

SMART CITIES
PUBLIC SERVICES
AND DIGITAL ADOPTION
——April 2017——

دبــــي الذكيـة SMART DUBAI

In Partnership with





# **TABLE OF CONTENTS**

#### **FOREWORD**

#### **INTRODUCTION**

| S           | BACKGROUND: SMART CITIES  Smart Cities Worldwide  Smart Cities in the Middle East  | 6                          |
|-------------|--|----------------------------|
| Т           | THE STUDY: OBJECTIVES AND METHODOLOGY  | 9                          |
| PUBLI       | C SERVICES OVERVIEW  |                            |
| F<br>F      | CONSUMER CHANNEL PREFERENCES - UAE Figure 1: Channels Used for Public Services – Overall UAE Figure 2: Channels Used for Each Public Service – Specifics UAE Figure 3: Drivers of Internet Usage Before / After Conducting In-Person Services – Overall UAE Figure 4: Frequency of Public Service Center Visits – Overall UAE  | 10<br>11<br>12<br>12       |
| DIGITA      | AL CHANNEL ADOPTION OVERVIEW   |                            |
| F<br>F<br>F | PERCEIVED BENEFITS OF DIGITAL CHANNEL ADOPTION - UAE Figure 1: Perceived Benefits of Digital Channel Adoption – Overall UAE Figure 2: Perceived Benefits of Digital Channel Adoption by Age Group – Overall UAE Figure 3: Perceived Benefits of Digital Channel Adoption by Monthly Personal Income – Overall UAE Figure 4: Perceived Benefits of Digital Channel Adoption by Occupation – Overall UAE Figure 5: Perceived Benefits of Digital Channel Adoption by Nationality – Overall UAE | 13<br>13<br>14<br>14<br>15 |
| F           | MAIN BARRIERS FOR DIGITAL CHANNEL ADOPTION – UAE Figure 1: Main Barriers for Digital Channel Adoption – Overall UAE Figure 2: Main Barriers for Digital Channel Adoption by Gender – Overall UAE Figure 3: Main Barriers for Digital Channel Adoption by Nationality – Overall UAE   | 16<br>15<br>15             |
| GOVER       | RNMENT MOBILE APPS OVERVIEW  |                            |
| F<br>F      | GOVERNMENT MOBILE APPS – ENGAGEMENT LEVELS – DUBAI Figure 1: Government Mobile Apps Adopters versus Non Adopters – Dubai Figure 2: Government Mobile Apps Adopters by Gender – Dubai Figure 3: Government Mobile Apps Adopters by Age Group – Dubai Figure 4: Government Mobile Apps Adopters by Monthly Personal Income – Dubai   | 18<br>19<br>19<br>20       |
| CONCL       | LUSIONS  |                            |
|             | Consumer Channel Preference – Overall UAE<br>Digital Channel Adoption Overview – Overall UAE<br>Government Mobile Apps Overview – Dubai  | 21<br>21<br>22             |
|             | NDIX Survey Questions Glossary of Terms and Phrases  | 23<br>25                   |

# **FOREWORD**



Her Excellency Dr. Aisha Butti Bin Bishr Director General of the Smart Dubai Office



Omar Christidis ArabNet Founder and CEO

Smart cites are cities that utilize modern technologies to improve our everyday lives, merging ICT with more traditional infrastructures to streamline processes, heighten efficiency and productivity, and increase well-being and happiness. As interest in smart cities has surged globally, it is estimated that their global market potential will surpass \$3.3 trillion by 2025. The Middle East is a particularly fertile region for smart cities: Euromonitor International expects that half of the global cities that will emerge as "smart cities" by 2025 will surface from emerging markets and the Middle East. Dubai is leading the smart cities race globally, evidenced by the launch of its smart city initiative, Smart Dubai, in early 2014, and continuous high-level commitment to innovation at the city level: Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of the Board of Trustees at Dubai Future Foundation announced the 10x initiative in February 2017, with the aim of Dubai being 10 years ahead of any other city in the world in terms of innovation.

The Smart Dubai initiative, formally undertaken in March 2014, aims to establish Dubai as the new global benchmark for smart cities, and the happiest city on earth. Through collaboration with its Strategic Partners – more than two dozen government departments and private entities spanning all city sectors, from healthcare to transportation and tourism – Smart Dubai is embracing technology and innovation as a tool to make Dubai the most efficient, seamless, safe, and impactful city experience for residents and visitors. Smart Dubai is pushing the boundaries of innovation to improve the city experiences, with a focus on introducing solutions that leverage cutting-edge trends including blockchain, artificial intelligence, cognitive computing, and open data.

ArabNet, in partnership with the Smart Dubai Office, are excited to present this report, which aims to provide the public and private sectors with a look into consumer behavior regarding digital urban services – including motivators and barriers to adoption. We hope this report provides you with insights that help shape your business strategy when it comes to e-services and ICT, and encourages public-private partnerships and collaborations that will help achieve the ambitious mandate of the Smart Dubai Office, to make Dubai the happiest city on earth.

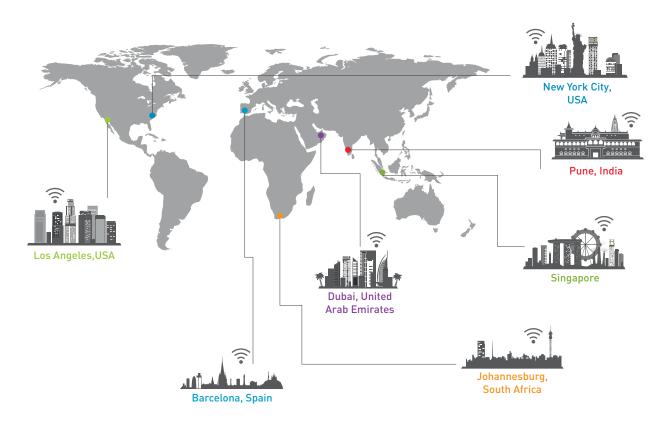
# INTRODUCTION

## **BACKGROUND: SMART CITIES**

#### **SMART CITIES WORLDWIDE**

As smart technologies propagate around the globe, the movement to apply innovative and sustainable solutions to the most pressing problems within modern cities has given rise to the concept of a smart city. The International Telecommunication Union (ITU), the United Nations' specialized agency in the field of telecommunications, information and communication technologies, defines a smart sustainable city as " an innovative city that uses information and communication technologies (ICTs) and other means to improve quality of life, efficiency of urban operation and services, and competitiveness, while ensuring that it meets the needs of present and future generations with respect to economic, social, environmental as well as cultural aspects."

The smart city market has witnessed considerable growth over the past few years driven by the need to improve quality of life for urban residents by managing urban complexities, reducing urban expenditure, and increasing energy efficiency. Euromonitor International has estimated that the global market potential of smart cities will reach \$3.3 trillion by 2025. Rapidly expanding and ageing populations, coupled with urbanization and industrialization, have led governments to embrace the concept of smart cities to address urban challenges.



Source: The Economist. The Global Smart Cities Outlook: Opportunities and Challenges.

Source: The Economist. The Global Smart Cities Outlook: Opportunities and Challenges.

Source: ITU-T, Smart Sustainable Cities at a Glance. http://www.itu.int/en/ITU-T/ssc/Pages/info-ssc.aspx

Source: ArabNet.The Quarterly. Issue Number 9. Summer 2016. Dubai the City of Tomorrow.

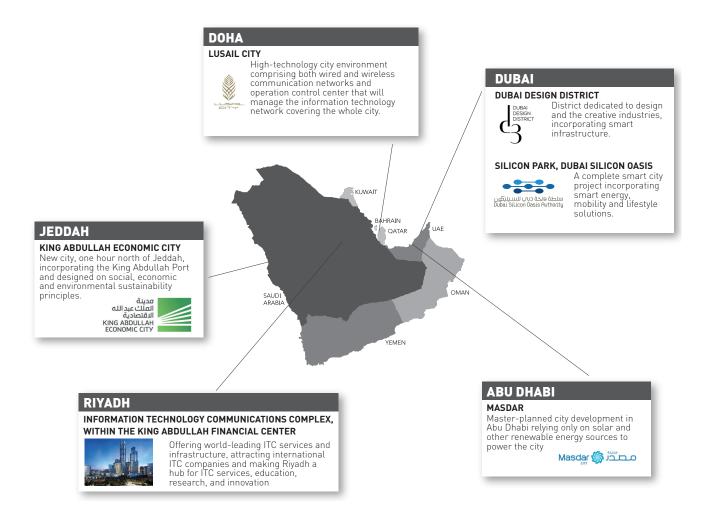
Source: Euromonitor International. May 2016. How Technology Is Transforming Business in the MENA. Kinda Chebib.



#### SMART CITIES IN THE MIDDLE EAST

Euromonitor International expects that half of the global cities to emerge as "smart" by 2025 will surface from emerging markets and the Middle East. The Middle East is advancing in the smart cities race, and the region is likely to see major gains due to significant initiatives launched by governments and private sector developers.

The six countries of the Gulf Cooperation Council (GCC) - Bahrain, Saudi Arabia, Qatar, Kuwait, Oman and the United Arab Emirates - have been witnessing rapid population growth and urban development brought on by historically strong oil revenue, construction and modernization booms. A number of smart developments and initiatives have been launched across the region, including Lusail City in Qatar, KAEC in Saudi Arabia, as well as Silicon Park and Dubai Design District in Dubai – as part of the broader platform of Smart Dubai.



Source: Monitor Deloitte, Smart cities...Not Just the Sum of its Parts, 2015.

The Smart Dubai initiative was introduced in 2014 to establish Dubai as the smartest city in the world by 2017, and has chosen happiness to measure the success of its smart city endeavors with its articulated vision to become the happiest city in the world. This is aligned with His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of UAE and Ruler of Dubai's vision where technology plays a vital role as an enabler to achieve this goal.

The initiative aims to encourage collaboration between the public and private sectors to achieve targets in six strategic dimensions: smart life, smart transportation, smart society, smart economy, smart governance, and smart environment, each of which will leverage the strong ICT infrastructure the city is currently developing. Supporting the smart city initiative is the commitment to open data and a governance system that will enable cross-functional collaboration in the pursuit of seamless urban services. Within these six dimensions, the strategy includes the implementation of over 100 initiatives in



areas such as transport, communications, infrastructure, electricity, economic services and urban planning, and a 1,000 services-plan to transform the government and the private sector into becoming smart.

An integral component of Smart Dubai's program relies on the Smart City Platform, providing the infrastructure and design tools necessary for smart services in the city. The Smart City Platform works through four distinct layers: infrastructure (sensors and smart machines are connected and can collect data); data orchestration (data is securely collected, managed and stored from different sources, and made accessible); services enablement (data is processed with analytics, allowing applications to interact with the data); and application (applications are developed using city data).

In this way, Smart Dubai is able to deliver government-as-a-platform (eventually city-as-a-platform), a platform that opens up the city's connectivity and data and allows government, businesses and entrepreneurs to create innovative services on top of this platform. A unified, smart, integrated government constitutes an ideal platform for technology and digital startups to propose products, services, and solutions on the city-wide level. The private sector is expected to provide a large majority of smart services in due course.



## THE STUDY: OBJECTIVES AND METHODOLOGY

ArabNet - in partnership with the Smart Dubai Office and with the support of OnDevice Research - has launched this study to examine UAE residents' overall engagement with public services and to assess Dubai residents' adoption of Dubai government apps. The study investigates UAE residents' channel preferences for a variety of services, factors influencing digital channel adoption, frequency of public service center visits, and Dubai residents' level of engagement with Dubai government mobile apps.

The findings are based on a study conducted in the United Arab Emirates during the month of May 2016. The survey methodology is mobile research-based with a total of 1,000 completed questionnaires resulting in a 3% margin of error. The target population is located within the United Arab Emirates, and the sample distribution is as follows: 45% Dubai, 30% Abu Dhabi, 15% Sharjah and the remaining 10% are in other dispersed locations. Being a mobile-based research study, the respondents are all mobile phone users with Internet connectivity. Random sampling during fieldwork revealed a gender split of 58% males and 42% females - the majority of which are millennials aged between 16 and 24 years. No quotas were applied to demographic variables, including age, gender, nationality, income, occupation and location. All questions related to public services and digital channel adoption in general were analyzed at the overall United Arab Emirates' level. However, Dubai government mobile app usage in specific was filtered by Dubai residents only. The data was analyzed based on demographic variables, and only analysis that generated interesting insights has been included in the study. It is important to note that questionnaire phrasing when utilizing mobile research methodology is required to be brief and short; this can place limitations on elaborating and explaining certain survey guestions and

Source: ArabNet Summit Video 2016.

Source: ArabNet The Quarterly, Issue Number 9, Summer 2016, Dubai, The City of Tomorrow,

Source: Monitor Deloitte. Smart cities...Not Just the Sum of its Parts. 2015.

Source: Euromonitor International. May 2016. How Technology Is Transforming Business in the MENA. Kinda Chebib.

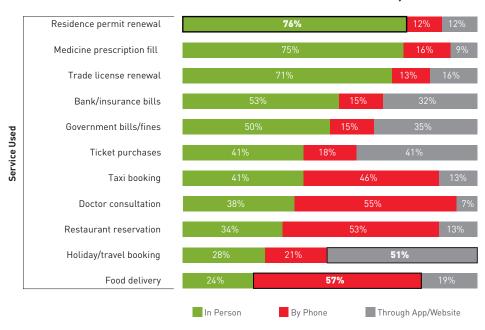


# **PUBLIC SERVICES OVERVIEW**

## **CONSUMER CHANNEL PREFERENCES - UAE**

#### FIGURE 1: CHANNELS USED FOR PUBLIC SERVICES - OVERALL UAE

Channel Used for Service Delivery

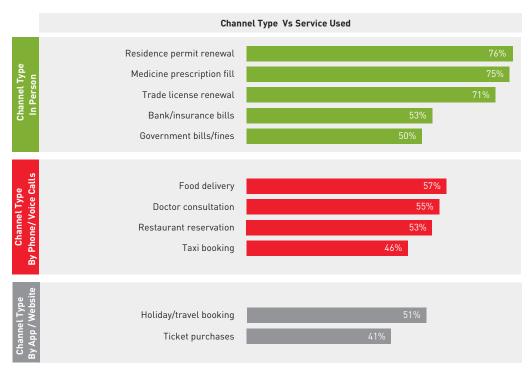


Base = 1,000 respondents = total UAE sample

Looking at consumer behavior in the UAE, the largest portion of respondents go in person to finalize government-related activities (76% and 71% renew their residence permits and trade licenses respectively, in person) and financial services (53% pay their credit card bills, loans and insurance in person). Meanwhile, it is interesting to note that approximately one third of survey respondents pay their government bills and fines through an app / website, which is much higher than other governmental transactions. This also indicates residents' willingness / appetite to use digital channels to execute government services efficiently and conveniently.



#### FIGURE 2: CHANNELS USED FOR EACH PUBLIC SERVICE - SPECIFICS UAE

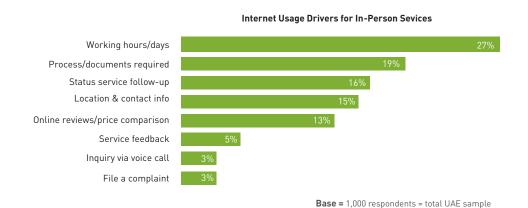


Base = 1,000 respondents = total UAE sample

Diving further into the results by ranking them according to the most used channel for each service, deeper insights emerge. As in the previous graph, governmental and financial services are usually executed in person, while booking lifestyle services (food and transportation) tend to be done over the phone / voice call, and online is used by the majority of respondents to make entertainment and leisure bookings (events and travel). It is interesting to note that while companies like Talabat and Uber / Careem – which provide online food delivery and car services respectively – are flourishing in the region, the most used channel for booking a car or ordering food is still over the phone / voice call.

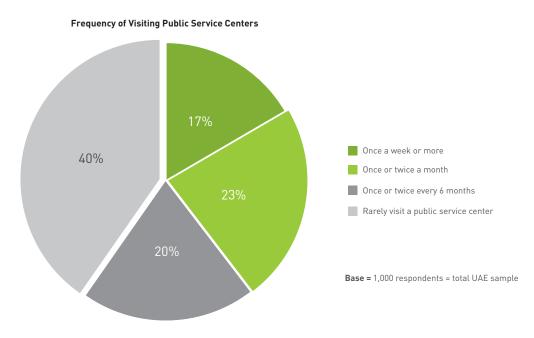


#### FIGURE 3: DRIVERS OF INTERNET USAGE BEFORE / AFTER CONDUCTING **IN-PERSON SERVICES - OVERALL UAE**



Despite the need to be individually present for certain services, UAE consumers often rely on the Internet for additional information. The top reasons for using the Internet before / after conducting an in-person service among UAE residents are to check working hours or timings (27% of respondents), to check the process or documents needed (19% of respondents), or to follow up on the status of a service (16% of respondents). Organizations – both public and private should ensure the availability of such information on their website in order to best serve their customers.

FIGURE 4: FREQUENCY OF PUBLIC SERVICE CENTER VISITS - OVERALL UAE



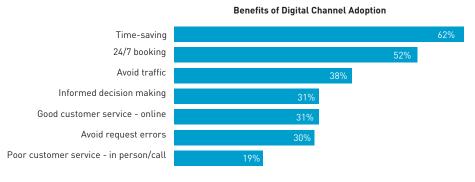
It seems that the major efforts within the UAE, enabling residents to complete their government transactions online are already paying off, with 40% of respondents saying that they rarely visit a public service center and an additional 20% saying that they visit every 6 months, which is still quite infrequent. However, this also means that there are roughly 40% of respondents who visit service centers relatively regularly, and government entities have a significant opportunity to convert these users to digital channels.



# DIGITAL CHANNEL ADOPTION OVERVIEW

# PERCEIVED BENEFITS OF DIGITAL **CHANNEL ADOPTION - UAE**

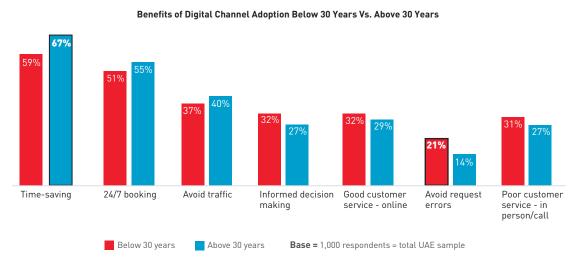
#### FIGURE 1: PERCEIVED BENEFITS OF DIGITAL CHANNEL ADOPTION - OVERALL UAE



Base = 1,000 respondents = total UAE sample

The perceived benefits of digital channels reflect the ever-growing demand for fast, reliable, hassle-free services. The top two drivers for digital channel adoption - saving time (62% of respondents) and ability to book 24/7 (52% of respondents) show that UAE residents are constantly looking for speed, flexibility and accuracy in services.

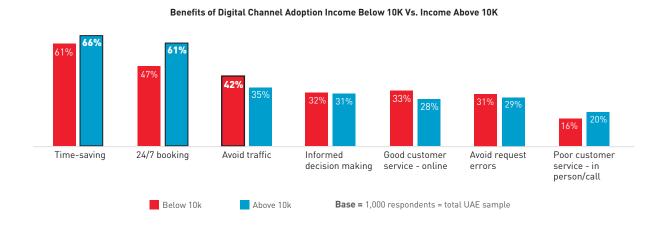
#### FIGURE 2: PERCEIVED BENEFITS OF DIGITAL CHANNEL ADOPTION BY AGE GROUP - OVERALL UAE



Comparing the perceived benefits of digital channels across age groups, it becomes evident that the older group (30 years and above) tend to prioritize time-saving and convenience, while the younger age group (below 30 years) is relatively more concerned with having high quality, error-free service and making a more informed decision.



#### FIGURE 3: PERCEIVED BENEFITS OF DIGITAL CHANNEL ADOPTION BY MONTHLY PERSONAL **INCOME - OVERALL UAE**



When comparing the perceived benefits of digital channels across income brackets, it becomes clear that the higher income group (more than 10K Dhs) places more value on convenience and flexibility, while the lower income group (less than 10K Dhs) is more likely to value personal time and efficiency.

#### FIGURE 4: PERCEIVED BENEFITS OF DIGITAL CHANNEL ADOPTION BY **OCCUPATION - OVERALL UAE**

|   | Occupation                                |   |  |   |   |  |
|---|---|---|--|---|---|--|
|   | Employer                                  | Employee                                  | Parent   | Investor                                  | Student                                   |  |
| 1 | Save time, avoid queues / waiting on hold | Save time, avoid queues / waiting on hold | Save time, avoid queues / waiting on hold                    | Save time, avoid queues / waiting on hold | Save time, avoid queues / waiting on hold |  |
| 2 | Ability to book 24/7 at one's convenience | Ability to book 24/7 at one's convenience | Ability to book 24/7 at one's convenience                    | Ability to book 24/7 at one's convenience | Ability to book 24/7 at one's convenience |  |
| 3 | Avoid congestion<br>/traffic              | Avoid congestion<br>/traffic              | Have more<br>information when<br>making purchase<br>decision | Better online customer service            | Avoid congestion<br>/traffic              |  |

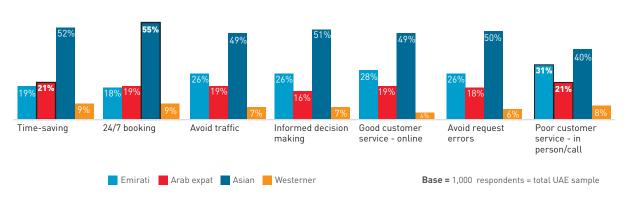
Base = 1,000 respondents = total UAE sample

Examining the perceived benefits of digital channels across occupations, the top two drivers of digital channel adoption across all occupations are the same: to save time / avoid queues and be able to book 24/7 at one's convenience. Campaigns that are geared towards increasing adoption of smart services should focus on highlighting these benefits.



#### FIGURE 5: PERCEIVED BENEFITS OF DIGITAL CHANNEL ADOPTION **BY NATIONALITY - OVERALL UAE**

#### Benefits of Digital Channel Adoption by Nationality Type

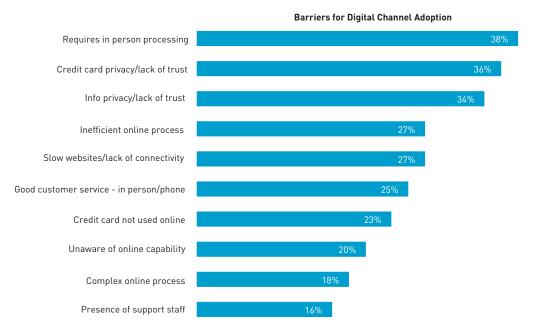


The key factors encouraging digital channel adoption vary slightly among nationalities. Emiratis and Arab expats tend to use digital channels because of the customer service quality being better than the phone / voice call or in person servicing quality, meanwhile Asian and Western expats adopt digital channels because of convenience and 24/7 service.



# MAIN BARRIERS FOR DIGITAL CHANNEL ADOPTION - UAE

#### FIGURE 1: MAIN BARRIERS FOR DIGITAL CHANNEL ADOPTION - OVERALL UAE



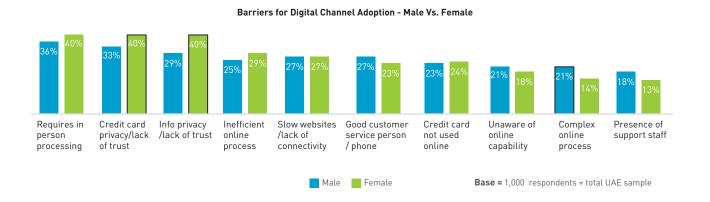
Base = 1,000 respondents = total UAE sample

The main barriers to digital channel adoption are associated with procedural systems, frameworks and trust. When it comes to procedural systems and frameworks as barriers to adoption, the majority of respondents (38%) cite that certain procedures cannot be conducted online and need to be conducted in person. When it comes to trust as a barrier to adoption, 36% of respondents have concerns regarding the security of their payments, while 34% mention fears regarding the security of their personal information / data as an obstacle. These findings highlight that to increase digital uptake there is a need to calm residents' security fears and to digitize certain procedures further.

Another interesting finding is that approximately 20% of respondents claimed not to know that they could perform city services online or they found the online process non user-friendly. Looking into user experience, while promoting awareness and educational programs could help increase digital adoption rates.

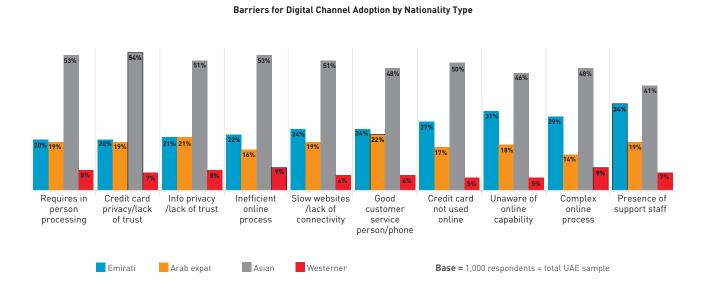


#### FIGURE 2: MAIN BARRIERS FOR DIGITAL CHANNEL ADOPTION BY GENDER - OVERALL UAE



When analyzing barriers to adoption across gender, the survey findings indicate that male residents are more likely to find the online process to be difficult to understand or use. On the other hand, female respondents are more concerned with trust / security issues, and are reluctant to use their credit card and personal information on these platforms; campaigns to increase female adoption of digital platforms should focus on these security / trust concerns.

#### FIGURE 3: MAIN BARRIERS FOR DIGITAL CHANNEL ADOPTION BY NATIONALITY - OVERALL UAE



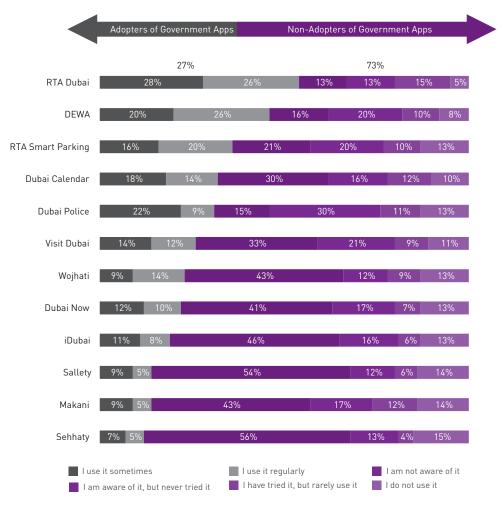
In hopes of better understanding the discrepancies between barriers for digital channel adoption among UAE's different nationalities, the top reasons are highlighted for each category. With respect to Emirati nationals, the most common reason for not using digital channels is the presence of support staff that handles services on their behalf; on the other hand, Arab expats believe that customer service is more flexible on the phone (voice calls) / in person. Meanwhile, Asians are uncomfortable sharing their credit card details and personal information over online portals. This indicates the need for education and awareness programs that tackle ease and trustworthiness of online digital channels.



# GOVERNMENT **MOBILE APPS OVERVIEW**

## **GOVERNMENT MOBILE APPS** - ENGAGEMENT LEVELS - DUBAI

#### FIGURE 1: GOVERNMENT MOBILE APPS ADOPTERS VERSUS NON ADOPTERS - DUBAI



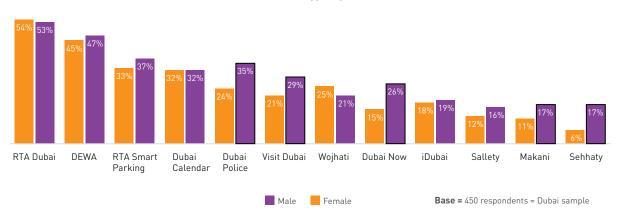
Base = 450 respondents = Dubai sample

Honing in on Dubai government apps, we take a closer look at overall Dubai residents' adoption rates and adoption by demographic criteria. There is a plethora of Dubai government applications available to Dubai residents. The availability of such a wide variety of apps could be a contributing factor to their low adoption rates. On average, Dubai non-adopters of government applications constitute approximately 70%. Utility mobile apps that offer a wide range of features - such as DEWA, RTA Dubai, and Smart Parking - witness high adoption rates ranging from approximately 30% to 50%. Residents are clearly skewed toward multi-functional applications that facilitate a large chunk of government services. Therefore, the consolidation of government apps will yield higher levels of engagement as smart services become increasingly incorporated into the Dubai lifestyle.



FIGURE 2: GOVERNMENT MOBILE APPS ADOPTERS BY GENDER - DUBAI

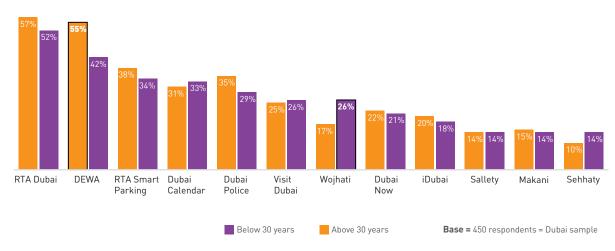




Exploring further the level of adoption of government mobile apps by gender, the survey finds that males are in general more engaged with government apps than females. This indicates that awareness campaigns / ads directed to females could be a quick win to increase adoption for mobile apps where engagement levels differ considerably with gender.

FIGURE 3: GOVERNMENT MOBILE APPS ADOPTERS BY AGE GROUP - DUBAI

Government mobile App Adopters Below 30 Years Vs. Above 30 Years

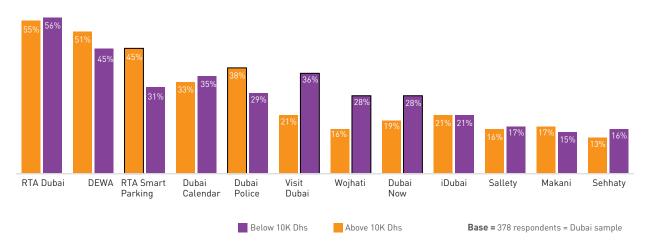


Exploring government apps engagement by age group, the survey finds that respondents below 30 years of age are more inclined toward location-based Wojhati. On the other hand, survey respondents older than 30 years show increased interest in functional / utility apps such as DEWA. Overall age is not a differentiator when it comes to Dubai residents' adoption patterns of government apps.



FIGURE 4: GOVERNMENT MOBILE APPS ADOPTERS BY MONTHLY PERSONAL INCOME - DUBAI

Government mobile App Adopters Below 10K Vs. Income Above 10K



Government apps adoption by income finds that higher income Dubai residents are more likely to adopt functional / utility apps like RTA Smart Parking and Dubai Police. This is consistent with the findings of the previous chart which highlights that older age segments, more likely to have higher personal incomes, tend to adopt functional / utility apps. On the other hand, lower income individuals tend to adopt entertainment apps, such as Visit Dubai and Dubai Now. Lower income Dubai residents are also more likely to use the public transport mapping route app Wojhati, for its time and money saving features. It is interesting to note that the lower income group has a higher rate of adoption of the all-inclusive Dubai Now app - indicating an opportunity to raise awareness about this app within the higher-income segment.



# CONCLUSIONS

This research report examines the attitudes of UAE consumers with regards to public services in general and Dubai residents' levels of engagement with government mobile apps specifically. The study uncovered high-level insights about UAE residents' behavior vis-à-vis public services including main drivers and barriers to digital channel adoption, while it honed in on Dubai residents' appetite for government mobile apps.

Key research outcomes are included below.

#### **CONSUMER CHANNEL PREFERENCE - OVERALL UAE**

- The majority of UAE respondents go in person to finalize governmental-related services and financial services
  (such as renewing residence permits, trade licenses, and paying credit card bills, loans, or government fines). UAE
  respondents also look for convenience and speedy servicing, and are more likely to pay their government bills and
  fines through an app / website.
- Booking lifestyle services (such as food) tend to be done over the phone / voice calls; even with the traction of services like Talabat, Uber, and Careem, phone / voice call is still the most used channel for booking a taxi or ordering food.
- Bookings for entertainment and leisure activities (such as events and travel) are mostly conducted over app / website channels.
- There is a significant minority of UAE residents who continues to conduct everything in person.
- The top reasons for using the internet before or after conducting an in-person service are for further administrative purposes, such as checking working hours, timings, or processes, or to follow up on the status of a service.
- The majority of UAE residents claims to rarely visit public service centers (around 80%) while the remaining respondents visit service centers between once a week to once or twice a month.

#### **DIGITAL CHANNEL ADOPTION OVERVIEW - OVERALL UAE**

- The key perceived benefits of digital channel adoption are time efficiency and convenience. This clearly indicates
  that UAE residents are constantly looking for speed and flexibility in services. This is true across gender and all
  types of occupations.
- Older UAE residents consider the biggest benefits of digital channel adoption to be time efficiency and convenience. Younger UAE respondents are more concerned with having high quality, error-free service, and making well informed decisions.
- Higher income respondents are looking for speed and flexibility while lower income UAE respondents are more likely to value personal time.
- Emiratis and Arab expats believe that customer service quality is lower via phone / voice call or in person.
- Asian and Western expats adopt digital channels because such channels allow for convenience and around the clock servicing.
- The main barriers to digital channel adoption are associated with procedural systems, frameworks and trust.
- The leading barriers to digital channel adoption are related to functionality and trust for both males and females, and across all occupations. The majority of respondents only go in person when a service is unavailable online or requires their presence. Another barrier is the concern for security related to trust and information sharing.
- Female respondents demonstrate concern about trust / security, as well as personal and financial information security.
- Having support staff to handle any service-related activity is a barrier to adoption of digital channels for Emirati nationals. When it comes to other nationalities, the lack of trust and preference for personal interactions trumps digital channel adoption.



#### **GOVERNMENT MOBILE APPS OVERVIEW - DUBAI**

- An average of 70% of Dubai respondents are irregular users of Dubai government mobile apps.
- Utility mobile apps that offer a wide range of features such as DEWA and RTA Dubai witnessed higher adoption rates among Dubai residents who are increasingly looking for consolidated services.
- Male respondents are more likely to use Dubai Police app and more lightly-themed apps related to leisure and entertainment, geo-location, and health.
- Younger age segments are more interested in location-based services (Wojhati), while the older age groups increasingly focus on functional / utility apps like DEWA.
- Higher income groups are higher adopters of functional / utility apps; whereas lower income groups are higher adopters of entertainment and leisure apps.



# **APPENDIX**

## **SURVEY QUESTIONS**

The report insights are based on the below questionnaire offered to the sample selected by OnDevice Research. The sampling criteria is mentioned in the methodology section of the report.

| 1. | Do yo  | u currently have a bank account?  |
|----|--------|---|
|    |        | Yes, I currently have a bank account  |
|    |        | No, I currently do not have a bank account                                    |
| 2. | Demo   | graphy:   |
|    |        | Age   |
|    |        | Gender  |
|    |        | Income Level  |
|    |        | Nationality   |
|    |        | Identify as: Student, Tourist, Investor, Parent, Employee, Employer           |
| 3. | For ea | ach of the services below, select the method you often use:                   |
|    |        | Pay your government bills / fines   |
|    |        | Renew your trade license  |
|    |        | Renew your residence permit   |
|    |        | Pay your credit card bills / loan payments / insurance payments               |
|    |        | Book a taxi / transportation service  |
|    |        | Book your holiday / travel  |
|    |        | Book a doctor's consultation  |
|    |        | Fill your medical prescription  |
|    |        | Buy tickets for entertainment events (movies / concert / etc.)                |
|    |        | Make a restaurant reservation   |
|    |        | Order food delivery   |
|    |        | Order lood delivery   |
|    | An     | sswer Options:  |
|    | •      | In person   |
|    | •      | By phone  |
|    | •      | Through app / website   |
| 4. |        | encourages you to use digital channels to perform these services or payments? |
|    |        | up to 3 reasons)  |
|    |        | To avoid congestion / traffic   |
|    |        | To save time, avoid queues / waiting on-hold                                  |
|    |        | Better online customer service  |
|    |        | To avoid errors with my request / order in writing                            |
|    |        | Low quality of customer service on phone / in person                          |
|    |        | Having more information when I make my purchase decision                      |
|    |        | Ability to book 24/7 at my convenience  |
|    |        |   |



| J. |                 | discourages you from using digital channels? (Fick up to 3 reasons)                     |
|----|-----------------|---|
|    |                 | I did not know I could perform these tasks online                                       |
|    |                 | I do not trust what's being done with my information                                    |
|    |                 | The online process is difficult to understand / use                                     |
|    |                 | The websites are slow and I do not always have connectivity                             |
|    |                 |   |
|    |                 | The online submission / sign-up process online is long / time consuming                 |
|    |                 | I cannot use my credit card for online transactions                                     |
|    |                 | I do not trust using my credit card or personal information on these platforms          |
|    |                 | Better / more flexible customer service on phone / in-person                            |
|    |                 | I only go in person when the service cannot be done online and requires my presence     |
|    |                 | I have support staff (office manager, driver, etc.) that does such things on my behalf  |
|    | _               | Thave support stain (office manager, arriver, etc.) that aves such things off my behati |
|    |                 |   |
| 6. | How r<br>RTA, e | many times do you visit a Public Service Center (DEWA, Dubai Police, RERA,              |
|    |                 | Once a week or more   |
|    | _               |   |
|    |                 | Once or twice a month   |
|    |                 | Once or twice every 6 months  |
|    |                 | Rarely visit a public service center  |
|    |                 |   |
| 7. | _               | ach of the below public service apps, list your level of engagement:                    |
|    |                 | Dubai Police  |
|    |                 | RTA Dubai   |
|    |                 | DEWA  |
|    |                 | Wojhati   |
|    |                 | RTA Smart Parking   |
|    |                 | Visit Dubai   |
|    | ä               |   |
|    |                 | Makani  |
|    |                 | Dubai Calendar  |
|    |                 | Sallety   |
|    |                 | Sehhaty   |
|    |                 | iDubai  |
|    |                 | Dubai Now   |
|    | Λn              | swer Options:   |
|    | All             | ·   |
|    |                 | I am not aware of it  |
|    | •               | I am aware of it, but never tried it  |
|    | •               | I have tried it, but rarely use it  |
|    | •               | I use it sometimes  |
|    | •               | I use it regularly  |
|    |                 |   |
| 8. |                 | I go to conduct an in-person booking / service, I use the internet before or            |
|    | after           |   |
|    |                 | Check the working hours / timings   |
|    |                 | Check the process / documents needed  |
|    |                 | Follow up on status of service  |
|    |                 | Read online reviews / price comparison  |
|    |                 | Check exact location / contact details  |
|    |                 | Give feedback / post a review about the service   |
|    |                 |   |
|    | H               | File a complaint  I do not check the website. I usually call to confirm my inquiry      |
|    |                 | r do not check the website. I usuatly Call to Confirm my Induity                        |



# **APPENDIX**

## **GLOSSARY OF TERMS AND PHRASES**

#### **CONSUMER CHANNEL PREFERENCES - UAE**

FIGURE 1: CHANNELS USED FOR PUBLIC SERVICES – OVERALL UAE FIGURE 2: CHANNELS USED FOR EACH PUBLIC SERVICE – SPECIFICS UAE

Residence permit renewal Renew your residence permit Fill medicine prescription Fill your medical prescription Trade license renewal Renew your trade license

Bank/insurance bills Pay credit card bills / loan payments / insurance payments

Government bills/fines
Pay your government bills / fines
Ticket purchases
Buy tickets for entertainment events
Taxi booking
Book a taxi / transportation service
Doctor consultation
Restaurant reservation
Book holidays/travel
Book your holiday / travel
Food delivery
Order food delivery

#### PERCEIVED BENEFITS OF DIGITAL CHANNEL ADOPTION - UAE

FIGURE 1: PERCEIVED BENEFITS OF DIGITAL CHANNEL ADOPTION – OVERALL UAE

FIGURE 2: PERCEIVED BENEFITS OF DIGITAL CHANNEL ADOPTION BY AGE GROUP - OVERALL UAE

FIGURE 3: PERCEIVED BENEFITS OF DIGITAL CHANNEL ADOPTION BY MONTHLY PERSONAL INCOME – OVERALL UAE

FIGURE 5: PERCEIVED BENEFITS OF DIGITAL CHANNEL ADOPTION BY NATIONALITY - OVERALL UAE

Time saving

To save time, avoid queues / waiting on hold

24/7 booking

Ability to book 24/7 at my convenience

Avoid traffic To avoid congestion / traffic

Informed decision making Having more information when I make my purchase decision

Good customer service - online Better online customer service

Avoid request errors

To avoid errors with my request / order in writing

Poor customer service - in person/call

Low quality of customer service on phone / in person

#### MAIN BARRIERS FOR DIGITAL CHANNEL ADOPTION - UAE

FIGURE 1: MAIN BARRIERS FOR DIGITAL CHANNEL ADOPTION - OVERALL UAE

FIGURE 2: MAIN BARRIERS FOR DIGITAL CHANNEL ADOPTION BY GENDER - OVERALL UAE

FIGURE 3: MAIN BARRIERS FOR DIGITAL CHANNEL ADOPTION BY NATIONALITY - OVERALL UAE

Requires in person processing Go in person when a service cannot be done online & requires my presence

Cannot use my credit card for online transactions

Credit card privacy/lack of trust Do not trust using credit card or personal info on these platforms

Info privacy/lack of trust Do not trust what is being done with my info

Inefficient online process Submission, sign-up process online is long / time consuming

Slow websites/lack of connectivity  ${\sf Websites\ are\ slow\ \&\ I\ do\ not\ always\ have\ connectivity}$ 

Good customer service - in person/phone Better / more flexible customer service on phone / in person

Unaware of online capability Did not know I could do these online

Complex online process The online process is difficult to understand / use
Support staff Support staff does such things on my behalf



Credit card not used online









