



You can learn all about our special offers on <http://www.cibeg.com/English/Personal/Cards/Pages/Special-Offers.aspx> or a about a specific offer to get details about it

شراكة مع مصر للطيران من خلال
ة ائتمانية تمنح حاملها أميال طيران مع كل استخدام لها في عمليات الشراء سواء داخل
ر أو خارجها، وتنقسم فئات بطاقات "Mileseverywhere" CIB-EGYPTAIR إلى ثلاثة فئات
هي:
لاتيني والتتانيوم والستاندر وتختلف المزايا الممنوحة بحسب كل فئة

يحصل مستخدمي البطاقة البلايني على سبيل المثال وليس الحصر على:
5 □ آلاف ميل هدية بعد اول عملية شرائية
□ ميل واحد مقابل كل 10 جنيهات يتم إنفاقها بالبطاقة
□ إمكانية التمتع بحقيبة إضافية مجاناً عند السفر على خطوط مصر للطيران
□ وكذلك أولوية إنهاء اجراءات السفر على خطوط مصر للطيران من خلال مكاتب درجة رجال
الاعمال بغض النظر عن درجة سفرهم

لمعرفة المزيد من المزايا الحصرية المتاحة على بطاقة ائتمان CIB-EGYPTAIR
Mileseverywhere™، برجاء زيارة الرابط التالي:

<http://www.cibeg.com/.../CIB-EGYPTAIR-Mileseverywhere.aspx>

وبالنسبة لتقديم على البطاقة فيتم عن طريق:
• زيارة أقرب فرع لحضرتك
• او الاتصال بمركز خدمة العملاء 19666
• او قدم الآن عن طريق الرابط التالي:

<http://www.cibeg.com/.../CIB-EGYPTAIR-Mileseverywhere.aspx>

CIB General working hours are from From: 8:30am to 3:00pm from Sunday to
Thursday

For more information please visit

<http://www.cibeg.com/English/Pages/branchesandatms.aspx> for more details

| type a message...

GOALS

- REDUCE COSTS.
- ENHANCE EXPERIENCE.
- GAIN INSIGHT.

Hoopoe Journey

1 Ideation
Build an MVP for a chat bot.

3 Integrate Hyve's Engine
Integrate our Ai Engine to do Intent Analysis.

4 Management Portal
Build the portal to manage Hoopoe components.

5 Build Banking Engine
Train the Engine to be banking aware.

6 Develop Conv. Studio
Build a development studio component to enable easy integration.

12 Launch PA Features
Hoopoe can now remind, inform and advise users.

13 Hoopoe is SIRI for personal banking.

2 Arabic Dictionary
Create a rule based engine to understand common Arabic phrases.

11 Launch Statement Analysis

14 Research new Languages and markets.

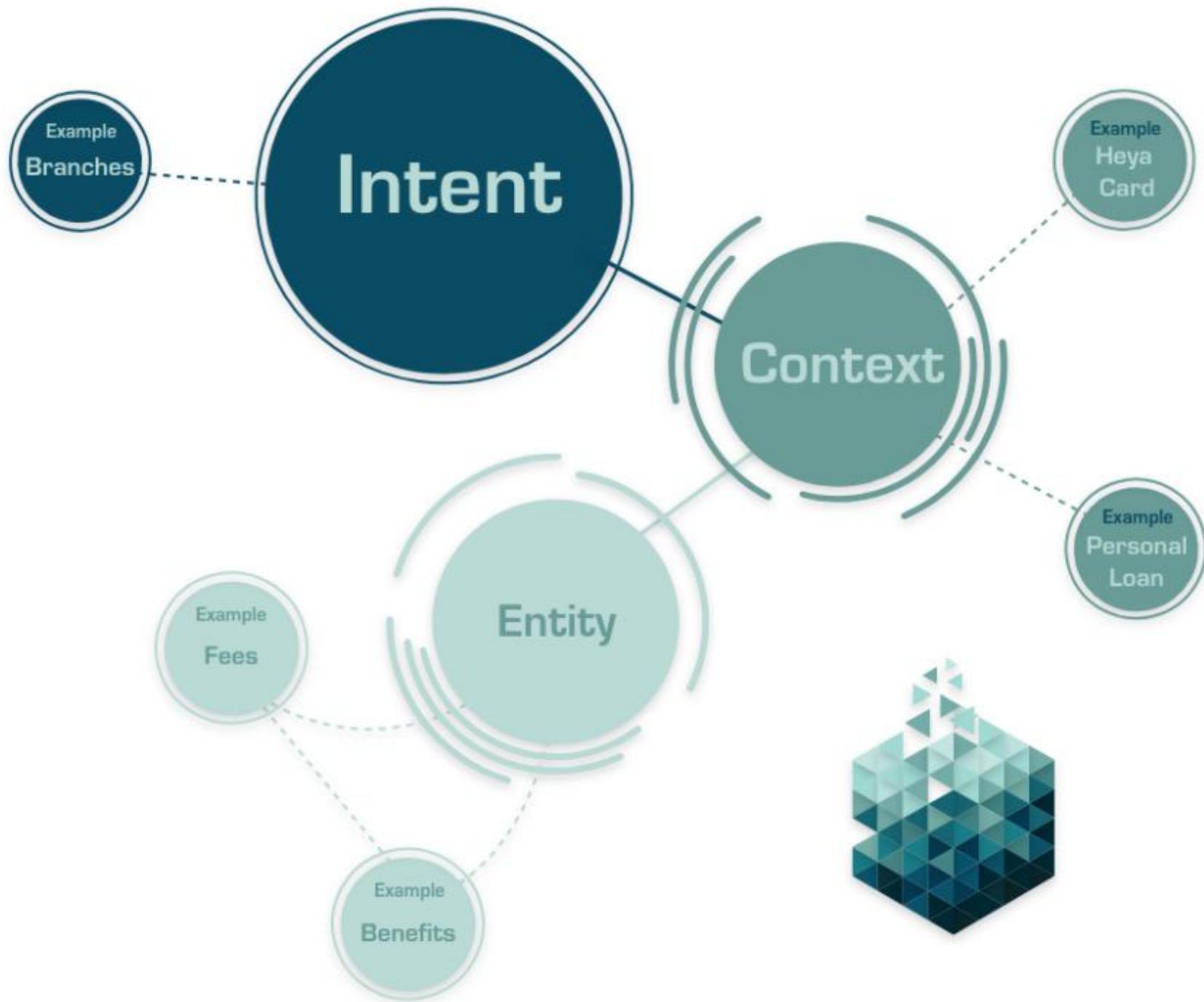
7 Revamp Ai Engine to Use Deep learning

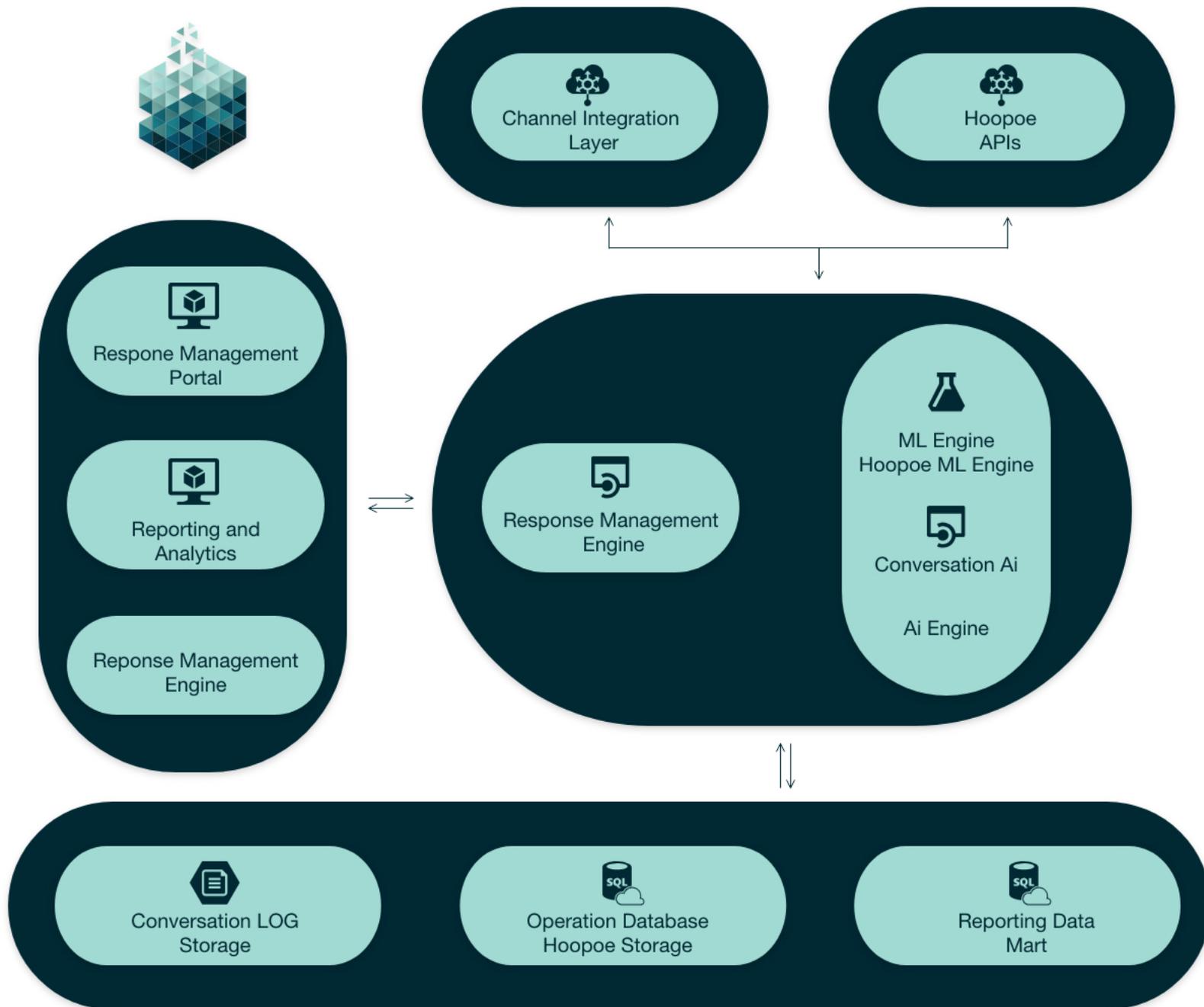
WE ARE HERE!

10 Launch Hoopoe Voice
Launch complete Arabic and English speech to text engine.

8 Make Hoopoe Voice Enabled
Create speech to text MVP

9 Launch Hoopoe for Public
Launch a B2C version of hoopoe to target Customers directly.







COGNITIVE/ARTIFICIAL INTELLIGENCE MODULE

Hoopoe's AI Module adds a new layer of data enrichment using propriety components developed by Hyve on top of Azure AI. The AI module uses advanced machine learning techniques to enrich the data and add new layers of information that enables the bot to understand the conversations related to personal banking In English, Arabic, Egyptian Dialect, and Franco Arab.

1 SENTIMENT ANALYSIS

The first layer of data enrichment is AI based sentiment analysis. Through several training cycles and continuously improving algorithms Hoopoe provides sentiment information for customer messages. Hoopoe supports several languages such as Arabic, English and Franco Arab. The bot can automatically flag offensive messages and even execute a predefined action based on it, like warn the user, end the conversation, or transfer the chat to a live chat system.

2 ENTITY EXTRACTION

Hoopoe AI provides an entity recognition engine that allows the system to detect and tag all posts containing important entities. As an added layer of enrichment. Entities are important to understand the conversation. The admin doesn't need to define the exact entities in the system, just to add some examples and the AI engine will predict most the other forms of the entity which will dramatically increase the bot vocabulary and accuracy in detecting entities.

3 INTENT ANALYSIS

The Intent Analysis is based on a deep learning model to insure 85% accuracy level of Intent classification. The intent analysis component supports Arabic, English, Arabic Dialects and Franco Arab. The AI Engine already trained on personal banking intents using hundreds of thousands of banking questions.

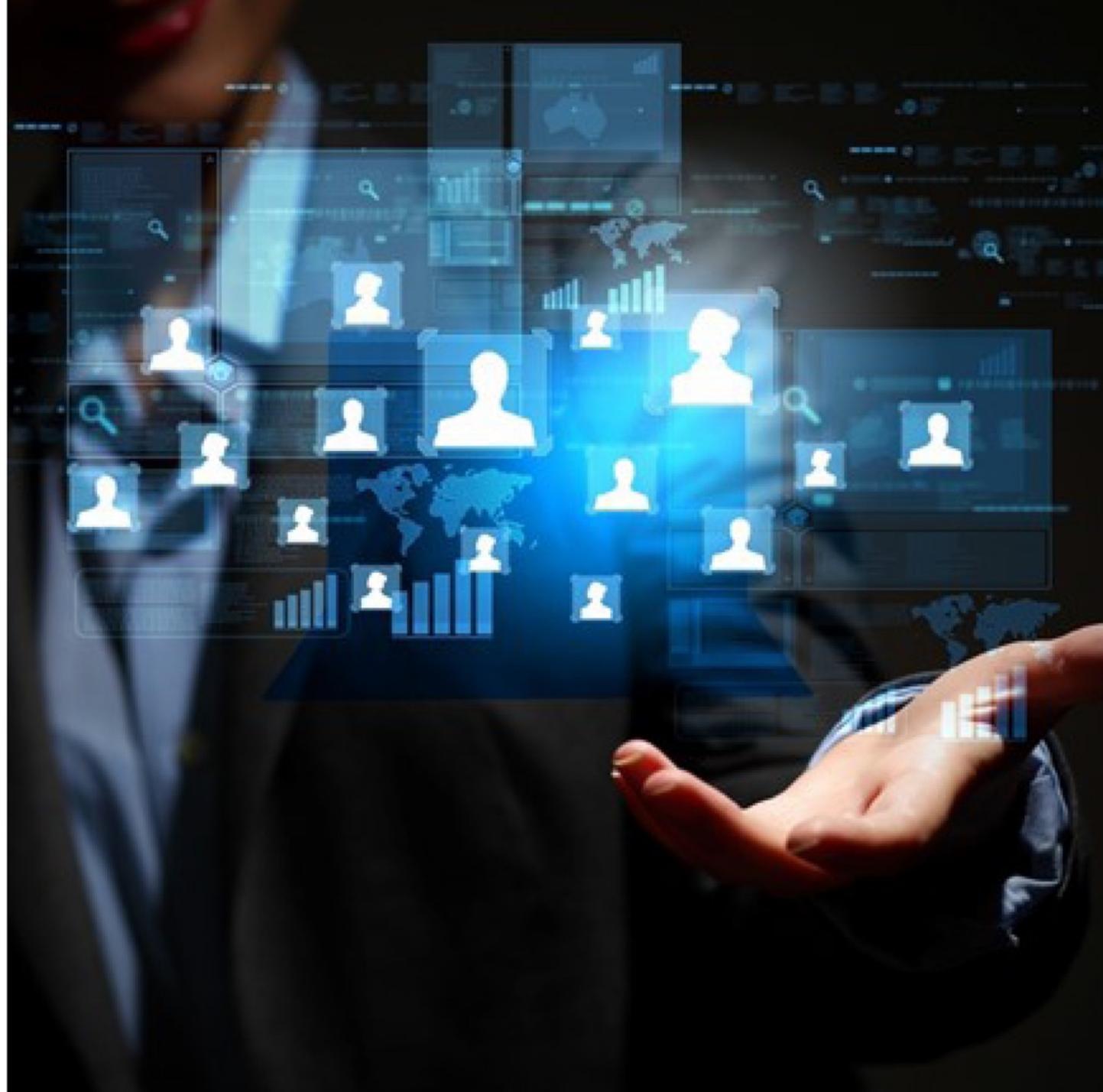
MULTI-CHANNEL SUPPORT

1 PORTAL

2 FB MESSENGER

3 SKYPE

4 MOBILE APPLICATION





PORTAL FEATURES

- INTENTS MANAGEMENT
- CONTEXT MANAGEMENT
- ENTITIES MANAGEMENT
- RESPONSE MANAGEMENT
- CONVERSATION STUDIO
- CONVERSATION LOGS

INTENTS MANAGEMENT

The main goal for this product, in order to provide a human-like experience, is to understand the intent of the customer and reply with the suitable response. In other words, the chat bot needs to comprehend the main motive that drove the user to initiate the conversation with the chat bot. for example (Intent to buy, intent to activate, intent to complain, intent to cancel). The system uses Deep Learning to understand the customer intents.

The intent management module is responsible for anything that is related to the intent. Using this module, you will be able to enable and disable predefined intents, add new custom intents or delete custom intents.

The screenshot displays the 'INTENTS' management interface. At the top, there are navigation tabs: INTENT (selected), ENTITY, RESPONSE, CONTEXT, CONVERSATION STUDIO, and CONVERSATION LOG. The main content area is titled 'INTENTS' and includes a '+ CREATE NEW' button. Below is a table with the following data:

INTENT	ARABIC INTENT	NUMBER OF RESPONSES	ACTIVE	ACTIONS
Branches	ما يتعلق بالفروع	3	<input checked="" type="checkbox"/>	
Working Hours	مواعيد العمل	1	<input checked="" type="checkbox"/>	
Service Details	تفاصيل الخدمات	26	<input checked="" type="checkbox"/>	
customer service	خدمة العملاء	1	<input type="checkbox"/>	
Default Response (Unrecognized Message)	رد تلقائي (رسالة غير معروفة)	1	<input checked="" type="checkbox"/>	
currencies rate	سعر العملة	1	<input checked="" type="checkbox"/>	
greeting	التحية	1	<input checked="" type="checkbox"/>	
good bye	انهاء المحادثة	1	<input checked="" type="checkbox"/>	

At the bottom of the table, there is a pagination control showing '1' of 10 items. The footer of the interface reads 'Hoopoe Standard v5.2.0.0 [20180916]'.

HOPOE English DEFAULT ADMIN

INTENT ENTITY RESPONSE **CONTEXT** CONVERSATION STUDIO CONVERSATION LOG

CONTEXTS + CREATE NEW

TITLE	ARABIC TITLE	KEYWORD	DATE	ACTIONS
Search	Search	Search	Search	
Hya Card	كارت هي	كارت هي, هي كارت,hya card,card hya	September 2, 2018	
current account	الحساب الجارى	حساب جارى,الحساب الجارى,current account	September 4, 2018	
saving account	حساب التوفير	حساب, saving account,التوفير,التوفير,saving	September 2, 2018	
smart saving account	حساب سمارت توفير	حساب سمارت توفير,smart save	August 16, 2018	
save and safe account	حساب توفير وحماية	حساب توفير وحماية,save and safe,save and safe account,توفير وحماية,	September 2, 2018	
Certificates of Deposit in EGP	شهادة الادخار للأفراد بالجنيه	شهادة الادخار للأفراد بالجنيه,Certificates of Deposit in EGP	September 9, 2018	
Certificates of Deposit in Foreign Currencies	شهادة ادخار بالعملة الأجنبية	Certificates of Deposit in Foreign Currencies,شهادة ادخار بالعملة الأجنبية,	September 9, 2018	
CIB Plus	بلس CIB	بلس,CIB Plus,plus	September 9, 2018	
personal loan	قرض شخصى	قرض شخصى,قرض شخصى,فرض شخصى,فرض شخصى,فرض شخصى,فرض شخصى	September 6, 2018	
accounts types	انواع الحسابات	انواع,accounts types,الحسابات,accounts	September 10, 2018	

CONTEXT MANAGEMENT

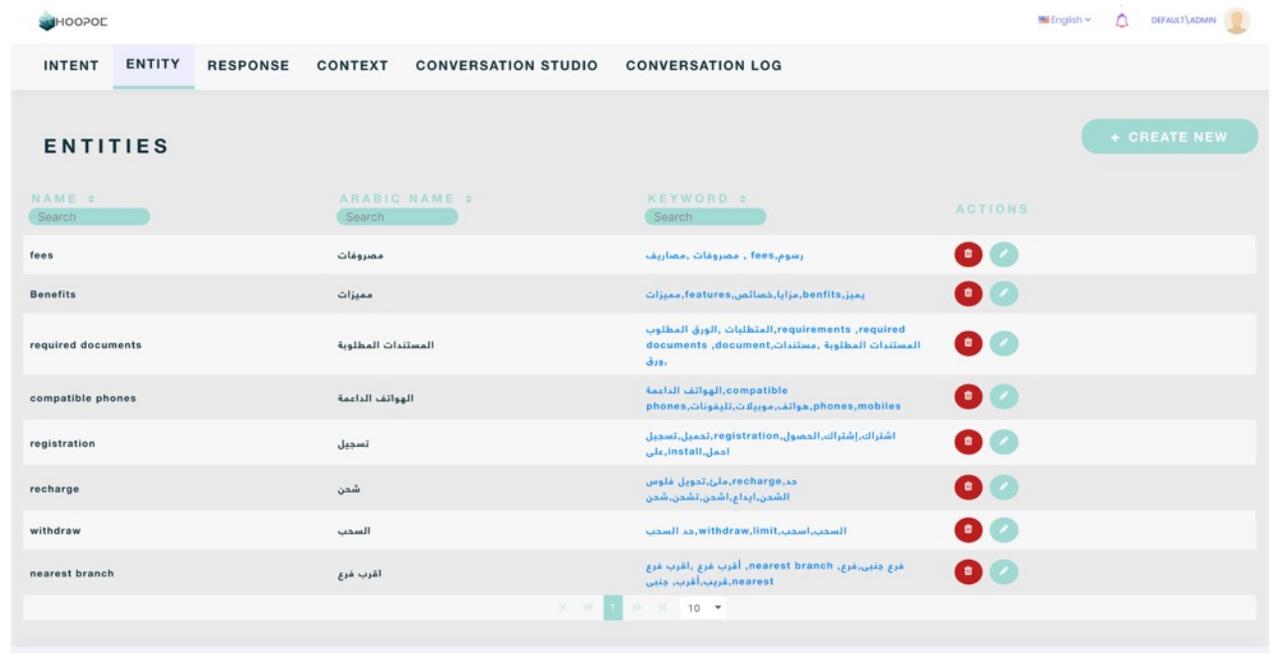
The context is the second step in understanding the customer input and the main step that the bot needs to engage in a meaningful conversation with the customer. Without determining the correct conversation context, the bot will not be able to link the intent and entity to the right response. The bot depends on deep learning to recognize the conversation context.

In Context management module, you will be able to add, delete, or update context.

ENTITIES MANAGEMENT

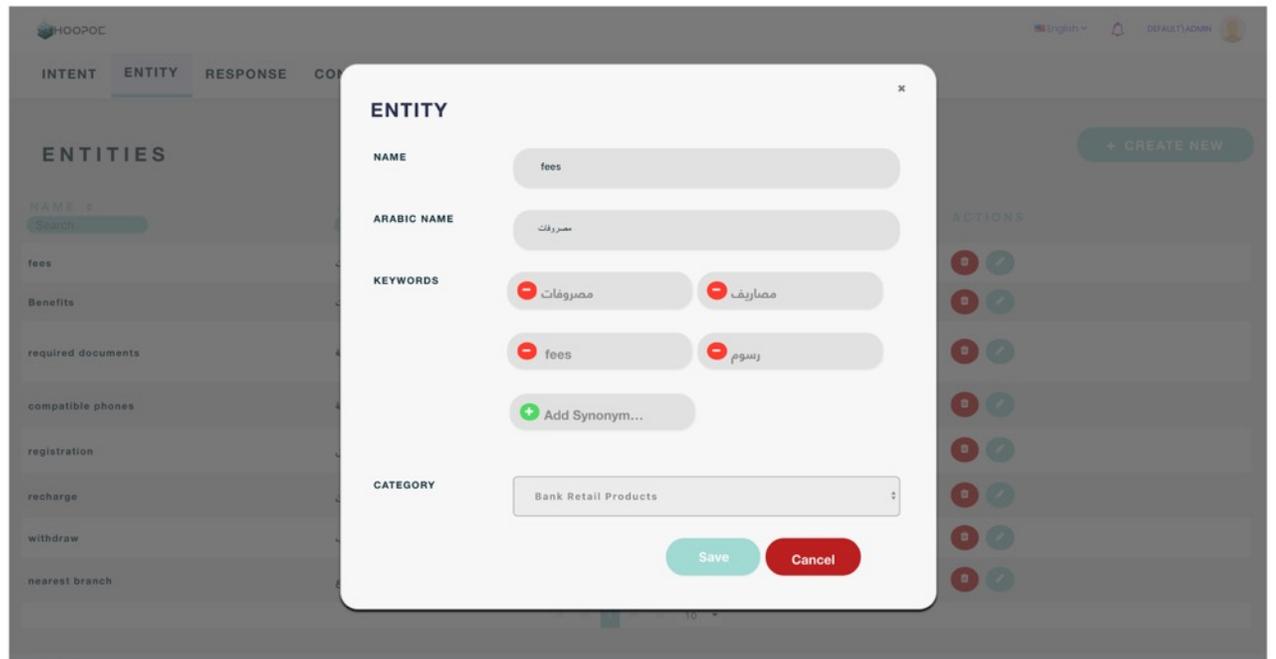
The entities detection is the third step the bot needs to be able to understand the conversation. As mentioned in the previous section the chatbot can understand the customer intent using intent analysis and the conversation context using context awareness and the entities detection component is responsible for defining the attributes attached to the detected intent under a specific context.

The Entities Management Module is responsible for Adding, deleting, and updating predefined entities.



The screenshot shows the HOOPOE Entities Management interface. At the top, there are navigation tabs: INTENT, ENTITY (selected), RESPONSE, CONTEX, CONVERSATION STUDIO, and CONVERSATION LOG. A '+ CREATE NEW' button is in the top right. Below the tabs is a table with the following columns: NAME, ARABIC NAME, KEYWORD, and ACTIONS. The table contains the following data:

NAME	ARABIC NAME	KEYWORD	ACTIONS
fees	مصرفات	رسوم,fees, مصروفات, مصاريف	[Delete] [Edit]
Benefits	مميزات	مميزات,features, خصائص,مزايا,benefits,مميز	[Delete] [Edit]
required documents	المستندات المطلوبة	الوثق المطلوب ,requirements ,required documents ,document,مستندات المطلوبة ,مستندات, وثق	[Delete] [Edit]
compatible phones	الهواتف الداعمة	الهواتف الداعمة,compatible phones,موبايلات,تليفونات,هواتف,phones,mobiles	[Delete] [Edit]
registration	تسجيل	اشتراك,إشتراك,الحصول,تحميل,تسجيل,احمل,install,على	[Delete] [Edit]
recharge	شحن	دد,recharge,ملئ,تحويل فأس,الشحن,إيداع,الشحن,ت شحن	[Delete] [Edit]
withdraw	السحب	السحب,اسحب,limit,withdraw,حد السحب	[Delete] [Edit]
nearest branch	اقرب فرع	اقرب فرع ,nearest branch ,فرع ختبي,فرع ,اقرب فرع ختبي,اقرب, اقرب,nearest	[Delete] [Edit]



The screenshot shows the HOOPOE Entities Management interface with the 'ENTITY' modal form open. The form has the following fields:

- NAME: fees
- ARABIC NAME: مصرفات
- KEYWORDS: مصروفات, مصاريف, fees, رسوم
- Category: Bank Retail Products

Buttons for 'Save' and 'Cancel' are at the bottom of the modal.

HOOPOE English | DEFAULT/ADMIN

INTENT ENTITY **RESPONSE** CONTEXT CONVERSATION STUDIO CONVERSATION LOG

RESPONSE LIST + CREATE NEW

TITLE	QUESTION	ENTITY	CONTEXT	ACTIVE	ACTIONS
Search..	Search..	Search..	Search..		
المستندات المطلوبة للقرض	Service Details	required documents	personal loan	<input checked="" type="checkbox"/>	
المزايا التي يمنحها القرض	Service Details	Benefits	personal loan	<input checked="" type="checkbox"/>	
المستندات المطلوبة لفتح حساب جاري	Service Details	required documents	current account	<input checked="" type="checkbox"/>	
مصاريف الحساب	Service Details	fees	saving account	<input checked="" type="checkbox"/>	
مزايا حساب التوفير	Service Details	Benefits	saving account	<input checked="" type="checkbox"/>	
المستندات المطلوبة لحساب التوفير	Service Details	required documents	saving account	<input checked="" type="checkbox"/>	
رد أنواع الحسابات	Service Details		accounts types	<input checked="" type="checkbox"/>	
من فضلك حدد موقعك	Branches		branches	<input type="checkbox"/>	
الحصول على المحفظة الذكية	Service Details	registration	smart wallet	<input checked="" type="checkbox"/>	

RESPONSE MANAGEMENT

After understanding the conversation, the bot retrieves the suitable reply from the responses' repository. The response management module is the single place to manage all bot responses, you can add, update, and delete responses. You can attach a response to an entity, intent, and context. You can also define default responses when the bot can't find an answer to the question, wants to ask for more information, or wants to confirm a certain response is correct.

HOOPOE English | DEFAULT/ADMIN

INTENT ENTITY **RESPONSE** CONTEXT CONVERSATION STUDIO CONVERSATION LOG

RESPONSE LIST + CREATE NEW

ADD RESPONSE x

CONTEXT:

INTENT:

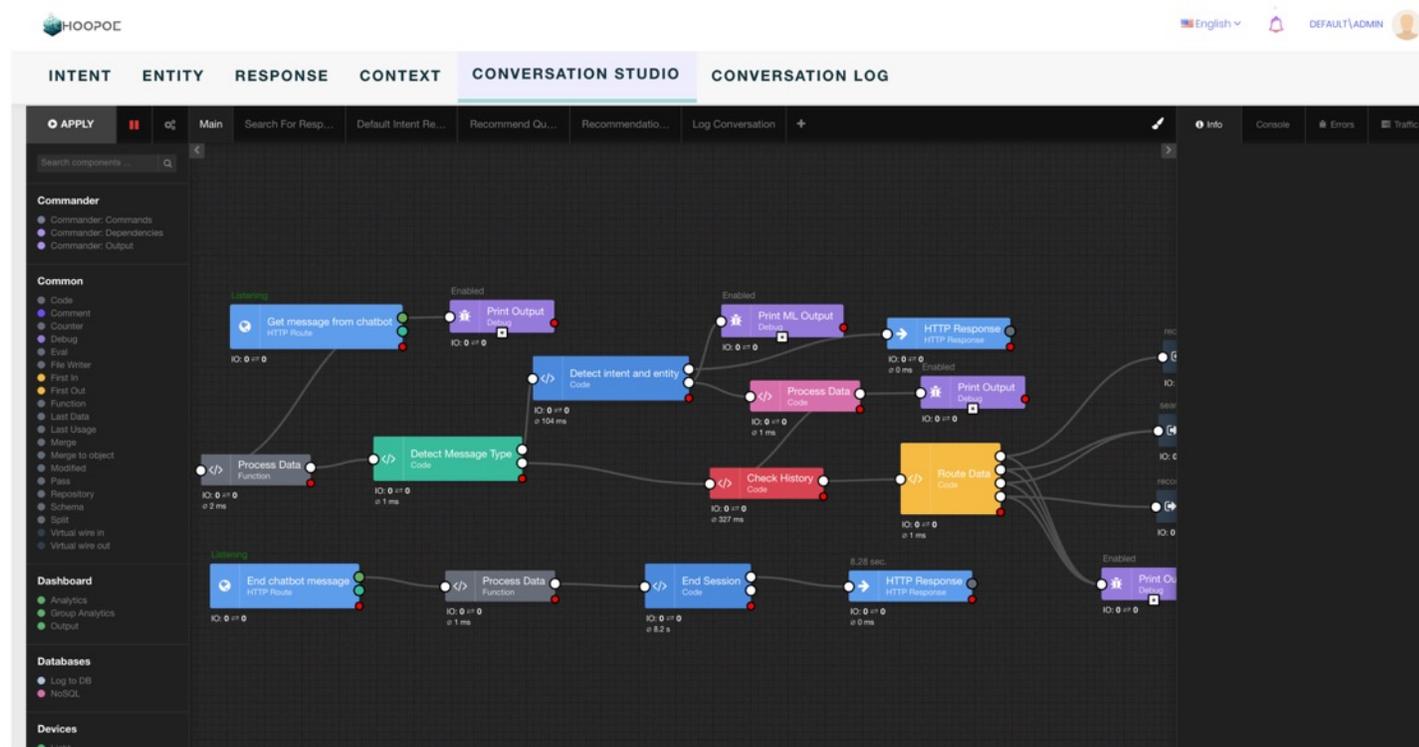
ENTITY:

RESPONSE TITLE:

RESPONSE:

CONVERSATION STUDIO

The most critical part about a good conversation is the conversation flow. We designed the conversation flow using the best practices in Conversational UX. Yet due to the dynamic nature of the conversation flow, and because our main goal is the contentious improvement of the customer experience, we developed the conversation studio to be a state of the art platform that will enable the technical team to update the flow of the conversation, retrieve data from external sources to enrich the conversation (share price, currency, offers and promotions, seasonal greetings), or trigger events in external systems. All the previous and more you can do with just a couple of mouse clicks and few lines of JavaScript.



HOPOE English DEFAULT ADMIN

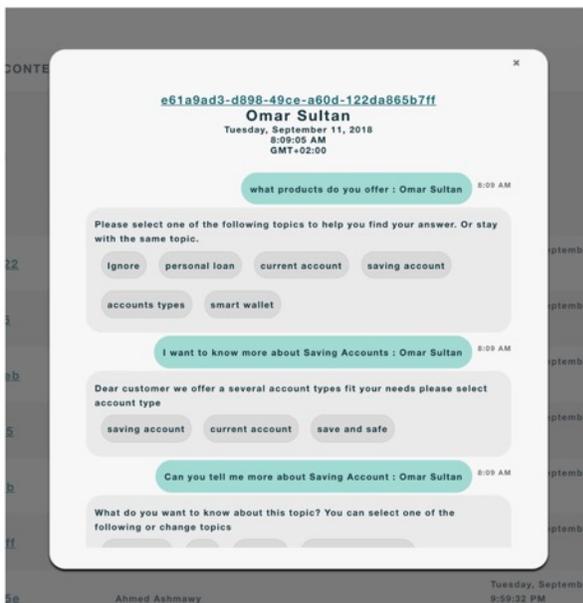
INTENT ENTITY RESPONSE CONTEXT CONVERSATION STUDIO **CONVERSATION LOG**

CONVERSATION LOG

CONVERSATION NUMBER	FULL NAME	TIME
c2fb5cf6-638d-4f86-824e-e54aa6465945	Omar Sultan	Monday, September 10, 2018 5:10:26 PM GMT+02:00
72b05d71-117e-4e21-997e-b81988da8b7e	Omar Sultan	Monday, September 10, 2018 5:18:36 PM GMT+02:00
e8004d2b-051b-4af5-ab7b-4cd77a26f04c	Omar Sultan	Monday, September 10, 2018 5:31:28 PM GMT+02:00
7d64b60a-6f30-43cd-96c3-f97401d80720	Omar Sultan	Monday, September 10, 2018 5:41:22 PM GMT+02:00
a93c6509-01e7-4989-8bd8-60be4102d3b3	Omar Sultan	Monday, September 10, 2018 5:47:30 PM GMT+02:00
645fffdb-1e32-4aee-8ee5-9c3110319ec7	شيماء محمد	Monday, September 10, 2018 6:25:51 PM GMT+02:00
a699e0bd-1dda-4543-80fd-03899f9b4adf	Hoopoe Demo	Monday, September 10, 2018 6:46:56 PM -----

CONVERSATION LOGS

With conversation logs, you will be able to retrieve any conversation with a customer. You will be able to view the conversation details and flow. You can review how accurate was the bot in detecting intents and different entities, and you will be able to correct them if needed. The bot will automatically retrain itself based on your feedback to make sure that the AI model will do the classification right the next time.



DASHBOARDS

On dashboard you can have a bird eye view of the conversations that is happening in a certain period, the most common intents, the bot confidence, the traffic vs different periods of the day, and much much more. You can request specific dashboards or charts in the analysis phase to be added to the current OOB dashboards, and you can add design your own dashboards using single click and basic understanding of the data model leveraging the beautiful features of Microsoft Power BI.



ENVIRONMENT SECURITY

- Cloud environment is completely isolated, no machines are exposed to the internet or have public IPs (Channel Communication is an exception)
- All inter communication between layers is done through HTTPs and through the use of API Keys
- Site to Site VPN can be provided for communication between Bank and Cloud Environments
- Two Factor Authentication is enabled for System Admins accessing the Response Management Portal





PORTAL SECURITY FEATURES

- Based on ASP.NET Identity Framework
- User & role management pages
- Hierarchical organization units system to group users and entities
- User login, register, password-reset and email validation pages
- User, role and permission based flexible authorization
- User and Tenant impersonation
- User account linking
- Two Factor Authentication (Email, SMS, Google Authenticator)
- User Lockout
- LDAP/Active Directory login support
- Active Directory Federation Service (ADFS) Authentication
- Social media logins (Facebook, Twitter, Google+ and Microsoft Account implemented)
- OpenId Connect Authentication
- Log and show all login attempts for users
- Password complexity settings
- Automatic Cross-Site Request Forgery (CSRF) protection



**THANK
YOU**
