

CoVision:

A Digital Solution for Hospitality in a Rapidly Changing World

Prepared by Jacques Goosen



A changing tide for the hospitality industry

Since the advent of the fourth industrial revolution, data and data collection have become crucial parts of organisational operations globally. In the current economic climate, this is particularly pertinent for businesses that rely on foot traffic to keep them profitable. With the world changing and developing at a record pace, many businesses are already finding it difficult to remain ahead of the curve.

To create further complexity, the recent outbreak of COVID-19 is forcing business owners to change the way they go about their day-to-day operations to not only remain operational but protect the health and wellbeing of their employees. Across the globe, the hospitality industry has responded with operational changes, event cancellations and even venue closures to curb the spread of the pandemic.

For many businesses, this has become a turning point in light of already changing consumer attitudes to the way we consume and produce food. The restaurant experience in the 21st century has transcended space, time and place while existing in the social media landscape. Today, as much as 78% of millennials would rather spend money on an experience rather than purchasing a product.

Restaurants are no longer a space or a brand, but a personality with an individual voice. While technology cannot replace the experience of a restaurant, it is seen as a driving force to its success. Over 95% of restaurateurs agree that restaurant technology improves their business efficiency. It can be used to tailor customer experiences and provide the ambience that will keep them coming back.

Secondly, as venues open up after COVID-19, safety and hygiene have been given the number one priority. Many foodservice businesses have had to temporarily close while some are thriving despite the pandemic due to their early adoption of online delivery services.

During the global COVID-19 pandemic, IoT.nxt continues to be committed to helping the world through the use of dynamic IoT technology. This white paper is focused on helping business owners understand how technology like our CoVision Solution can help you navigate through this uncertain time.



The impact of COVID-19 on the hospitality industry





















4 in 10 restaurants may close down after lockdown restrictions are removed globally



\$US25 billion loss in sales



Although the outbreak of COVID-19 has been felt across sectors, the disruption caused by the pandemic has had a significant impact on the hospitality and restaurant industry. Between widespread economic slowdown, interruption to supply chains, tourism shutdowns, and general uncertainty, venues have had to adapt to a host of new challenges.

In the United States alone, the restaurant industry lost an estimated \$US25 billion in sales and more than three million jobs in the first 22 days of March 2020. Overall, restaurants have reportedly lost almost three times more jobs than any other industry since the beginning of the pandemic and it is estimated as much as four out of ten restaurants may close down after lockdown restrictions are removed globally.

Since the outbreak of the coronavirus left few options for consumers beyond staying in their homes, demand within the industry has shifted to food delivery apps. The increase in food orders via such services has kept many businesses afloat, yet it has also placed new pressures on both the restaurants and the delivery apps themselves.



Key areas of change

As the global lockdown concludes, medium-term prospects for the hospitality industry appear promising. Many restaurateurs have understood the need to innovate and remain flexible in their offerings during these trying times. However, the transition into food delivery models will not be enough to sustain many venues post COVID-19. In particular, restaurant owners will have to face two key new areas of change:



1. Physical spaces and bookings

Many venues now require bookings and safety measures to be put in place before they are able to accept patrons. Customers need to be kept at a safe distance from each other and only a limited number may be allowed in certain spaces. This has also impacted how hospitality businesses staff their operations, with some countries requiring single servers to service-specific tables.



2. Hygiene requirements

Increased hand washing has been hard to ingrain into the minds of the public, including food workers. It's often one of the most difficult food safety tasks to enforce with food workers not having enough time to do so regularly. Additionally, many countries are only allowing venues to open their doors again if they are able to provide sanitizing stations and suitable hygiene facilities to their patrons.

More than just a 'short term solution'

CoVision isn't just a solution to address the issues created by the COVID-19 pandemic. With the application of our system, you can effectively manage many facets of your business as well as facilitate smooth, seamless and "clickable" experiences in your venue while still enforcing safety measures. It also enables you to facilitate greater customer experiences by analysing how your space is being used and allowing you to make data-driven decisions on staffing, space and inventory needs.





We call it 'CoVision'

A blend of hardware and software that allows organizations and consumers to use existing equipment such as android based phones to allow for people counting to take place or camera infrastructure with no need to rip and replace, and at no extra cost. As a separate option, our CoVision gateway and camera combination will also enable four different solutions namely:



CoVision People
Counting



CoVision Thermal Screening



How it works

The CoVision solution has multiple options for purchase. Although they perform similar functions, there are differences in the accuracy of measurement and hardware that is used to enable the solutions, as well as their application. Our solution also ensures compliance with all data security and privacy regulations, to give you and your visitors peace of mind.

We utilise existing hardware such as the cameras in your local network to monitor footfall traffic, while also allowing for contactless temperature screening to take place. The devices can also send live data to our public website where consumers can view the occupancy of their favourite stores in real-time or owners/ store managers can view live metrics.

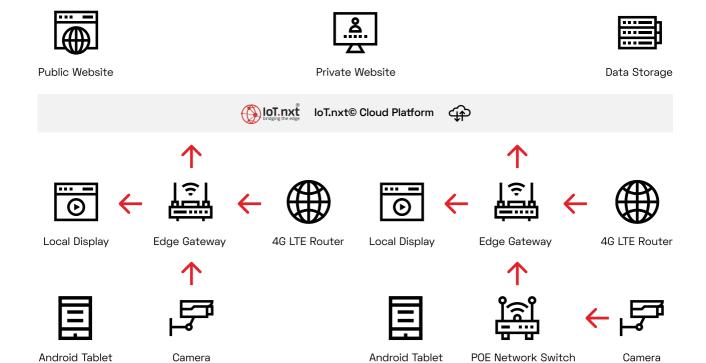
Our solutions were designed for small low traffic zones and for larger buildings or areas with multiple entrances that need to be monitored. If there is no existing hardware or additional hardware is required, we can provide our CoVision Gateway and IP based cameras to allow for easy installation and deployment. This allows for the collection of information to ensure compliance to local regulations, or to detect if people's temperatures are within threshold and are wearing personal protective equipment such as masks. Ensuring transparency and improved management of spaces.

Benefits to hospitality

- Maintain staff numbers and reduce security costs
- Ø Effectively manage occupancy and social distancing
- Oreate seamless experiences while enforcing health and safety
- Monitor visitor access and ensure the safety off staff and visitors
- Measure traffic from entry and exit points
- Allow for contactless temperature screening to take place
- Oreate a digital audit trail to ensure compliance



Solution diagram





CoVision in action:

An implementation example

As customer numbers in a venue become more important now than ever before, CoVision's solutions will help you restrict customer flow. This will help you manage staff numbers and reduce the spread of COVID-19.



1. Get access to real-time data

You and your customers will be able to see the number of people at your venue at each point in the day. With CoVision, you can make calculated decisions on adding restrictions to your venue



2. Maintain safety and curb the spread

To enforce strong hygiene standards, ensuring that individuals are wearing masks and having the right number of staff, while not overcrowding the area is crucial. With CoVision, real time information on the amount of people within a space or the temperatures of entrants will allow you to make informed decisions to limit the spread of the virus.



3. Reduce customer frustration

Customers are less likely to visit an overcrowded area where no measures have been put in place to ensure hygiene standards are adhered. With CoVision, you can effectively manage occupancy and the screening of entrants, to improve customer sentiment and create a safe operational environment, allowing your visitors to enjoy the experience of dining in while also creating a digital audit trail to prove compliance if any complaints are lodged.



Investing in the future

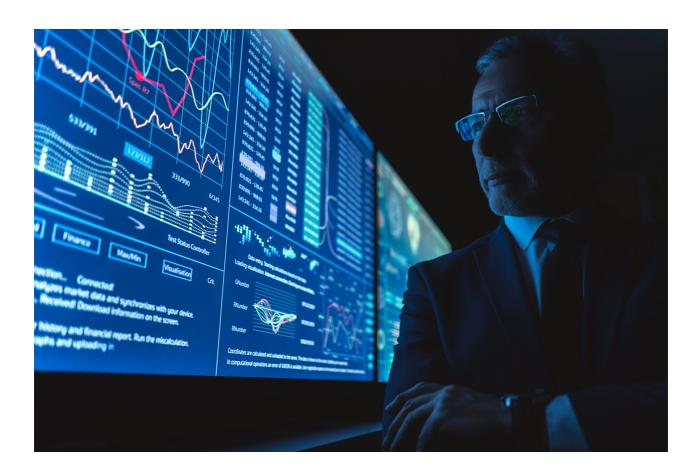
While the long term societal impacts of the COVID-19 virus remain unknown, the technology introduced now to combat the spread of the virus is paving the way for future innovation within the hospitality sector. As a solution, CoVision seeks to not only operate as a tool for managing the strict health measures brought about by the virus but offer insights that business can utilise for broader business goals. In particular, this includes providing:

1. Core data on space and inventory optimisation:

You can use the data from the CoVision app to understand how your venue is being utilised. With this information, you can optimise the facility layout to improve services and provide seamless customer experiences.

2. Real-time analytics on foot traffic:

With real-time reports, you can accurately measure patron numbers to manage occupancy and optimise staff placement. Counting footfall also helps you identify popular times in a day so you can measure staff and inventory needs.



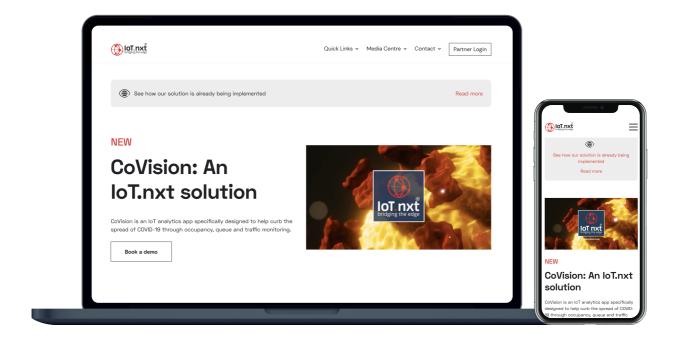


Get ahead of the curve

Globally authorities have succeeded in slowing the number of new COVID-19 cases, yet the World Health Organization warns the situation is unpredictable and ever-changing. We all have a part to play in this fight to combat the spread of coronavirus. Around the world researchers, businesses, and innovators alike are putting technology to work to combat the effects of the global health crisis. Our CoVision platform could help your business manage social distancing measures, minimize the risk of overcrowding, and restore customer confidence.

It's time to see the world differently. Step into the future, with the CoVision solution from IoT.nxt.

Visit www.iotnxt.com/covision today.



IoT.nxt: Our Story

In the wake of the 4th Industrial Revolution, IoT.nxt has been recognised as a leader in the South African IoT industry and has been listed in leading technology media as one of the top five companies in Africa to watch. In May 2019, telecom giant Vodacom bought a majority stake in IoT.nxt which has only served to accelerate our global expansion.



About the author



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This white paper was produced by Jacques Goosen, Product Manager at IoT.nxt, in collaboration with the RACe or Rapid Application Commercialisation team. Goosen is an experienced business solution architect and consultant that has worked in a range of roles across the environmental, energy and IoT industries.

In his time at IoT.nxt, Goosen has helped with the development and implementation of a series of IoT solutions and continues to work closely with the CoVision product team to refine new applications of the solution in and around the hospitality space.

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Appendix / References

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