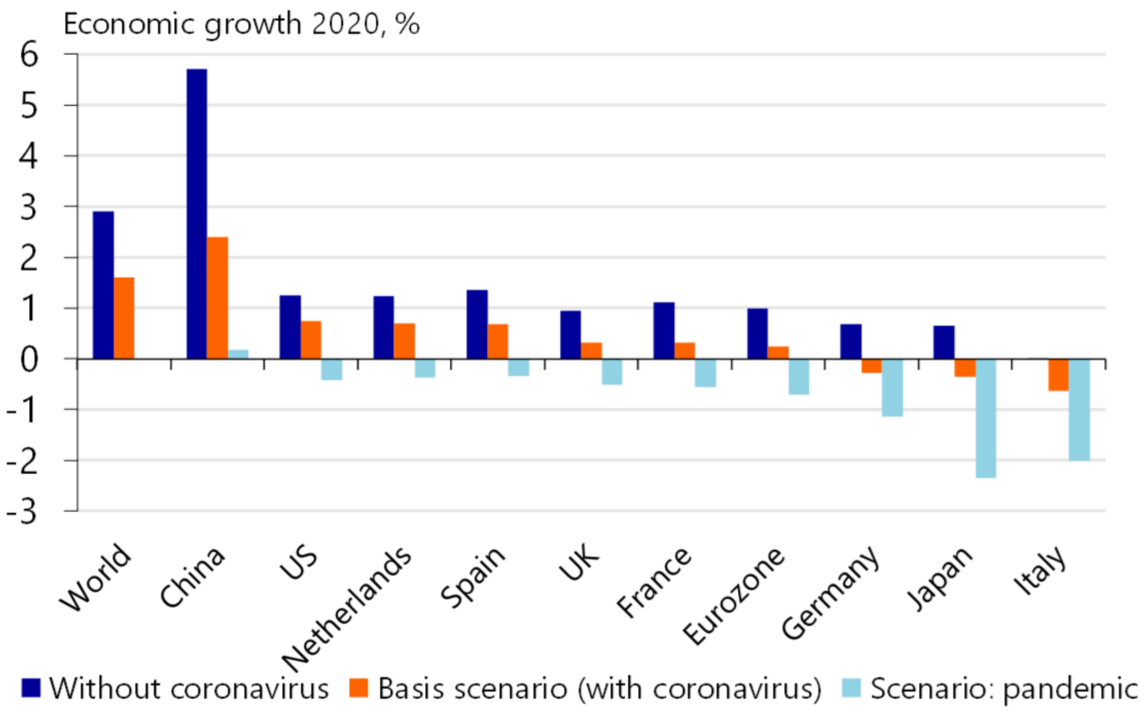

Figure 2: Economic Outlook for 2020 (Source: Rabobank)

Regardless of the variance in economic forecasts such as the example shown in Figure 2, both small and medium sized enterprises as well as specific sectors are likely to be at the center of the expected downturn. At best, this may be a passing effect – at worst, critical parts of the supply chain will be permanently disrupted, forcing organizations to re-think their strategies in order to continue their core business activities.

In summary, any prolonged suspension of business, combined with more stringent health-related restrictive measures, will inevitably aggravate the economic downturn. National and global initiatives to provide threatened organizations with interim credit may fail: additional liquidity funneled into the markets may ensure short-term functioning of the system. However, as the medical crisis gradually subsides, organizations will face their accrued losses and may still not survive payback day on their emergency loans.

This critical trade-off must be taken into account when planning and organizing for pandemic scenarios. Organizations must revisit their assumptions and find answers to long-term outages of business as well as cascading supply chain effects.

On Failed Plans

As the crisis progresses, many organizations are facing successive failure of their business continuity and pandemic plans. Where these plans are based on flawed assumptions, immediate failure follows. Where plans may have anticipated the situation but do not cover a sufficient period of time, plan failure after the end of the defined time horizon is almost certain. As a result, many organizations are forced to improvise and hope for the best [15].

Traditional pandemic planning after previous epidemics centered around strengthening the business activity side of things, while staff availability was assumed to be a (partial) given [16][17][18]. Typical BCPs would further set a level of expectation with regard to government restrictions, but they often assumed that market demand for products and services would remain comparatively stable.

In the current context, we observe several key weaknesses that contribute to partially functional or failing plans. Not all of these are present in all cases, but many historical errors appear to be repeating themselves.

Scope error – pandemic plans cover parts of the organization and employees only. Family and friends, family-centric services and private needs of employees are often not included in plans.

Flawed assumptions – plans assume that business (as long as essential functions are running) will continue as usual. They do not anticipate volatility in demand or volatility in the supply of upstream products and services.

Incorrect time horizons – plans are designed to cover a period of up to three months, assuming that restrictions will be lifted after this period of time.

Disconnect with crisis management – plans prescribe certain business and behavior patterns that are impossible or unwise to invoke from a crisis management standpoint. Frequently, these prescribed patterns are unlikely to be acceptable from an employee, media, or health point of view.

Cost considerations – plans are designed with cost minimization in mind, reducing resources and reducing effort in times of crisis. As a direct result, the increased resource needs during recovery and reducing the backlog are not considered. Likewise, the added cost of care for employees is often overlooked.

Scenario error – plans do not describe an adequate pandemic scenario, or precisely the wrong one. This type of planning is not versatile enough to allow for a “flexible response” strategy when enacted.

Planner and group bias – assumptions for pandemic planning are based on group-dynamic decisions rather than data. This typically introduces biased planning that is often distorted by fear, lack of knowledge, or non-factual influences.

A Game Changer for Crisis Management

Traditional crisis management practices have proven insufficient to cope with the "Corona Crisis". In many instances, the actual situation has been altered by an increasingly aggressive media coverage that, in turn, has prompted political forces to enter a race towards the "strongest" or most "decisive" measures to be taken. Without prejudice to their respective value and justification, more is likely to follow.

As a result, the chain of information and reasonable analysis is broken. To a large extent, "risk as a feeling" has replaced more objective analysis, and the very foundations of modern democratic societies are being suspended. This is new, in that health-related crises of the past were rarely used to create new political realities.

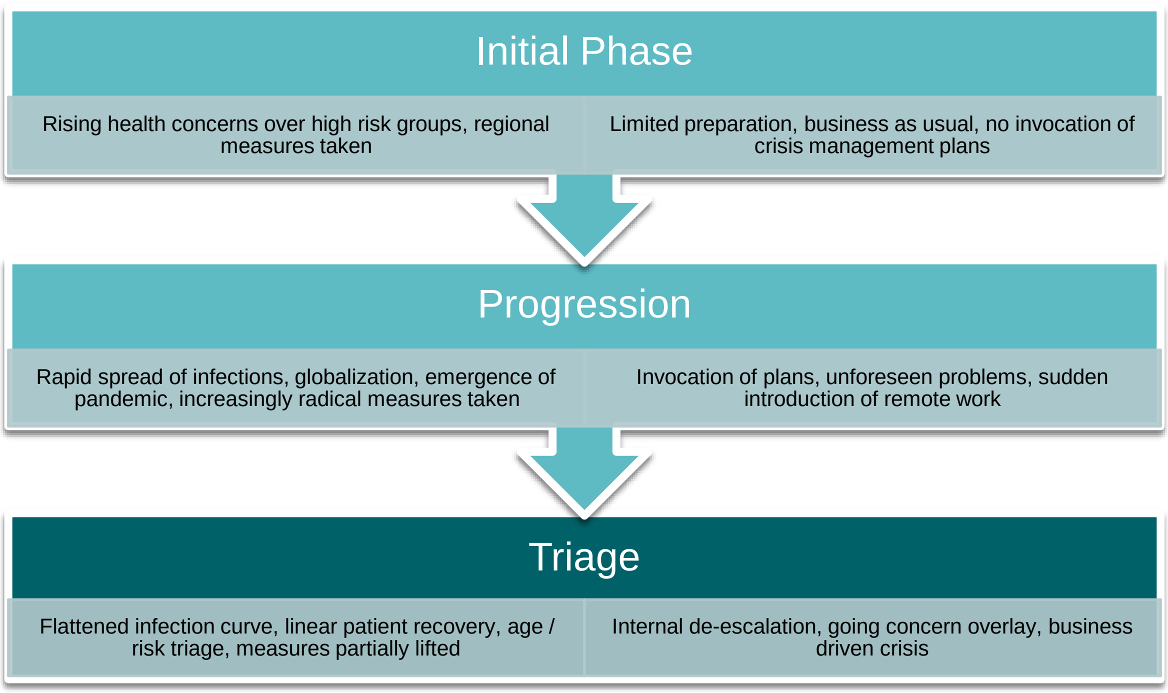

FIGURE 3: OVERVIEW OF CRISIS PHASES

For crisis management practitioners, this is a game changer. Following the increasing pressure to isolate individuals, most countries have imposed a partial or full curfew. But there is more to come:

Winding down non-essential industries[1] and cordoning off cities – parts or all of the organizational facilities may not be accessible for prolonged periods of time.

Direct military control of "key" enterprises[2] - crisis management may face a "new boss" at any point in time, which is equal to indirect martial law.

[1] Cf. Italy, as of 2020-03-23
[2] Cf. Hungary, as of 2020-03-20

Nationalization[3] - the immediate crisis may be followed by loss of management control.

Geo-tracking of individuals and long-term restrictions of movement – crisis management teams may lose freedom of movement regardless of existing deployment plans.

The inevitable and massive economic downturn (see above) will lead many nations to consider centrally planned economic mechanisms. Organizational crisis management may have to regroup under rationing, requisitioning and re-purposing of production facilities.

Indeed, the very political model of democratic decision-making is now being questioned[4], as more and more political stakeholders seize the opportunity to create facts that may change the respective systems in an irreversible manner.

Crisis management will therefore have to refocus and reinvent itself. Earlier recipes and plans are no longer viable, as the freedom of decision (and implementation) is restricted. As a result, it is likely that crisis management teams will have to stay in operation for much longer periods of time, covering even months or years.

The current crisis also marks a momentous shift from rational decision making to deciding in view of "prevailing opinion" and public perception. New stakeholders have emerged whose immediate power is much greater than in previous health crisis situations.

This in turn puts enormous pressure on crisis management teams to conform to expected courses of action, even if these do not fit the organization´s interest and plans and require flexibility in management and workforce.

[3] Cf. The United Kingdom, as of 2020-03-23
[4] Cf. Hungary again, as of 2020-03-20

Digital Transformation is Key

For most organizations, the primary means of continuing business is to put non-essential and administrative activities in remote mode. However, this is often difficult as digital maturity is low and business processes are not designed for remote operation. There are various reasons for these shortcomings, including technical and organizational weaknesses:

Weak infrastructure – where organizations rely on stationary IT and on-site presence, the remote infrastructure (if any) poses bandwidth issues. In many cases, hardware and office supplies for remote work are not readily available. Additional security issues may arise where BYOD is improvised or where groups of people need to introduce federation through collaborative tools.

Unsuitable work practices – in organizations with a traditional regime of work practices, time accounting and existing policies may be obstacles to remote work or flexi time. In times of crisis, these are not easily changed, often causing delays until new arrangements have been agreed.

Weak tool chain – in many organizations, core processes cannot run in remote operations because key elements of a digital tool chain (such as qualified electronic signatures) are missing. In other cases, collaborative tools are insufficiently developed, including conferencing, data rooms and secure mail. Experience with existing – or available – tools is limited, and security concerns cannot be addressed at short notice.

Lack of skills – many employees having to work remotely will not have the requisite skills. Managers are not experienced in leveraging digitalized ways of working and orchestrating their teams. Training may be difficult to organize at short notice. This in turn leads to a slowdown in throughput and puts employees under pressure to deal with growing backlogs.

In practice, we observe that organizations who have a high digital maturity level are most likely to cope with the current situation. Where remote or flexible work patterns have been tried and tested, transition to full remote operations appears to be seamless and without any loss in productivity. More traditional organizations experience moderate to severe difficulties in trying to get to grips with the threefold challenge of rapidly adjusting technology, processes, and people´s mindsets.

Digital transformation is therefore one of the key success factors in preparing for future crises that will require remote operations for extended periods of time. This is particularly important where both administration and any production sites or other integrated processes must be continued at high levels of availability. As pointed out above, even a short period of “shutdown” may lead to significant losses up to the point of facing going concern issues.

Being digital is even more important where long supply chains or supply meshes are in place, as interfaces between organizations and third parties need to remain functional at the assured level of service. If business partners have not tested their business continuity arrangements, degraded or failed service may occur, quickly causing cascading effects through the supply chain.

Refreshing BCM and Resilience

Given the five key learnings outlined above, new pandemic planning is an exercise in business continuity management to achieve a higher level of resilience. However, plans for the current crisis and future situations will be different from those of the past. The social and political environment has changed significantly, as have the financial and reputational consequences for organizations. Past pandemics may therefore be informative in medical and societal terms, but they cannot necessarily be taken as object lessons for the future.

We observe several key areas in which the business continuity management system (BCMS) and its components (including pandemic plans) will need to be changed:

Area 1 – Scope and assumptions: rework is needed to reflect the massive restrictions imposed by governments, including travel, freedom of movement, availability of goods, societal shutdown etc. This means that a pandemic plan may look more similar to a civil unrest or wartime scenario, but with certain differences. Furthermore, planners need to revisit the usual assumption of a maximum of 30% or 50% temporary loss of staff.

Area 2 – Crisis management plans: rework is required in terms of escalating, managing through longer periods of time, and de-escalation in line with gradual lifting of public countermeasures. Planners further need to prepare for a secondary crisis – after the business impact has been materialized with a time lag – and adjust their strategic and tactical approach. In practice, this will often mean a complete overhaul of current crisis management practices.

Area 3 – IT Service Continuity Management: significant rework will be needed to adjust traditional (infrastructure-centric) ITSCM to the new reality of distributed, collaborative and cloud-based operations. To a significant extent, this will also mean revisiting information security and cyber security. Planners will also need to look at supply chain IT continuity, making sure that critical interfaces and communications with business partners are covered, tested and functional.

Area 4 – Communicating and protecting against non-financial impacts: additional plans will be needed to address crisis communications, finding and adequate balance between organizational needs and individual employee protection, protection against any legal action, maintaining and protection the organization´s reputation, and more. Most importantly in this area, organizations will need to develop and implement processes for recognizing unexpected opportunities and acting on them.

Area 5 – Cleaning up: Plans are required for managing third-party funding (such as special aid), refinancing (for example reacting to margin calls) and taking stock after the initial period of crisis is over. From an operational perspective, organizations also need to be aware of the backlog arising from the crisis and adjust their planning accordingly.

The current crisis is a wake-up call: just ensuring business continuity and recovering the organization to the state of affairs before the crisis is obviously wrong. There are too many changes in the economic climate, the market outlook and the way in which business will resume post-crisis. This means that organizations will need to understand the “new normal” and use it to their advantage.

This is why the current crisis presents an opportunity for reviewing and strengthening organizational resilience. While this may sound counter-intuitive, organizations are currently experiencing a situation with unforeseen external conditions and – in many cases – improvisation.

Quite often, this includes changing daily routines, questioning what used to be “certainties” and finding new ways of solving sudden and unexpected problems. We observe that many are considering this to be an opportunity for not going back to their traditional business model, but to review the potential benefits arising from the sudden need to change.

However, in many cases this is not easy. Many of the internal steps taken, such as moving to remote operations, may not work for indefinite periods of time. The immediate cost savings will be offset by limitations on top line growth. Measures designed to sustain business in times of austerity are simply the wrong recipe for times of recovery, growth and opportunity.

Genuine resilience is different, as it encourages organizations to reinvent their business model, quickly internalize key learnings from crises, and move decisively when presented with unexpected opportunities. Organizations aiming at strengthening their overall resilience should therefore address a number of key questions:

Which parts of the business are affected and why? The “why” is important, as it will reveal weaknesses and – possibly – how to take preventive measures for the next crisis.

What are the “certainties” that have suddenly disappeared, and what is the new normal? In many instances, time-honored assumptions and beliefs about the business are suddenly gone. Other such “certainties” should now be questioned to change organizational culture in line with the new normal.

What are we doing differently now, and why is it (not) working? This is a time for questioning and changing established practices, taking into account the crisis experience. The key success factor in resilient organizations is their drive to constantly change and adapt.

We observe that organizations with a higher level of resilience use every crisis – or even “near misses” to test their assumptions and adapt to changes in their ecosystem. This is supported by a resilience management model such as [19][20][21] that structures the implementation of these changes.

For further information please contact:
Rolf von Roessing
Partner
+41 41 511 4603
+49 172 6712322

References

[1] PARK, Kihyun; MIN, Hokey; MIN, Soonhong. Inter-relationship among risk taking propensity, supply chain security practices, and supply chain disruption occurrence. Journal of Purchasing and Supply Management, 2016, 22. Jg., Nr. 2, S. 120-130.

[2] RICHEY, R. Glenn, et al. Managing supply chains in times of crisis: a review of literature and insights. International Journal of Physical Distribution & Logistics Management, 2009.

[3] SIMPSON, J., et al. The Role of Emergency Planning, Business Continuity and Exercises in Pandemic Preparedness. Introduction to pandemic influenza, 2010, S. 74.

[4] SIKICH, Geary W.; STAGL, John M. " Are we missing the point of pandemic planning?. Continuity Central, 2005.

[5] WOODMAN, Patrick. Business continuity management. Chartered Management Institute, 2007, 292. Jg.; section 2

[6] VAN KERKHOVE, Maria D., et al. A review of epidemiological parameters from Ebola outbreaks to inform early public health decision-making. Scientific data, 2015, 2. Jg., S. 150019, and references quoted there.

[7] ANDERSON, Roy M., et al. How will country-based mitigation measures influence the course of the COVID-19 epidemic?. The Lancet, 2020, 395. Jg., Nr. 10228, S. 931-934.

[8] WATERER, Grant W.; HUI, David S.; JENKINS, Christine R. Public health management of pandemic (H1N1) 2009 infection in Australia: a failure!. Respirology, 2010, 15. Jg., Nr. 1, S. 51-56.

[9] MACKEY, Tim K.; LIANG, Bryan A. Lessons from SARS and H1N1/A: employing a WHO–WTO forum to promote optimal economic-public health pandemic response. Journal of public health policy, 2012, 33. Jg., Nr. 1, S. 119-130.

[10] GIBBS, W. Wayt; SOARES, Christine. Preparing for a pandemic. Scientific American, 2005, 293. Jg., Nr. 5, S. 44-54.

[11] CAUCHEMEZ, Simon, et al. Closure of schools during an influenza pandemic. The Lancet infectious diseases, 2009, 9. Jg., Nr. 8, S. 473-481.

[12] MORENS, David M., et al. The 1918 influenza pandemic: lessons for 2009 and the future. Critical care medicine, 2010, 38. Jg., Nr. 4 Suppl, S. e10.

[13] RIZZO, C., et al. Response to the 2009 influenza A (H1N1) pandemic in Italy. Eurosurveillance, 2010, 15. Jg., Nr. 49, S. 19744.

[14] DALTON, Craig B. Business continuity management and pandemic influenza. New South Wales public health bulletin, 2006, 17. Jg., Nr. 10, S. 138-141.

[15] JONAS, Olga B. Pandemic risk. 2013. World Bank Open Knowledge Series.

[16] SEARLE, Annie. Pandemic readiness in the US financial services sector: When failure is not an option. Journal of Business Continuity & Emergency Planning, 2008, 2. Jg., Nr. 4, S. 357-364.

[17] WATKINS, Rochelle E., et al. Tackle the problem when it gets here: pandemic preparedness among small and medium businesses. Qualitative health research, 2008, 18. Jg., Nr. 7, S. 902-912.

[18] ROSENBLUTH, James. Pandemic response: developing a mission-critical inventory and cross-training programme. Journal of business continuity & emergency planning, 2010, 4. Jg., Nr. 2, S. 126-131.

[19] CARALLI, Richard A. et.al. CERT® Resilience Management Model, Version 1.2. Carnegie Mellon University, February 2016.

[20] ISO 22316:2017 Security and resilience — Organizational resilience — Principles and attributes.

[21] ASIS SPC1.2009: Organizational Resilience: Security, Preparedness, and Continuity Management Systems – Requirements with Guidance for Use.