

HOTEL | INDUSTRY DIGITAL PLAN

A guide for hotels to assess their digital readiness and opportunities to go digital



Sector lead:



In support of :



Supported by:



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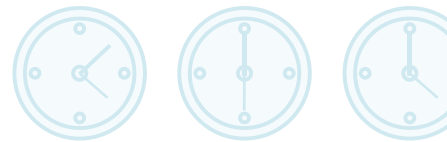
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01

OUR HOTEL INDUSTRY

The Hotel industry, is a key pillar in the Tourism sector, and plays an important part in strengthening Singapore's status as a vibrant global city that is a magnet for capital, businesses and talent.





Increasingly Competitive Tourism Landscape

pushing the need to differentiate the Singapore Experience



Slowing Workforce Growth

leading to the need to pursue productivity driven growth through digital transformation



Changing Customer Expectations

driving the need to adopt different innovative formats of customer engagement

INDUSTRY TRANSFORMATION MAP

To navigate the trends impacting the industry, the Hotel Industry Transformation Map (ITM) was launched in 2016. It aims to accelerate business transformation and forge a competitive industry through 5 key thrusts:

1. Closer partnerships between Government, union, industry and its stakeholders;
2. Strong pipeline of talent and deep-skilled workforce;
3. Enhanced guest experiences and business processes via innovation;
4. Lean business models through productivity; and
5. Business growth through internationalisation



Click [here](#) or scan this QR code for more details on the Hotel Industry ITM

03 HOTELS GO DIGITAL

Hotels can look forward to a full suite of resources to help in their transformation journey, including this Industry Digital Plan (IDP) that aims to help hotels navigate various digital solutions.

Smart Hotel Technology Guides

Resources to inspire and identify opportunities to go digital

- 1) Smart Hotel Technology Guide 2018 (Guest Experience Journey)
- 2) Smart Hotel Technology Guide 2019 (Heart-of-House Operations)

Hotel Industry Digital Plan (IDP)

Guide on digital solutions and training required for each stage of business growth

Co-developed by



SMEs GO DIGITAL



Tech College

A series of masterclasses on Digital Transformation to educate participants on technology, innovation and data

Diagnostic tool (available in 1H2020)

A tool to self-diagnose areas of gaps and opportunities

This digital roadmap serves as a guide for you to plan your digital journey.

STAGE 01

GETTING READY FOR THE DIGITAL ECONOMY

Enhanced Digital Capabilities,
Optimised Operations

Fundamental standalone solutions that are business as usual

STAGE 02

GROWING IN THE DIGITAL ECONOMY

Smart Ecosystem,
Data-Driven Operations

Intermediate solutions requiring integration with internal systems to maximise potential

STAGE 03

LEAPING AHEAD

One Singapore (SG) Experience,
Intelligent Business

Advanced solutions to drive more intelligent businesses and seamless guest experiences in Singapore



Front Office



Housekeeping



F&B



Engineering



Security



Sales & Marketing



HR



Finance

BUSINESS CAPABILITIES

Cybersecurity

Abbreviation:
F&B - Food and Beverage
HR - Human Resource

Note: This roadmap will be updated over time.



DEPARTMENT: FRONT OFFICE

APPLICABILITY OF STAGES

SOLUTIONS Click on solution for more information and system inter-dependencies		STAGE 01 GETTING READY FOR THE DIGITAL ECONOMY Enhanced Digital Capabilities, Optimised Operations	STAGE 02 GROWING IN THE DIGITAL ECONOMY Smart Ecosystem, Data-Driven Operations	STAGE 03 LEAPING AHEAD One SG Experience, Intelligent Business
	Cloud-Based Property Management System (PMS)			
	Luggage Tagging			
	Chatbot			
	Self Check-In/Out			
	Robotic Process Automation (RPA)			
	Crowd Management			
	Data Analytics for Guest Personalisation			
	Video Analytics for Enhanced Guest Experience			



DEPARTMENT: HOUSEKEEPING

APPLICABILITY OF STAGES

SOLUTIONS Click on solution for more information and system inter-dependencies		STAGE 01 GETTING READY FOR THE DIGITAL ECONOMY Enhanced Digital Capabilities, Optimised Operations	STAGE 02 GROWING IN THE DIGITAL ECONOMY Smart Ecosystem, Data-Driven Operations	STAGE 03 LEAPING AHEAD One SG Experience, Intelligent Business
	e-Housekeeping	✓	✓	
	RFID Uniform and Linen Management	✓	✓	
	Privacy and Make Up Room Signalling	✓	✓	
	Power Assisted Delivery	✓		
	Housekeeping Delivery Robots		✓	
	Public Area Floor Cleaning Robots	✓	✓	
	Data Analytics for Resource Optimisation		✓	
	Integrated Smart Room		✓	
	e-Compendium		✓	✓



DEPARTMENT: F&B




APPLICABILITY OF STAGES

SOLUTIONS Click on solution for more information and system inter-dependencies		STAGE 01 GETTING READY FOR THE DIGITAL ECONOMY Enhanced Digital Capabilities, Optimised Operations	STAGE 02 GROWING IN THE DIGITAL ECONOMY Smart Ecosystem, Data-Driven Operations	STAGE 03 LEAPING AHEAD One SG Experience, Intelligent Business
	Breakfast Tracking	✓	✓	
	Online Reservation and Ordering	✓	✓	
	Mobile-Ordering for Crew	✓	✓	
	Table Queue Management	✓	✓	
	Power Assisted Delivery	✓		
	Data Analytics for Resource Optimisation		✓	
	Food Management		✓	
	Crowd Management		✓	
	F&B Delivery Robots		✓	

DEPARTMENT: ENGINEERING



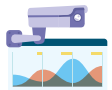

APPLICABILITY OF STAGES

SOLUTIONS		STAGE 01	STAGE 02	STAGE 03
Click on solution for more information and system inter-dependencies		GETTING READY FOR THE DIGITAL ECONOMY Enhanced Digital Capabilities, Optimised Operations	GROWING IN THE DIGITAL ECONOMY Smart Ecosystem, Data-Driven Operations	LEAPING AHEAD One SG Experience, Intelligent Business
	Building Management	✓	✓	
	Data Analytics for Energy Optimisation		✓	
	IoT-based Maintenance for Heating, Ventilation and Air Conditioning (HVACs) and hotel assets		✓	

DEPARTMENT: SECURITY



APPLICABILITY OF STAGES

SOLUTIONS		STAGE 01	STAGE 02	STAGE 03
Click on solution for more information and system inter-dependencies		GETTING READY FOR THE DIGITAL ECONOMY Enhanced Digital Capabilities, Optimised Operations	GROWING IN THE DIGITAL ECONOMY Smart Ecosystem, Data-Driven Operations	LEAPING AHEAD One SG Experience, Intelligent Business
	CCTV Security Analytics	✓	✓	
	Visitor Management	✓	✓	

Abbreviation:

IoT - Internet of Things

CCTV - Closed Circuit TV

DEPARTMENT: SALES & MARKETING








APPLICABILITY OF STAGES

SOLUTIONS Click on solution for more information and system inter-dependencies		STAGE 01 GETTING READY FOR THE DIGITAL ECONOMY Enhanced Digital Capabilities, Optimised Operations	STAGE 02 GROWING IN THE DIGITAL ECONOMY Smart Ecosystem, Data-Driven Operations	STAGE 03 LEAPING AHEAD One SG Experience, Intelligent Business
	Revenue Management System (RMS)		✓	✓
	Reputation Management/ Social Listening Tool	✓	✓	
	Global Distribution System (GDS)		✓	✓
	Events Layout Automation	✓	✓	
	MICE Sales and Event Management		✓	
	MICE Group Reservations Management		✓	
	Augmented Reality/ Virtual Reality (AR/VR) for Visualisation	✓	✓	

Abbreviation:

MICE - Meetings, Incentive Travel, Conventions and Exhibitions

 SOLUTIONS Click on solution for more information and system inter-dependencies		DEPARTMENT: FINANCE APPLICABILITY OF STAGES		
		STAGE 01 GETTING READY FOR THE DIGITAL ECONOMY Enhanced Digital Capabilities, Optimised Operations	STAGE 02 GROWING IN THE DIGITAL ECONOMY Smart Ecosystem, Data-Driven Operations	STAGE 03 LEAPING AHEAD One SG Experience, Intelligent Business
	RFID Asset Tracking	✓		
	Cloud-Based Accounting Management	✓	✓	




 SOLUTIONS Click on solution for more information and system inter-dependencies		DEPARTMENT: HUMAN RESOURCES APPLICABILITY OF STAGES		
		STAGE 01 GETTING READY FOR THE DIGITAL ECONOMY Enhanced Digital Capabilities, Optimised Operations	STAGE 02 GROWING IN THE DIGITAL ECONOMY Smart Ecosystem, Data-Driven Operations	STAGE 03 LEAPING AHEAD One SG Experience, Intelligent Business
	Employee Communication	✓	✓	
	Time and Attendance Tracking	✓	✓	
	e-Learning	✓	✓	
	Foreign Worker Accommodation Management	✓		
	Labour Scheduling	✓	✓	
	Candidate Management	✓	✓	

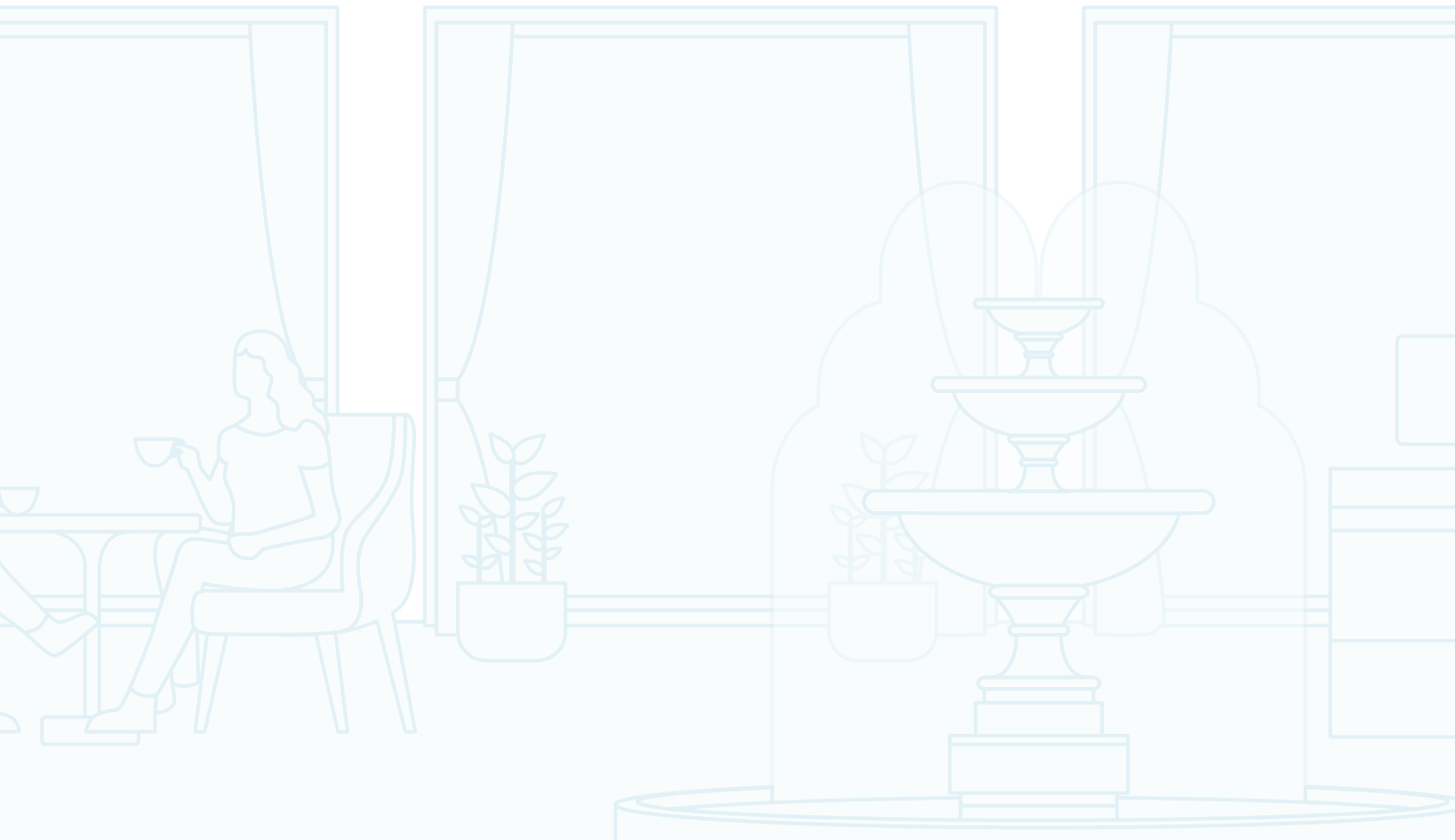
Abbreviation:
RFID - Radio Frequency Identification















DEPARTMENT: ACROSS SEVERAL

APPLICABILITY OF STAGES

SOLUTIONS Click on solution for more information and system inter-dependencies		STAGE 01 GETTING READY FOR THE DIGITAL ECONOMY Enhanced Digital Capabilities, Optimised Operations	STAGE 02 GROWING IN THE DIGITAL ECONOMY Smart Ecosystem, Data-Driven Operations	STAGE 03 LEAPING AHEAD One SG Experience, Intelligent Business
	Customer Relationship Management (CRM)		✓	
	IoT-enabled Inventory Management		✓	
	Data Analytics for Financial Forecasting and Budgeting		✓	



Integrate your hotel solutions with STB's Technology Resources to enable a frictionless end-to-end visitor journey in Singapore and to achieve a more intelligent state of operations.

	 PLANNING AND BOOKING	 ARRIVAL AT HOTEL	 NAVIGATION/ EXPLORATION/ STAY	 DEPARTURE
CUSTOMER EXPERIENCE	<ul style="list-style-type: none"> Seamless research with varied and timely information via hotel's B2C digital platforms e.g. events around hotel or precinct during stay period Present relevant info of interest via hotel's B2C digital platforms based on search history and interest 	<ul style="list-style-type: none"> Seamless check-in via hotel's mobile app as guest's stay validity and identity are verified automatically 	<ul style="list-style-type: none"> Convenient query of hotel's digital platforms and receive up to date information and personalised recommendations e.g. itinerary recommendation, and directions Seamless payment on the go, and access to key attractions, transit options, and guest room via a single pass. 	
BUSINESS OUTCOMES	<ul style="list-style-type: none"> Reach new markets Understand visitor profile to drive better guest experience and increase spending Automatically submit and receive real-time industry performance data and other tourism data to generate projections and forecasts for better business outcomes 			
STB TECHNOLOGY RESOURCES TO ENABLE CUSTOMER EXPERIENCE	 Visit Singapore (VS) App Software Development Kit (SDK) Leverage SDK services for VS App as building blocks to create a mobile app if hotel does not already have one			
	 Chatbot-As-A-Service Leverage STB's Chatbot-As-A-Service to build and customise to hotel's needs, if hotel does not already have one			
	 Tourism Information and Services Hub (TIH) Power B2C platforms using TIH for digital content and software services			
Click on solution for more information and system inter-dependencies	 Visit Singapore Account (VS Account) Leverage VS Account to gain insights of your guests		 E-Visitor Authentication (EVA) Integrate PMS with EVA for real-time authentication of guest's stay validity	
			 TIH Smart Software Services Leverage TIH Smart Software Services to enhance B2C digital experience	
			 One-Tourism Pass (OTP) Leverage STB's OTP , a single digital pass to unlock access to key attractions, transit options, guest rooms and payment	
 Singapore Tourism Analytics Network for Tourism Industry (StanTI) Integrate existing systems, e.g. PMS, with StanTI for better business decision making				

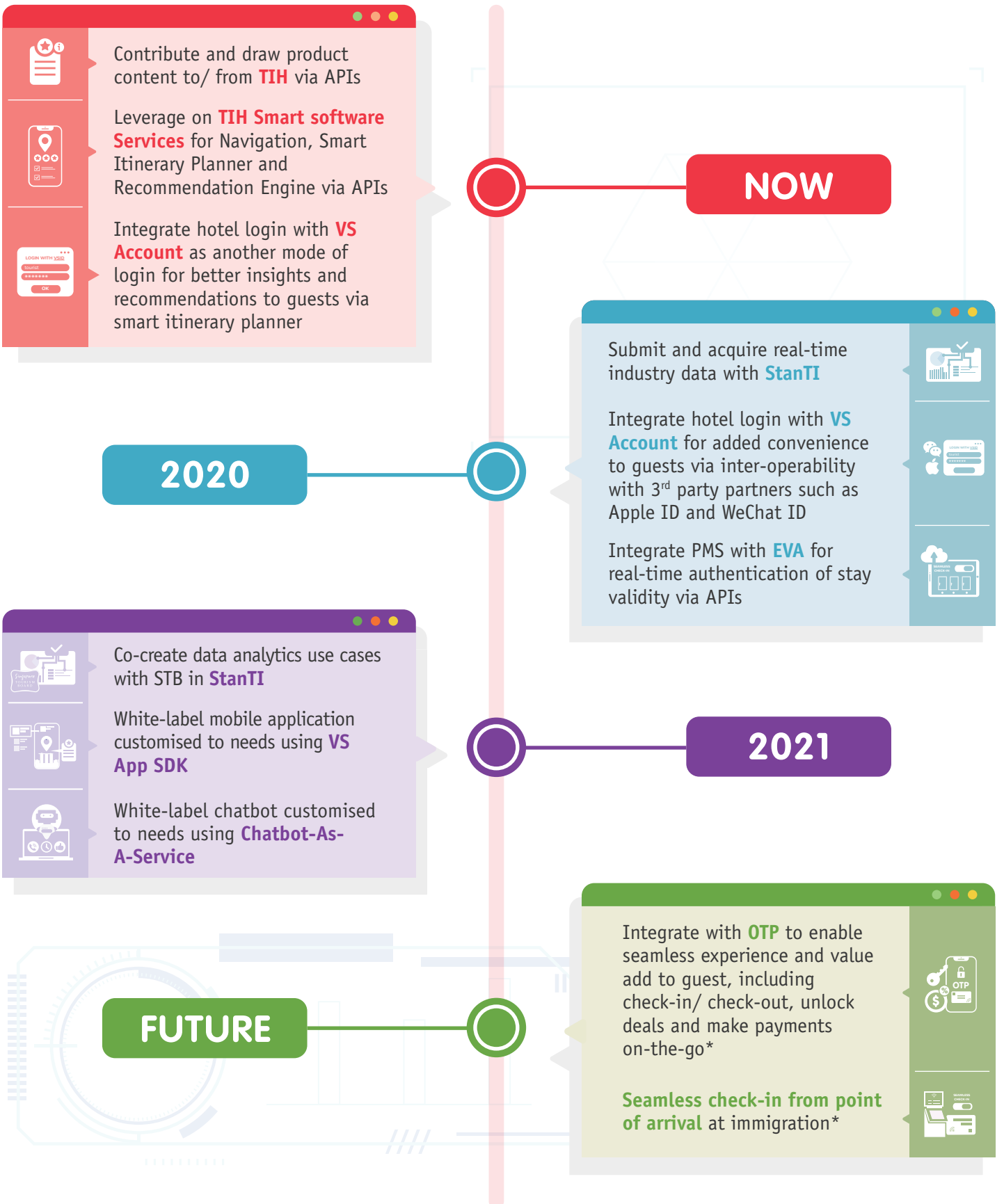
Illustrative of a potential end state of an enhanced traveller's experience by 2022.

Abbreviation:

- B2C - Business-to-Consumer

ONE SINGAPORE EXPERIENCE

TIMEFRAME FOR STB's TECHNOLOGY RESOURCES ROLLOUT



*Note: Timeline for VS App SDK, Chatbot-As-A-Service, OTP and seamless check-in from arrival are tentative

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DIGITAL SKILLS NEEDED

Digital skills are required for all job roles, to varying levels of proficiency. Upskill employees to support the Hotel's digitalisation journey.

ALL USERS

Require broad-based digital literacy and awareness

ADVANCED USERS

Require higher proficiency digital skills

"TECH BASICS" COURSES

Broad-based innovation mindset and digital literacy / awareness

SkillsFuture Singapore (SSG) funded broad-based courses – e.g. SkillsFuture for Digital Workplace

Solution-specific user level digital skills

Vendor solution-specific training

"TECH ADVANCED" COURSES

Higher proficiency level digital skills

Tech training mapped to the Skills Framework for Hotel and Accommodation Services (HAS) and Skills Framework for Infocomm Technology (ICT)



Examples

**CONCIERGE
FRONT OFFICE RECEPTIONIST
FACILITIES MANAGER**



Examples





**REVENUE MANAGER
HUMAN RESOURCE MANAGER
HOTEL MANAGER**

	STAGE 01 GETTING READY FOR THE DIGITAL ECONOMY	STAGE 02 GROWING IN THE DIGITAL ECONOMY	STAGE 03 LEAPING AHEAD
“TECH BASICS” FOR ALL EMPLOYEES IN THE INDUSTRY	<ul style="list-style-type: none"> • Hospitality Industry Analytics • Survive the Robots! Preparing Hospitality and Tourism Professionals • SkillsFuture for Digital Workplace • Transform Your Business with e-Commerce • e-Commerce Order Fulfilment (The Lean Way) • IT-Enabled Business Transformation • Internet and Social Media Marketing • Digital Marketing - Search Engine Marketing • Digital Marketing for Hospitality Management: A Practical Approach • Digitize Your Existing Business Using Business Analytics • Digital Strategy and the 101 of Search Engine Optimisation (SEO) • Developing Social Media Advocacy • Social Media Crisis Management 	<ul style="list-style-type: none"> • Introduction to Hotel Technology Innovation • Digital Recruitment for Talent Acquisition • Digital Analytics for Marketing: Use Customer Intelligence to Uncover High-Value Audience • Strategies for Effective Data and Information Management • Understanding IoT Analytics • Customer Relationship Management Chatbot 	<ul style="list-style-type: none"> • Introduction to Artificial Intelligence (AI)
	Vendor solution specific training		

“TECH ADVANCED” FOR EMPLOYEES THAT EXPLORE OR USE ADVANCED TECH IN THEIR WORK	<ul style="list-style-type: none"> • Relooking at Operations with An Open Mind (ROOM) – Job Re-Design • Digital Marketing in Hospitality • Hands-On Data Protection Officer Training Programme 	<ul style="list-style-type: none"> • Building an IoT Project • Squared Online Certificate in Digital Marketing • Tableau Desktop Certified Associate • Wiley Certified Data Analyst • Robotic Process Automation for Business 	<ul style="list-style-type: none"> • Data-Driven Design: Harnessing the Power of Predictive Analytics • Technological Innovation Strategies • Practical Foundations in AI with Python
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THESE TRAINING PROGRAMMES ARE ALIGNED TO THE SKILLS FRAMEWORK AND EMERGING AREAS UNDER SKILLSFUTURE SERIES

Hotels will be supported at every stage of your digital journey, through three simple steps:

	RESOURCES FOR SME HOTELS (SMES GO DIGITAL)	RESOURCES FOR ALL HOTELS
<p>1</p> <p>IS YOUR BUSINESS DIGITAL-READY?</p> <p>Find out using tools available</p>	<p>Find out if you are digital ready by using the IDP resources here or scan the QR code.</p> <div style="text-align: center;">  <p>Hotel Industry IDP</p> </div>	<p>Identify areas of gaps and opportunities using STB's diagnostic tool (available in 1H2020)</p>
<p>2</p> <p>HOW DO YOU GET STARTED?</p> <p>Identify and adopt solutions with grant support to defray cost</p>	<ul style="list-style-type: none"> • Tap on CTO-as-a-Service to complete your Digital Readiness Self-Check in the web app and select from the recommended digital solutions that best meet your business needs. • Visit GoBusiness Gov Assist to contact solution providers to purchase and implement digital solution. If funding support is required, apply for the Productivity Solutions Grant (PSG) on the Business Grants Portal, before purchasing and implementing the digital solutions. • Apply for training subsidies under the SkillsFuture Enterprise Credit(SFEC). <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>CTO-as-a-Service</p> </div> <div style="text-align: center;">  <p>GoBusiness Gov Assist</p> </div> <div style="text-align: center;">  <p>SFEC</p> </div> </div>	<p>Be inspired with opportunities to transform with the Smart Hotel Technology Guide 2018 and Smart Hotel Technology Guide 2019 focusing on the solutions for the guest experience journey and Heart-of-House operations respectively.</p> <p>Identify digital solutions and training required for each stage of your business growth using this Hotel IDP and the Skills Framework.</p> <p>Ideate and develop customised action plans aligned to your hotel's vision for transformation via the STB Tech College.</p> <p>Tap on STB's Business Improvement Fund (BIF) and e2i, and Workpro Job Redesign Grant (WJR) to implement solutions.</p>
<p>3</p> <p>WHERE CAN YOU GET HELP?</p> <p>Contact relevant organisations for support</p>		<p>Contact Singapore Hotel Association or STB for advice or recommendation on digital needs and support.</p>

Aligned to the ITM, the Industry Digital Plan (IDP) is part of the SMEs Go Digital programme that helps to make going digital simple for SMEs.



INFORM COMM MEDIA DEVELOPMENT AUTHORITY

SMEs GO DIGITAL

3 STEPS TO GO DIGITAL



For more information
Scan the QR code or visit
www.imda.gov.sg/SMEsGoDigital

Support available

- Chief Technology Officer-as-a-Service (CTO-as-a-Service)
- Industry Digital Plans
- Pre-Approved Solutions
- Start Digital
- Grow Digital
- Advanced Digital Solutions
- Government Grants e.g. Productivity Solutions Grant (PSG)

- 1** | Is your business digital-ready?
Find out using the Industry Digital Plan (IDP) for your sector.
- 2** | How do you get started?
Take up pre-approved solutions with grant support.
- 3** | Where can you get help?
Access the CTO-as-a-Service for support.

SMEs Go Digital comprises the following:

CTO-as-a-Service

Assess your digital readiness, explore digital solutions and request for digital advisory and project management services.

INDUSTRY DIGITAL PLANS (IDP)

Step by step guide on digital solutions and training required at each stage of your business growth.

PRE-APPROVED SOLUTIONS

Proven off-the-shelf digital solutions pre-approved by IMDA to meet your business needs. Government grants, e.g. Productivity Solutions Grant (PSG), are available for the adoption of these solutions.

START DIGITAL

Foundational digital solutions for new SMEs to get a head start in going digital.

GROW DIGITAL

Leverage Business-to-Business (B2B) and Business-to-Consumer (B2C) e-commerce platforms to go international, without a physical presence overseas.

ADVANCED DIGITAL SOLUTIONS

Advanced and integrated digital solutions to help you strengthen business continuity and build longer term resilience.

FOR ENTERPRISES

DIGITAL CONSULTANCY & SOLUTIONS

CTO-as-a-Service

go.gov.sg/CTOaaS

SMEs Go Digital

<https://imda.gov.sg/SMEsGoDigital>

GoBusiness Gov Assist

<https://govassist.gobusiness.gov.sg/productivity-solutions-grant/>

BE SAFE ONLINE HANDBOOK

https://www.csa.gov.sg/~media/csa/documents/publications/be_safe_online/be_safe_online_handbook.pdf

BUSINESS ADVISORY

SME Centres managed by Trade Associations

- Association of Small and Medium Enterprises (ASME)
- Singapore Chinese Chamber of Commerce & Industry (SCCCI)
- Singapore Indian Chamber of Commerce & Industry (SICCI)
- Singapore Malay Chamber of Commerce & Industry (SMCCI)
- Singapore Manufacturing Federation (SMF)

<https://www.enterprisesg.gov.sg/smecentre>

Enterprise Infoline: +65 6898 1800

Singapore Hotel Association

<https://www.sha.org.sg>

FOR INDIVIDUALS

CAPABILITY UPGRADING

Fundamentals for Future Economy

<https://www.skillsfuture.gov.sg/digitalworkplace>

Course Directory

<https://www.myskillsfuture.gov.sg/content/portal/en/training-exchange/course-landing.html>

TechSkills Accelerator (TeSA)

<https://www.go.gov.sg/TeSA>

Introduction to Hotel Innovation & Technology

<https://www.rp.edu.sg/ace/short-course/Detail/intro-to-hotel-technology-innovation>

<https://www.rp.edu.sg/ace/course-summary>

Singapore Tourism Board Tech College

<https://www.stb.gov.sg/content/stb/en/trade-events-and-resources/stb-tech-college.html>

CAREER FACILITATION

WSG's Careers Connect

<https://www.wsg.gov.sg/career-services.html>

e2i Centres

<https://e2i.com.sg/app>

FOR ICM VENDORS

SMEs Go Digital

<https://imda.gov.sg/icmvendors>

09

APPENDIX





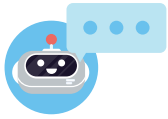
CLOUD-BASED PROPERTY MANAGEMENT SYSTEM (PMS)

DESCRIPTION	The solution enables a hotel or group of hotels to manage front-office capabilities, such as booking reservations, guest check-in/check-out, room assignment, room rates, and billing. It integrates with other onsite services that impact the guest's overall experience, including Payment Gateway Solution/ Digital Payment, Food and beverage operations, Housekeeping, etc.		
BENEFITS	<ul style="list-style-type: none"> • Lower investment costs • Helps achieve productivity • Forms basis of a consolidated loyalty programme, across hotels and its F&B outlets • Enhances guest experience, as guest data is seamlessly collected and analysed across touch points in the hotels 		
POSSIBLE SYSTEM(S) INTEGRATION LIST IS NON-EXHAUSTIVE	STAGE 1 <ul style="list-style-type: none"> • Can be used as a standalone system 	STAGE 2 <ul style="list-style-type: none"> • CRM • Central Reservations System (CRS) • Other hotel solutions. See respective solutions 	STAGE 3 <ul style="list-style-type: none"> • Singapore Tourism Analytics Network for tourism industry (StanTI)



LUGGAGE TAGGING

DESCRIPTION	The solution simplifies luggage storage and retrieval via LIVE location updates.		
BENEFITS	<ul style="list-style-type: none"> • Reduces average time for luggage retrieval by 50% - 60% • Lessens bellmen frustration to locate luggage via small tags • Allows employees to have more control during busy situations. 		
POSSIBLE SYSTEM(S) INTEGRATION LIST IS NON-EXHAUSTIVE	STAGE 1 <ul style="list-style-type: none"> • Can be used as a standalone system 	STAGE 2 <ul style="list-style-type: none"> • PMS • e-Ticketing/ Housekeeping 	STAGE 3 <ul style="list-style-type: none"> • N/A



CHATBOT

DESCRIPTION	The solution helps hotels manage guest enquiries and requests with accuracy and consistency.		
BENEFITS	<ul style="list-style-type: none"> • Reduces enquiries at Front Office by average of 40% • Saves an average of 60% man-hours spent on related activities • Generates sales leads for banquet and event spaces • Allows customisation to suit each hotel's unique needs 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • PMS • Hotel Digital Platforms • Point of Sale (POS) System • In-room voice assistant • e-Ticketing/ Housekeeping • Hotel Map & Positioning Solution • Meeting Room Management System 	<ul style="list-style-type: none"> • Tourism Information and Services Hub (TIH) • Leverage on Chatbot as a service provided under the TIH if hotel does not already have an existing chatbot



SELF CHECK-IN/OUT

DESCRIPTION	The solution allows for guest self check-in/out without need for interaction with a service representative.		
BENEFITS	<ul style="list-style-type: none"> • Reduces queues • Added convenience for guests • Front Office employees have more time to engage with guests on value-added services • Increases revenue by encouraging guests to spend on other hotel services 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • CRM • PMS • Payment Gateway • Door locks • Hotel Digital Platforms 	<ul style="list-style-type: none"> • Electronic Visitor Authentication (EVA)



ROBOTIC PROCESS AUTOMATION (RPA)

DESCRIPTION	Soft "robot" to automate manual processes and inputs.		
BENEFITS	<ul style="list-style-type: none"> • Streamlines or eliminates manual processes to increase efficiency • Reduces human errors • Higher volumes can be processed in shorter time frame • Overcomes integration with legacy data systems without need for IT system code changes 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • PMS • CRM • Contract Management System (CMS) • CRS • Finance Systems • Business Intelligence (BI) Solutions 	<ul style="list-style-type: none"> • N/A



CROWD MANAGEMENT

DESCRIPTION	Leverages video analytics to understand human traffic flow and crowding.		
BENEFITS	<ul style="list-style-type: none"> • Improves coordination between Front and Back Office for more efficient operations • Reduces queue wait time, improves consumer experience and increases customer retention 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • e-Ticketing/ Housekeeping • Hotel Digital Platforms 	<ul style="list-style-type: none"> • N/A



DATA ANALYTICS FOR GUEST PERSONALISATION

DESCRIPTION	Provides guest with personalised recommendations that are based on market trends and past guest interactions.		
BENEFITS	<ul style="list-style-type: none"> • Provides insights for new business opportunities • Maximises sales and distribution strategy • Better understanding of guests profiles 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • PMS • CRM • CRS • Revenue Management Systems (RMS) • Chatbot • In-room Voice Assistant/ Butler 	<ul style="list-style-type: none"> • N/A



VIDEO ANALYTICS FOR ENHANCED GUEST EXPERIENCE

DESCRIPTION	Intelligent video analytics solution recognises guests and sentiments to understand customer behaviour and preferences, and staff service levels.		
BENEFITS	<ul style="list-style-type: none"> • Optimises guest experience by analysing demographics, heat maps and guest preferences through sensors/ video feeds • Enhances service levels and customer experience 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • PMS • CRM • Chatbot • Room Control Systems • Security Systems 	<ul style="list-style-type: none"> • N/A



E-HOUSEKEEPING

DESCRIPTION	e-Housekeeping enables seamless scheduling of room cleaning, housekeeper assignments, room status updates, mini bar consumption, defects tracking, etc.		
BENEFITS	<ul style="list-style-type: none"> • Real-time update of room status and cleaning assignment • Increases efficiency and housekeeper work satisfaction • Improves communication and coordination between housekeepers team leaders, and between departments • Reduces errors and lapses, to minimise customer dissatisfaction 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • PMS 	<ul style="list-style-type: none"> • Chatbot • Voice Butler/ Assistant • Integrated Smart Room Solution • e-Engineering System 	<ul style="list-style-type: none"> • N/A



RFID UNIFORM AND LINEN MANAGEMENT

DESCRIPTION	Solution leverages RFID to automatically count and track linen and uniform inventory.		
BENEFITS	<ul style="list-style-type: none"> • Improves operational efficiency with real-time automated data collection, thereby reducing manpower needed for manual counting and sorting • Allows easy tracking and retrieval of inventory 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • Staff Time & Attendance/ ID System 	<ul style="list-style-type: none"> • N/A



PRIVACY AND MAKE UP ROOM SIGNALLING

DESCRIPTION	Privacy and Make Up Room solution uses in-room motion sensors to detect if guest has left the room and alerts housekeeping staff to clean room. Integrated with real-time tracking of in-room Privacy and Make Up Room indicator.		
BENEFITS	<ul style="list-style-type: none"> • Enhances guest satisfaction • Deploys housekeeping staff efficiently by minimising trips to occupied rooms 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • e-Ticketing/ Housekeeping • Hotel Digital Platforms 	<ul style="list-style-type: none"> • N/A



POWER ASSISTED DELIVERY

DESCRIPTION	Power assisted delivery system aids staff in moving heavy loads safely and efficiently.		
BENEFITS	<ul style="list-style-type: none"> • Helps staff to move heavy loads of up to 300 kg safely and effortlessly • Minimal training required for staff to use system • Increases productivity 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • N/A



HOUSEKEEPING DELIVERY ROBOTS

DESCRIPTION	Autonomous front of house robots to aid with delivery of guest requested items to guest rooms; and, Heart-of-House robots to deliver linen and collect waste.		
BENEFITS	<ul style="list-style-type: none"> • Reduces labour requirements 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Lifts • e-Housekeeping/ Ticketing • Voice Butler/ Assistant • Integrated Smart Room Solution • Smart Dispensers/ Vending Machines 	<ul style="list-style-type: none"> • N/A



PUBLIC AREA FLOOR CLEANING ROBOTS

DESCRIPTION	Robots to automate floor cleaning tasks.		
BENEFITS	<ul style="list-style-type: none"> • Reduces manpower and operating costs • Increases efficiency • Ensures consistency in cleaning standards 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • Lifts • e-Housekeeping/ Ticketing 	<ul style="list-style-type: none"> • N/A



DATA ANALYTICS FOR RESOURCE OPTIMISATION

DESCRIPTION	Analyses guest feedback, preferences and resource usage to provide actionable plans to improve productivity and deliver better guest experiences.		
BENEFITS	<ul style="list-style-type: none"> • Enhances guest experience • Improves brand reputation • Optimises resources • Improves productivity 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • PMS • CRM • CRS • Chatbot • In-room Voice Assistant/ Butler 	<ul style="list-style-type: none"> • N/A



INTEGRATED SMART ROOM

DESCRIPTION	Solution to enhance room with tech capabilities such as paperless check-in/out, messaging, in-room control capabilities, etc.		
BENEFITS	<ul style="list-style-type: none"> • Provides guests with enhanced in-room experience • Streamlines housekeeping/ service operations 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Aircon/ Lighting • Online door locks • PMS • Hotel Digital Platform • Voice Butler/ Assistant • Digital Concierge/ Chatbot • e-Housekeeping/ Ticketing 	<ul style="list-style-type: none"> • N/A



E-COMPENDIUM

DESCRIPTION	The e-Compendium replaces traditional printed materials in guestrooms to provide guests with up-to-date hotel, events and promotion information. May incorporate functions of an integrated smart room solution.		
BENEFITS	<ul style="list-style-type: none"> • Reduces manual efforts and cost involved to update hardcopy compendium and hotel information 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1 <ul style="list-style-type: none"> • N/A 	STAGE 2 <ul style="list-style-type: none"> • PMS • CRM • Voice Butler/ Voice Assistant • Digital Concierge/ Chatbot • e-Housekeeping/ Ticketing • Hotel Digital Platform 	STAGE 3 <ul style="list-style-type: none"> • TIH





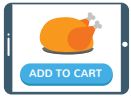
BREAKFAST TRACKING

DESCRIPTION	Solution enables outlet to retrieve guest's entitlement and consumption status by tapping key card on reader. It will reconcile charges automatically at the end of each breakfast service.		
BENEFITS	<ul style="list-style-type: none"> • Improves efficiency of breakfast queue • Improves productivity of F&B staff as end of day reconciliation is no longer necessary • Real-time analytics on consumption 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • PMS 	<ul style="list-style-type: none"> • Mobile App • POS • Door Locks 	<ul style="list-style-type: none"> • N/A



ONLINE RESERVATION AND ORDERING

DESCRIPTION	Solution allows guests to self book and order food for dine-in or take-out directly via various platforms. Reservations and orders are directly updated to the POS and table management system of the restaurant.		
BENEFITS	<ul style="list-style-type: none"> • Streamlines order taking and payment processes • Optimises manpower • Eliminates ordering errors 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Hotel Digital platforms • POS • Payment Gateway 	<ul style="list-style-type: none"> • Digital Concierge/ Chatbot • Voice Butler/ Assistant • Table Management System • Hotel Digital Platforms 	<ul style="list-style-type: none"> • N/A



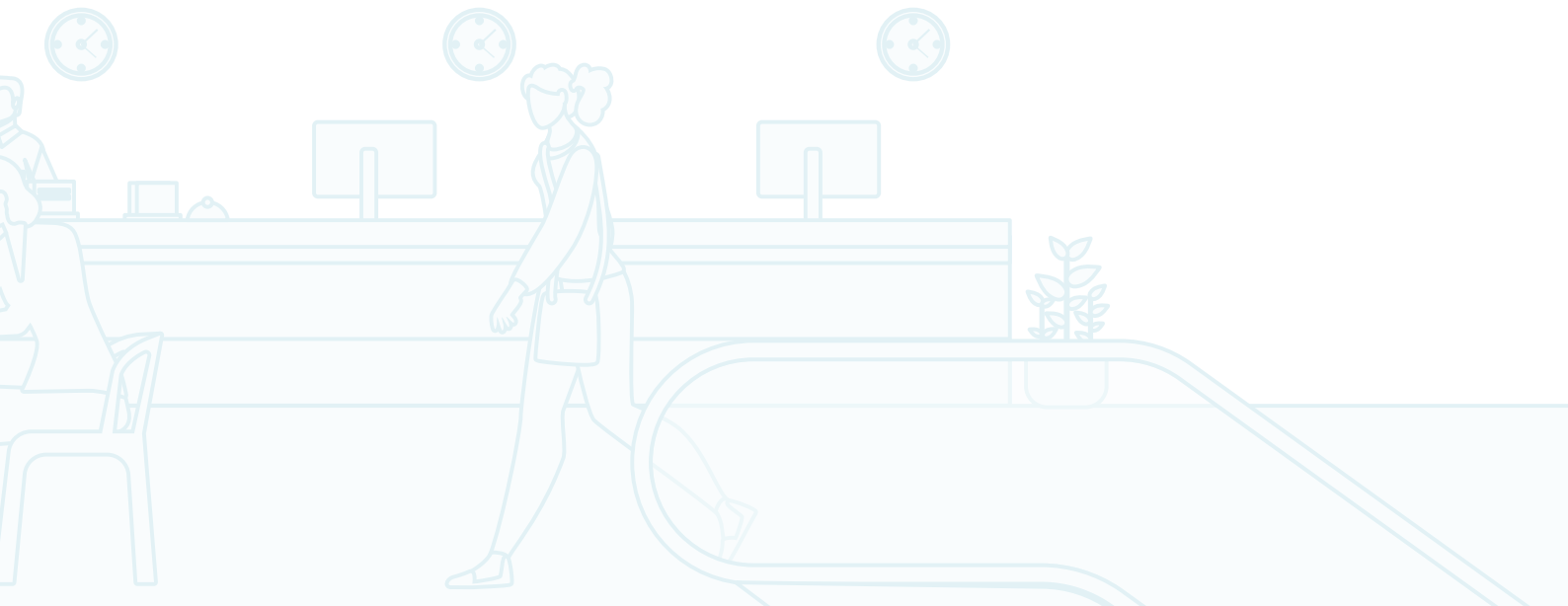
MOBILE-ORDERING FOR CREW

DESCRIPTION	Solution allows employees to take orders and complete payment at the table.		
BENEFITS	<ul style="list-style-type: none"> • Streamlines order taking and payment processes for crew to reduce waiting time • Optimises manpower by reducing trips to POS and/ or kitchen • Eliminates ordering errors 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • POS • Payment gateway 	<ul style="list-style-type: none"> • PMS 	<ul style="list-style-type: none"> • N/A



TABLE QUEUE MANAGEMENT

DESCRIPTION	Electronic management of table bookings and occupancy.		
BENEFITS	<ul style="list-style-type: none"> • Simplifies management of tables • Streamlines service operations and reduces business costs 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • Online reservation and ordering system • POS • CRM 	<ul style="list-style-type: none"> • N/A





POWER ASSISTED DELIVERY

DESCRIPTION	Power assisted delivery system aids staff in moving heavy loads safely and efficiently.		
BENEFITS	<ul style="list-style-type: none"> • Helps staff to move heavy loads of up to 300 kg safely and effortlessly • Minimal training required for staff to use system • Increases productivity 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • N/A



DATA ANALYTICS FOR RESOURCE OPTIMISATION

DESCRIPTION	Analyses market trends, seasonal demands, and guest preferences to provide an actionable plan to improve productivity and generate new revenue.		
BENEFITS	<ul style="list-style-type: none"> • Enhances guest experience • Streamlines supply chain and operations to respond quickly to seasonal changes 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • CRM • CRS • Inventory Management • Procurement 	<ul style="list-style-type: none"> • N/A



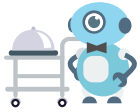
FOOD MANAGEMENT

DESCRIPTION	Leverages AI to monitor food availability along buffet lines to trigger replenishment. Analyses food consumption patterns after each meal service.		
BENEFITS	<ul style="list-style-type: none"> • Enhances guest experience by ensuring timely supply of food along buffet line • Improves productivity by reducing manual checking • Optimises production of food and minimises wastage 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Inventory Management Systems • Procurement systems • Food Waste Management System 	<ul style="list-style-type: none"> • N/A



CROWD MANAGEMENT

DESCRIPTION	Leverages video analytics to understand queue patterns at outlets, especially during peak hours.		
BENEFITS	<ul style="list-style-type: none"> • Allows actionable insights e.g. redirect guests in queue to another outlet • More efficient staff deployment to optimise operations 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Lifts • Hotel Digital Platforms 	<ul style="list-style-type: none"> • N/A



F&B DELIVERY ROBOTS

DESCRIPTION	Robots that deliver F&B to guests.		
BENEFITS	<ul style="list-style-type: none"> • Augments tight manpower and reduces operating costs • Increases efficiency in performance • Ensures consistency in quality of service 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Lifts • POS/ Ordering System • e-Housekeeping/ Ticketing 	<ul style="list-style-type: none"> • N/A





BUILDING MANAGEMENT

DESCRIPTION	Solution allows centralised control and monitoring of building's mechanical and electrical equipment such as ventilation, lighting, power systems, fire safety system, etc.		
BENEFITS	<ul style="list-style-type: none"> • Optimises energy usage to reduce operational costs and extends equipment lifespan • Provides real-time status of equipment • Reduces frequency of manual checks on equipment to improve productivity 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • Integrated Smart Room Solution • IOT maintenance systems 	<ul style="list-style-type: none"> • N/A



DATA ANALYTICS FOR ENERGY OPTIMISATION

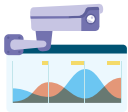
DESCRIPTION	Analysis of hotel equipment e.g. Heating, Ventilation, and air-conditioning (HVAC) systems, to reduce energy consumption.		
BENEFITS	<ul style="list-style-type: none"> • Optimises energy usage to reduce operational costs and extends equipment lifespan • Enables visibility of energy usage via a dashboard • Unlock insights to reduce energy consumption 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Building Management System • Integrated Smart Room System 	<ul style="list-style-type: none"> • N/A



IOT-BASED MAINTENANCE FOR HVACS AND HOTEL ASSETS

DESCRIPTION	Enhanced tracking and management of HVAC systems and hotel assets with IoT.		
BENEFITS	<ul style="list-style-type: none"> • Optimises resource management • Enables preventive maintenance 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • e-housekeeping/ Ticketing • Building Management System 	<ul style="list-style-type: none"> • N/A





CCTV SECURITY ANALYTICS

DESCRIPTION	Smart CCTV monitoring using video content analysis to help hotels automate CCTV surveillance of premises.		
BENEFITS	<ul style="list-style-type: none"> • Reduces need for physical monitoring and investigations • Provides insights on areas of attention • Anticipate potential security issues 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • PMS 	<ul style="list-style-type: none"> • N/A



VISITOR MANAGEMENT

DESCRIPTION	Digital registration and tracking of visitors (e.g. suppliers, contractors, etc.) within the hotel premises.		
BENEFITS	<ul style="list-style-type: none"> • Enhances security protection • Streamlines tracking of visitors • Facilitates search and retrieval of information 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • Heart-of-House Door access • Positioning/ Tracking System 	<ul style="list-style-type: none"> • N/A



REVENUE MANAGEMENT SYSTEM (RMS)

DESCRIPTION	Analyses reservations data and demand trends, to help hotels optimise pricing and maximise profit.		
BENEFITS	<ul style="list-style-type: none"> • Improves productivity • Gain insights to market trends to increases competitiveness • Maximises revenue 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • PMS • CRS • POS • CRM • GDS • Hotel Website 	<ul style="list-style-type: none"> • StanTI



REPUTATION MANAGEMENT/ SOCIAL LISTENING TOOL

DESCRIPTION	Tracks and monitors overall sentiment and satisfaction across multiple social media platforms. Enables hotel to provide timely responses to manage its reputation across multiple social channels.		
BENEFITS	<ul style="list-style-type: none"> • Builds brand trust and social reputation • Gain understanding of customer needs • Improves customer service from feedback received • Improves efficiency to understand reviews across multiple social media channels 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • CRM • Digital Concierge 	<ul style="list-style-type: none"> • N/A



GLOBAL DISTRIBUTION SYSTEM (GDS)

DESCRIPTION	The solution links services, rates and bookings across travel industry service providers, mainly airlines, hotels, car rental companies, and travel agencies, to enable transactions among service providers.		
BENEFITS	<ul style="list-style-type: none"> • Enables bundled packages that include a hotel stay, air travel and other destination promotions to be offered to travellers • Allows hotel to update product information in real-time such as adjusting price or offering special promotions across multiple channels • Widens reach to potential users 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • PMS • CRM • CRS • Yield Management System 	<ul style="list-style-type: none"> • StanTI



EVENTS LAYOUT AUTOMATION

DESCRIPTION	Enable accurate and collaborative digital diagramming of suitable layouts for venue area and capacity.		
BENEFITS	<ul style="list-style-type: none"> • Better visibility to unlock insights to drive sales • Improves productivity • Enables effective collaborative planning with clients 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • Sales CRM • AR/ VR systems 	<ul style="list-style-type: none"> • N/A



MICE SALES AND EVENT MANAGEMENT

DESCRIPTION	Empower sales and catering teams to seamlessly contract new businesses, efficiently manage blocking of guest rooms and communicate details of event across departments.		
BENEFITS	<ul style="list-style-type: none"> • Enables effective engagement with clients • Enables operational transparency and efficient workflows across relevant departments • Increases productivity with automated tasks and workflow • Provides insights from data analytics 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	• N/A	<ul style="list-style-type: none"> • PMS • Sales CRM • AR/ VR systems 	• N/A



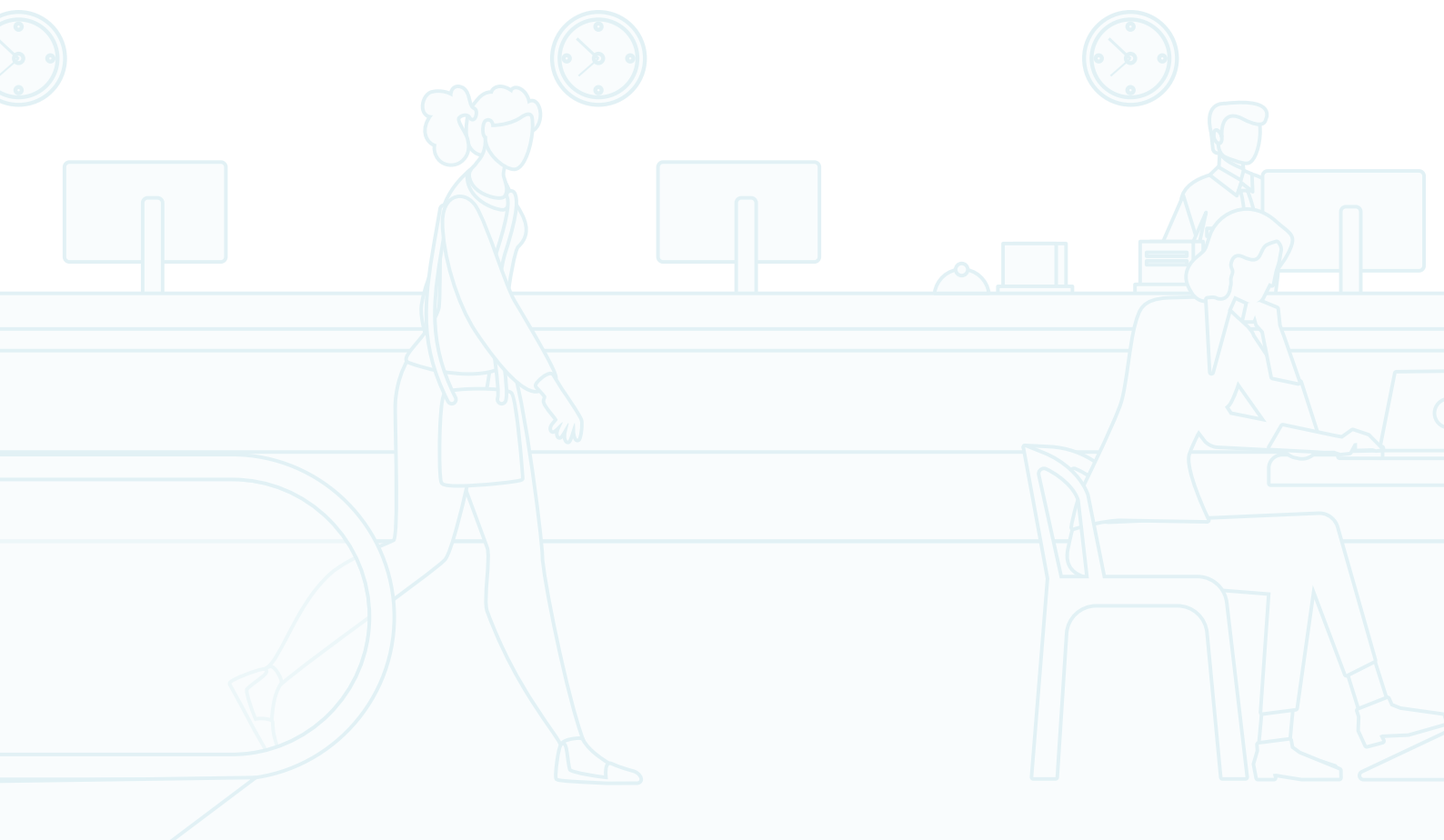
MICE GROUP RESERVATIONS MANAGEMENT

DESCRIPTION	Enables customisation of partners' event booking microsites that connects the hotel directly with event delegates. It allows automated and efficient workflow for contracting, upselling, rooming, and tracking reservation rate.		
BENEFITS	<ul style="list-style-type: none"> • Increases productivity from automated workflows and managing reservations • Increases upsell from extended stays and room-types • Provides detailed data analytics for insights • Improves booking experience for event delegates • Allows hotel to connect with guest directly 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	• N/A	<ul style="list-style-type: none"> • PMS • Sales & Catering System 	• N/A



AUGMENTED REALITY/ VIRTUAL REALITY (AR/ VR) FOR VISUALISATION

DESCRIPTION	Provides potential guests with a realistic and interactive view of the property through an augmented or virtual environment.		
BENEFITS	<ul style="list-style-type: none"> • Increases buyer confidence and triggers faster purchases • Increases productivity from elimination of lengthy site inspections • Facilitates easier cross-selling opportunities to overseas clients 		
POSSIBLE SYSTEM(S) INTEGRATION LIST IS NON-EXHAUSTIVE	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • Hotel Digital Platforms 	<ul style="list-style-type: none"> • N/A





RFID ASSET TRACKING

DESCRIPTION	Electronically track assets for accounting and reporting. Attach RFID tags to hotel assets to track and retrieve electronically-stored data through handheld devices.		
BENEFITS	<ul style="list-style-type: none"> • Improves operational efficiency with real-time data collection • Increases productivity, e.g. Laundry operations by eliminating counting of items • Allows easy tracking of item lifespan 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • N/A



CLOUD-BASED ACCOUNTING MANAGEMENT

DESCRIPTION	Manages accounting and simplifies financial operations across the organisation.		
BENEFITS	<ul style="list-style-type: none"> • Automates core calculations and administrative procedures of finances • Enables real-time reporting and visibility 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • Procurement systems • Payroll systems • Accounts Payable systems 	<ul style="list-style-type: none"> • N/A



EMPLOYEE COMMUNICATION

DESCRIPTION	Real-time unified communication for workforce. Allows secure one-to-one and group messaging, content management, engagement analytics, employee surveys and more.		
BENEFITS	<ul style="list-style-type: none"> • Empowers employee connection • Improves productivity via efficient information sharing • Allows faster responses • Provides valuable insights instantly 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • Human Resource Management Systems • Crisis Management System 	<ul style="list-style-type: none"> • N/A



TIME AND ATTENDANCE TRACKING

DESCRIPTION	Allows hotel to digitally track clock-in and clock-out of employees via biometrics, such as facial recognition, fingerprint, etc., to facilitate work schedules, payroll, and productivity management.		
BENEFITS	<ul style="list-style-type: none"> • Reduces errors in compensation and manpower tracking • Streamlines scheduling processes • Facilitates easy search and retrieval 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • Human Resource Management Systems • Payroll System 	<ul style="list-style-type: none"> • N/A



E-LEARNING

DESCRIPTION	Online learning platform where employees can conveniently login to access training courses via a computer/smart device anytime and anywhere.		
BENEFITS	<ul style="list-style-type: none"> • Training accessible 24/7 • Customisable training content • Increases productivity for Learning & Development department by reducing time spent on administration of staff training • Saves costs by reducing need for classroom training 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • Human Resource Management Systems 	<ul style="list-style-type: none"> • N/A



FOREIGN WORKER ACCOMMODATION MANAGEMENT

DESCRIPTION	Virtually manage foreign worker's (FW) accommodation to ensure compliance with housing regulations by Ministry of Manpower. It allows workers to take and share photos of prevailing accommodation conditions with employers directly.		
BENEFITS	<ul style="list-style-type: none"> • Increases productivity of HR department by reducing need for frequent physical spot checks 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • N/A



LABOUR SCHEDULING

DESCRIPTION	Automate forecasting of labour and management of shift scheduling, and enable real-time updates of roster.		
BENEFITS	<ul style="list-style-type: none"> • Optimises workforce to increase overall productivity • Minimises operational disruptions by reducing conflicts in work scheduling • Reduces error in manpower planning • Empowers employees to manage schedule at hand • Increases productivity for managers 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • Human Resource Management Systems • Payroll System 	<ul style="list-style-type: none"> • N/A



CANDIDATE MANAGEMENT

DESCRIPTION	Tools to enable video interviews, digital pre-screening assessment as well as resume and interview management. AI assistance in identifying talent and mapping behavioral assessments of candidates.		
BENEFITS	<ul style="list-style-type: none"> • Streamlines and increases effectiveness of hiring processes • Enables data analytics for insights on hiring 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • Human Resource Management Systems 	<ul style="list-style-type: none"> • N/A



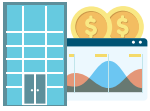
CUSTOMER RELATIONSHIP MANAGEMENT (CRM) SOLUTION

DESCRIPTION	CRM manages customers' data and helps to analyse their profiles, needs and preferences.		
BENEFITS	<ul style="list-style-type: none"> • Deepens understanding of customers' demographics and preferences through data analytics to enhance relationships • Develops better customer retention strategies • Improves customer engagement for selling and cross-selling opportunities 		
POSSIBLE SYSTEM(S) INTEGRATION LIST IS NON-EXHAUSTIVE	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • Can be used as a standalone system 	<ul style="list-style-type: none"> • MICE Sales and Event Management System • Reputation Management/ Social Listening • Global Distribution Management System • Data Analytics and BI Solutions • e-Compendium • Self Check-in/ out solutions • Video analytics for guest recognition and sentiments 	<ul style="list-style-type: none"> • N/A



IOT-ENABLED INVENTORY MANAGEMENT

DESCRIPTION	Solution enables real-time tracking of inventory status and automates ordering process as required.		
BENEFITS	<ul style="list-style-type: none"> • Increases productivity from automated stock-taking and ordering processes • Manages inventory effectively to minimise losses 		
POSSIBLE SYSTEM(S) INTEGRATION LIST IS NON-EXHAUSTIVE	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Procurement system 	<ul style="list-style-type: none"> • N/A

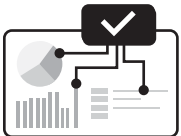



DATA ANALYTICS FOR FINANCIAL FORECASTING & BUDGETING




DESCRIPTION	Analyses room reservation data and demand trends, to help hotels accurately forecast and budget financials, as well as automatically submit daily financial reports.		
BENEFITS	<ul style="list-style-type: none"> • Improves productivity • Gain insights to financial trends • Increases effectiveness of using financial information for planning & strategic decision making 		
POSSIBLE SYSTEM(S) INTEGRATION <small>LIST IS NON-EXHAUSTIVE</small>	STAGE 1	STAGE 2	STAGE 3
	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • PMS • RMS • Labour scheduling System 	<ul style="list-style-type: none"> • StanTI




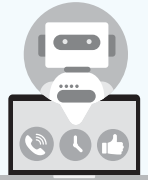
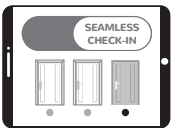
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STB TECHNOLOGY RESOURCES	DESCRIPTION	BENEFITS	CONSIDERATIONS	FOR OPTIMAL BENEFITS, INTERFACE WITH FOLLOWING HOTEL SOLUTIONS
<p>Singapore Tourism Analytics Network for Tourism Industry (StanTI)</p> 	<p>An analytics platform for industry to contribute and retrieve performance data for better business decision making.</p>	<ul style="list-style-type: none"> • Gain ready access to tourism-related data, and a suite of user-friendly analytics tools and predictive models to analyse and present your data • Use StanTI's predictive models to generate projections and forecasts 	<ul style="list-style-type: none"> • Automate submission of hotel performance data to STB through Application Programming Interface (API) integration with existing hotel systems 	<ul style="list-style-type: none"> • PMS • CRS • Revenue Management Systems • Global Distribution System • Data Analytics and BI Solutions for Financial Forecasting & Budgeting
<p>Tourism Information & Services Hub (TIH)</p> 	<p>One-stop B2B platform for tourism businesses to access a ready library of offerings in Singapore, as well as digital content and software services.</p>	<ul style="list-style-type: none"> • Delivers real-time and updated information on hotel's products to a wider market • Improves travel inspiration content and enhances visitor satisfaction in hotel's B2C channels • Delivers productivity gains for Marketing team by removing need to manually research and update content frequently across various platforms 	<ul style="list-style-type: none"> • Sync updated content seamlessly and automatically with existing digital platforms via an API 	<ul style="list-style-type: none"> • Website • e-Compendium • Mobile App • Chatbot • Kiosks

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STB TECHNOLOGY RESOURCES	DESCRIPTION	BENEFITS	CONSIDERATIONS	FOR OPTIMAL BENEFITS, INTERFACE WITH FOLLOWING HOTEL SOLUTIONS
<p>TIH Smart Software Services</p> <ul style="list-style-type: none"> - Navigation service - Smart Itinerary Planner - Recommendation Engine 	<p>Essential digital suite of standard services to help guest with travel needs.</p>	<ul style="list-style-type: none"> • Enhances digital experiences for guests • Delivers productivity gains for Front Office team by reducing common enquiries 	<ul style="list-style-type: none"> • Hotels without existing service capabilities can tap on the smart digital services to keep development costs low, and shorten development timeframe 	<ul style="list-style-type: none"> • Website • Mobile App • Chatbot • Kiosks
<p>Visit Singapore Account (VS Account)</p> 	<p>A unique identifier that aims to understand the visitor profile, behaviours and interests to provide a more personalised experience.</p>	<ul style="list-style-type: none"> • Partnerships with other merchants through the VS app can offer convenience to guests, e.g., delivering purchases to hotel • Gain insights and understand visitors' preferences 	<ul style="list-style-type: none"> • Allow parameters passing between hotel login and VS Account 	<ul style="list-style-type: none"> • Guest Account login
<p>Visit Singapore (VS) App Software Development Kit (SDK)</p> 	<p>Destination mobile application providing information on attractions, events, etc.</p>	<ul style="list-style-type: none"> • Provide up-to-date, ready information about the destination via guest's own mobile device 	<ul style="list-style-type: none"> • Hotels without existing mobile application, can tap on the Software Development Kit (SDK) to white label the application to keep development costs low, and shorten development timeframe 	<ul style="list-style-type: none"> • N/A

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STB TECHNOLOGY RESOURCES	DESCRIPTION	BENEFITS	CONSIDERATIONS	FOR OPTIMAL BENEFITS, INTERFACE WITH FOLLOWING HOTEL SOLUTIONS
<p>One Tourism Pass (OTP)</p> 	<p>A single pass enabling access to hotel room, key attractions, and seamless transit options. Allows payment on the go.</p>	<ul style="list-style-type: none"> • Allows access to hotel rooms and simplify check-in/ out process 	<ul style="list-style-type: none"> • Integrate with hotel’s mobile app and key lock system to enable mobile access to rooms • Integrate with hotel’s mobile app and payment gateway to allow payment upon check-out 	<ul style="list-style-type: none"> • Mobile App
<p>Chatbot-As-A-Service</p> 	<p>Virtual assistant, readily integrated to the Tourism Information and Services Hub (TIH), to answer visitor queries in 4-5 different languages and provide personalised recommendations.</p>	<ul style="list-style-type: none"> • Delivers productivity gains for Front Office by reducing manual customer service workload to free up time for value-added engagement 	<ul style="list-style-type: none"> • Hotels without an existing Chatbot can tap on Chatbot as a software service to keep development costs low, and shorten development timeframe 	<ul style="list-style-type: none"> • Website • Mobile App • Social media Account e.g. Facebook messenger
<p>E-Visitor Authentiction (EVA) System</p> 	<p>System to enable real-time authentication of guest's stay validity.</p>	<ul style="list-style-type: none"> • Enables seamless check-in and potentially direct access to rooms without assistance of a hotel employee • Delivers productivity gains for Front Office by removing need for physical checks on stay validity 	<ul style="list-style-type: none"> • Redesign check-in process with use of EVA and a mobile app/ kiosk that is equipped with facial recognition capabilities 	<ul style="list-style-type: none"> • PMS • Mobile App • Self-service kiosk

#SGDIGITAL

Singapore Digital (SG:D) is a nation-wide movement to unify Singapore's digitalisation efforts. Whether it is help for different industries to start their digitalisation journeys, or creating new ecosystems, opportunities and capabilities for the future, SG:D is set to take us ahead as a leading digital global node. The :D smiley face icon in the logo signifies the optimism of Singaporeans advancing together with digital innovation. As we progress into the digital economy, it is all about the people – the heart of all we do.



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