

A successful restart of cruise lines requires much more than just meeting new Covid-19 hygiene standards - building trust with guests and destinations and significantly increasing efficiency are the key factors!

This pragmatic, holistic and systematic approach has been set up by three companies, very experienced in the cruise business, but with completely different perspectives - medical, cruise operation, lean management – as a guideline and start of further discussions to setup a reliable restart.

The challenge:

The cruise industry will face five major, general changes due to the new demands to avoid a further Covid-19 spread:

- 1. More crew and operational measures will be necessary adding to operational costs
- 2. The ships will host less passengers than before
- 3. The prices will decrease tremendously due to overcapacities in the market
- 4. The importance given to medical and health care related questions will increase tremendously from the authorities, guests, and the cruise companies
- 5. The inhabitants of the destinations will be much more critical and hostile towards the cruise than in the past

The general goal for the next several months will be not to seek for profit like in the past, but to decrease losses and stay longer alive and gain a stronger position compared to the competition.

Balance the two triangles

The approach of many cruise lines in the past to focus on their own profitability in an unsaturated market no longer works. The expectations and requirements of all three key stakeholders are becoming significantly higher, must be exceeded and brought into balance again:



Guest expectations:

- ⇒ Extraordinary experience on board and ashore
- New: Safe travel to ship and back home, no "per se quarantine"
- ⇒ **New**: High safety against infection during cruise
- New: Top medical care in case of infection incl. emergency treatment
- New: easily available, comprehensive and transparent information about disease control measures as well as new behavior rules onboard and ashore

Expectations of the destinations:

- ⇒ Revenue for destination
- ⇒ New: No risk of infection of inhabitants
- ⇒ **New**: Acceptance of international guests by inhabitants in times where nations tend to close borders. This includes transparency and avoidance of bad media
- ⇒ **New**: No risk ashore in case of severe infection onboard
- ⇒ **New**: Fulfilment of all new international, national and local rules in respect to health care and operation / management of crowds e.g. on shore excursions

Mandatory requirements for the cruise lines:

- ⇒ **Increased demand**: Reliable and plannable operation, also taking into account the new uncertainties regarding travel & destinations
- ⇒ **Increased demand**: efficiency to reduce losses
- ⇒ **New:** Over-fulfilment of all new and extended rules and regulations in respect to diseases of public concern as basis for sail permit
- New: Cultural Change with respect to medical care in general, its transparency, new processes and preventive measures to build up trust as basis for bookings and reliable operation
- ⇒ **Increased demand:** Safe manning / nautical & technical operation as basis of business, even in case of several infected crew members onboard
- ⇒ Increased demand: Protection of crew against infection as basis of business
- ⇒ **Increased demand:** Protection of guests against infection
- □ Increased demand: Establishing reliable collaborations with dedicated shoreside medical facilities
- ⇒ Increased demand: No bad media arising from C-19
- ⇒ **Increased demand:** Safety against legal claims arising from C-19 infection on board

The **general goal** for a restart of cruise operation must be to **fulfil all demands** above. This has significant consequences on the three major fields of operation:



The Health recommendations set the new standards:

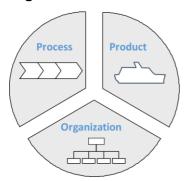
- Assure guests & crew are healthy when boarding
- Reduce risk of infections onboard to minimum
- Reduce risk of infections ashore to minimum
- Assure guests & crew are healthy when deboarding (= travel permit)
- Assure early detections of infections
- Immediately segregation / quarantine of (potentially) infected people
- Assure highest standard of medical care for critical patients
- Fulfilment of all new national and international rules
 & regulations

The new US CDC interim guidelines are a good start, but not sufficient yet.

Cruise Operation needs to be adjusted with focus on:

- Assurance of safe operation / safe manning including adaptation of SMS Safety Management System
- Revision of all nautical & technical processes
- Revision of all hospitality processes
- Revision of standards and procedures in ship's hospital operations
- Clear & safe port operations agreed with destinations before arrival / definition of itinerary.
- Clear agreements with authorities / class and shoreside medical facilities at all levels
- Safe supplies / provisioning
- Assured crew exchange

A great chance for future profitability:

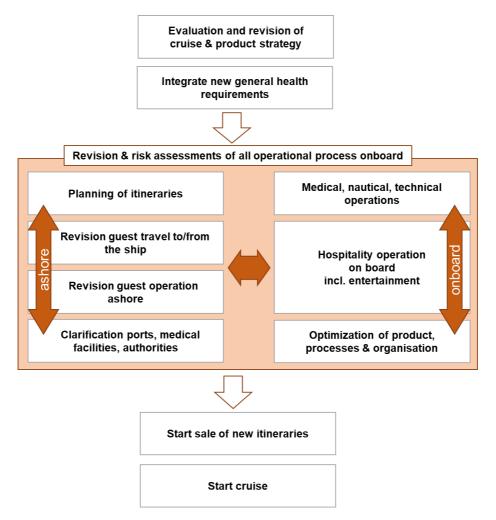


The entire operation needs to be extremely optimized according to Lean Management principles to assure economic success even under Covid-19 conditions:

- Adaptation & optimization of all hospitality, hospital, nautical & technical and shore excursion processes
- Implementation of a culture of continues improvements processes on all organizational levels for robust and sustainable changes

How to proceed this challenging, complex task in a pragmatic manner?

To build up trust it is essential to have a general new concept, that fulfils the basic new demands, before approaching the destinations and guests in respect to new itineraries:



The cruise lines general goals and strategy should be revised first. In parallel the health recommendations and affected fields of operation shall be defined in general. This must be performed individually for each cruise line and sailing area and shall include the entire product philosophy. It can be performed by a simple matrix:

| Effects on | | | | | |
|------------|-----------------|---|--------------------------------------|---|--|
| shore ops | guests | hospitality ops | hospital crew | naut & tech ops | company ops ashore |
| | | | | | |
| | Χ | Χ | (X) | | |
| | Χ | Χ | | | |
| | Χ | X | | | |
| | Χ | | Χ | | Χ |
| | X | Χ | | | |
| Х | | Χ | | | |
| | | | | | |
| | Χ | Χ | | Х | |
| | Χ | Х | | Х | |
| | Χ | Χ | | Χ | |
| | X | Χ | | Χ | |
| | Χ | Χ | Х | | |
| | | | | tender ops: | |
| Х | Χ | Х | | (x) | |
| Х | Χ | Χ | | (x) | |
| Х | Χ | Х | | (x) | |
| X | Χ | Х | | (x) | |
| X | | | | | Χ |
| | x x x x x x x x | shore ops guests X X X X X X X X X X X X X X X X X X | Shore ops guests hospitality ops | Shore ops guests hospitality ops crew | Shore ops guests hospitality ops crew tech ops |

In a second step the matrix above shall be used as a guideline to investigate and revise all operational processes. The proven FMEA approach is a very simple, systematic way to perform this task. When defining the mitigation measures lean management principles shall be taken into consideration already. It is not rocket science and must be performed in a pragmatic way:

| triang | description of risk | before mitigation | | ion | mitigation measures | | r mitigati | on | |
|---|--|-------------------|--------|--------|---|----------|------------|--------|--------------------------|
| topic | | severity | proba | rating | | severity | proba | rating | cost / revenue / guest |
| | | | bility | | | | bility | | experiance effect |
| | est's perspective / recommendations: | | | | | | | | |
| | fe travel to ship and back home, no "per | | | | | | | | |
| *************************************** | flights are no availible | 4,0 | 3,0 | red | start / end of cruise in source market | 1,0 | 1,0 | | fuel, revenue lower? |
| | flights are no availible | 4,0 | 3,0 | red | Book own charter flights | 1,0 | 1,0 | green | high charter cost |
| | transfers are not availible | 3,0 | 2,0 | yellow | organise back up coaches for transfer | 1,0 | 3,0 | green | coaches on standby |
| | country / authorities reject deboarding | 4,0 | 2,0 | red | clarification with local and national | 4,0 | 1,0 | yellow | less revenue due to less |
| | | | | | authorities, reduce number of turn around | | | | passengers |
| | | | | | ports / nations | | | | |
| | country / authorities reject travel | 4,0 | 3,0 | red | clarification with local and national | 3,0 | 1,0 | green | less revenue due to less |
| | | | | | authorities, reduce number of turn around | | | | passengers |
| | | | | | ports / nations | | | | |
| | | | | | | | | | |
| | ise Ops needs to be adjusted: | | | | | | | | |
| | ax. safe operation / safe manning | | | | | | | | |
| | single key crew failure due to infection | 1,0 | 3,0 | green | no activity | 1,0 | 3,0 | green | |
| | failure of several crew members | 3,0 | 2,0 | yellow | redundancy of key player onboard, | 3,0 | 1,0 | green | additional crew members |
| | | | | | segregation of teams, | | | | |
| | | | | | | | | | |
| | stination's perspective / recommendation | is: | | | | | | | |
| 2.a No | infectionsof inhabitants | | | | | | | | |
| | Unplanned contacts by indisciplinary | 2,0 | 3,0 | yellow | restricted leave, only leave of guests if | 2,0 | 1,0 | green | reduction of experiance |
| | guests | | | | guided | | | | |
| | Unplanned contacts by indisciplinary | 2,0 | 3,0 | yellow | induction for guests about local rules & | 2,0 | 2,0 | green | nil |
| | guests | | | | regulations before each port | | | | |
| | guests too close to inhabitants | 2,0 | 4,0 | red | more tours to attractions off the public | 2,0 | 3,0 | yellow | reduction & increase of |
| | | | | | | | | | experiance |
| | | | | | | | | | |

Thereafter it is time to approach the port authorities, agents and other local stakeholders, e.g. shore excursion companies and medical facilities to ensure a proper and adequate medical care especially in more severe cases of infection. To avoid the repeated experience of a "quarantine ship" agreements have to be reached with shoreside medical facilities. All of this will cause a lot of work, as many new regulations have to be agreed. However, it is the basis for reliable itineraries and therefore economically imperative.

The risk matrix should serve as a basis and be developed further, also for the assurance of the arrival and departure processes. It is not just a simple instrument. It offers transparency to all stakeholders what is essential for acceptance.

A further improvement of efficiency of all processes onboard must be performed in parallel to the sales activities.

Conclusions:

A fast, safe restart requires considerable effort in advance. Cruise companies will be successful if they get to work quickly and actively seek transparent cooperation with stakeholders at an early stage to balance the triangles.

All resources must be activated to optimize operations and economic success. This also requires the introduction of new cultures of cooperation, which are already standard in other industries, on all levels.

Criticism, suggestions or additions? We are pleased to receive your comments:

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