

TiGERtms



White paper: The Future of Guest Services

A guide to how technology can assist in:

- Increasing Guest satisfaction and improving social media reviews
- Improving insights on Guest requirements and preferences
- "Right sizing" staffing levels to meet Guests needs
- Capturing a greater percentage of Guest spend during their stay
- Maximising booking path conversions and minimising cancellations

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Contents

1. Introduction.....	2
2. Considerations	4
A. Technology choices.....	6
B. Scope	7
C. Timing	7
D. Data Confidentiality	7
E. Promotion and uptake	8
F. ROI/Justification.....	8
I. <i>Tangible</i>	8
II. <i>Intangible</i>	8
3. Technology Options	9
A. In-Room Tablets and Touch Screen Handsets	9
B. BYOD (Bring Your Own Device) – Smartphones	10
I. <i>Dedicated Mobile APPs</i>	11
II. <i>Progressive Web APPs (PWAs) and Integrated Smartphone Technology</i>	13
4. Summary.....	15
5. Technical Addendum.....	17
A. TigerTMS – Background and Overview of Guest Facing Solutions.....	17
B. iPortal.....	18
C. iNotify	19
D. TigerTMS Software Architecture and iLink	20
6. About the Author	21



1. Introduction

As we slowly emerge from the Coronavirus pandemic and enter a “new normal”, there are several new challenges facing many Hoteliers:

- Lower levels of demand for rooms globally (1)
- Change in occupancy types from business to leisure travel (2)
- Guest expectations around health, wellbeing and social interaction (3)
- Ability to attract and retain staff (4)

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- (1) <https://www.unwto.org/unwto-tourism-recovery-tracker>
(2) <https://www.qbta.org/blog/business-travel-full-recovery-expected-by-2025/>
(3) <https://www.concur.co.uk/resource-centre/infographics/business-travel-closer-look-over-next-12-months?ite=21867&ito=2556&itq=ac4dfdcf-9be5-446e-bd1c-5357cc420ba8&itx%5Bidio%5D=27349696>
(4) <https://medium.com/the-standpoint/is-hospitality-to-blame-for-its-own-staffing-crisis-268342bf614f>

We are all pleased to see travel starting to rebound from the dark days of 2020. The welcome peak in demand from “Staycationers” across Europe and the US has brought high occupancy and room rates for many properties. Similarly, the backlog of weddings, anniversaries and belated birthday parties has helped kickstart the events-led side of the industry.

Consumer activity, whether it is travel or retail remains volatile and highly unpredictable. It is majorly affected by the latest news regarding Covid variant outbreaks, severe acts of nature (such as wildfires and floods) and travel restrictions. Business travel remains at very low levels for most countries and is forecast to remain so until at least the end of 2023. Bill Gates has gone so far in saying that “over 50% of business travel and over 30% of days in the office will go away”. Employers continue to restrict staff travel and many employees have fully embraced new ways of working, leveraging on-line meetings and a variety of collaboration tools in favour of better work/life balance plus welcome savings in travel and entertainment expenses.

Health and wellbeing has seen a significant increase in focus from people across the world over the last 18 months:

- From a physical perspective as a means of reducing the likelihood of catching Covid and/or being in better physical shape to deal with any resulting infection
- Mentally, as a result of widespread attention and the removal of the stigma attached to mental health disorders and conditions

The increased adoption of technology over the last 18 months to facilitate the continuation of work, ordering of groceries and retail goods and virtual socialising has accelerated the demise of “bricks and mortar” retail outlets and increased the frequency of eating “out”, albeit the majority of which is in the form of takeaway or delivery. Contact-less solutions abound and the QR code has made a stunning comeback. Technophobes have had to overcome their fears to simply survive, and swathes of Baby Boomers and older generations are now regulars on Facebook, Deliveroo and Zoom.



Last, but by no means least, are the acute staff shortages across the whole of the Hospitality industry. Former hospitality employees finding work in different industries and many workers returning to their country of origin during the pandemic are impacting hotels' abilities to maintain high levels of Guest satisfaction. Attracting, retaining and upskilling staff to the required levels is proving difficult in many locations around the world.

A Guest's decision of which hotel to select for their stay is likely to be based on traditional and new factors influenced by the above considerations. New technology can assist Hoteliers in meeting these challenges:

- Hoteliers are no longer bound by their existing PMS. Middleware offers a bridge between different software applications enabling integration and freedom of choice on which systems to use and when to replace them.
- IoT technology can improve operational efficiencies enhancing workflows resulting in easier management of the property. Monitoring applications in the form of IoT (Internet of Things) that offer data led insight on how to improve operational efficiencies by enhancing workflows resulting in easier management of the property
- New PWA (See section 3.B.ii) solutions on the Guest's own smartphone device can offer a simple and easy way to access information about facilities, order food and drinks, automatic check-out and communicate with the hotel via messaging, email or voice.

The pandemic has accelerated change in many things. Hoteliers need to adapt to the new normal and retune to meet revised Guest requirements and expectations. New technology will be an intrinsic factor in enabling this transformation, enabling solutions that overcome barriers to provide a superior Guest experience.

In summary, a Guest's decision of which Hotel to select for their stay is likely to be based on traditional and new factors influenced by the above considerations. The aim of this whitepaper is to provide insight on the technology forward thinking Hoteliers can leverage to meet these requirements whilst maintaining operational and budgetary constraints.



2. Considerations

In the previous white paper, we spent some time introducing the 5 stages of booking as defined by Google and this provides a framework on which to now layer the new considerations:

5 Stages of Travel	Previously	Today
Dreaming	Pleasurable and positive experiences that can be found in and around the location	As "Previously" but how these experiences can still be attained whilst tempering the risks that are associated with them
Planning	The practical implementation of attaining the dream	The mitigation of risks associated with achieving the dream
Booking	Rate, location, value and what elements of the dream can be facilitated and/or enjoyed at the Hotel	What demonstrable measures has the Hotel put in place to mitigate Guest perceived risks and maintain/improve Guest's Health, Wellbeing and Safety
Experiencing	Meeting, exceeding or falling short of Guest expectations and engaging with Guests at a personal level	As "Previously" but the need for interaction between Guest and Staff at a higher level to provide advice and reassurance on safety. Many Guests wanting this interaction to be completed remotely/at social distance
Remembering	Recounting their strongest memories from "Experiencing" and relaying these via Social Channels including travel review sites	No change though strongest memories much more likely to include safety and wellbeing



Self-Actualisation: **the need to be all that you can be** was first described by Maslow in his 1943 paper "A Theory of Human Motivation". Experiences that widen the mind and help us achieve aspirational goals or "Dreams" are strong motivators.



Fig1: Maslow Pyramid Model

Maslow also believed that Self-Actualisation, the pinnacle in the pyramid model (Fig 1) had to be built on firm foundations; basic needs in the form of sustenance, safety, love and self-esteem.

The human psyche works very differently when dealing with fear and angst than it does with aspirational goals. Anxiety, fear and loss is, for most people, a much more powerful motivator than the achievement of goals, especially when the possible risk is as acute as death or serious illness, away from home.

Reducing fear or anxiety is difficult – it's not like selling a dream where a video or photo of a beautiful room, pool or local beauty spot will send a rush of dopamine to the potential Guest's brain and make them more likely to click on the booking button. Fear and anxiety are controlled through a mix of logic, understanding and support.

If Hoteliers relate this to the 5 stages of booking, the information they provide across all the different communication channels and the ability to field questions from potential/ booked/checked-in Guests seeking answers to their concerns will be vital in maximising bookings, reducing cancellations and meeting Guest expectations.

Over and above increased occupancy levels, Hoteliers can expect to see some additional upside from becoming the trusted advisor to their Guests. Once that bond exists, Guests are more likely to seek advice and guidance on the more traditional aspects of their stay – places to eat and drink, best means of travel to and from the hotel or to places they wish to visit etc.



All of the above provide Hoteliers with the opportunity to:

- Understand their Guests in much greater detail; information that can be used to capture more of their planned spend, upsell products and services from the hotel.
- Leverage that knowledge to remarket future stays on a direct basis
- Surpass Guest expectations that result in better quality reviews and social referrals

How Hoteliers go about providing relevant, updated, consistent information on websites, across their social channels, webchat, messenger apps and staff answering questions from Guests via the good old telephone is the topic of the next section.

A. Technology choices

Hoteliers can attempt to hire more call centre staff and front of house employees but thoughtfully implemented technology can offer significant advantages at much lower cost and is increasingly the way in which many Guests prefer to operate.

Hoteliers should consider how best to fulfil different types of requests:

- Informational and low interaction requests:
 - What are the options for travel to and from the hotel?
 - Latest guidance on pandemic/wildfires/social unrest etc.
 - Guest order for room service
 - Checking in and out
- Interactive high value requests:
 - I have a free evening and would like to know what I could do?
 - I'm due to arrive on Thursday and worried about the news I hear on Covid infection rates

Communication options for Guest Interaction

Fundamentally, it is about personal choice and ensuring that Guests have a convenient and easy means to obtain what they want, when they want it!

Informational and low interaction requests need to provide relevant and consistent information with a simple confirmation. They answer a question or provide a convenient means of satisfying a Guest query. They also offer little in terms of value-add opportunities for staff (same questions/same answers). High value requests are much more likely to be interactive and represent an opportunity for staff to provide real worth to Guests and in turn offer significant insight on Guest preferences to Hoteliers. It is worthwhile noting that Guests may prefer to have highly interactive conversations by audio or even video whereas others may elect to use text and message-led interaction.

Consideration should also be given how to deliver against any request made:

Low Interaction examples should be relatively easy – simple orders and requests could be answered using automated responses with any downstream fulfilment (e.g. Room Service) being routed into the workflow of the applicable system (e.g. POS). This can save staff time and be provided in the language preferred by the Guest.



For High Interaction requests, questions need to be routed to the resources that can best provide a timely, high-quality response. That resource may be an outsourced centralised facility (e.g. Reservations desk) or staff working from home or at a sister Hotel (e.g. Concierge). Technology should enable the seamless routing and response to Guest requests whilst maximising the efficiency of the operation. Guest requests that are left "hanging" or unfulfilled will become a lost opportunity, source of frustration and complaint.

Hoteliers should also understand that Guests may initiate the conversation via simple text that could transition into audio/video calls or potentially result in a face-to-face discussion with another member of staff. Having the ability to hand-over a conversation to a colleague without delay and without the Guest having to repeat the previous conversation is also highly advantageous.

B. Scope

Deciding on the scope of what a Hotelier wants to offer is an important consideration. Some questions that should be answered early in the project are listed below:

- Which functions and capabilities Hoteliers wish to extend to Guests?
- What will add value to Guests and be supportable by staff, processes and systems?
- Who will be responsible for implementing the system and training internal stakeholders on the use of the system?
- Who will own the content and be responsible for updating information so it remains relevant and accurate?
- How will Hoteliers measure the success of the project and continually improve performance?

Whilst the collective answers to the above questions are unique to every hotel, there are an increasing number of vendors with real world experience of deploying these solutions and a growing list of Hoteliers that have lived through their own implementations and use of such systems. Reaching out to both communities and garnering their thoughts will pay dividends downstream.

C. Timing

Choosing when to implement new systems within Hotels is always a challenge but with lower demand for rooms, greater competition for Guest bookings and a challenging employment market, the question should probably become how quickly can Hoteliers act?

A survey undertaken by HFTP in the USA found that a large majority of Guests already welcomed the use of technology that enables social distancing in Hotels.

D. Data Confidentiality

Since May 2019, the regulations around personal data have become enforceable with significant fiscal penalties alongside the impact on brand reputation. Any system that is implemented will need to cleanse personally identifiable information (PII) in accordance with GDPR, CCPA (California Consumer Privacy Act) and other local law.



E. Promotion and uptake

How will Hoteliers promote the use of any solution to Guests and Staff? Enthusiastic and well-trained staff will soon lose their enthusiasm and knowledge of the system if Guest uptake is poor. Similarly, poorly trained or unwilling staff will negatively impact the Guest experience, exactly the opposite of what any solution sets out to achieve.

F. ROI/Justification

One final but clearly essential aspect to any potential system is the return on investment – not simply the cost of any solution but the implementation, staff training and on-going administration to ensure that information within the system is kept updated. How will Hoteliers be able to justify the cost of this, especially in a challenging market? Like most situations, there are tangible and intangible benefits associated with these systems, some examples below:

I. Tangible

- Primary and secondary room bookings
- Early and late Check-in/Check-out extensions
- Additional or "secondary" spend on F&B, activities, onward travel, etc.
- Staff time saving

II. Intangible

- Guest satisfaction – Net Promoter Score (NPS) scores
- Guest reviews – Increasing the volume and rating of reviews
- Improved Staff retention and recruitment
- Insight on Guest preferences for remarketing purposes

Social Distancing Tech:

PERCEIVED BENEFITS

Overall, I feel that using technology for social distancing in hotels is beneficial to reduce my risk of getting infected with coronavirus. **3.89**

Using technology for social distancing in hotels provides me with the convenience to efficiently social distance from other people at the hotel. **3.88**

SOCIAL BENEFITS

Using technology for social distancing in hotels will prevent others from getting sick with coronavirus (COVID-19). **3.81**

Using technology for social distancing in hotels will make me more confident that staying in hotels will not get me sick with coronavirus (COVID-19). **3.73**

PERCEIVED RISKS

It would be risky to use technology for social distancing in hotels. **1.13**

There would be high potential for loss in using technology for social distancing in hotels. **1.10**

Scale: "1" Strongly Disagree, "3" Neutral to "5" Strongly Agree



3. Technology Options

There are two critical decisions for Hoteliers to take regarding the approach they will take when implementing any Guest facing solution:

- Does the Hotel supply their own hardware for Guests to use or leverage the devices already owned by the Guest, primarily Smartphones?
- If the decision is to leverage Guests devices, should Hoteliers elect to have an APP developed/customised for Guests to install, or leverage the technology that already exists on that Smartphone (often referred to as APP-less)?

The sections below discuss the merits and challenges of each approach:

A. In-Room Tablets and Touch Screen Handsets

Many Hospitality technology vendors marketed interactive TV and large screen desk phones as a means of encouraging Guest interaction prior to the availability of low cost, yet much more suitable touch-screen tablets which are ubiquitous across the world today.



No need for Guests to download, install or update anything – they can simply pick up the device in their room and then browse through highly bespoke informational content and/or complete transactions for any offerings the Hotel wishes to promote.

Tablets are not limited to five-star or Resort Hotels, they can also help drive down staff and operational costs within self-service or “tech” biased hotels, especially when tightly integrated into core hotel systems. Many Guests welcome the highly contextual information that can be provided through the system and find it much more alluring than the standard in-room directory. Similarly, Hoteliers can ensure that regulatory information such as fire escapes and procedures are easily updated and distributed.

Given the device and screen belong to the Hotelier, the ability to market hotel-led propositions to Guests whilst they are in their room is an appealing proposition for many Hoteliers that can also increase “secondary spend” whilst remaining a discreet, none-invasive means of advertising.

Hoteliers should also understand the following drawbacks when considering the use of in-room tablets:

- The system only works when Guests are in the room – whilst most in-room tablet vendors also offer an APP that Guests could use outside of their room, the Hotelier should consider the points made in the [“Dedicated APPs”](#) section of this document
- There is clearly a cost to acquire and maintain these devices – not simply from a technology refresh perspective but also encompassing hygiene, electrical safety testing and of course theft/accidental damage
- System vendors generally take a proprietary approach to the supply of these systems – i.e. they supply their tablets, content management system and staff facing devices. This can leave little flexibility in the future if Hoteliers wish to change supplier in future.



B. BYOD (Bring Your Own Device) – Smartphones

The adoption of Smartphones throughout the world is by any standards an unqualified success. The number of smartphone users now surpasses 6 billion.

(<https://www.statista.com/statistics/330695/number-of-smartphone-users-worldwide/>).

User demographics extend from infants to great-grandparents and support nearly every spoken language in the world.

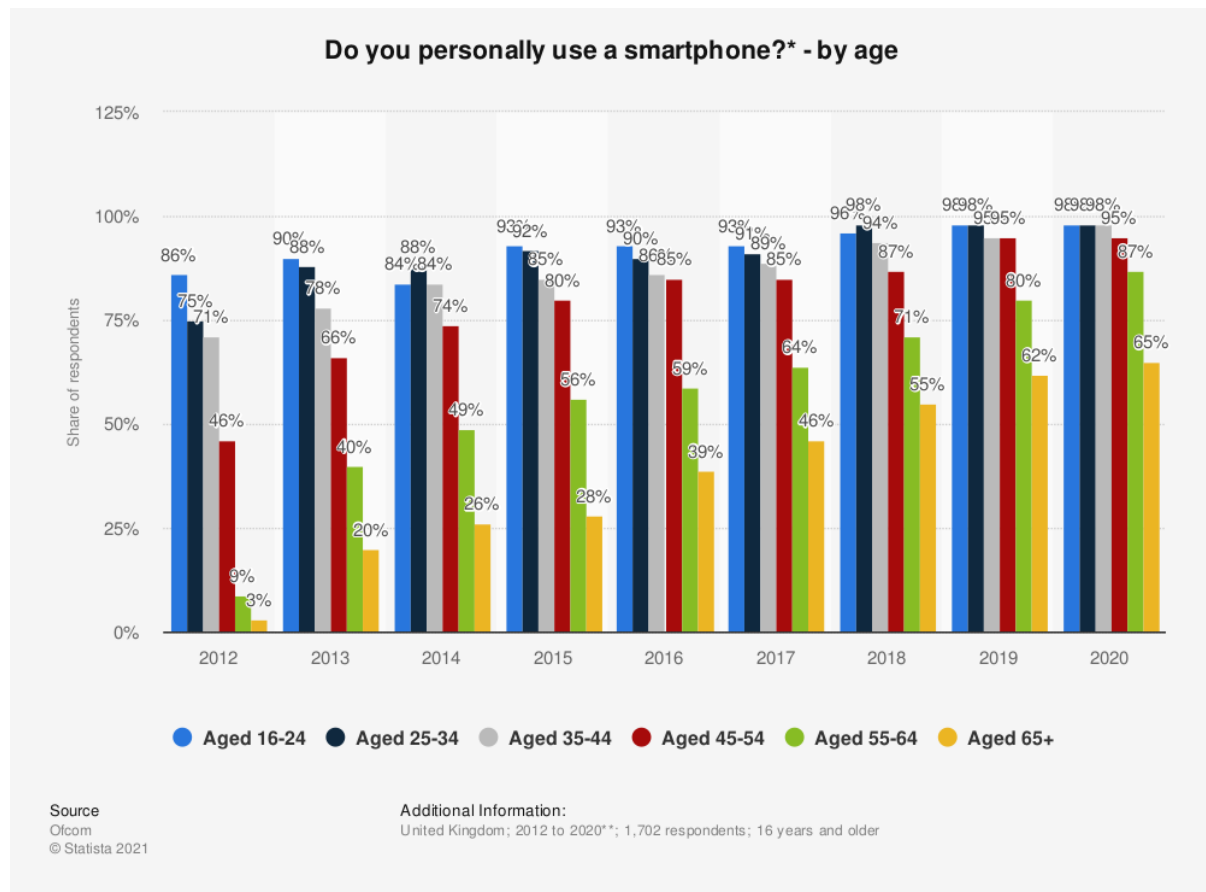


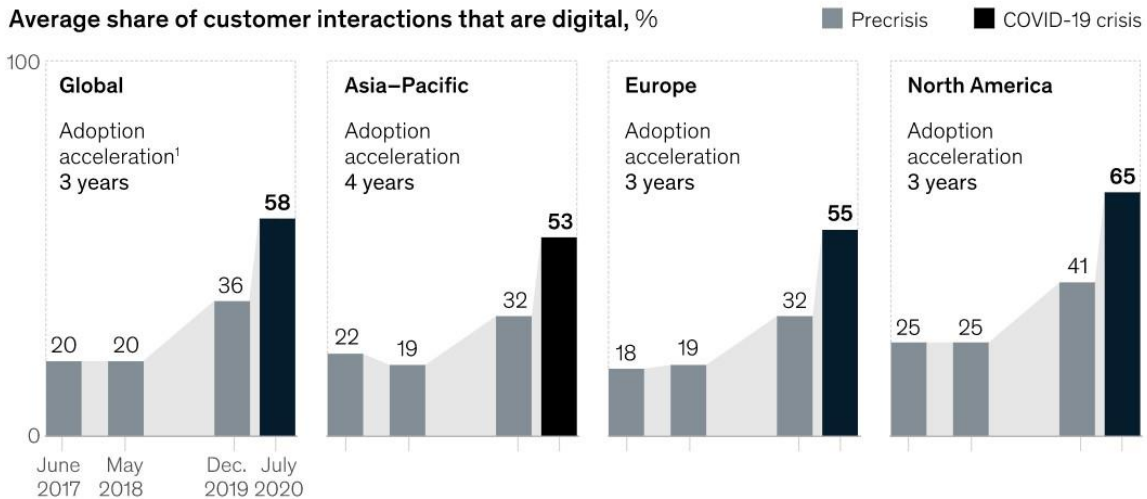
Fig 2: Smartphone Usage by Age

Smartphones provide users with access to live information and entertainment but also act as a central hub for all of their communications media (voice, video and pictures) across the user's choice of communication channels (e.g. Social Platforms, SMS, Email, Telephony etc).



The impact of Covid has accelerated the adoption of technology and forced consumers into greater use of digital interaction as can be seen from the McKinsey graphic below.

The COVID-19 crisis has accelerated the digitization of customer interactions by several years.



¹Years ahead of the average rate of adoption from 2017 to 2019.

Fig 3: Accelerated Technology Adoption

Driven by the need for bandwidth, WiFi has become the new essential utility and granting frictionless access to secure, reliable, high speed internet access can be the deciding factor for many Guests when choosing between hotels, whether it is for a work or recreational trip.

Nearly half¹ of Guests commonly connect three or more of their own devices to the Hotel WiFi, so what are the options for leveraging these devices to provide Guest facing APPs and great interaction?

¹* https://www.hotelwifi.com/wp-content/uploads/2019/04/HIS_WiFiSurvey_FullReport_web.pdf

I. Dedicated Mobile APPs

Dedicated Hotel APPs have become widespread, especially for larger Hotel brands – they provide regular/loyal Guests with an all-in-one experience on their own smartphones that can offer wide ranging functionality: room search and booking, loyalty rewards, automated check-in/check-out with room key access, room service, concierge, WiFi and IPTV Access, guides to local activities as well as “in APP” messaging at any time.

Marriott’s investment in technology is well publicised, everything from APPs to Room Service Robots. In 2018, their Mobile APP accounted for \$1.7bn in annual gross bookings and has been downloaded tens of millions of times. This makes perfect sense for a Hotel group with approximately 1.4m rooms across 7,300 properties and when 52% of occupied rooms originate from the 141m Marriott Bonvoy Members.

Additionally, the Marriott APP encompasses a wide range of capabilities that in turn requires complete integration with back-end systems – quite an undertaking if



Hoteliers have multiple systems from different vendors, hosted on/off premise with a mixture of Cloud thrown in!

This would suggest that every hotel should invest heavily in APPs but contention for "screen estate" is high and APP survival rates are notoriously low. To be successful two things need to happen:

- Users need to download, install and grant permissions to that particular APP
What percentage of Guests will take the time to download the APP, register their personal details and grant the APP access to core phone features such as location and notifications?
What feature set and/or promotional offer do Hoteliers have to offer Guests to overcome any real or perceived obstacles?
- Users need to use and maintain the APP
The average person uses 25 x APPs each month but 96% of that time is split between just 10 x APPs. On average, each person has between 60-90 APPs on their phone – i.e. 2/3rds of APPs are simply not used. In reality, 71% of all APPs are used once and then discarded after 3 months^{1}*
Updates to smartphone operating systems regularly change rights previously granted to specific APPs to resolve security issues – plan on having the Hotel APP updated at regular intervals to keep abreast of these patches or be prepared for the APP to stop working.

Updating content on a regular basis to ensure it remains relevant will improve the chances of it being retained. Integrating any "transactional" features (room service/ alarms etc) with existing operational processes will make it scalable and more reliable in meeting or surpassing Guest expectations.

Many Hoteliers have already tried their own Hotel branded APP, provided by specific Hotel APP developers or via their trusted digital marketing agency as an offshoot of their website. Sadly, many find the percentage of guests that download, use and maintain the APP is minimal. Low utilisation on either side (Guest or Staff) will typically result in a downward spiral of content and activity – opportunity lost, investment wasted.

Returning to the Social APPs that fall into the Global Top10, those that consume 96% of the User's time spent on their mobile devices – these social platforms exist to provide a ready means of sharing their users' thoughts and experiences across expansive social circles that incorporate friends, family and colleagues. Whether it is one of the historic behemoths such as Facebook, Instagram, Twitter or the relative newcomers of Snapchat, WeChat, TikTok they are all enormous, counting hundreds of millions or billions of members.

^{1*} <https://buildfire.com/app-statistics/>



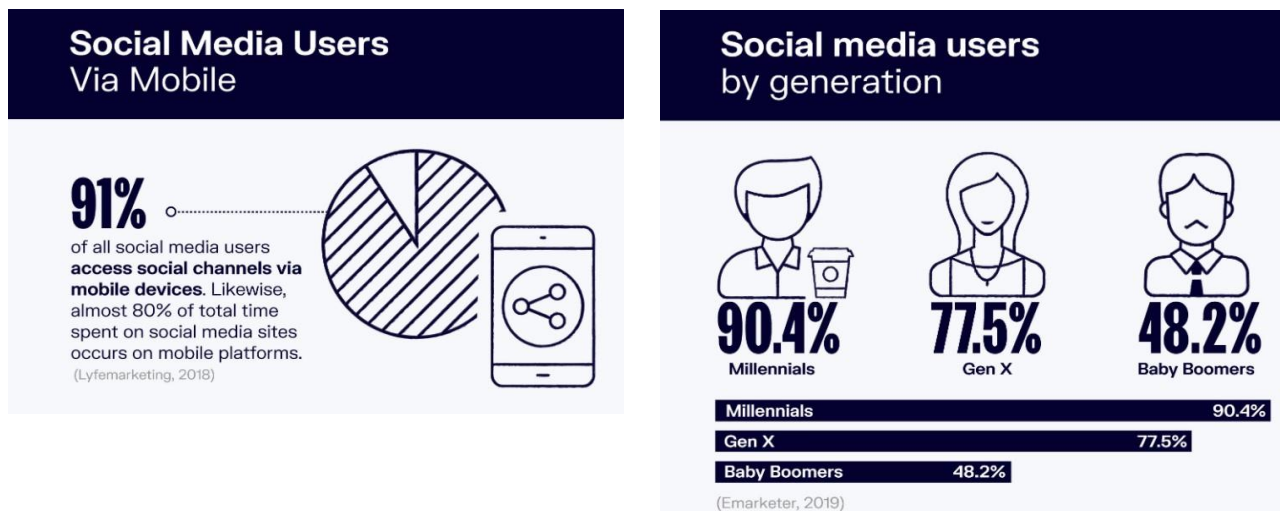


Fig 4: Social Media Usage

In summary, Smartphones and the Top10 APPs have some interesting and notable attributes:

- Vast majority of Guests booking at a hotel will have a Smartphone and several of the Top10 APPs already installed
- They are treasured, highly personal devices. Few, if any, users allow anyone else to use or handle their devices and are therefore deemed to be low risk regarding transfer of disease (Covid)
- Users have intimate knowledge of their devices and the APPs they use each and every day – i.e. no learning curve, no barrier to use.
- The installed APPs have access to the phone resources they need to operate – e.g. access to location/notifications/camera etc.
- Hoteliers have no need to buy, maintain, update or replace these devices

It would therefore appear to be eminently practical to leverage these advantages in any Guest facing solution.

II. Progressive Web APPs (PWAs) and Integrated Smartphone Technology

An APP is a program/application that runs on top of an Operating System (OS). An APP was historically the optimal means of providing a superior user experience but due to the performance of today's Smartphones the boundaries of what can be achieved by an APP versus a PWA are increasingly marginalised.

The mobile device market is dominated today by iOS (Apple) and Android OS (Google) and both offer APP stores that test, approve and host millions of APPs for users to download at their convenience. Developers engineer dedicated APPs to work on specific Operating Systems and to cover the market a Hotelier will need an APP for both Apple and Android based devices. Regular security patches and updates are applied to operating systems (OS) and these changes are often applied automatically or mandated to user devices. When APPs are installed, they seek permission to core phone applications such as the camera or 4G, and users may grant access to these resources at time of install but these can be superseded by security patches and APPs will then no longer function or be flagged as possible security risks.



Alternatively, PWAs use browsers such as Google Chrome or Safari that are pre-installed as part of the core OS to make what is fundamentally a website, look, feel and act like a dedicated APP.

PWAs load instantly so that the user is presented with a screen to peruse whilst other content is loaded in the background. Aspects of the PWA can be cached following the first use so that offline and latency issues are minimised. Future access to the PWA can be made to appear just like a dedicated APP, an icon with a name appearing on the user's home screen.

The device's browser is core to the device OS; any upgrades or patches are tested and qualified by the OS developer and because the PWA operates like a website they do not attract the restrictions often applied to 3rd party dedicated APPs. Similarly, downloading and installing a PWA is as simple as accessing any website and can be achieved by typing a URL, pointing the camera at a barcode or touching the phone on an NFC tag.

Forward thinking solutions providers are taking the same approach to facilitate other functionality such as messaging, voice and video calling by leveraging either core functions of phones or those of the Top10 installed APPs such as WhatsApp and Facebook Messenger.

This removes the obstacles that traditional solutions experience so Hoteliers can achieve the benefits associated with good Guest interaction.



4. Summary

Room occupancy levels will remain challenging for several years and therefore the competition for these bookings will only increase. Individuals across the world, whether consumers or business people have embraced digital interactions and changed the way they work and live. Health, wellbeing and safety are highly influential factors in the decisions they make when making any trip.

The need for clear interaction between Guests and Hoteliers has never been greater. People want timely, relevant information that is easy to find and consume, they want to be able to find answers to the questions they have and to raise requests for the things they need.

Hoteliers should not be concerned that these digital interactions will reduce opportunities for Guest and Staff interaction. Social APPs such as “WhatsApp” offer the full range of communication media within a single application so whilst many conversations might begin as simple text, they can seamlessly escalate into richer voice, video and content led conversations where Hotel Staff can add significant value and derive real job satisfaction. Harnessing this capability in today’s environment also makes Guests feel safer by avoiding face to face conversations that can be awkward or difficult to comprehend due to face masks and/or language barriers.

Knowing what Guests want and then turning that into a timely deliverable, whether it is a drink or onward travel advice, will endear Guests to Hoteliers. Similarly, asking a Guest to complete a review at the end of a valued conversation and providing them with a simple link to follow on their own phone is much more likely to elicit a positive outcome than a link in an email following their departure.

The world has changed, people’s habits alongside generational preferences means that the traditional means of communicating are changing – making it simple and easy for all Guests should be a major focus for any Hotelier today.

More than ever today, Hoteliers understand that technology can help with the challenges they face but many are struggling to decide on the journey they must take. Wholesale change of platforms is not equitable for most in the current climate and the integration of formerly disparate, occasionally antiquated systems to become guest facing feels full of risk.



Hoteliers that are going to invest in technology must consider the following specific goals:

- Improve Guest communications – provide highly relevant information and a ready means of asking unanswered questions using Guest's own technology and existing applications
- Enhance operational efficiency and accuracy – achieve a net reduction in overall labour costs
- Quickly and easily integrate into the existing technology environment without requiring wholesale change to working practices
- Offer scalability in terms of volume and flexibility to accommodate future system changes, whether those systems are on premise or in the Cloud

There are a growing number of solution providers that offer systems with the above attributes. Those with real world experience of referenceable implementations should be at the top of Hoteliers lists to contact.



5. Technical Addendum

A. TigerTMS – Background and Overview of Guest Facing Solutions

TigerTMS (www.tigertms.com) will be a familiar name to anyone in the Hospitality technology sector. The company was founded in the 1970's and has supplied telecoms-related solutions specifically for Hotel use since 1996. Their primary focus over the past 25 years has been system integration through the development of middleware software – reducing the complexity, cost and risk of making one system communicate with another (e.g. between PMS and PBX or TV system).

This has resulted in the development of a portfolio of more than 150 interfaces to a wide range of Hospitality IT Systems. The company's newly acquired independence in 2020 has resulted in a strategy that includes offering Hotel Guests access to the information and capabilities held across those 150 systems using a technical architecture that simplifies contact and use for Guests, Hotel and IT Support Staff alike.

One of the guiding principles is to leverage fit for purpose technology and applications that already exists in abundance on consumer smartphones, thereby simplifying access and use of the functionality Hoteliers wish to provide their Guests.

As discussed previously, prolific use of any Guest facing system is vital in ensuring the use of the system becomes embedded within the core operations of a hotel whilst proving the benefits to all stakeholders. Like any new venture, the first step on a journey is always the hardest to make and therefore TigerTMS's approach to this challenge is two-fold:

- Provide an easy to access PWA that invites potential and pre-booked Guests to ***discover more*** about the Hotel, provides the ability to communicate with the Hotel via voice or chat, and to place food and drink ordering to boost secondary spend. This solution is called [**iPortal**](#).
- Encourage potential and pre-booked Guests to ***start communicating*** ahead of their stay using messaging applications the user already has installed (e.g. WhatsApp, Facebook Messenger). This solution is called [**iNotify**](#).



B. iPortal

iPortal leverages built-in Smartphone technology by using a PWA approach in stark contrast to traditional APP development. This enables immediate and easy access to rich content and capabilities without the associated delay and complexity associated with traditional APP downloads.

Potential and booked Guests can access iPortal by a variety of means; typing in a traditional URL in their browser, a Barcode accessed through their standard Smartphone camera APP or a Near Field Communication (NFC) tag. Again, the use of the capability can be leveraged to promote the Hotel through any marketing channels and for Guests to use upon their arrival at the Hotel.

An example portal can be seen in the side bar and is configurable via the TigerTMS Configuration Manager that enables Hoteliers to:

- Choose from various templated styles
- Originate and update content and branding
- Offer different capabilities (Room service, automated Check-out etc.)
- Offer chat or voice communications
- Report on utilisation (by user, by language, by device and by button-press)

Unlike dedicated APPs, PWAs provide real-time changes to what Guests will see without having to download any APP update - that combined with the TigerTMS Configuration Manager can provide Hoteliers with the ability to change content/functions within the portal home screen to suit what is most appealing to Guests.

Indeed, if Hoteliers are already familiar with website analytics and are using these to refine their Guest proposition, iPortal works in the same way. Hoteliers can see which information and features Guests are accessing most frequently and those which they may be finding difficult to understand or simply do not want. Why develop a new feature within a traditional APP, publish on the various APP stores and promote its use to only find out that Guests perceive little or no value in the investment Hoteliers have made?

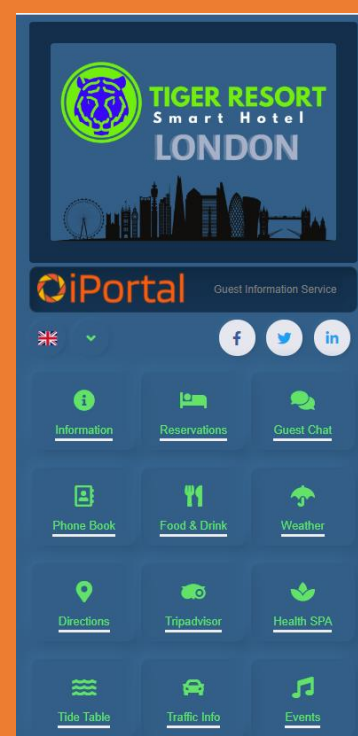
Point your phone camera at the Barcode image below

Click on the URL

Click on any of the icons to find out more



iPortal example:



C. iNotify

iNotify leverages the WhatsApp messaging APP installed on over 2 billion handsets across 180 countries to open a communication link directly to the Hotel.

Installation is as simple as pointing the phone camera at a barcode and clicking on the link.

Engagement with potential and pre-booked Guests can start at any time. The Barcode can be used on posters in airports, at reception, in-room on the TV, and the ensuing conversation can be routed to the most appropriate individual, reservation desk or hotel department.

Once checked in, Guests can be automatically sent a language optimised "welcome" message with pictures, videos or links to other information and content the Hotel wishes to provide/promote.

Response times to messages received from Guests can be set with configurable escalations to other staff and/or management to ensure a timely reply is provided.

Conversations can be simply transferred to other members of staff with access to the complete conversational history so that staff are aware of the context and background.

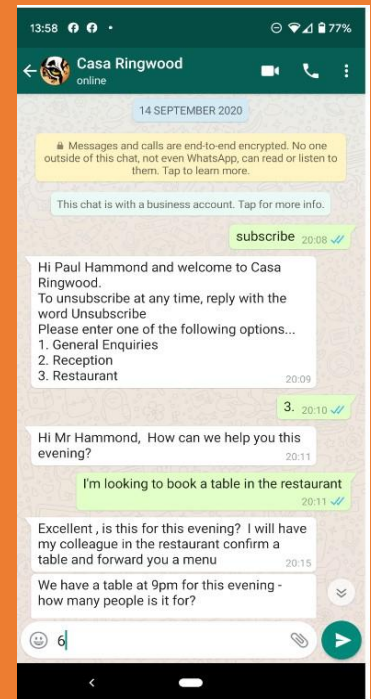
Routing of messages is skills based to ensure any communication is sent to the most appropriate resource to optimise the response with language and content.

On Check-out the guest will be automatically removed from the CRM and a "Thank you" message sent. Links to guest surveys or TripAdvisor ratings can also be included to increase the volume of reviews.

The software architecture is built to support any number and variety of popular social platforms offering a familiar application used by the Guest and a uniform approach for Hotel Staff.

It is also worthwhile noting that WhatsApp along with all popular Social APPs offer state of the art end to end encryption as part of their proposition and as such ensures Guest and Staff communication remains secure.

Example of a WhatsApp chat session using iNotify below:



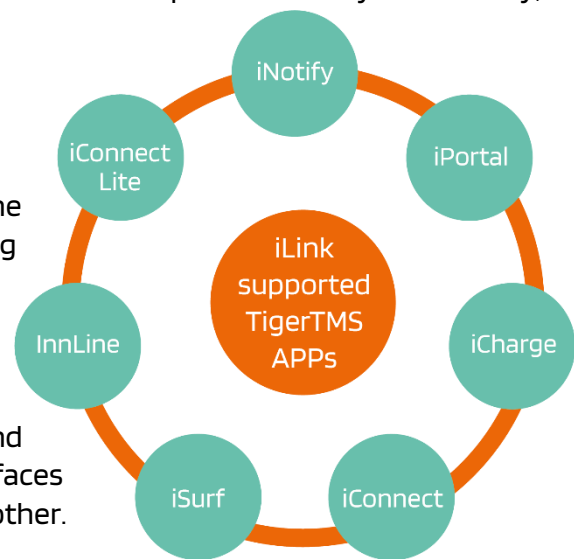
D. TigerTMS Software Architecture and iLink

The rich heritage of TigerTMS within the Hotel industry has led to a different approach to the development of Guest facing solutions.

Unlike other interactive Guest Solution vendors that approach their application from an end-user (Guest) perspective, TigerTMS started with a rich array of interfaces and niche, staff facing applications within Hotels. Their most recent developments have revolved around building Guest facing applications that connect to them.

The fulfilment of Guest requests is a critical factor for Hoteliers to consider as setting an expectation that is not then met will result in a poor experience for all stakeholders. Relying on manual processes or Hotel Staff remembering instructions and then accurately transcribing information arriving on a messaging APP into a separate Hotel system is risky, especially during peak times when staff are busy.

Conversely, having the ability to automatically route mundane requests directly into the appropriate hotel system using only technology has great value. Something as simple as setting the correct time for an early wake up call for the wrong room will result in two serious complaints that most Hotel Managers will gladly live without, especially at the start or end of a long shift. In reality, few hoteliers will have a single supplier of systems that provide all the functions required and only a handful have risked crafting bespoke interfaces that allow each and every system to talk to each other.



TigerTMS's legacy in developing and maintaining over 140 interfaces enabled them to take a pragmatic approach in managing this complexity. iLink is middleware in the form of a service bus that routes messages between the otherwise disparate systems that operate within most Hotels: PMS, Telephony, WiFi, Housekeeping, Maintenance, Building Control, POS etc.

The Development Team at TigerTMS has over 100 man years of experience, purely in Hotel specific system interfaces. Their experience spans legacy Delphi based interfaces (that they continue to support for a handful of clients) through to the REST interface that is the chosen technology of today.

TigerTMS realised that middleware was an essential requirement for their own developments as well as providing Hoteliers with a resilient, scalable architecture that allows IT departments to manage the evolutionary change of on-site systems and cloud-based services. iLink is now the core element of their proposition that enables the individual applications that are increasingly becoming Guest facing to be tightly integrated to legacy and future Hotel systems (see Fig. 4.). iLink is available On Premise, Off Premise or as a Cloud Service.



In the Sept '20 HFTP Europe "Hangout" a well-respected Hotel COO remarked that "Middleware freed up our approach to everything". Having the ability to change a process without the cost and complexity of re-engineering multiple interfaces or being forced to change core systems meant that they could approach Business Process Re-Engineering (BPR) from the purest sense; if it made sense for the Hotelier and the Guest they did it.



Fig 4: A Centralised Middleware Approach

Both iNotify and iPortal are reliant on iLink middleware to provide the infrastructure each application requires – TigerTMS effectively bundles iLink as part of the package. If, like many CIO's within the industry, you are looking to find a way of enabling real system integration without major system upgrades and/or interface "science" projects, TigerTMS and iLink may prove to be a very viable option.

Any hotelier considering easy to install, well supported, easily deployed Guest facing systems would do well to include TigerTMS in their conversations.

6. About the Author

Paul Hammond is a highly experienced Hospitality industry IT professional who has specialised in the development of mobile solutions.

Beginning his induction to mobile at Psion in the mid '90s, Paul enjoyed roles at Good Technology & Nokia prior to being instrumental in the growth of Crave Interactive as they spearheaded the adoption of tablet-based technologies into the UK Hospitality market. More recently, Paul has been the Sales Director at Oracle, the leading provider of PMS and POS systems worldwide.

With over 25 years of mobile data knowledge behind him at a variety of the industry's leading suppliers, Paul is ideally qualified to present a situation report on the challenges facing hoteliers in providing Guests with easy to use solutions during, and after, the Covid era.



TIGERtms

In March 2020, after almost 5 years ownership by Mitel Networks, TigerTMS became an independent company once more following a successful management buy-out, led by new [CEO, John Owen](#).

The company's mission is to satisfy the demands of the Hospitality market with market-leading applications and middleware that drive guest satisfaction and loyalty.

TigerTMS is headquartered in the United Kingdom, with regional satellite offices in North America, Europe, Africa, the Middle East and Asia Pacific. Sales and around the clock technical support centres are located in each office providing local presence to our valued clients.

TigerTMS' success is reflected in the long-term relationship established and nurtured with hotel groups, independent hotel operators, telecommunications manufacturers, systems integrator and property management system vendors.

The TigerTMS solutions portfolio includes:

iLink

The world's most widely deployed middleware solution, iLink, connects TigerTMS products and hundreds of other hotel applications, with more certified interfaces available on one platform, available on premise or via the cloud.

InnLine

Provide efficient communications and a superior experience for your guests with the world's leading voice messaging, wake-up management and room status solution.

iSurf

Ensure guests experience secure and reliable internet connection, wherever they roam within the hotel with intelligent distribution of bandwidth across your entire property.

iNotify

The new way to communicate with your guests; with a quick opt-in to receive hotel notifications, your guests can chat with hotel agents using iNotify via WhatsApp.

iCharge

Enable fast billing of voice usage for guests and administration teams. This popular guest and call management system offers detailed and comprehensive call management and guest status reports.

iGuest

Enable staff to provide a greater guest experience and support emergency notifications with this unique guest services solution developed specifically for the Mitel PBX system.

iPortal

The no download, zero footprint approach to guest information with integrated voice and messaging technology - with no need to install a mobile app, and no hefty development fees.

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