World's 1st Smart Wi-Fi

Marketplace

Company Profile - August 2024

Mohammad Omara, Founder & CEO/CTO



Overview

Hoopoe Digital was founded to unlock the huge underrated potential behind the Wi-Fi technology beyond just wirelessly connecting people to the Internet within local areas.

Our goal is to utilize the Wi-Fi infrastructure in every public and enterprise venue to offer its visitors a smart new experience, help its operators enhance their business and generate new revenue streams.

For that, Hoopoe built the world's first <u>Smart Wi-Fi</u> <u>Marketplace.</u>





Smart Wi-Fi Marketplace Wi-Fi Smart Services offer management and marketing values to Wi-Fi Network Owners and Wi-Fi Advertisers (B2B)

> Wi-Fi Smart Services

Wi-Fi Instant Applications offer local area digital services to Wi-Fi users through a new type of smart applications that require no download and no install (B2B2C)

Wi-Fi Instant Applications

Analytic & Business Intelligence A wide range of user data and information modules reflecting the behavior of both associated and unassociated users to help improve the business efficiency.



Customer Segments

Hoopoe's Smart Wi-Fi Marketplace contains over 25 services, instant applications and analytical modules targeting, but not limited to, the following segments:

- Public Venues: Shopping Malls, Museums, Airports, Hotels, Banks, Hospitals, etc.
- Public Transportation: Buses, Trains and their Stations.
- Food & Beverage: Restaurants, Cafes, Food Aggregators, Cloud Kitchens, etc.
- Events & Exhibitions: GITEX, LEAP, Expo, Web Summit and similar.
- Business Parks: Corporate Buildings and Co-working Spaces.
- Customer Support Centers: Telecom Companies, Departments of Motor-vehicles, etc.
- Educational Establishments: Universities and Schools.



WHO WE ARE

Hoopoe Digital is the region's leading provider of Smart Wi-Fi Solutions for public, governmental and enterprise networks.

Our customers' list include big corporates like Amazon and Huawei, shopping malls like Marakez District 5 Mall, large F&B chains like McDonald's and Burger King, class-A retail brands like Harmont & Blaine and more. Hoopoe Digital is now the official Smart Wi-Fi service provider for Ooredoo Qatar.

Our team of experts has over 70 years of cumulative experience in the Wi-Fi industry starting from chip design to end-user applications development with track records of working in mega projects like the Wi-Fi network of the Louvre Museum in Paris and Metro & Train Stations in London and Paris.





Wi-Fi Smart Services

Hotspot Management

(Guest Wi-Fi)

Location-Intelligent Marketing

Smart Leaderboard For F&B Wi-Fi
Offloading
&
EAP

Wi-Fi in
Public
Transportation

Map-based Marketing Indoor Digital Interactive Maps Indoor Tracking & Positioning

Hotspot Management

(Guest Wi-Fi)

Hoopoe's centralized Wi-Fi Management Cloud (WMC) platform offers a one-stop-shop for creating and managing Guest Wi-Fi networks.

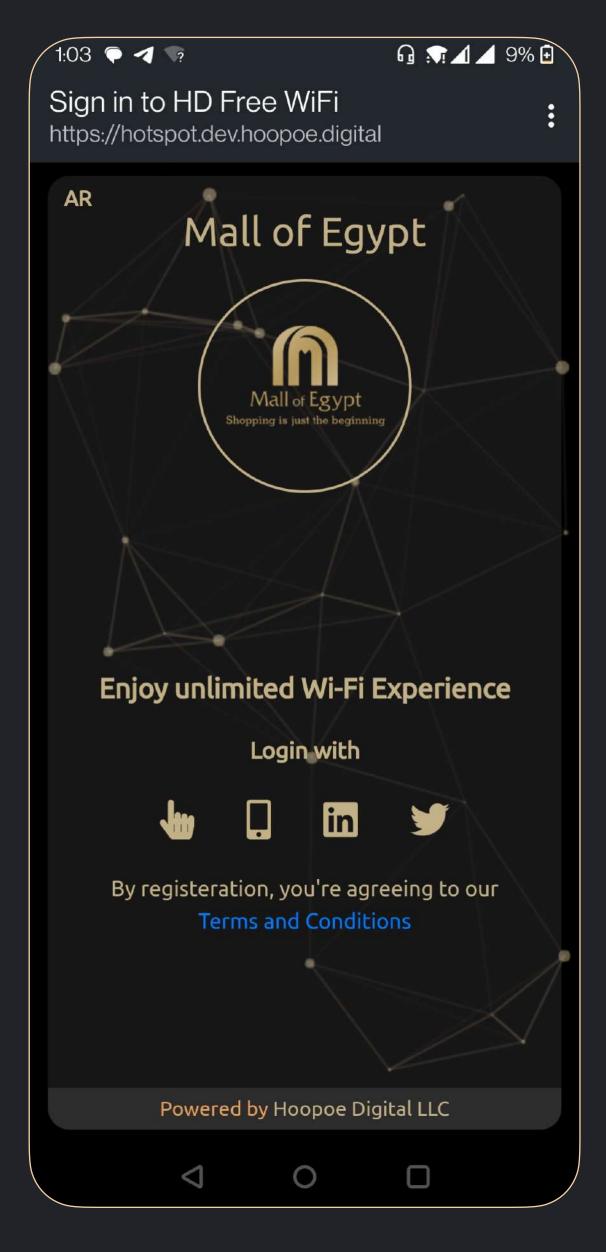
From enabling the creation of fully branded splash pages, to selecting user authentication methods (phone number, social login, vouchers, email address, etc.) to creating user packages (speed, quota, session duration, access windows, etc.), to managing the service (de-authenticating users, blocking users, changing offers, etc.), blacklist/whitelist URLs. Simply, dealing with your Hotspot as if you are a Mobile Network Operator.

Suitable for:

All types of Public Venues

Public Transportation

Universities



Click <u>here</u> to watch the User Journey

Location-Intelligent Marketing

Hoopoe Ad Manager (HAM) platform enables both Wi-Fi network owners as well as third party advertisers and marketing agencies to create highly targeted location-intelligent marketing campaigns with accuracy down to 3-meters.

This forms a new revenue stream for network owners and enables them to monetize their Wi-Fi acquired data.

Suitable for:

Shopping Malls

F&B

Exhibition Centers

Museums

Airports

Public Transportation

Train Stations

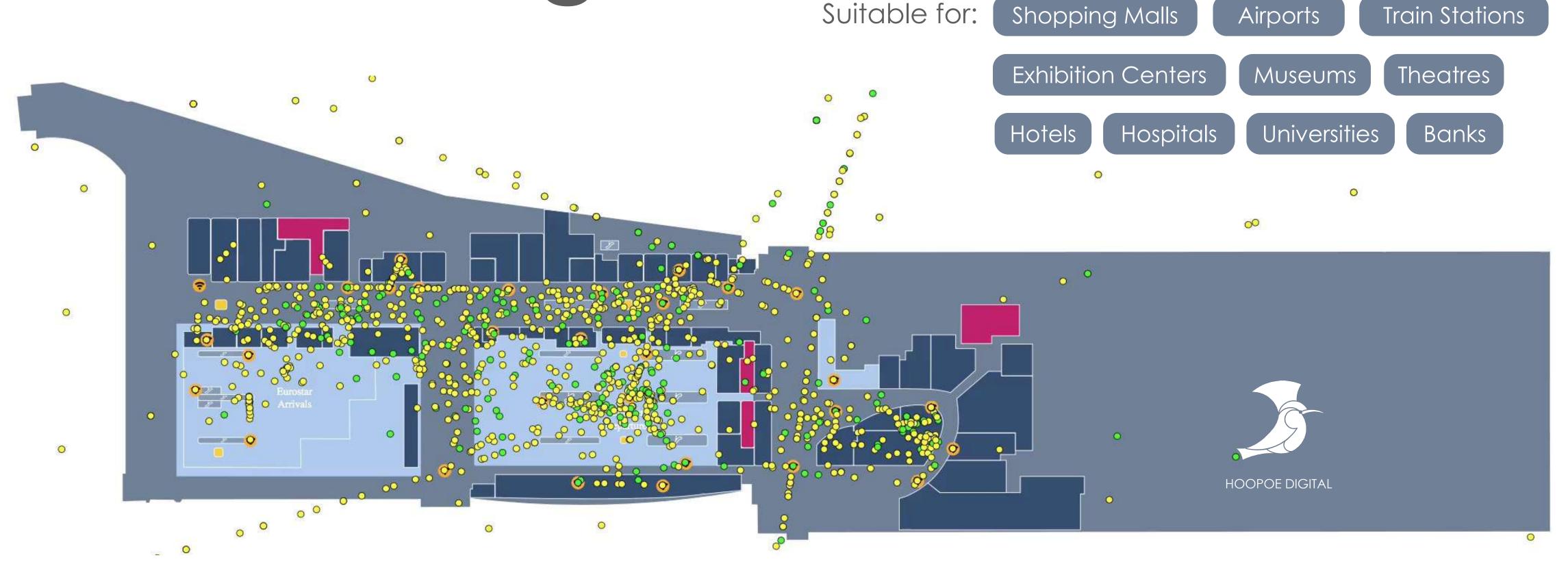
Hospitals

Hotels



Indoor Tracking & Positioning

While GPS doesn't work indoors, Hoopoe uses Wi-Fi access points as satellites to calculate indoor users' locations with up to 3-meter accuracy. This works even when users are not connected to the Wi-Fi.



Indoor Digital Interactive Maps

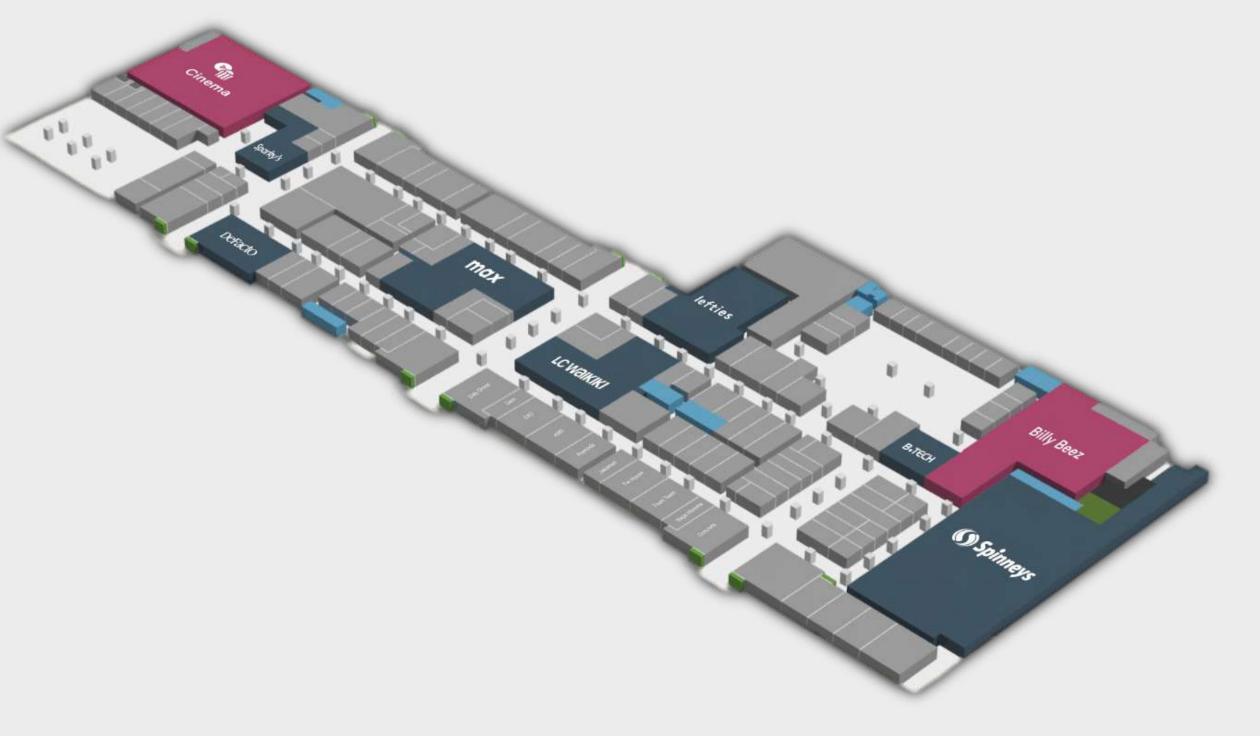
Both Indoor Tracking & Positioning Wi-Fi Service and Indoor Navigation Wi-Fi Application require Indoor Maps. Hoopoe builds highly intuitive, digital interactive maps for indoor venues. The map enables multi-layer customization of geofences, different color themes, retail branding, integration with retail POS systems and many more.

The 2D version of the map is suitable for Indoor Tracking & Positioning while the 3D version give a more realistic experience for Indoor Navigators.

Suitable for: Shopping Malls Airports Exhibition Centers

Museums Hotels Theatres Banks

Train Stations Hospitals Universities





Map-based Marketing

In shopping malls and similar venues, retail shops can advertise their products to venue visitors over the Wi-Fi Navigation Application.

Instead of just searching for retail locations, visitors can also search the map for products, services or even promotions. If a retail is subscribed to the Map-based Marketing Service with the mall, all its products will be available for search on the map. Retail can also create instant targeted promotions directly from the POS system.

Hoopoe Digital is integrated with a large number of cloud-based POS systems to enable retails to avail their products for direct search on the map.

Suitable for: Shopping Malls Airports Exhibition Centers

Museums Hotels Theatres Banks

Train Stations Hospitals Universities



Wi-Fi in Public Transportation

Hoopoe has a special interest in building Free Wi-Fi hotspots in Public, as well as Private, transportation. This enhances the quality of the ride and converts the commute time into leisure.

For marketing agencies, Free Wi-Fi in Public Transportation can bridge the gap between outdoor marketing and online digital marketing. Millions of daily commuters can programmatically be targeted with Wi-Fi Ads, at predefined locations. This can be a technology killer to road billboards that are quite expensive, hard to install, lack a mechanism to specify personae and don't have options for performance tracking.

For fleet owners/operators, Free Wi-Fi enables them to monetize their riders beyond just selling them tickets.



Extensible Authentication Protocol (EAP)

EAP's best practice is to enable Wi-Fi authentication using mobile operators' SIM cards. This can be very similar to data roaming between mobile carriers, but In this case, one of the mobile carriers is a Wi-Fi network.

Some of the SIM-based Wi-Fi authentication applications can come in the form of enabling tourists to seamlessly get connected everywhere; at the airport, in the museum, or while shopping.

Another major EAP application is Wi-Fi offloading. This technology is required by mobile network operators to offload some of their data loads in crowded areas like stadiums, expos, etc.



Suitable for:

Airports

Museums

Hotels

Exhibition Centers

Touristic Destinations

Resorts

Stadiums

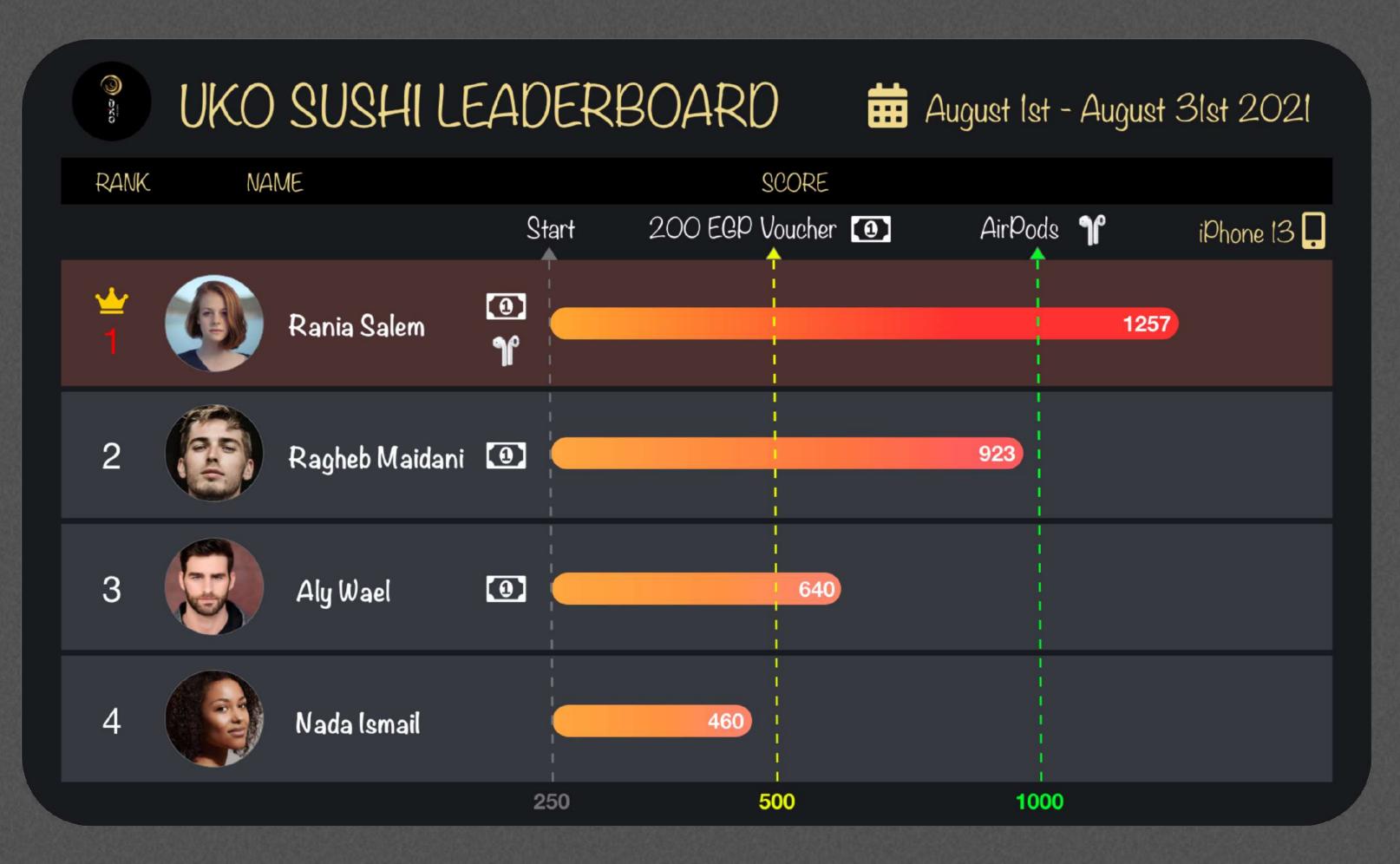
Smart Leaderboard



Restaurants and Cafes can use Hoopoe's Smart Leaderboard to create a gamification experience for their clients. They can set goals for them to hit and get rewards. The leaderboard can be displayed on any smart screen.

Hoopoe's integration with the wide spectrum of market-available cloud POS systems enables it to directly link clients' orders with IDs. This works in full harmony with Hoopoe's Smart Digital Menu.

Suitable for: Restaurants Cafes





Wi-Fi Instant Applications

Wi-Fi Smart Digital Menu Wi-Fi Smart Queuing

(Doarak)

Digital Twin

e-Ticket Booking

Indoor Smart Navigator

JukeBox

HEP/ex

Wi-Fi Instant Applications

A NEW CONCEPT COINED BY HOOPOE DIGITAL

Neither it's a mobile application nor a web application. Wi-Fi Instant Application pops up directly to your phone screen once you get connected to the application-dedicated Wi-Fi network. You won't need to download or install anything.

Wi-Fi Instant Applications open a new era for "Local Area Digital Services" that not just connect Wi-Fi users to the physical areas around them, but also enables Wi-Fi network owners to collect more data as they own the network the applications are running on - Simply becoming mini Mobile Operators.





Smart Digital





Hoopoe introduces a new dine-in and drive-through, hygiene digital ordering experience.

Unlike QR-code menus, The Wi-Fi smart digital menu connects clients directly to the restaurant's POS system. All they need to do is to join the menu Wi-Fi network and they will automatically be redirected to a highly interactive, rich content smart menu where they can place their orders with a click of a button.

The data acquired by the digital menu links orders to user profiles even if they pay in cash. This helps in building loyalty programs.

Suitable for:

Restaurants

Cafes

Food Courts



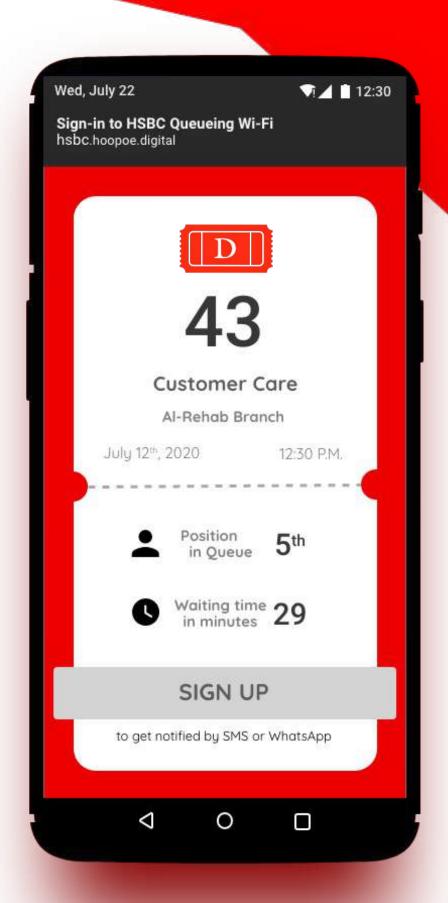
Smart Queueing

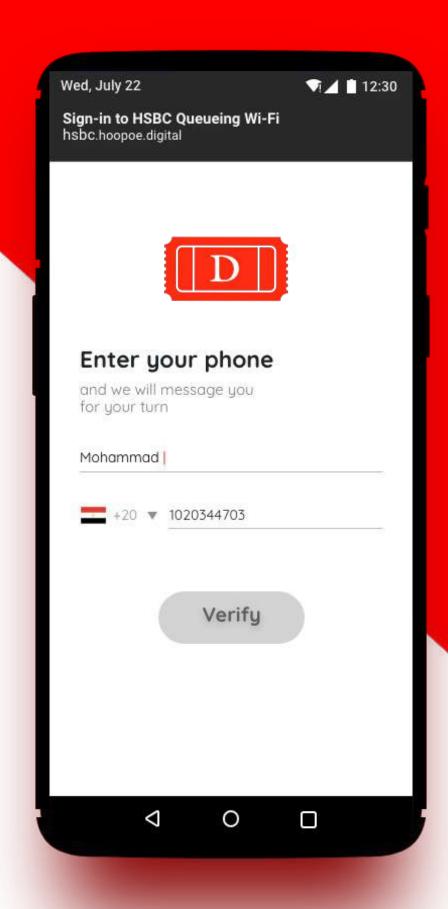
DOARAK

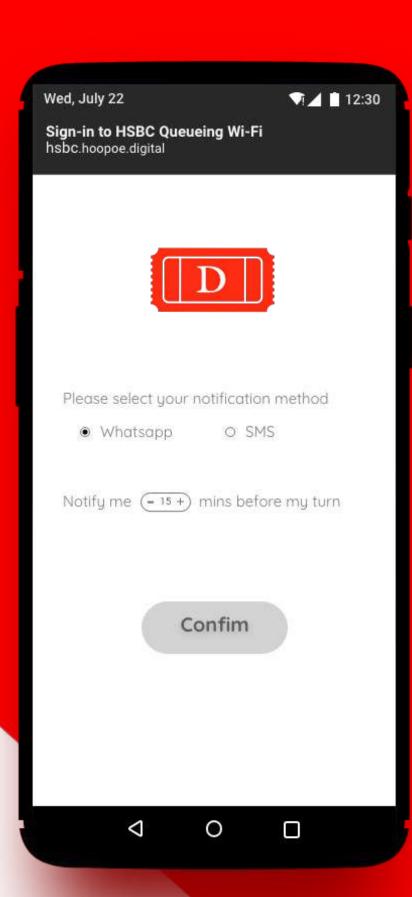
A hardware-less, paper-less, touch-less, hygiene, fully integrated Smart Queuing System.

It works as a stand-alone system, maintaining backward compatibility, and it can also be integrated with existing queuing systems to give them a Digital Interface.

Hoopoe Digital uses Machine Learning to provide insights about estimated waiting time and serving time for every service. "Doarak" also provide a Smart Remote Notification system to remind users with their turns via SMS, WhatsApp or Automated Voice Calls







Suitable for:

Banks

Customer Support Centers

Post Offices

Hospitals/Clinics

Universities

Schools

Department of Motor Vehicle

Real Estate Registration Offices

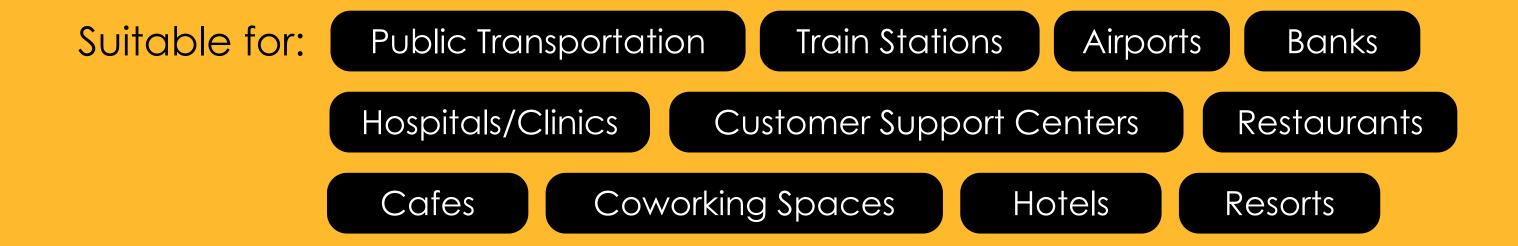
Play a demo video here

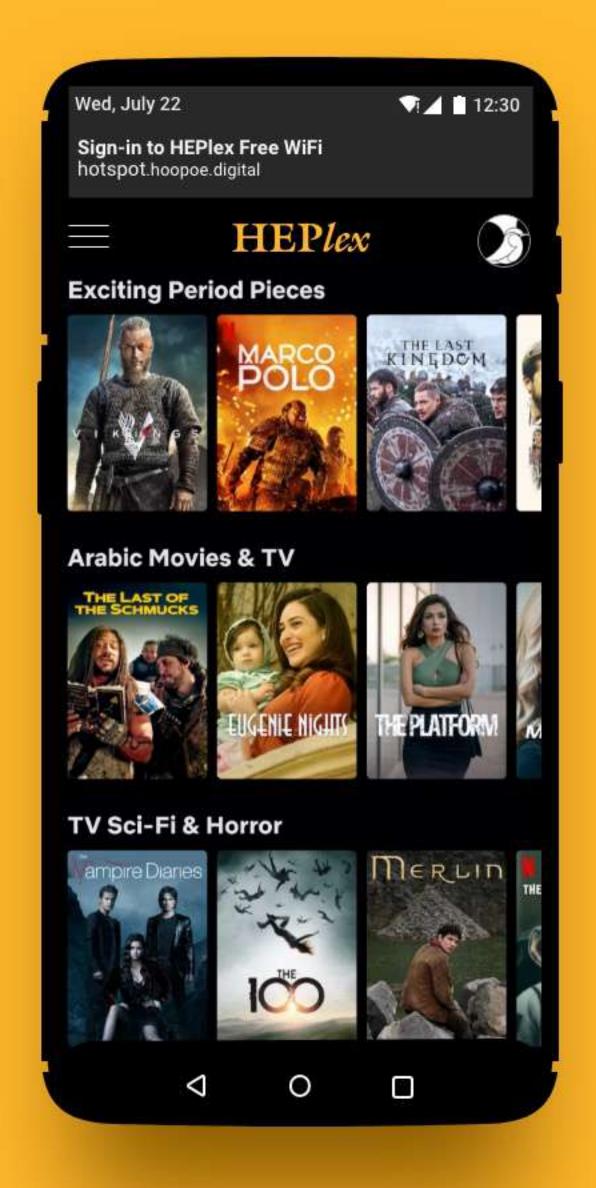
HEPlex

Hoopoe Entertainment Plex (HEPlex) is a Wi-Fi entertainment suite offering an experience similar to Netflix but over the local Wi-Fi network.

HEPlex streams movies, TV Shows, music audios and videos and even enables you to run network games once you connect to its dedicated Wi-Fi network. **HEPlex** is integrated with the Ad Manager to display ads within streamed content.

It's most suitable for venues with customer waiting time.





Play a demo video here

JukeBox

Hoopoe's JukeBox re-invents the old-days Jukebox with today's technology. With one click, your customer can select his/her favorite song, from your playlist, and play it to the whole venue.

Hoopoe's JukeBox is most suitable for restaurants & cafes, pubs, clubs, malls and all types of recreation venues.

It can be integrated with various types of loyalty programs to give your customers a gamifying experience.

Suitable for:

Restaurants

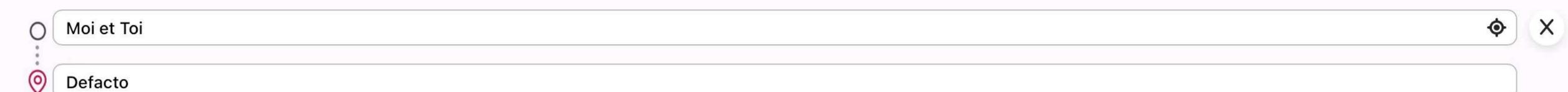
Cafes

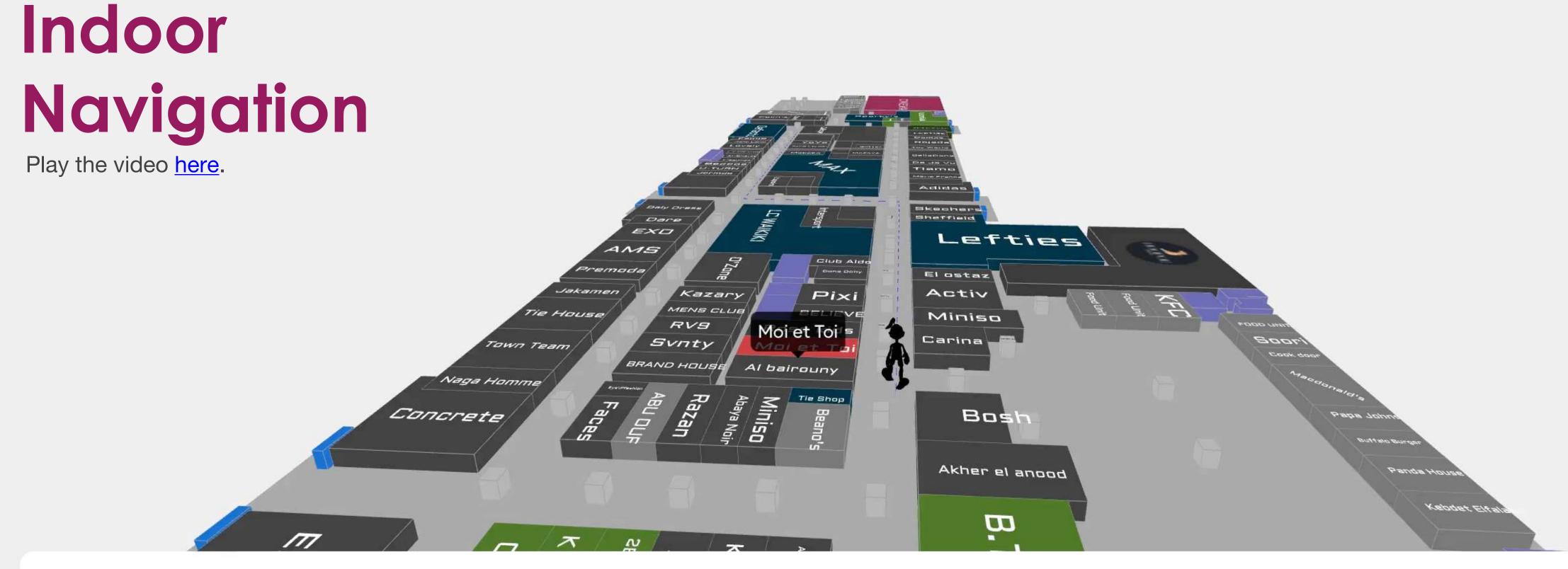
Food Courts

Clubs













e-Ticket Booking





Although e-Tickets are widely accepted in train stations, movie theaters and similar venues, a big percentage of people don't know where to get them online or even know they exist. Others prefer not to install booking apps as they are used less frequently. For that we long booking queues in such venues do exist.

Wi-Fi instant application for e-Ticket Booking can potentially help reduce these queues.

Suitable for:

Train/Bus Stations

Cinemas

Opera Houses

Museums

Stadiums

The picture is from St. Pancras Int. Train Station before deploying the Smart Wi-Fi e-Ticket Booking App which reduced the time-to-book by 61%



The Digital Twin is a global trending technology that aims to create a Digital Identical Replica of any physical product for simulation and behavior prediction and enhancement purposes. Hoopoe Digital creates Next Generation Functional Digital Twins that offer a wide range of Smart Services to Physical Venue Operators and a splendid mixture of Location-Intelligent Instant Wi-Fi Applications to Venue Visitors.

Suitable for:

Shopping Malls

Airports

Stadiums

Hospitals

Museums

Universities

Train Stations

Banks

Hotels



Wi-Fi Data Analytics

Users Data

Device Info

Marketing Performance App-Specific Data

Business Intelligence (BI) Deep Packet Inspection (DPI)

Sessions Info

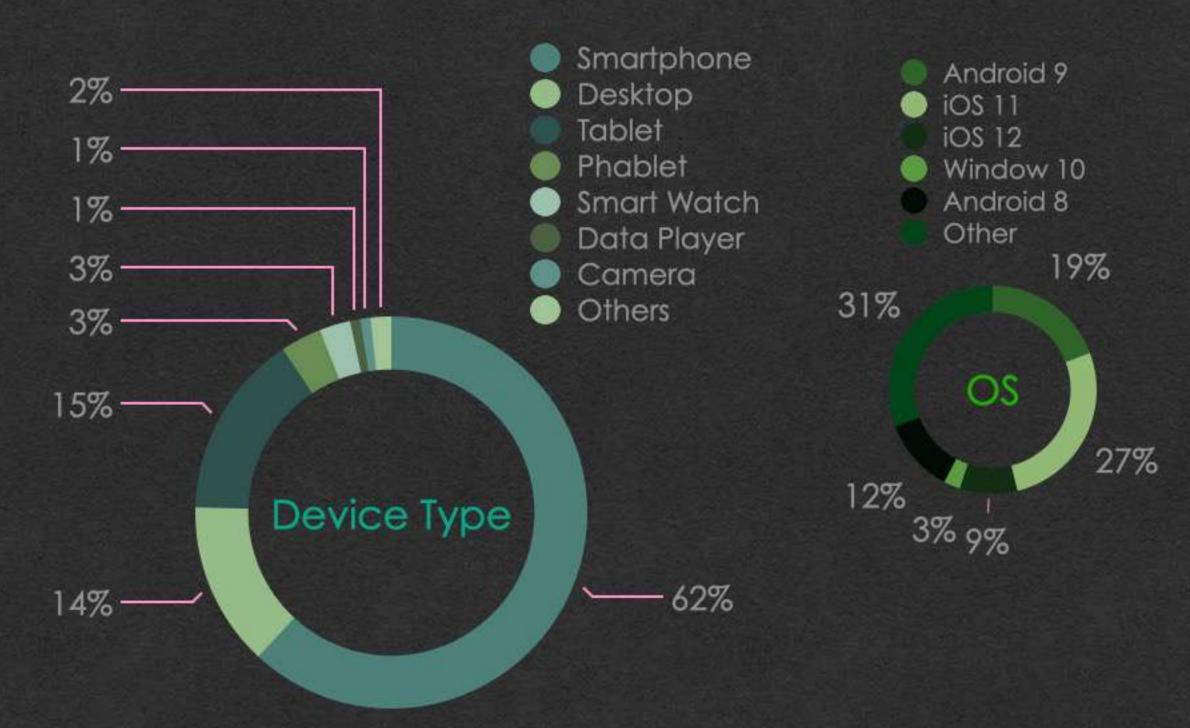
Users Data

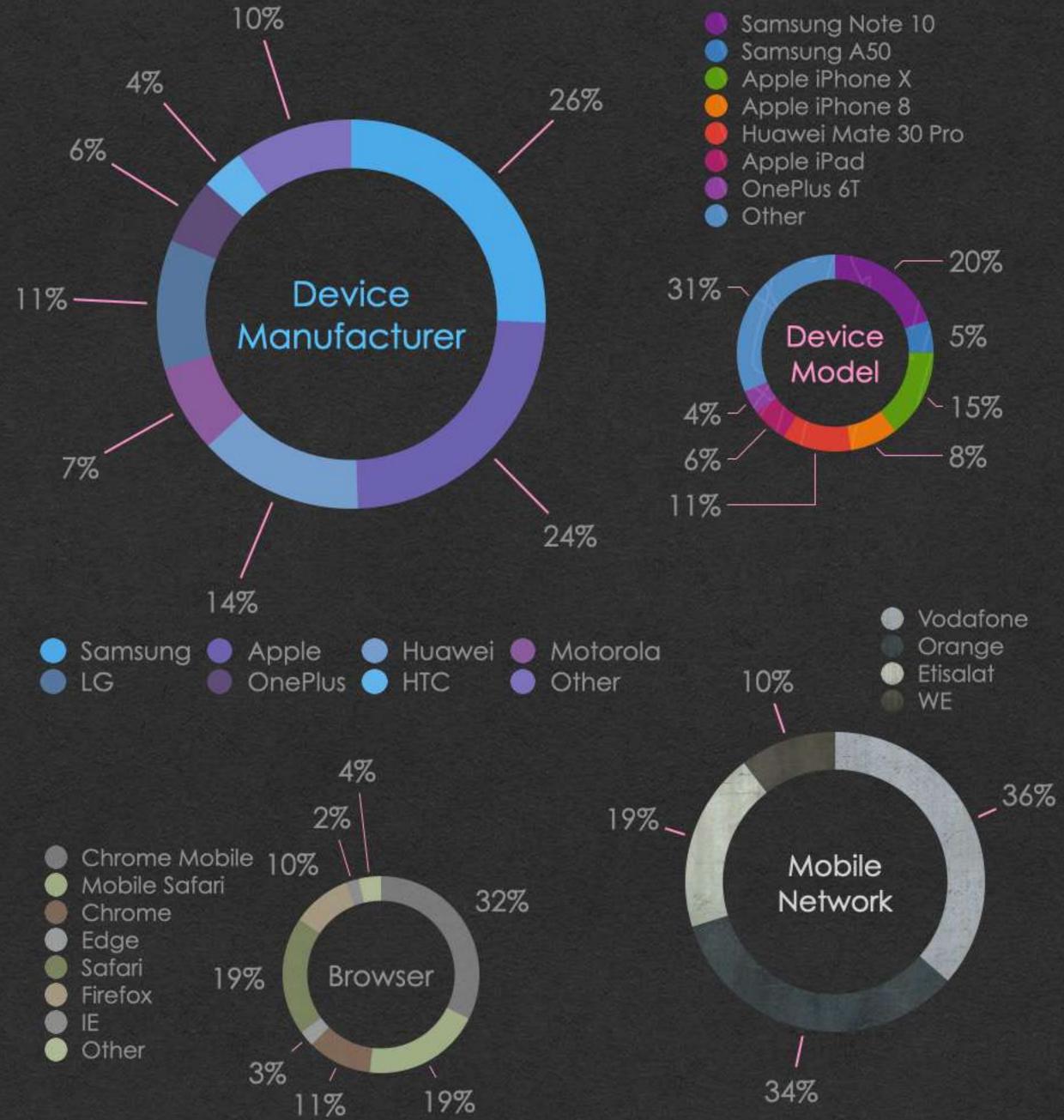
The User Data Hoopoe Digital collects include, but not limited to, User's Name, Gender, Age Group, Language, Nationality, Verified Phone Number, Social Accounts, Number of Owned Devices and more. Hoopoe Digital abides by EG/EU/UK/USA GDPR in collecting all types of User Data including Personally Identified Data/Information.

Full Name	USER ID	Gender	Age Group	Lang/Nationality	Device	Registration Area	Registration Date	Registration Time
احمد فتحي	+201022121415	ď	18 to 28	AR / EG	iPhone 13	Food Court Entrance1	May 10, 2022	20:12:11
احمد سليمان	4	ď	29 to 45	AR / UAE	Samsung Note 10	Mall Concourse 7	May 10, 2022	19:52:30
Samir Abdelwhap	+201066249666	Q	29 to 45	AR / KSA	OnePlus 9	Front of Gate 3	May 10, 2022	19:05:13
Engi Wadie	+201223858307	Q	Less than 18	EN / EG	iPhone 11	Besides Lefties	May 10, 2022	18:45:28
Amany Asim	***************************************	Q	18 to 28	EN / EG	Samsung A50	Inside Penny's	May 10, 2022	18:42:22
Silvia Fernandez	Ē	+0	18 to 28	SPAN / MEXICO	Huawei Mate 30 Pro	CINEMA - Hall 8	May 10, 2022	18:40:03
Ahmed Musallam	+201094589060	Ŏ'	18 to 28	AR / EG	iPhone X	Beside Active Store	May 10, 2022	18:32:05
amr rashed	+201025268857	ď	Less than 18	EN / EG	Oppo Reno 6	Food Court Entrance2	May 10, 2022	18:31:40

Devices Info

Hoopoe Digital acquires varies information about the User's Device, e.g. Device Manufacturer/Brand, Device Type, Device Model, Operating System and its Version, Browser and its Version, Device MAC Address and more.





Sessions Info

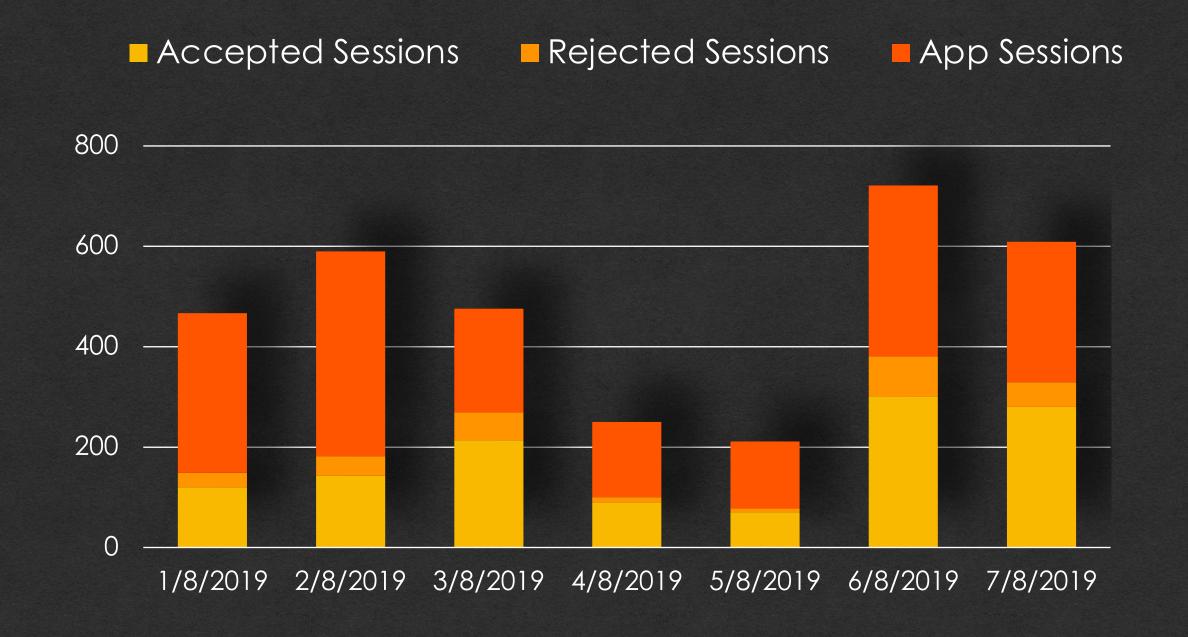
Sessions Info contains information about the Accepted/Rejected Sessions, Number of Sessions (daily, weekly, monthly, customer), Average Session Duration (daily, weekly, monthly, customer), Quota Consumption, Application Access Time and more.

Accepted / Rejected

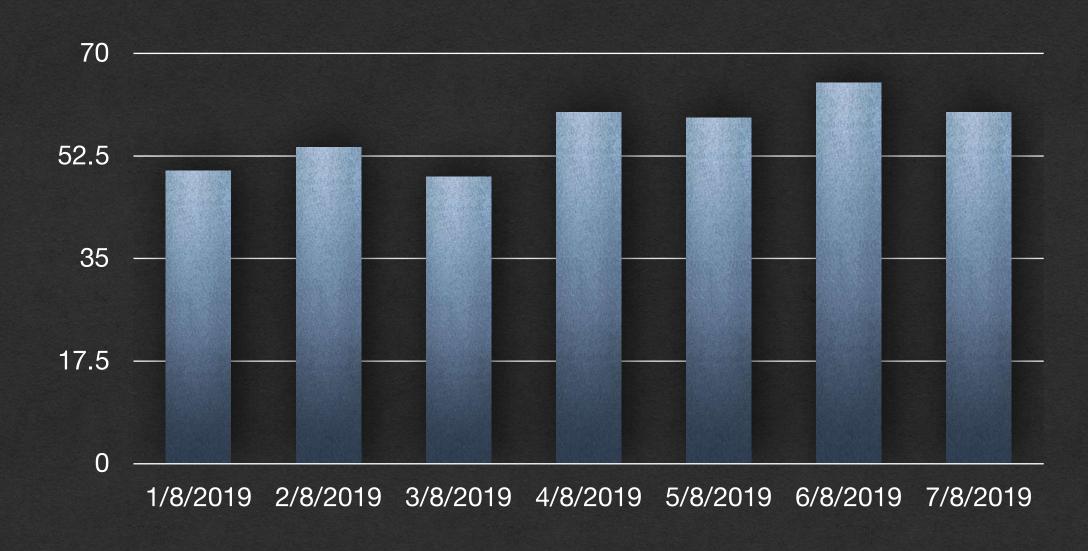
721 / 35

Download / Upload

51_{GB} / 9_{GB}

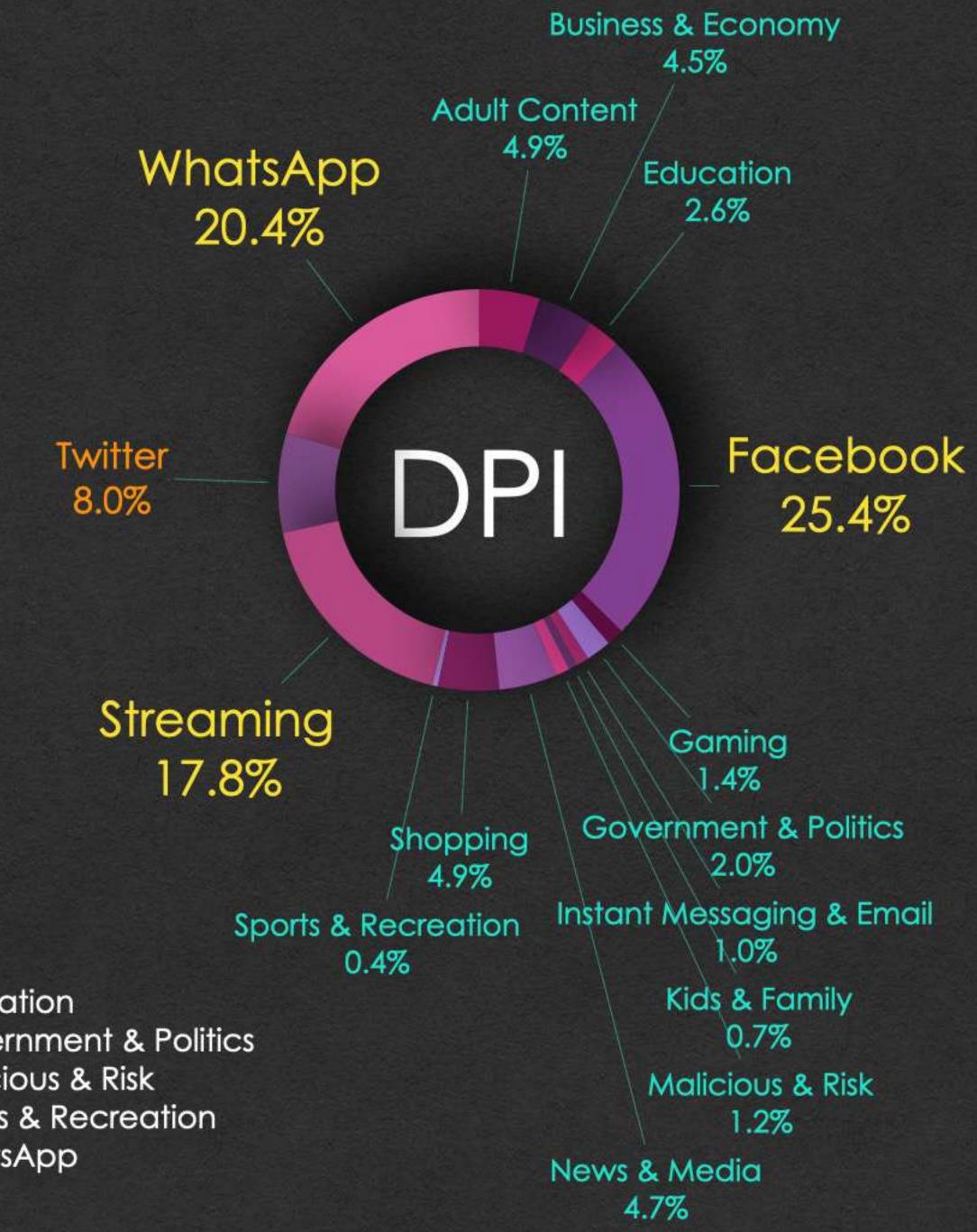


Average Session Duration (min)



Deep Packet Inspection

Hoopoe Digital analyzes the online traffic of the authenticated Wi-Fi users, as part of analyzing their dynamic behavior, using Deep Packet Inspection (DPI) technology. DPI tells what applications, services, protocols users use while online. The DPI dashboard reports individual users traffic analysis as well as the overall Wi-Fi traffic analysis.



- **Adult Content**
- Facebook
- Instant Messaging & Email
- News & Media
- Streaming

- **Business & Economy**
- Gaming
- Kids & Family
- Shopping
- Twitter

- Education
- Government & Politics
- Malicious & Risk
- Sports & Recreation
- WhatsApp

Business Intelligence

Business intelligence (BI) transforms data into actionable insights that supports business owners in decision making.

Wi-Fi BI accesses and analyzes data sets and presents analytical findings in dashboards, graphs, charts, reports, summaries and maps to provide customers with detailed intelligence about the state of their businesses.

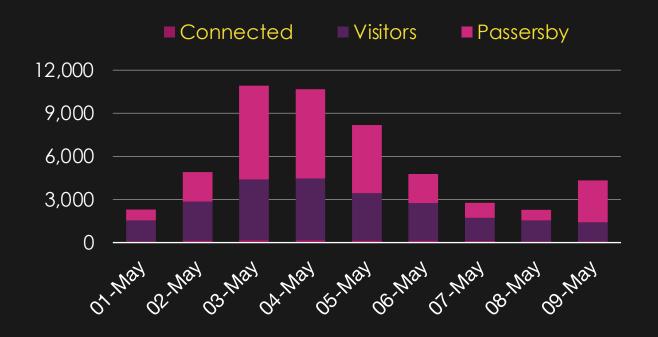


Hoopoe Bl Dashboard

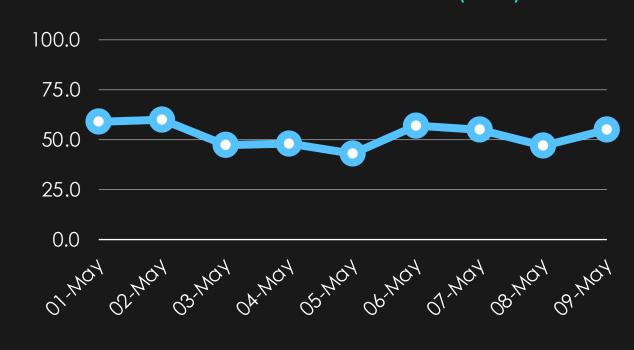
Hoopoe Digital's BI Dashboard contains, but not limited to, the following modules:

- Associated/Unassociated Users.
- Connected (Authenticated/Unauthenticated)
 Users.
- Visitors vs. Passersby.
- Capture Rate.
- Visitors Groups based on Dwell Time.
- Median Visit Duration.
- Visitors Loyalty.
- Repeat Visitor Rate.

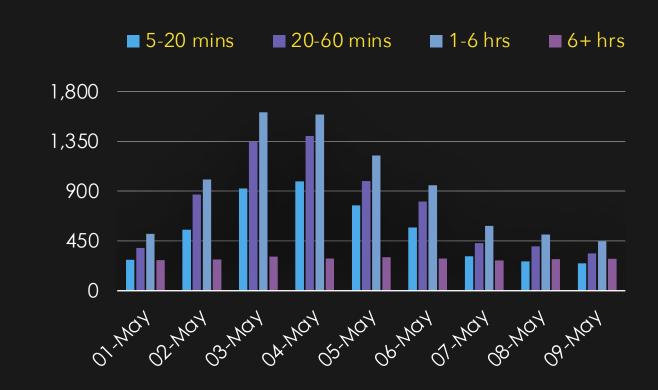
Associated/Unassociated Users



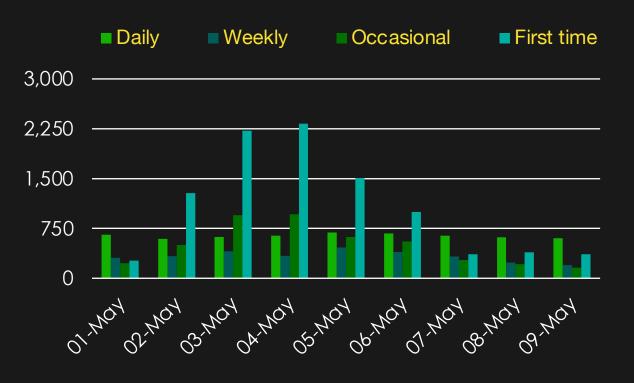
Median Visit Duration (min)



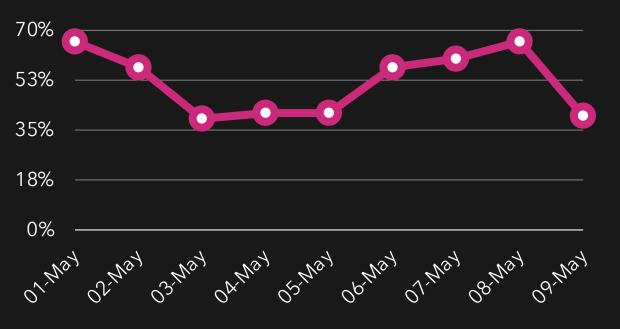
Visitor Groups by Dwell Time



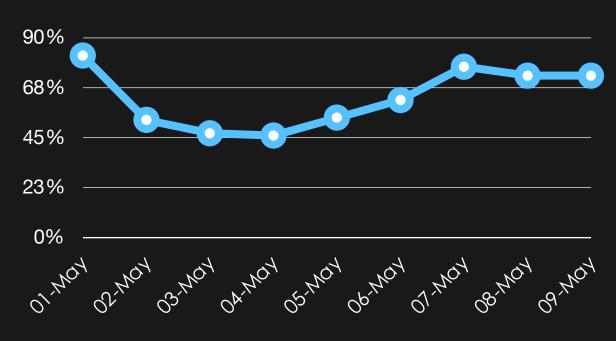
Visitors' Loyalty



Capture Rate (%)



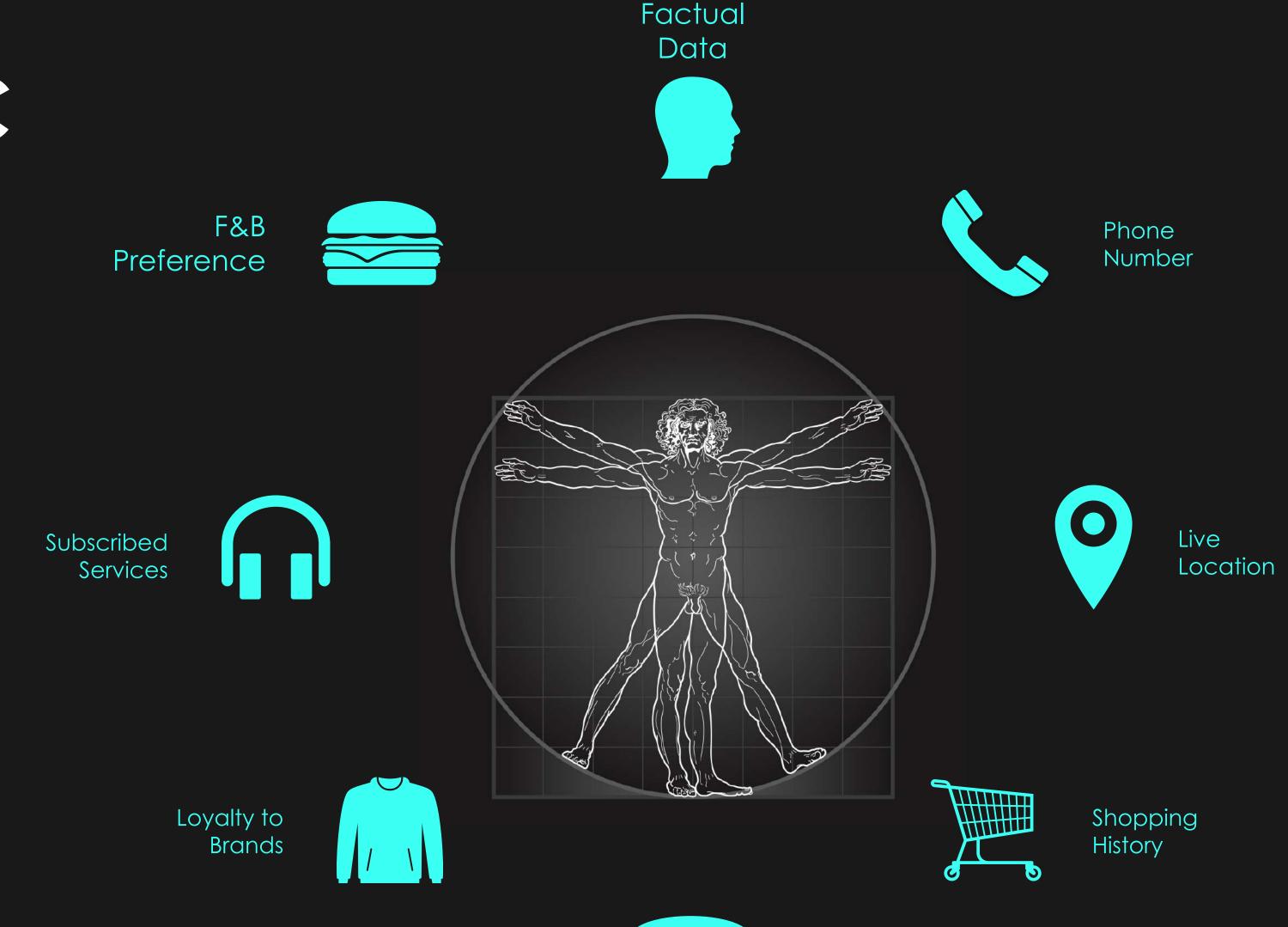
Repeat Visitor Rate



App-Specific Data

Each Wi-Fi Instant Application collects app-specific data, e.g. Wi-Fi Smart Digital Menu collects data about user's orders and F&B preferences, HEPlex and JukeBox collects data about user's movies and music preferences, Wi-Fi Smart Navigator and Wi-Fi Indoor Tracking & Positioning Service collect user locations and so on.

Building a wide-spectrum profile for the users maximizes marketing performance and boosts sales efficiency.





Marketing Performance

For customers running Wi-Fi Marketing Campaigns, Hoopoe Digital offers:

- Live analytics of the campaign performance, e.g. Number of Ad Views, Number of Clicks, Click-Through-Ratio (CTR), Average View Duration, etc.
- Visualization of data acquired via Meta Pixel or Google Analytics.

Views 1,854K

CTR 73.2%

SKIP AD AFTER

6s

AV. VIEW DURATION

14.13s

GMV

\$8,468

POS Partners













Technology Partners

























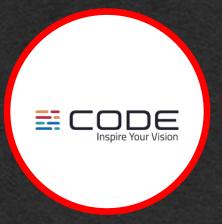
Media & Sales Partners













Clients

amazon ooredoo' W HUAWEI SOT















































