Innovations in Restaurants, Hotels and Venues

Food for thought during corona crisis

LAB8
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Food for Thought

Corona crisis has hit restaurants, hotels & attractions hard. Thousands of managers & entrepreneurs suddenly find themselves looking for innovative ideas that would help their business to recover and at the same time fulfill the requirements of Business Finland and ELY.

To whet your appetite for innovative ideas already at work in the industry, **we've gathered lots of clever examples.** We collected recent innovations which already have shown their worth, and attracted volumes, customers and euros. Hopefully they'll spark some ideas for your operations, and help you in ideating new things that would fit your business.

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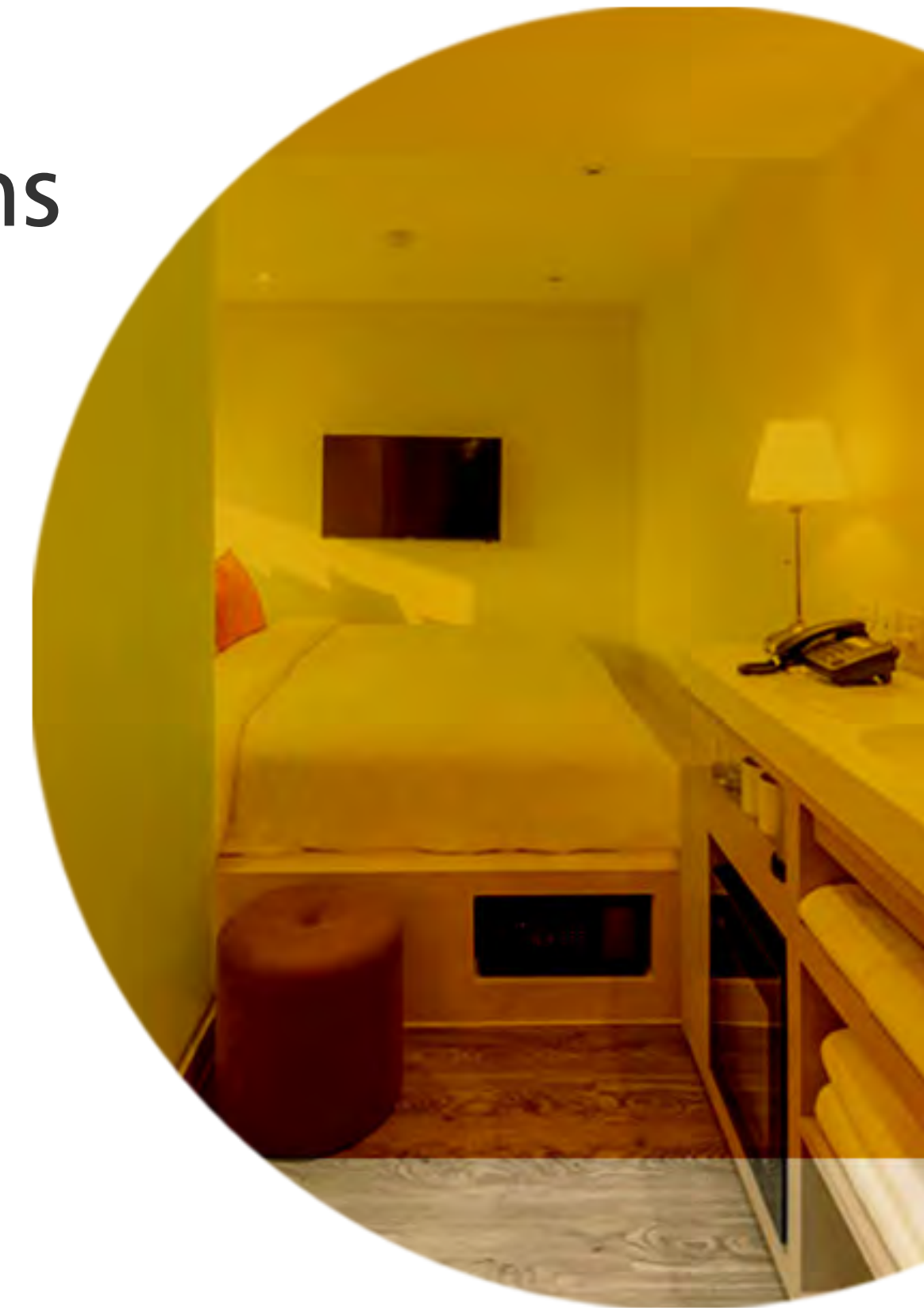
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CHAPTER ONE

Chapter I

NEW SERVICE CONCEPTS & DIGITAL INNOVATIONS IN RESTAURANT INDUSTRY

Online cooking classes with ingredient delivery

An Edmonton based restaurant Milk Crate recently started hosting online classes through video calls to customers who want to experience restaurant-quality food at home. The chef takes in customer requests for any dishes even not on their menu and delivers the ingredients to their home after which the chef returns to the kitchen to set up a video call to cook with them. The chef has done one-on-one classes as well as group calls. Read more [here.](here)

Healthy food delivery for families with kids

In the UK, families are choosing meal-subcriptions over groceries stores and prepping because of the convenience and personalisation of meal-delivery digital platforms such as Freshly, HelloFresh, SunBasket, etc.
Parents can creates profiles for whole family with individual preference and allergies, meal plans for families sizes, and see all information regarding the ingredients, calories, and recommendation. Read more [here.](here)

© MilkCrate / twitter

DIGITAL SERVICES

CATER VULNERABLE GROUPS
AND FAMILIES

Food Order via Phone for the Elderly

Uber launch a phone line for the elderly and the disable to call and order foods. People who call in to order food will be paired with a live team member who'll confirm their meal request and give them the total price upfront. City of Helsinki has also similar services started in 2019, however, is not widely developed and has limited food options. Read more [here.](#)

ONLINE RESTAURANTS

Digital Ordering is no longer a maybe but a must have to run a successful restaurant business. As explained by QSR magazine, the value of digital food ordering will grow to more than $38 billion by 2020, forming 11% of all quick-service restaurant transactions. Over the upcoming years, that statistic will swell beyond imagination, becoming the majority of all food experiences. UBS forecast delivery sales could rise an annual average of more than 20% to $365 billion worldwide by 2030, from $35 billion. Read more ...

© Pexels.com

Case: Flyfood Vn Company
Using Tech to make difference

8 years of experience of running a online-restaurant business, a purely delivery-only model of running a restaurant. Half a million followers on social media. Tracking website and social media's visitors and customers engagement to increase leads and sales. Developing AI to predict customers' patterns in the future. Customers occasionally get access to live-stream of the kitchens when chefs are making foods. Read more here.

Case: SweetGreen Company
Think like a Tech Company

12 years busines including 3 years in online-restaurant model since 2017 Restaurants as content creators and a food platform to maintain direct consumers relationship. Outpost model: customized batch delivery to SweetGreen outpost with no fees. Mobile app > 1 million customers, personalized food profiles Going digital generates 50% of all revenue in first year. Read more here.

© flyfood.vn

Virtual Wine Tasting

Wine Tasting is now going virtual and generating new sales sources for wineries. The service is included in the membership program as well as when customers order wines to home. Several digital platforms such as Priority Wine Pass, Acker Wines, and wine -deals platforms, offer virtual tastings which customers can choose the wineries to buy wines and have virtual tastings session with.
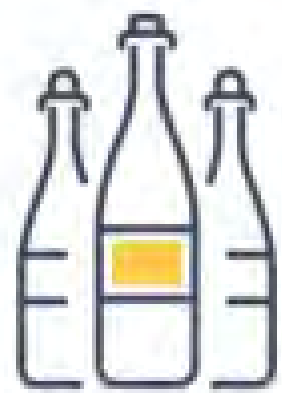
The model is not just about wine tasting but connecting over wine, thus encourage new customers to try as part of social activities. The Wineries start using Social Media to reach out to their followers and drawing attentions and engagement with potential customers directly. Read more here.
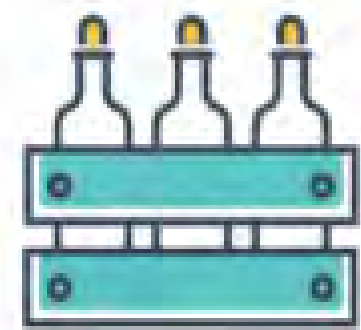
The Texas Wineries Case

Although having to shutdown tasting rooms, the Texas Wineries Community have been able to picked themselves up with innovation, by going fully virtual and collaborating with other wineries and wine professionals. Recently, a group of Texas winemakers, wine writers and influencers joined wine drinkers to chat about Texas viognier, roussanne and tempranillo via Twitter and Instagram.

Called "#TXwine Twitter Tuesday," the online session drew 60 participants, who opened their favorite bottles and shared thoughts as they tasted. The virtual event generated more than 1.5 million #TXwine Twitter impressions. Read more here.

© flickr.com

Choose a winery below

Buy direct

Schedule a time

Enjoy!

romaine
~~avocado~~
~~tomato~~
~~blue cheese~~

apple
chicken
egg
dressing

what is a honeybar?

00:00:12:14

NEW INNOVATIONS CUT DOWN ON TRAINING TIME WITH BETTER END RESULTS

VR Onboarding

Honeygrow, a fast-casual restaurant chain founded in 2012 introduced VR training for new and existing hires in 2017. Before the VR implementation, the company had tracked the percentage of its managers that were certified in different parts of its training program. In under 30 days, the percentage of team members certified on company culture rose from 50% to 77%. VR training also ensures the same exact training for all members and shown to free more time for managers to handle their other responsibilities. Read more here.

© pxfuel.co

# Artifical intelligence and automation

KitchIntel is a tool to simplify the cooking process and staff training. It uses AI-driven forecasting algorithms to predict food sales and improves food consistency by guiding the cooking process through digital interactions. The AI also calculates the correct quantity to grill or cook, with data-driven forecasts.

A quick-service restaurant rolled KitchIntel to over 130 locations and found many benefits including reduced employee training time and food waste and improved speed of service and freshness of food items.
Read more here.
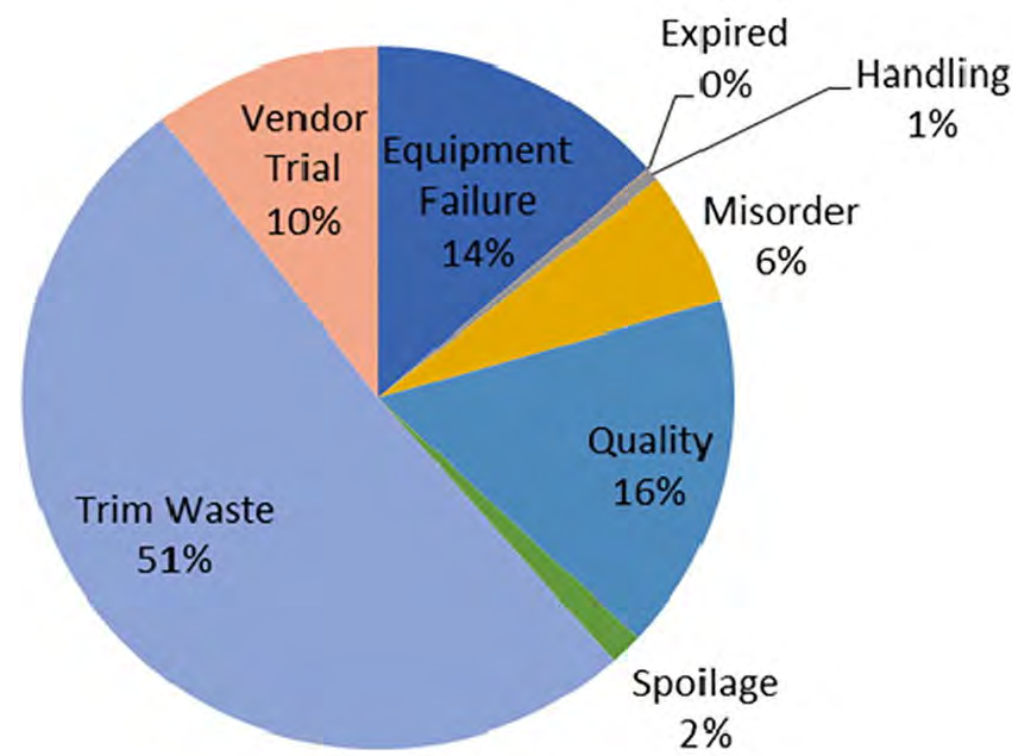
Total FW for Jan 2017 – 6190 kg
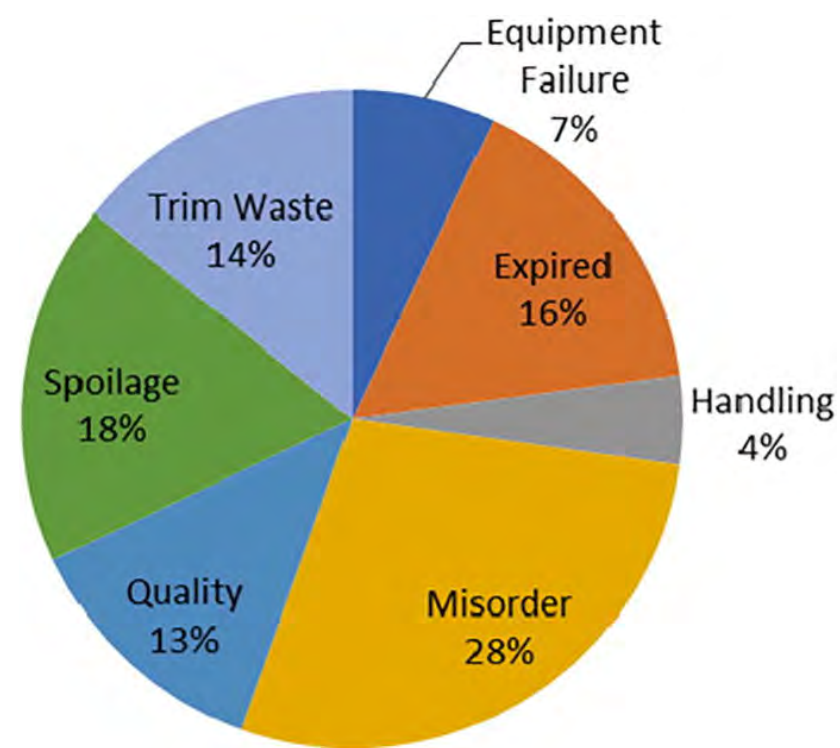
Total FW for Sep 2017 – 2428 kg

© S.Jagtap, S.Rahimifard / Sciencedirect.com

Tracking food waste

Food is a valuable resource and reducing food waste is important for both large food providers and smaller businesses. Food waste is largely produced during preparation, or because the food cannot be stored and reused.

A ready-meal factory in the UK implemented a digital food waste (FW) tracking system with positive results. Between January and September, the factory reduced food waste from 6190 kg to 2428 kg, a 60,7% reduction. Operational improvements, data generations and employee behaviour saved the factory approximately £307000 on food waste compared to the previous year.
Read more here.

Location

Vibration

Temperature

Electricity

Humidity

Open / Close

Voltage

Tracking food temperature

To save time in HACCP procedures, restaurants have started using IOT devices to monitor food and equipment. Modern devices wirelessly record temperatures and alert if temperatures are above set thresholds. Each food and equipment item are configured to custom thresholds.

The sensors record the temperatures into a HACCP log so employees don't have to. This saves time on daily reports and creates accurate readings without any human error or paper logs. IOT sensors adopt a proactive approach to food safety, helping businesses to avoid product loss and most importantly protect customer safety. Read more here.

Restaurant Analytics

The restaurant industry has one of the highest employee turnover rates. Labor is a big expense in operating a restaurant, so it's crucial to be on top of your labor cost vs your total sales. Utilizing data will help pinpoint less busy shifts and help keep costs low as fewer employees are required during that period.

Insights will also help you schedule quicker and more strategically based on what days you're busiest, when your sales are highest, and how much should be your average labor spend. Restaurants using scheduling software have seen up to a 2 percent reduction in labor costs. Read more here.

Automated purchasing and inventory

Restaurants that want to cut down on food waste and save money on food costs can use restaurant inventory management and purchasing software.

Machine learning and artificial intelligence help boost manager's ability to stay up to date on purchasing orders and inventory. The technology can suggest purchasing recommendations based on forecasts and custom par levels.

Managers can either manually order or let the system

automatically order when inventory is under a certain threshold.

Everything can be managed through a mobile device where all records of suppliers, receipts, invoices and purchasing records are digitized.
Companies using inventory systems often see savings that range from between 1–4 percent of sales in food and liquor cost savings. Read more here.

© Harri.com

Restaurant automation brings the restaurant business such advantages as:

- Efficiency increase
- Improvement of visitor services
- Cost savings by staff reduction
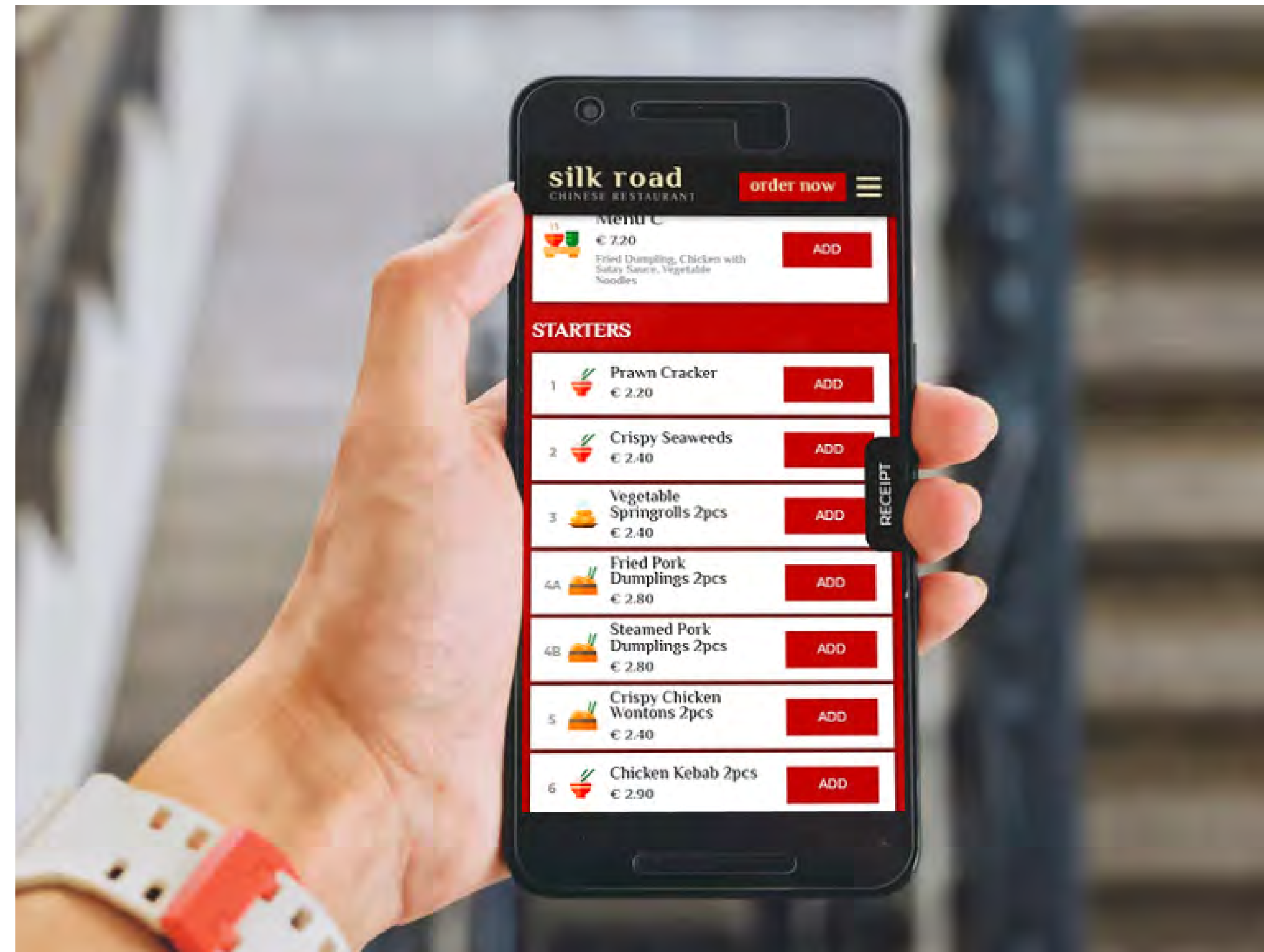
Self-service

Toast, a POS technology provider, state their research shows that 54% of millenials say self-ordering kiosks improve the restaurant experience, while nearly half, 49%, say the same.

Self-service POS kiosks or table-top devices allow the customer freedom of choice. This, along with suggestions for upsells and cross-sells, encourage diners to order more. Toast's data shows that restaurants that adopt their kiosk model see a 5-10% increase in dine-in ticket sizes on the platform.

Having kiosks to handle the transactions allows employees to focus their efforts on back-of-house operations and customer service, rather than having their efforts divided. Read more here.

Waiter digital ordering

Some guests will still prefer physical waiters to take care of them. Waiters can be connected straight to the kitchen with a handheld mobile device. Instead of sending paper receipts or handwritten notes to the kitchen, the order is sent directly to the system and sent to the kitchen with no room for error.

Mobile Ordering

Mobile ordering can be done with either a web service or a mobile app. They allow customers to order delivery, reserve tables, browse offers, etc. With branded apps, points or savings from a loyalty program are automatically added to the customers account, allowing for ease of future ordering.

Starbucks created value with an app that made it easier for customers to order, pay, and pick up their food. Currently they handle almost a third of all orders through their app.
Read more here.

Chapter II

NEW SERVICE CONCEPTS & DIGITAL INNOVATIONS IN ACCOMMODATION INDUSTRY

BIG DATA

Enhancing work efficiency

Hotels are thinking of new ways to use the data collected from the guests - Big Data gives new perspectives to revenue management and personalizes upselling strategie.

Marriott and big data

Marriott is a forerunner in using big data. They optimize their revenue management with dynamic pricing based on use of Big Data, depending on factors such as weather and events. They use big data to analyze their competitors, optimize operations and to forecast the future. Read more here.

© pexels.com

Oaky

Oaky is an automated upselling engine for personalized pre-arrival upgrades. Create customer segments and personalize the deals for the needs of the specific segment. Eg. spa visit, fish tank in the room or champagne. It increases both the revenue and the customer experience. Read more...

Marriott loyalty program

Marriott Bonvoy loyalty program has an app in which guests can send request for the hotels prior and during their stay. The app contains an option for mobile check-in/out and a mobile key.

Bonvoy offers guests information and offers from your destination and suggests new destinations based on the previous stays. Guests can set their personal preferences (eg. High floor, foam pillows) to their profile and when they enter their new location, their request has been filled prior arrival. Instead of housekeeping the guests can choose to have extra loyalty points or plant a tree to the rainforest.
Read more here.
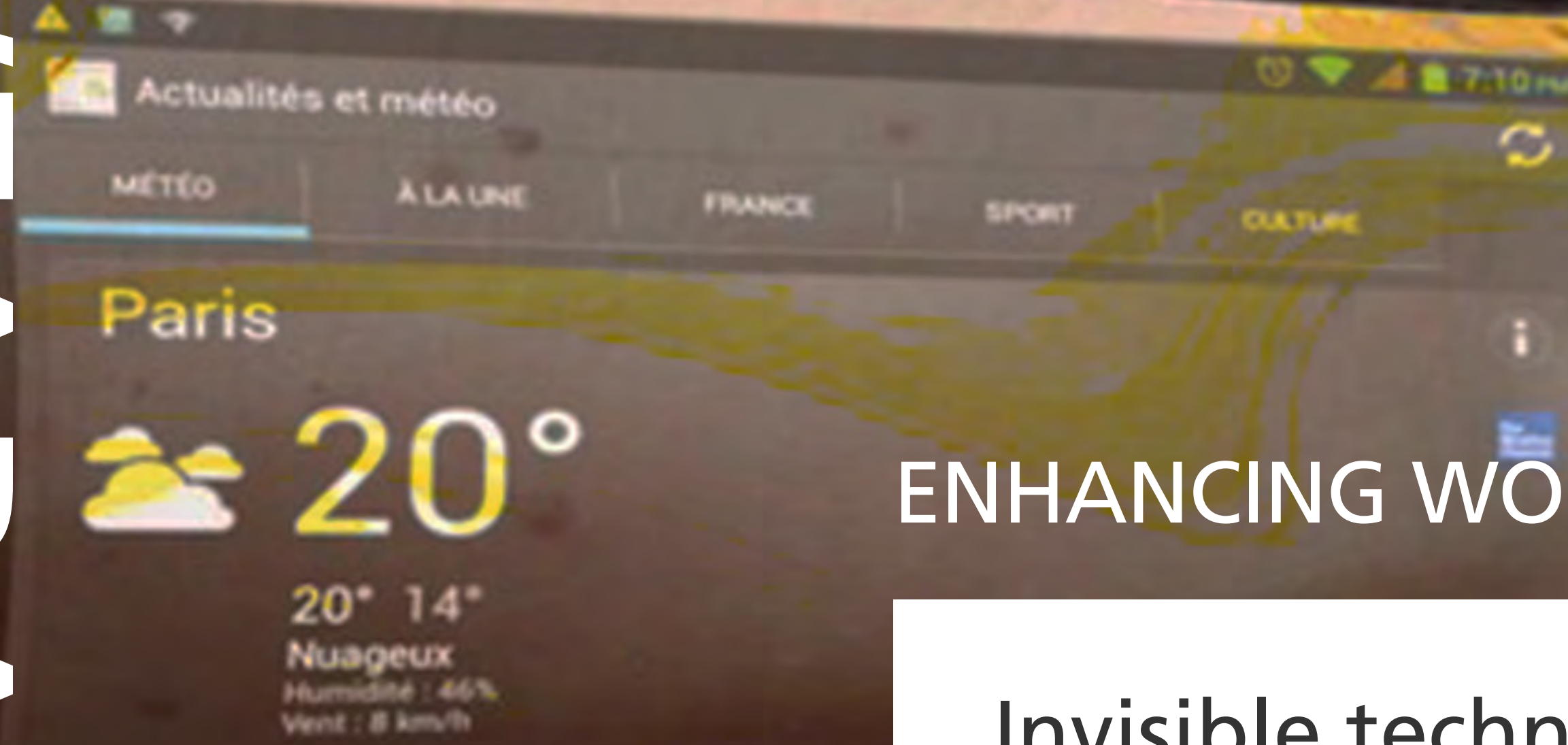
WEARABLES

ENHANCING WORK EFFICIENCY

Invisible technology, eases real-time communication and liberates your hands!

"The wearables market was worth over 50 billion USD in 2019, more than double from 2014. Report finds that wearable technology products continue to see excellent sustained growth" (IDTechEx)

©jebiga.com

TREKSTOR SmartAgent

With software [SAMFEX Wearable](#) enables the departments to communicate hassle-free in real time. Overview of entire hotel room status and it's easily updated through the watch, giving real-time information to everyone concerned hassle-free. Wearable improves the productivity of housekeeping and makes their work more efficient. [Read more…](#)

© Microsoft 2020

CityHub

CityHub's wristbands are keys to the hubs and guests can self-serve beer with just showing the wristband. [Read more…](#)

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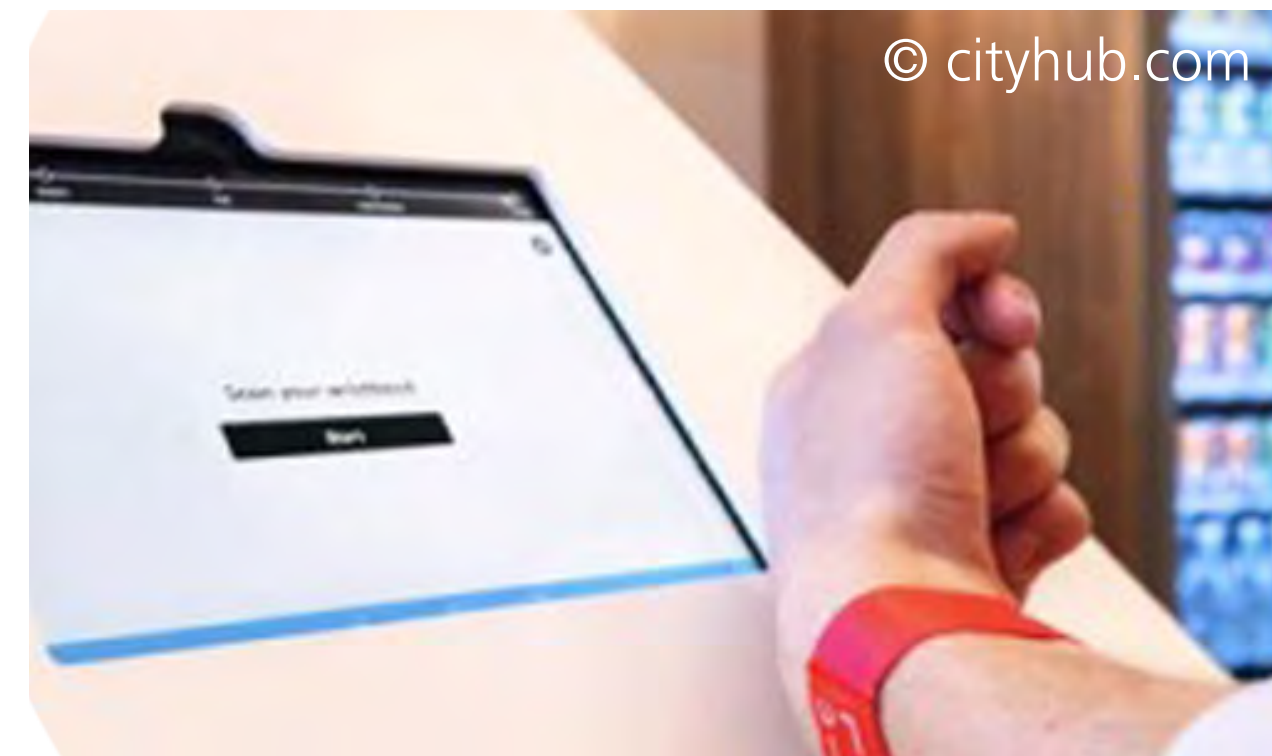
HEARABLES

HY by Zoku "a wearable voice assistant that liberates your senses to the digital world" enables users to listen to stories of surroundings, know exactly where they're going and to speak their notes for later. Read more.

RFDI Wristbands

RFDI Wristbands can work as keys for the rooms and as credit cards/room bill. Whenever the guest wants to purchase something, they'll simply show the wristband and bill goes for the room.

FACIAL RECOGNITION

ROBOTICS

Robots and humans work better as a team in guest service!

62% of consumers said automated recognition using biometrics and facial recognition would enhance their experience, 41% would visit more often if hotels offered this service. (OracleHospitality 2017)

Facial recognition

Facial recognition makes processes such check-ins, opening room doors and payments more efficient and saves time from the front-office staff. Facial recognition enhances personalized customer experience.

- Facial recognition Check-in in Marriott China

- 4 Use Cases of Facial recognition in the Hospitality Industry (Revfine, 2020)

- Enhancing visitor experience using face recognition in Shirahama

Robots in hospitality

Hilton launched the first AI-robot used in hospitality Robot Concierge Connie in 2016.

YOBOT is a robot luggage concierge in Yotel New York stores the luggage for the guests.

JEEVES can replace 200 minibars. This robot delivers room service products.

CleanseBot kills bacteria from the bedsheets.

Robotic Technology

While robots have not replaced the human service, the robotics are widely used in helping with tasks.
Chatbots are widely used online to help guests to book, answer questions – but can also be storytellers and characterize the personality of the hotel, eg. Dingle JackBot.

© jeeves.robotise.eu

Technological solutions which enhance customer experience and satisfaction.

"56% of customers actively seek to buy from the most innovative companies that consistently introduce new products and services based on customer needs and new technology". (Salesforce)

© all-go.co.uk

© neoma.ai

Gaia – AI assistant

"Everybody deserves to feel special"
World's first, and Asia's leading AI assistant supervises traffic and harmonizes operations and services, while it enables the staff to create exceptional, personalized customer service. Read more [here.](#)

AI Customer loyalty programs

"Loyalty programs for today's consumers"
Loyalty programs that are powered with AI use rich customer data and analysis to predict next high value customers. They build emotional loyalty and provide deep customer insights that help in understanding and influencing customer behavior. Highly personalized and customer-centric approach.

- [Aimia Loyalty Solutions](#)
- [LaaSie – AI x Instant Gratification](#)

© Pullman Brisbane / youtube.com

VR/AR solutions

Virtual and augmented reality solutions enhance customer experiences. VR can be a powerful tool for marketing purposes, by encouraging customers to book, by letting them experience services beforehand. It's a great way to pass information, guide around or create additional gamified services.
With AR you can e.g. improve guest experience with interactive hotel rooms and environments.

- Amadeus virtual booking experience
- Shangri-La Hotel VR tour
- MGM Grand Hotel & Casino free roam VR game

Assistive technology (AT)

Helps travelers with disabilities. It also brings extra comfort for the guests. Smart lifts, voice assistants... All-go designed rooms to be suitable with disabilities rather than having a few poorly designed accessible rooms. They create personalized hotel rooms, removing the barriers to travel and creating inclusive environments with smart design. Read more...

SMART ROOM

In-room technologies that interact with each other and enhances convenience and comfort

"70% of hotel operators believe that by 2025 voice recognition will be widespread within the industry" (Oracle Hospitality).

© news.marriott.com

Remote room control

Smart technology allows guests to control e.g. air-con, temperature, lights, TV, music and synchronize everything with their schedule. Hilton Hotels are enabling their guests to do all that and more, remotely through their application. As latest additions, the guest can set their preferences to Netflix and stream their favourite music.

- Hilton Connected Room

Smart Speakers In-Room Butlers

Smart Speakers like Alibaba's TmallGenie or Amazon's Echo are like in-room butlers. The speakers are voice-controlled and capable of answering questions, provide information and control other smart devices nearby
(e.g. air-com, temperature, music, TV, lights).

 The speakers are powered with AI and they can be connected to other in-house systems such as room service or restaurant booking system. Smart Speakers enhance personalized customer experiences and greatly benefit people with disabilities.

- Alexa for Hospitality
- Why Viceroy Hotels & Resorts is "All In" with Voice Technology

In-room services

In Four Seasons Resort Orlando guests can purchase wine with their new on-demand wine sys-tem, Plum. Plum preserves two bottles of wine up to 90 days. It convenient to use for guests and saves time in room service. Plum could also greatly enhance the customer experience if combined with data of customers' prefer-ences or as an add-on in booking.

- Plum for hotels

IMPROVED

SUSTAINABILITY

Innovations that contribute to sustainability issues

"87% of millennials would be more loyal to a company that helps them contribute to social and environmental issues." (Ecosphere+, 2018)

© aguardio.com

Ori living – robotic furniture

"Robotic interiors that efficiently multiply your square footage"
With a touch of a button you can change the functions of the room from a bedroom to a working place. Robotic interior unlocks unused potential and saves space. (Ori Living)

Aguardio – water management system

"in rooms with the Aguardio Display installed the average shower time is reduced by 15%." (Aguardio)

Aguardio is easy to use water management system that is powered with AI and it provides valuable data for hotels. Besides saving water and energy, Aguardio helps on identifying leakages and humidity issues. (Aguardio for hotels)

FlyZoo Hotel: "The hotel represents Alibaba's endeavor to marry hospitality with technology."

FlyZoo Hotel is a 290- room hotel in Hangzhou, China. In FlyZoo, the employees can focus on delivering exceptional customer service while digital systems maintain routine operations.

Guests can book and check-in through an application, use elevators and access their rooms with facial recognition and the gym offers fun digital experiences and interactive workouts. Customers can control their smart rooms, get information and access the room service via Tmail Genie smart assistant from the comfort of their bed, while robot butlers will deliver their orders to the door. Go inside Alibaba's FlyZoo Hotel.
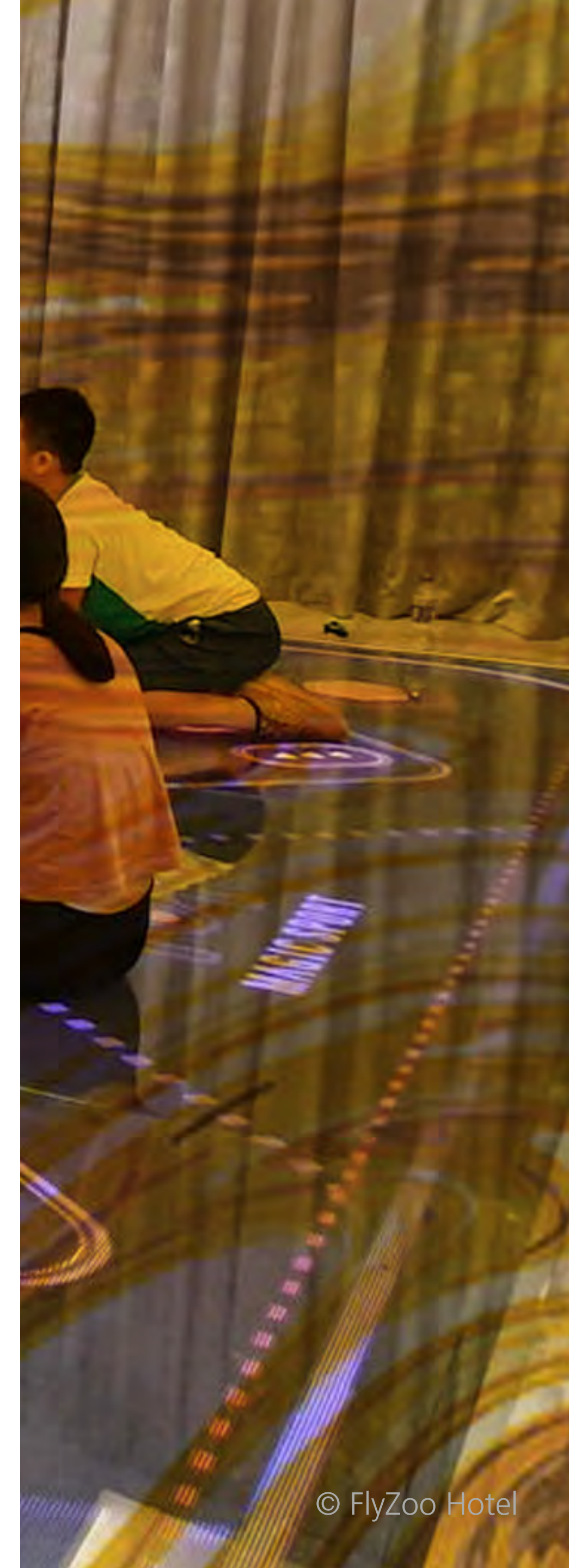
"Stylish, high-tech and cheap:
is citizenM the future of hospitality?"
(Financial times 2012)

CitizenM is constantly improving the customer experience.
It's tailor-made for their customer, the Mobile Citizen,
Millennial businessperson.

Their goal is to provide affordable luxury by exploiting
technology. T the front desk – the check-in here is no
Front Desk, the check-in and –out are fully automated.
Ambassadors are there to assist when needed. The receipt
will automatically go to the guest's email. RFID cards
work as room keys and as payment method at canteenM,
luggage tags on the way home and new keys for the next
stay at citizenM. The rooms are small, but they're packed
with power. Guests can control the rooms ambiance
without moving their feet. Go inside citizenM.

NEW CHAPTER

Chapter III

NEW SERVICE CONCEPTS & DIGITAL INNOVATIONS IN ATTRACTIONS, MUSEUMS,THEATRES,ARENAS

Virtual Reality Experience as a Product Package

These days VR & AR technologies creating many opportunities for businesses to introduce their offerings on a new level and charge more for the digital experiences. However, the challenge is that not many people own or are willing to buy VR & AR headsets. Unless they are already included in the package! You can give them for rent as a part of the experience while cooperating with the headset producers & VR/AR developers.

Imagine visiting a museum or an art gallery by purchasing a ticket with VR set included and delivered to your home address! Or maybe there will be a new platform for VR experiences provided by museums or cultural, educational institutions in cooperation with the XR –related stakeholders.

© pexels.com

Manchester City VR Experience

Every year, thousands of fans come to visit the Etihad Stadium to cheer on their favourite team - The Manchester City. Since 2017, The Manchester City Football Club and its homebase Etihad Stadium have been offered fans the chance to see and feel Match Day at home with Virtual Reality Packages. The idea is to give fans who cannot travel to the stadium the opportunities to enjoy the real feelings of watching it live. Including in the Fanclub Subcriptions, the VR Experience offers 360degree immersive experience for global fans. Read more ...

Examples of new XR experiences

Soon we can see more experiences as this BBC "Micro Kingdoms" or "The Vanishing at the Grand Starlight" on the market. It is done with a new kind of glasses AR "lightwear" by Magic Leap which allows you to see both physical surrounding and virtual reality. It is one of the well-known tech company. It is becoming more accessible to the end-user. According to their website, you can purchase them for Or $96 per month for 24 months with 0% APR.

Experience Virtual Tour

While many museums, arenas, art galleries are closed, the Monterey Bay Aquarium is using new Nintendo game "Animal Crossing: New Horizons" world to host virtual museum tours. The game is popular among Millennials. The players can collect in-game items from fish to fossils and donate them to the virtual museum. Read more here.

Have you expected that the game industry could work so well with such serious establishment as a museum?

Amos Rex

Regarding local examples, Amos Rex has gone virtual which provides live-streaming tours in several languages on Instagram for customers. The virtual tour is free at the moment, however, it can be expanded to private groups with tickets which provides different virtual tour packages.
Read more here.

3 D Collection facilitated by Sketchfab

Sketchfab's established a Public Domain which helps museums and other organizations to share the scan of the 3D Cultural Heritage objects. The company worked with 27 organizations across 13 countries, including the Smithsonian, the National Gallery of Denmark, Chile's Museo Nacional de Historia Natural.
It is proving the platform to share 3D cultural relics to the public. The users can edit, download, share the models or even use them commercially. This new way of presenting museum collections opens more opportunities for education, creating new experiences or marketing museums.

How Museums, Arenas and Other Businesses can create a virtual experience with Google

Google Art & Culture and Google Street View provide services for Museums, Arenas, and other Interactive Spaces to a full package of Virtual Experience with 360 degrees and VR version of the spaces.

Property owners can contact list of Google Trusted Companies that offer the virtual recording services. The list is a country-based list and most European countries have several Google Trusted Organisations listed. Read more here. This unprecedented period has the potential for museums, galleries and cultural centres to renew and rethink their digital estates as remarkable spaces in their own right and for the widest possible audiences to enjoy,' says Barnaby Wright, deputy head of the Courtauld. 'If this happens, we should be able to hear the sound of thousands of pins dropping into Google Maps as people plan their trips to museums and galleries they've discovered online when the world reopens again. Read more here.

The Parties of VR Experience Services Process in Museum/Arenas Business

The Consumer

The party who is using/paying for the Virtual Experience Service

The Producer

Technology service providers with VR/AR software/hardware. The Producer provides digital solutions for The Utilizer. The Producer works closely with the Creator to produce the Virtual Content

The Utilizer

Property/Services Providers
The MAIN party who wants to provide Virtual Experience Service to The Consumer. The Utilizer orders the Virtual Content from The Creator, and the Technology services from the Producer

The Distributor

Logistic platforms, membership programs, sale and marketing service providers who take care of the content delivery to The Consumer

The Creator

Content providers such as artists, 3D creators, ads & media, athletes, performers, designers,… who provides their original contents to The Utilizer

Research & Education

The party is working in the field of research to develop new innovations or raising competencies, and to provide researched information

© Nguyen Nguyen

STATISTICS

- ABI Research predicts that the value of all kinds of VR content (360, interactive and immersive video) will generate USD 6 billion by 2022.

- Ericsson14 predicts that 30% of consumers will use VR/AR for TV and video watching in five years' time. The main driver is the new dimension VR watching offers to consumers.

- 360-degree content is the easiest form of Monetizing Virtual Experience with lowest budget. (approximately 500€)

- Mobile Augmented Reality (AR) is here to stay. Tractica expects that there will be 1.9 billion mobile AR users by 2022.

- Sports and branded contents are considered the first step towards financially viable production.

- According to a Nielsen and YuMe report, VR prompted a 27% higher reaction in users and kept them engaged for 34% longer than traditional ads (Digital Media Finland).

Merchandise opportunities

The protective masks can become a new item of merchandise. People are searching for the new creative designs and the masks might be still in fashion. Imagine a museum selling masks with the motives of its artworks. The Rijksmuseum museum is not afraid to experiment with useful merchandise products! Read more here.

©iStockphoto.com

Touchless Experiences

It is fair to predict that people will be still paying attention to their hygiene after the pandemic is over .It might become important metrics in evaluating customer experience. The services of such companies as Roidu, a quickly growing Finnish software company, might become popular among museums, arenas, restaurants and other organizations.

Imagine coming to the exhibition or restaurant, paying for the service, checking the restroom and performing other actions without a single touch of the screen or surfaces.

Such interactions themselves can become a new experience for people. Considering children as a target group, there is a room for playfulness depending on the level of creativity.

Mixing art and sport in creating experience

Light installation in Amsterdam called Lightbattle created a competition in which people created beautiful light art who by cycling.
It is not a recent example but could inspire new ideas in this area. Read more here.


© InventDesign/YouTube.com

Another example of synthesis be-

tween art and sport is 'THE ROYAL COURT' during Art week in Miami. It was not art installation for observation, but everybody was invited to participate in the fun activities on the basketball court design by D'ana Nunez and organized with NBA All-Star Jimmy Butler and Crown Royal Regal Apple.

Retail, art and theatre

Furniture showroom mixed with restaurants was so-called commercial hybridization which was successfully done by Tom Dixon.
In the Manzoni restaurant, you can buy everything from a dining table to the candle holders. Another example is a mixture of art, retail and theatre where "department store of the future is using actors to sell you stuff". More…

©LivingSpirits/YouTube.com
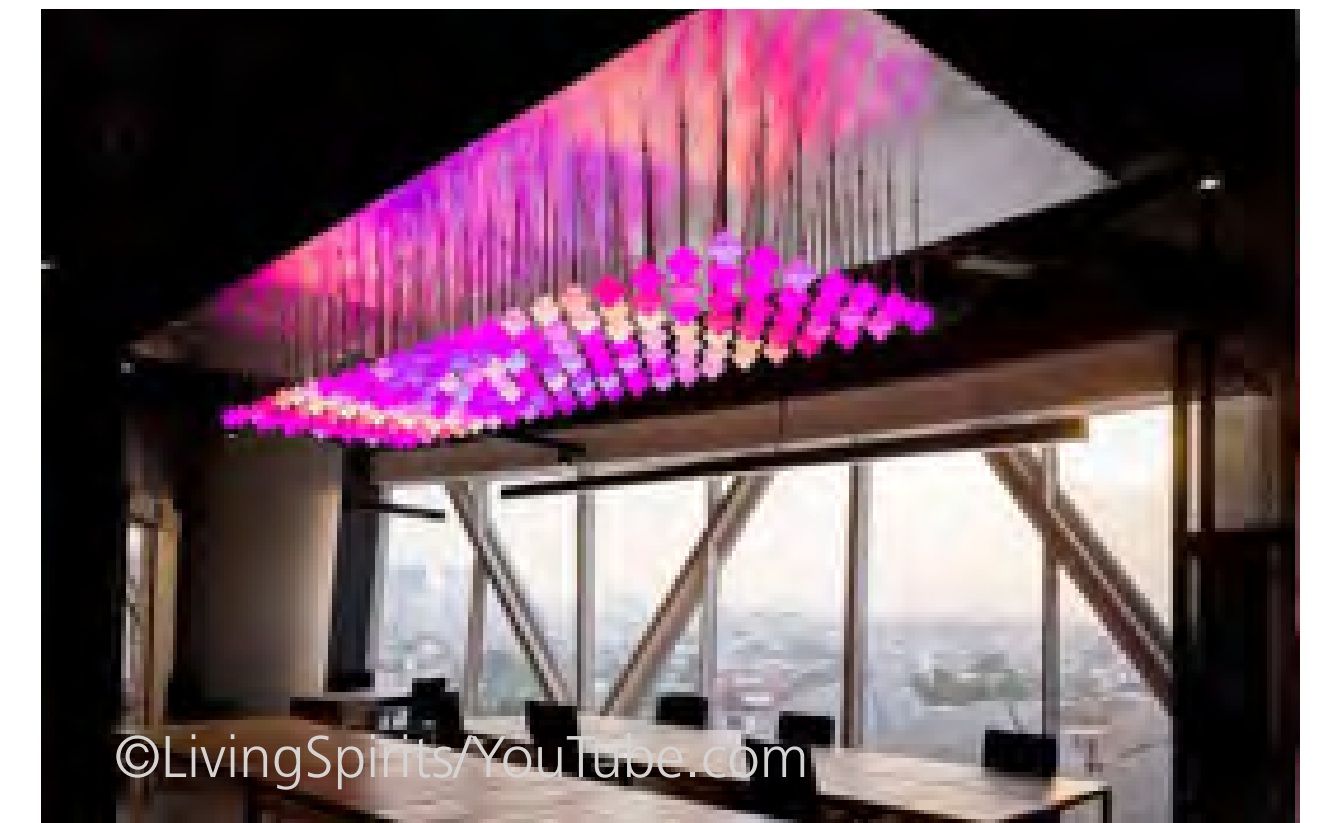
Co-creation and art

Living Spirits, an artist in Bangkok design the light installation that displays the creativity process of the teamwork. As soon as the idea is shared, the light starts shining turning brainstorming process into the artwork.
By that, it does not only add a visual effect to the innovation process but creates a meaningful environment. Read more here.

Thank you
from LAB8 team!

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