

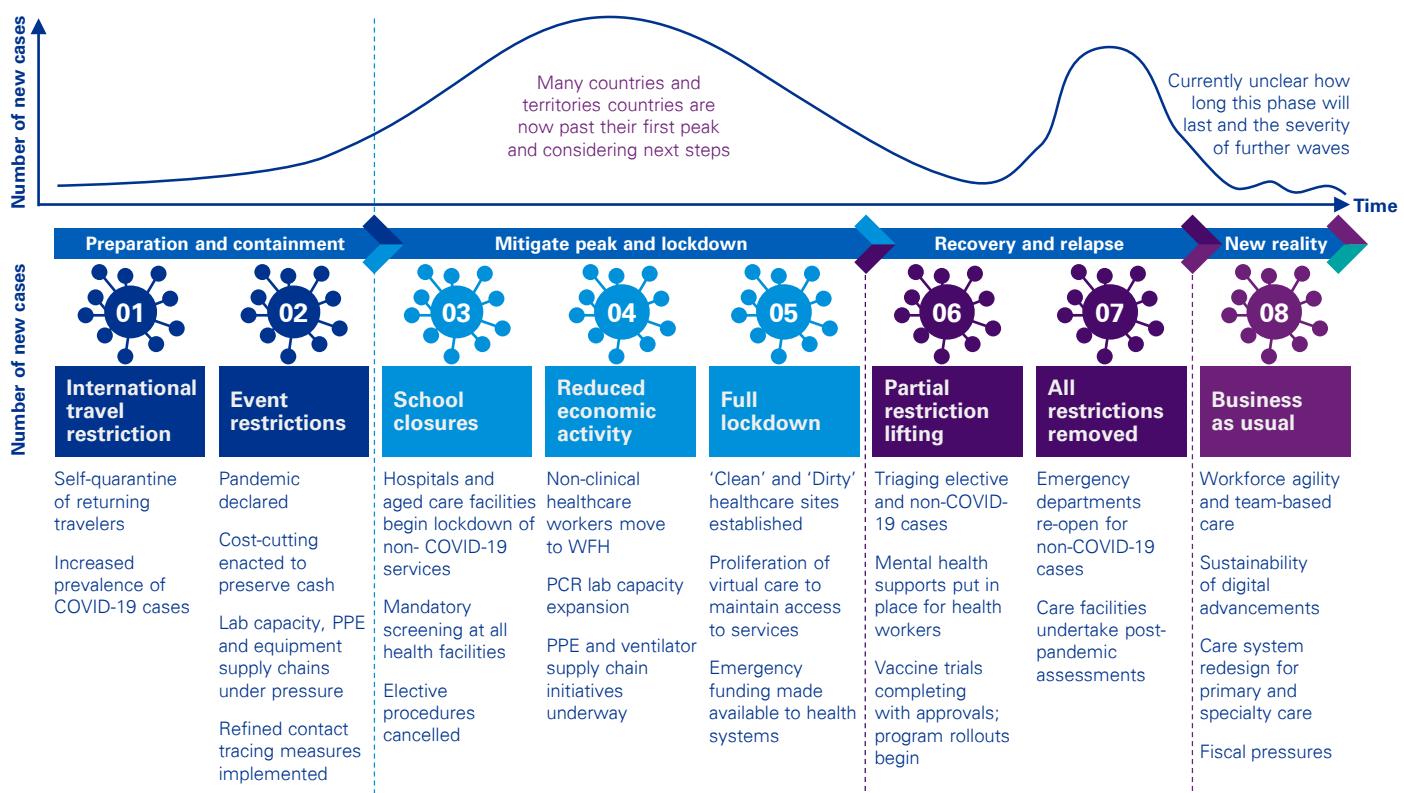
Hygiene Factor: Building Population Health Confidence in the Asia-Pacific & Beyond

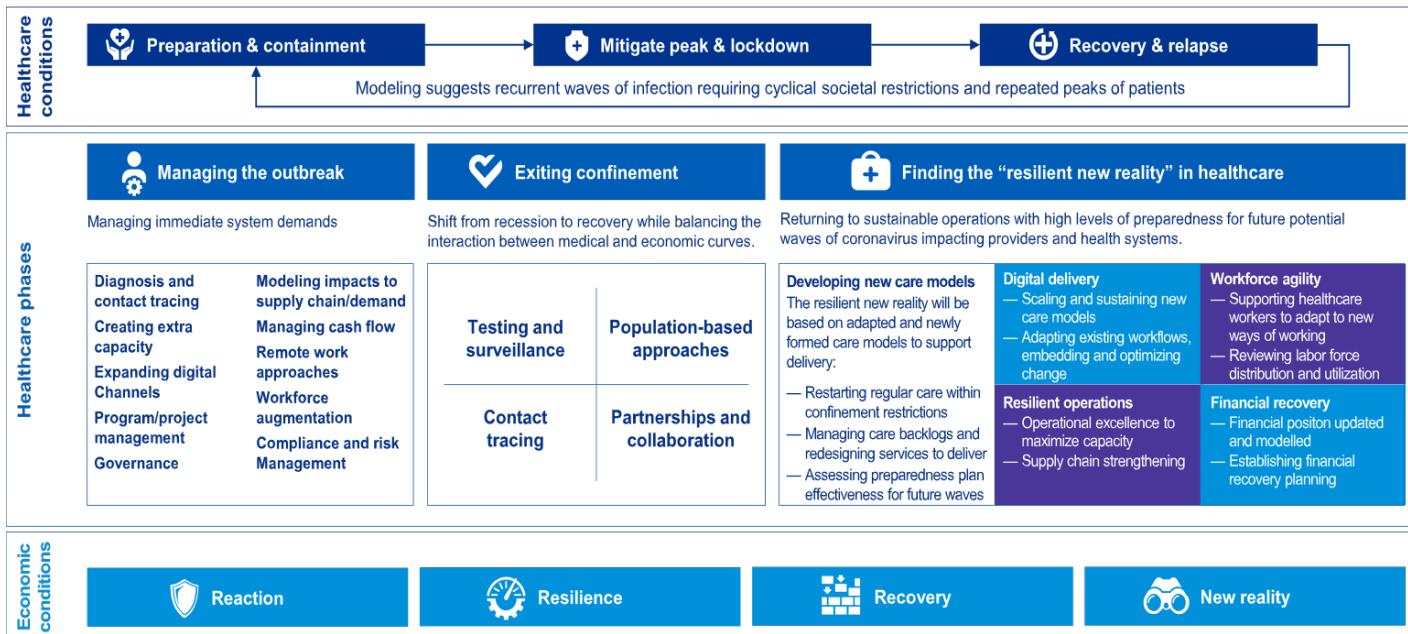


We are living in strange times. Not the least due to the raging modern pandemic but beyond, as we seek to rebalance our livelihoods on what matters most. And it is here that we find ourselves facing a great conundrum ahead – just what level of intervention will be required to build confidence into the new reality, once and for all?

The focus at the moment is on the cycle of COVID-19 testing, therapies, vaccines. And rightly so, the level of global collaboration on these topics is nothing short of miraculous. According to the KPMG COVID-19 recovery frameworks being deployed by national systems across the Asia-

Pacific, we need to take a multi-pronged approach to tackling the various health, social, and economic dimensions of the pandemic. Continued crisis management and risk mitigation are certainly the near-term needs of the hour.





COVID-19: Recovery and resilience in healthcare: Global insights, practical advice and tools to help healthcare leaders build and sustain a resilient new reality, KPMG International, 2020.

This article, however, focuses on KPMG's role in raising the standard level of hygiene in countries as another key interventional tool in infectious disease control. The truth is, our societies were not nearly as considerate as they should have been with cleanliness, hence softer response efforts like social distancing and the use of masks have become a key strategy in the COVID-19 fight. "Cleanliness is the first law of health", as they say. So the new reality would do well to incorporate a bit of this classical thinking too.

First things first: establish the North Star

The SGClean concept, as developed by Singapore Tourism Board (STB), was actually born during the SARS pandemic some two decades ago, the learnings of which have positioned the Asia-Pacific region well for the pace and precision of response efforts to COVID-19. Hence the first step in bringing hygiene to the forefront of discussions over the past year has been in the bespoke design, as spearheaded by STB, of a COVID-19 "cleanliness framework", which includes details about how organisations as well as associated individuals (e.g. employees) should embrace, adopt, and implement the specified standards. Such a framework is particularly critical for industries such as tourism and retail, in order to reopen as quickly as possible and to engender a sense of trust amongst local communities.

In expanding similar concepts across borders, some of the sub-steps have included:

In this article we will cover the story of SGClean, a programme born under prior pandemics and powered through advanced technology capabilities. The programme's success does not just reside in Singapore, as it has been expanded into other markets too such as the Middle East region. And this is more than a story of health policy – public and private sectors alike should pay attention to the fostering of innovation, competitive advantages, and economic opportunities therein.

- Leveraging a cleanliness framework baseline "north star", for further refinement tied to local context and dynamics
- Benchmarking policies and approaches of similar market archetypes (usually 3-5), taking note of relative maturities in COVID-19 response efforts too
- Conducting hands-on working sessions with the key stakeholders to gain inputs and buy-in, cross-Ministry and also private/third sector constituents such as property, transport, hospitality, among others
- Providing a level of detailed guideline considerations, by industry, in terms of hygiene requirements, assessment protocols, verifications, reporting, and remediation plans

Subject to the final rounds of approval, the sealed policy will be created as well as the legal implications therein.



	Singapore	Hong Kong	United States	Switzerland	Portugal	Turkey
Initiative	SGClean Quality Mark	Health Advice on Prevention of COVID-19 for Hotel Industry (Interim)	Safe Stay Logo	Clean & Safe Label	Clean & Safe Seal	Safe Tourism Certification
Period Introduced	March 2020	January 2020 (Updated April 2020)	May 2020	May 2020	April 2020	May 2020
Lead Authority	Singapore Tourism Board, National Environment Agency, Enterprise Singapore	Centre for Health Protection (Department of Health)	American Hotel & Lodging Association	Switzerland Tourism	Turismo de Portugal	Ministry of Culture and Tourism for the Republic of Turkey
Sector Lead	Public	Public	Private	Public	Public	Public
Approach	Voluntary	Voluntary	Voluntary	Voluntary	Voluntary	Voluntary
Cost to Business	Free (For first certification)	N/a (No certification)	No indication of cost of inspection	Free (No inspection)	Free	Fees will include fixed cost of inspection, stickers, documentation
Targeted Sectors	15	16	1	6	9	3
Validity	30 June 2021	No indication of validity period	No indication of validity period	Indefinite	30 April 2021	For duration of pandemic (Government to define at later date)

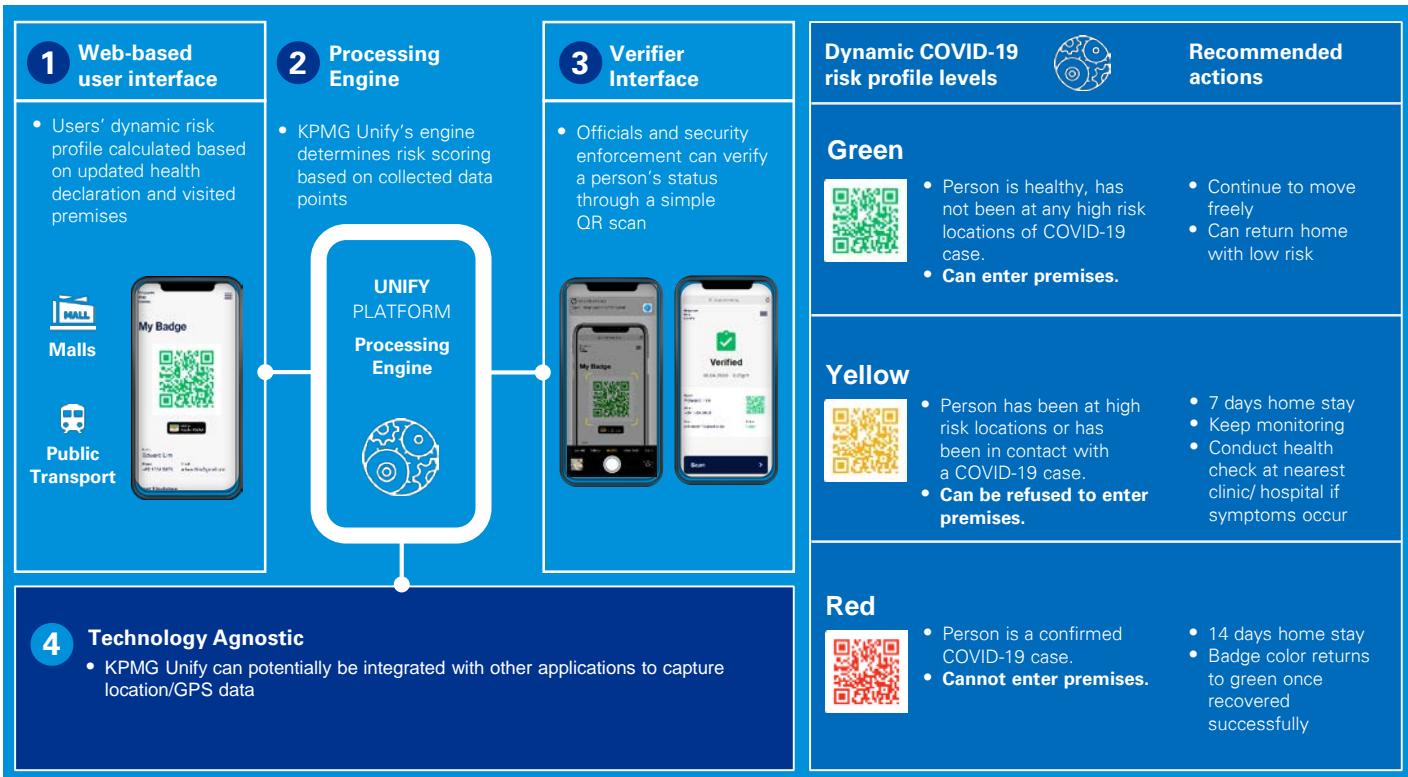
With the framework in hand, deploy leading edge technology

Perhaps one of our greatest learnings across the past two pandemics is about how to harness the power of the latest technologies in order to bring cleanliness programmes to a new level. With the framework ready, the second workstream in the SGClean programme entails the design and implementation of a platform for the tracking and monitoring of the roll-out to the targeted organisations and individuals.

The core technology is known as CAST, powered by our Unify platform through the KPMG Digital Village. CAST is the enabler behind the execution of SGClean for self-reporting and compliance automation

protocols, using data visualisation and dashboarding techniques to proactively identify those hygiene standard issues that require intervention.

Built upon an Azure cloud, it has undergone continuous iterations since deployment during the first pandemic and through the COVID-19 period. CAST now encompasses interfaces for the web-based front end and verification layer, as well as the blockchain processing engine and technology-agnostic integration points. The platform is also now even being considered for dynamic risk profiling in order to serve the population mobility needs.



Attempting to deploy a technology-driven cleanliness programme across borders, could result in it being a victim of its own fate during a pandemic. We must initiate such programmes by preparing the local working environment for secure and efficient team collaboration under remote structures. From there, some of the sub-steps for the technology workstream include:

- Defining the detailed functional requirements as aligned to local market needs, including through wide-reaching survey questions and taking into account language considerations
- Arranging the cloud subscriptions to support the platform and to initialise the off-the-shelf platform, with a hyper focus on security access management
- Developing the platform architecture relative to upstream as well as downstream processes such as data ingestion, storage, transformation, and load in anticipation of case management
- Customising and training the artificial intelligence for process automation and advanced analytics, with appropriate data workflows therein
- Handing over the quality documentation on the above, including with a roadmap for continued evolution



Country	Common international hygiene practices
Singapore	<p>Safe / Social / Physical Distancing</p> <ul style="list-style-type: none"> • All hotel employees and guests should adhere to safe distancing measures implemented by the establishment of at least 1 metre between people and furniture arrangements
Hong Kong	<p>Temperature and Symptoms Management</p> <ul style="list-style-type: none"> • Temperature checks should be done at least daily for employees and guests • Employees should alert relevant authorities immediately upon recognition of respiratory symptoms
United States	<p>Personal Hygiene</p> <ul style="list-style-type: none"> • Personal hygiene recommendations should be printed and displayed in common spaces and on walls • Hand sanitiser dispensers of at least 60% alcohol content should be available in common spaces and checked and refilled regularly
Switzerland	<p>Protective Equipment</p> <ul style="list-style-type: none"> • Appropriate quantities and types of personal protective equipment for employees should be stocked and available for guest use upon request • These include: surgical masks, latex gloves, disposable gowns, and face shields
Portugal	<p>Contactless Payments</p> <ul style="list-style-type: none"> • Contactless payment methods should be encouraged over handling of cash
Turkey	<p>Enhanced Cleaning / Disinfection</p> <ul style="list-style-type: none"> • Enhanced disinfection measures should be implemented with increased frequency and intensity of cleaning • These include: using chemical agents, washing laundry with hot water, and maximising natural ventilation <p>Isolation Facilities</p> <ul style="list-style-type: none"> • On-site isolation areas should be allocated for suspect or confirmed cases of COVID-19

Of course, the technology alone is only so useful without being able to generate actionable insights for the stakeholder and user communities. Beyond the workstream sub-steps outlined, we seek to optimise the experience by building real-time, mobile-friendly dashboards, sitting on OLAP cubes for processing

large amounts of data that is generated from the cleanliness programme. Lastly, we provide the baseline content such as directives, FAQs, and other templates for the country establishments, leveraging the experience from prior deployments.

The greatest change management effort of our time

In addition to being one of the greatest health and economic challenges of our era, addressing COVID-19 through a cleanliness programme like the one outlined in this article is a monumental social challenge too. In other words, the desired outcomes would not be achieved by a framework and technology alone. Change management to build confidence is key.

One of the workstream sub-steps therefore is producing a communication plan, outlining the objectives, target audience, messaging, channels, activities, and sequencing for the execution of the cleanliness programme. Again, we provide a base example from prior experience, and then seek to tailor to the local market stakeholders. We even encourage national leaders to really brand the initiative, a symbol of pride in achieving a hygiene certification.

From there, the next sub-step lies in ensuring appropriate training is available to support the organisations and individuals to understand the mission in solidarity that cleanliness must become

a priority. This entails standard policy and framework training materials, delivery of the curriculum itself (most commonly virtually), and wider population self-help tools that need to be available in order to most efficiently resolve any queries or concerns. We've found that adherence and compliance with cleanliness standards is heavily reliant on a robust training strategy.

Finally, the programme fully gets off the ground through a workstream sub-step of defining the end-to-end inspection plan, across organisation types, individual-level responsibilities, and validation protocols therein. A detailed inspection plan based on international standards but favouring local buy-in is a document that brings to life the framework concept. Prioritising the industries and establishments, using a risk-based approach, helps to foster an efficient launch with near-term quick wins. And simple checklists for the inspectors, powered by the technology platform, can avoid confusion and achieve the data quality necessary for proper pandemic control.

So what?

While this article is a tactical guide to cleanliness programme best practices, this is not meant to be a point-in-time, start/stop crisis management intervention only. Rather, we see the modern pandemic as an opportunity to re-centre ourselves on a level of hygiene that serves to provide long-term population health benefits, in addition to the economic and social goals of reopening our countries with confidence as quickly as possible.

We hope the cleanliness programme, following in the footsteps of SG Clean as developed and embraced by STB, is of interest and are happy to discuss it further. Our final thoughts for readers to take the concepts forward are as follows:

- 1 Place cleanliness back as a central strategy, a sort of Population Health 2.0 initiative.
- 2 Ensure you are aligned to international best practices, certainly in regards to hygiene teaching and learning.
- 3 Think about how the use of data, digital tools, and innovation in cleanliness programmes can become a portable value proposition too.

Ultimately, cleanliness is more about a practice than a project. Let's make this a collective effort.

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