

Advertisement on Stand-alone Voice Assistants

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1. Introduction

1.1 Executive Summary

This report was commissioned to examine advertisement-related revenue opportunities linked to the raise of AI-powered voice assistants such as Amazon's Alexa and Google Assistant.

The research first draws attention to the potential of this technology, currently at the peak of inflated expectations according to the 2018 Gartner Hype Cycle, its current adoption rate and its forecasted market growth with regards to the field of advertisement, expected to reach nearly \$19 billion globally by 2022.

With our goal being to find out how an advertisement company, specifically COMUNICA+A, could use the technology to extend its offer and provide additional value for its customers, we assessed the potential and feasibility of VA-based advertisement by looking at already available solutions, like Siri's suggestion to use Uber when guessing the user needs a lift, and active collaborations, like Telefónica's partnership with Google or Orange France's one with Amazon, aimed at integrating third party voice assistants.

We found that, in order to profit from VAs, companies will have to find a way to stay exposed and visible in order to push people to try and use their platform or services through voice assistants. Thanks to its specialization in advertisement, Comunica+A can enhance its customers' visibility, making sure that the information necessary for the assistant to work are available online and supporting the process of teaching people how to use said functionalities through their advertisement network spread over other media channels. On top of that, Comunica+A could integrate the development, done in-house or outsourced to a third-party company, of personalized skills or actions (i.e. specific, company-related questions the assistants would be able to answer) in this process. Offering personalized skills would mean both gathering more data form the end-users and also being able to earn based on the popularity of a specific skill through what's called 'In-skill' purchasing.

Offering said services would allow Comunica+A to extend its offer to include voice assistants, setting itself to be the middle player between its customers and the big industry player, being independent from a specific VA brand while, at the same time, staying crucial to the process with their ad-related strategy to boost end-users adoption of the new functionalities offered.



1.2 Acknowledgements

The authors would like to express heartfelt gratitude for the support and valuable time provided by below-listed professionals, coaches and professors.

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2. Challenge identification

2.1 Larger innovation and entrepreneurial context

Al-powered voice assistants are proficiently transforming the world with its smart abilities.

The fact that it can emulate natural voice based human-technology interactions in the most natural way possible, thereby making it a popular choice for technology driven customers. This also stimulates deeper and more personal relationships between people and their technology. At a given time, its response and delivery efficiency is at par and sometimes even faster than human resources.

Due to lack of proper integration with the business systems, speech recognition systems could not sail that far. Also, the fact that they failed to replicate true human voice experiences added to its downfall. The successful evolution of voice applications as 'Voice Assistants' truly attributes to Al and machine learning support.

Currently, the large market players in the field of stand-alone voice assistants are companies like Google and Amazon. Google Home and Amazon Alexa are capturing the major customer segment around the globe. However, it would be unfair to not take into account the other existing market players. For example, the voice assistants provided by big companies like Apple, Microsoft, Accenture, and so on. Also, in Spain, companies like Orange and Telefonica have rolled out their own voice assistants.

The voice application services like Amazon are proposing open source APIs¹, integration solutions and tools to provide the possibility to businesses to develop their customized applications also called "Skills". These Skills would provide better-personalized voice assistants and improve the service (user) experiences as per the business requirements. Voice assistants are been installed for various use cases because of the availability and free access to these Skills. This is the fundamental reason that is leading to the building of strong voice application ecosystem.

¹ https://www.xda-developers.com/saiy-offline-voice-assistant-open-source/



2.2 Entrepreneurial relevance

Building such an ecosystem presents a number of challenges for businesses that want to use it to improve their services. This creates an opportunity for companies to either gain a strategic advantage over the competition, being among the firsts to properly use the new technology capabilities, or to specialize in helping other businesses to include it in their offer.

One of the biggest forecasted revenue opportunities linked to the raise of voice assistants is advertisement and how it needs to be redesigned in order to be feasible and effective. Marketers need to look at ways to collaborate with the main market leaders, integrate their offers in their assistants and use the enormous amount of data that they can harvest from this platform.

Another challenge that communication agencies need to deal with is a potential disruption of the customer journey as conceived thus far: the new technology at the current state is already proving greater potential for those purchases that are repetitive or that require little thoughts, and it may in future evolve in deepen change of the purchasing process.

2.3 Industry (COMUNICA + A) problem description

In the following sections we are going to illustrate how stand-alone voice assistants technology are already helping companies to expand their business in the field of marketing and advertising. The relevance of this technology has to deal with the increase of smart devices connected to the network, as well as the diffusion of assistants on smartphones, cars and domestic environment (stand-alone devices).

As we know, the customers are already using voice assistance, and to capture this revenue, companies must embrace the technology. According to a study published by Accenture in February 2018², an evidence of how impactful the technology is that two out of three consumers who own a stand-alone voice assistant use their smartphone less. Moreover, it was observed from this study that 64% of the user use entertainment services less, 58% do less online purchasing and 56% do fewer general searches.

As discussed earlier, these data can be read in broader context of an increase of devices connected to the network (IoT) that will strengthen the level of automation in our daily life. Favorable conditions enable companies to build devices and softwares that are able to place

 $^{^2\} https://geomarketing.com/accenture-stand-alone-digital-voice-assistants-are-taking-consumers-away-from-smartphones$



this automation under human sight in a rather innovative way but not limited to Voice Assistants.

Therefore, we believe that COMUNICA + A could have an important role in managing the communication of brands that want to be present on these devices with a process that may differ from the traditional advertising but would eventually maintain the need of creativity.



3. Business Research

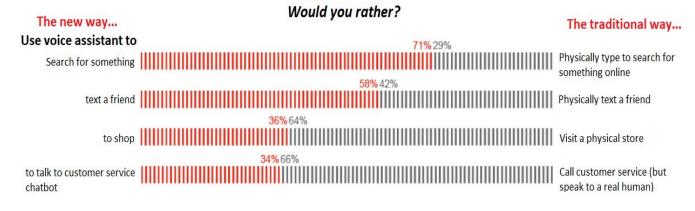
3.1 Trends in Technology

An important study was conducted by PwC³ to determine the trends of this technology. The data used to develop the paper was collected through an online survey conducted by a leading global research firm in February 2018. Is regarded a sample of 1000 Americans aged between 18-64 years. Furthermore, PwC also conducted two focus group sessions in March 2018.

The study summarized three major factors inhibiting voice technology experimentation:

- A limited knowledge of device's capabilities
- A general lack of trust in voice assistants
- Some hesitation due to use complexity and price

Another important piece of the project, conducted a research on the way that users generally utilize voice assistants:



Through the survey it was possible to plot data against three crucial questions about voice technology.

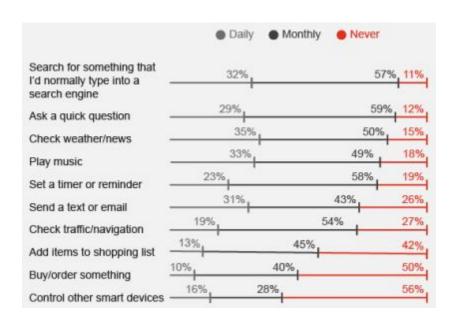
3.1.1 How frequently people use voice to do the following?

The below statistics shows how often people use voice technology i.e. if they use it on daily or monthly basis or if they have never used it for particular actions. There are a list of actions

 $^{^3\} https://www.pwc.com/us/en/advisory-services/publications/consumer-intelligence-series/pwc-voice-assistants.pdf$



against which users of voice technology voted. It can be seen that voice technology has been maximum used to ask quick questions followed by an action to set a timer/reminder, or to search for something online. Around 56% of users have yet not explored this technology to control their other smart devices and to purchase something online. This clearly shows the limited knowledge amongst the voice technology users to utilize its full breadth of capabilities.



3.1.2 What have customers bought by speaking to voice assistant?

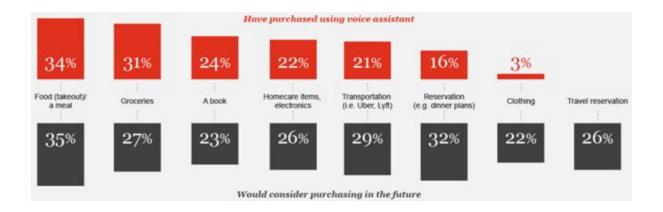
It can be observed that consumers have purchased different categories of items through voice assistant. Where 34% people used it for purchasing take-away meals, 21% and 16% consumers have also used it for booking shared taxi like Uber and reserving dinner tables respectively⁴. Furthermore, 22% users also used voice technology to buy homecare items and electronics.

The interesting point to notice here is that until now the consumers have not explored the usage of voice technology for travel reservation but 26% of them would consider doing so in the future. This clearly shows the market availability for voice technology.

⁴ https://dgit.com/google-home-actions-59678/

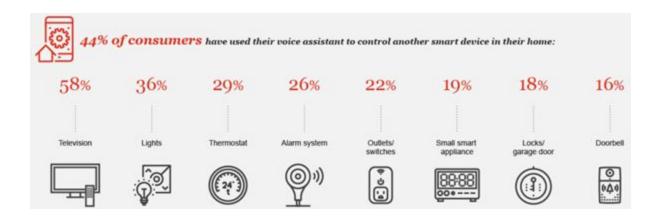


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3.1.3 What type of purchases are influenced by voice assistants?

From the below figure it's evident that voice assistants influence smart home purchases, and vice versa. 89% of the consumers believed that their choices for smart home device or product was influenced by its compatibility with their voice assistant. Moreover, the reverse also stands true. Around 85% consumers said that the type of voice assistant they used/purchased was highly influenced by the smart device they owned.



3.2 Brands' use of tech

A company's website used to be the first place where customers looked for information about them and their products. Now, and for the years to come, the consumer traffic is moving elsewhere as intelligent third-party sources like voice assistants dominate the landscape.

According to a research, in 2018 one out of every five searches performed on a mobile



device is made by voice⁵. But companies' involvement in this technology is not constraint to offer a search platform to their customers; the role and the challenge that they're trying to tackle is more focusing in creating a new interface between the costumer and their products via voice assistants⁶.

Currently, the way brands use voice assistants to interact with their users can be summarized in four macro categories that we will now illustrate.

3.2.1 Educational purposes

Brands are exploiting voice assistants for educational purposes when they want to deliver practical and educational value that can be difficult to convey with straightforward brand advertising. Moët Hennessy USA, the importer and marketer of luxury wines and spirits have created a skill for Amazon's alexa voice assistant called "Bottles and Bubbles" that aims to help customers become champagne connoisseurs. The campaign demonstrate ways in which creative agency can have a role in this new type of technology.

Moreover, brand repositioning is also viable option in voice assistants through education messages. Patron Tequila has recently partnered with Amazon's Alexa to bring its Cocktail Lab recipe library to consumer via voice activation. Additionally, they introduce "Bot-Tender", which consists in an Al-enabled chatbot that suggest cocktail ideas to customers on direct messaging app. Because of this, some analysts concluded that their move is an attempt to reposition the brand away from "served-as-shot" concept, pledging to increase its usage in homes so that the "bot-tender" would suggest recipes and creations based on local trends, insights and personal preference⁸.

3.2.2 Work easing and business process optimization9

An interesting aspect of voice controlled app is their use at work. Remarkable examples come from Liberty, a luxury retailer, that uses voice interfaces to aid with warehouse picking by providing headsets with microphones to their staff. They work with the system to both pick the right products and let the system know what needs to be replaced.

Time saving is also a reality: Forbes have observed a reduction of 85% in time spent for logging police reports by using voice recognition features.

⁹ https://www.forbes.com/sites/theyec/2018/07/09/how-voice-interfaces-speak-to-the-future-of-business/



⁵ https://searchengineland.com/google-reveals-20-percent-queries-voice-queries-249917

 $^{^6\} https://medium.muz.li/voice-assistants-your-customers-are-ready-are-you-5b53e98371df$

⁷ https://www.mobilemarketer.com/news/moet-hennessy-pops-the-cork-on-alexa-champagne-skill/512068/

⁸ https://www.cmo.com.au/article/628066/8-brands-using-voice-activation-boost-brand-engagement/

3.2.3. Product purchasing and interactions

One of the main application of this new technology is certainly product purchasing by voice. It's been years now that Uber is available as Echo's skill or Google Home action, and the possible interactions are many: from asking for a ride to getting info about the ride just booked and even canceling. However, also other companies over consumption or purchasing services through voice: Spotify allows voice interactions if the user owns a premium subscription, Netflix too and Ryanair allows to check flight status, routes, price information and accommodation options, making the possibilities of these devices endless¹⁰.

Furthermore, the market of connected devices is growing year by year and so are increasing opportunities for IoT providers to connect their products to voice assistants. An example is Whirlpool, which announced early this year a new collaboration with Amazon's Alexa to allow voice control of home appliances, such as asking for the remaining time on a wash cycle of a connected washing machine or adjusting the cooking mode on a smart oven¹¹.

3.2.4 Medical applications

Many pharma companies have already implemented their skills/actions to interact with their customers. One allergy medicine company Zyrtec recently released a skill to report how pollen and allergens will make a person feel a particular day, by asking regular updates on how a person feels and it will be able to predict which forms of pollen mostly make the person to feel bad¹². This technology combines many different inputs that may be apparently unrelated within each other, but a machine learning algorithm is able to determine the reaction of a person's body to pollens.

3.3 Brand Monetization

Right now the focus of most of the voice assistant provider is towards providing the most useful functionalities possible to the end user via voice assistant to make them comfortable with the whole process of voice-based queries and get as many people as possible in their system. While keeping in mind that voice assistant must be useful and interaction must feel natural. So all the players in this industry are investing in user experience more than how to generate the revenue out of it. But at the same time, the biggest companies like Amazon¹³

¹³ https://developer.amazon.com/alexa-skills-kit



¹⁰ https://medium.muz.li/voice-assistants-your-customers-are-ready-are-you-5b53e98371df

¹¹ https://www.cmo.com.au/article/628066/8-brands-using-voice-activation-boost-brand-engagement/

¹² https://venturebeat.com/2017/04/06/the-zyrtec-alexa-skill-can-identify-your-allergy/

and Google¹⁴ are allowing the 3rd party companies to develop apps for these devices just like app for mobiles which a user can interact in most realistic way possible.

These devices work more like a personal assistant for the end user to help them with day to day task. By doing so these providers can learn the behaviour of the user and can sell this data to 3rd party companies to generate the revenue for them self. 3rd party apps on the voice assistant device can take advantage to use this for personalized user experience.

This allows the other brand to also provide services to voice assistant users which eventually means a whole new set of the market they can target. A survey was done by the Capgemini¹⁵ a well-known research institute in which they find out that the NPS (Net Promoter Scores) of a brand would improve by nineteen percentage points when it provides a personal voice assistant globally, which eventually means an increase in revenue. So the brands providing better voice assistant experience will mean more business and positive word of mouth.

3.4 Target Customers

A survey done by PWC¹⁶ with a sample of 1000 people find out that only 10% of surveyed respondents were not familiar with voice-enabled products and devices. Of the 90% who were, the majority have used a voice assistant (72%). 25-49-year olds are using them most often and are statistically more likely to be considered "heavy" users. Consumers see voice assistants as the smarter, faster, and easier way to perform everyday activities. Yet, for more serious situations involving money (shopping, refund on an airline ticket, etc.), consumers prefer what they already know and trust—at least for now. Despite being accessible everywhere, three out of every four consumers (74%) are using their mobile voice assistants at home. The majority of focus group participants were quick to say that they prefer privacy when speaking to their voice assistant and that using it in public "just looks weird."

When forced to choose, 57% of consumers said they would rather watch an ad in the middle of a TV show than listen to an ad spoken by their voice assistant. To make advertising more enticing for the latter, consumers agree they would be open to listening to ads through their voice assistant if:

- They can say "skip" if they don't like an ad—88%
- They are asked if they want to hear the ad before it plays—82%
- Ads don't interrupt pre-identified events (e.g., listening to music)—81%
- They get to choose the ad they listen to—80%

¹⁶ https://www.pwc.com/us/en/advisory-services/publications/consumer-intelligence-series/pwc-voice-assistants.pdf



¹⁴ https://developers.google.com/actions/extending-the-assistant

¹⁵ https://www.capgemini.com/wp-content/uploads/2018/01/dti-conversational-commerce.pdf

- Ads are only played at pre-approved times (e.g., not during dinner)—79%
- Ads are personalized by comments/questions they have spoken to their voice assistant previously—73%
- Ads are seamlessly embedded into answers (e.g. ask for restaurant, answer with paying advertiser)—71%
- They can interact with the ad by speaking to it—70%
- Ads are connected to "liked" brands on their social networks—70%

While looking at another surveys done by Invoca¹⁷, a well-known data analysis organization, of the 1000 surveyed individuals who **already owned** a living-room-based voice assistant, they found out that longer people own their voice assistant, the more they use it. To be precise 64% use it more frequently and 24% use it at the same frequency. 73% of people with voice assistants have made a purchase directly through the device at some point. 39% of people said an interaction with a voice assistant influenced a purchase decision in the past month.

61% of people are willing to hear ads on their voice assistant device in certain circumstances:

- If asked if they want to hear the ad before it plays 30%
- They choose the brands they hear ads from 28%
- Ads are connected to brands they like on Facebook or other social networks 23%
- Ads are personalized based on commands or questions they ask often 25%
- Ads embedded into answers from the assistant 18%

3.5 Feasibility

As stated before, it's clear how consumer awareness of voice devices and assistants, in terms of all the technology that exists and the capabilities that are already in place, is nascent and on the rise.

Even though an online survey by NetElixir¹⁸ found that just under 40% of U.S. adult respondents said they would be open to ads on smart speakers, this technology is inevitably opening up a new frontier for advertisers: according to Juniper Research¹⁹ this is the biggest revenue opportunity for voice assistants, forecasting ad-spend to reach nearly \$19 billion globally by 2022.

¹⁹https://www.juniperresearch.com/researchstore/innovation-disruption/digital-voice-assistants/subscription/platforms-revenues-opportunities



¹⁷ http://go.invoca.com/rs/769-GSC-394/images/The-Rise-Of_Voice_Invoca-REPORT.pdf

¹⁸ https://www.netelixir.com/wp-content/uploads/2017/12/searchwithoutscreens-final-web.pdf

Currently, the main tech players are Google and Amazon, followed by Microsoft, Apple, Samsung and possibly Facebook, whose VA still has to launch.

While Apple pioneered the technology with Siri's launch in 2011, the market is now dominated by Amazon, with over 42% of global smart speaker shipments as of Q2 2018, and Google, following at 28% but retaining a massive lead in VA usage on mobile phones thanks to Android's omnipresence.

With the market shaped as-is, marketers need to look at ways to collaborate with these tech companies, integrate their offers in the assistants and use the enormous amount of data that they can harvest. One way to it is by using Amazon Alexa skill or Google Assistant actions to build possible responses (or actions) to specific answers that a user might ask; this works both for branded and generic content, even though the two have different implications.

For branded content, third-party company services can be activated via VA when the user asks for that specific service, an example being Telefónica's partnership with Google (among others) to provide their *Aura voice assistant*'s services whenever a Google Assistant is asked "Let's talk to Aura"²⁰. Similar services are also offered by other companies like Vodafone Spain, also on Google Assistant, and France's Orange, who teamed up with Amazon to combine their assistants with Alexa. Another profitable approach consists in building cross-platform branded actions/skills and analytics for companies who have not developed their own assistants; in this field we can look at companies such as Snaps and LaPraim to see example of feasible business plans as well as potential partners to outsource the development of said features.

Regarding answers to generic skills/actions to a specific website or product, the assistant will fetch the information from a specific site based, among other things, on user's preferences and previous searches. One step towards gaining more share on VA's results would be for brands to ensure they have adequate representation on the major e-commerce sites. This presence in e-commerce stores will not only boost the chances of brands becoming the most requested in a given category, but also the potential to become the default brand suggested by voice assistants. Additionally, there's going to be a learning curve in the way people talk to their assistants and ask for information or order product, and it's in a company's best interest to *train* them through mass media spots and online advertisement to increase the chance of becoming said preference. This can be a profitable offer for marketers to have as a "voice-specialized" addition to their services, allowing them to plan strategies that cover all the necessary media sources, including voice assistants.

 $^{^{20}\} https://voicebot.ai/2018/02/26/telefonica-launches-aura-voice-assistant-partners-microsoft-google-facebook/$



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In conclusion, based on market projections, active partnerships between big companies and the tech industry leaders and successful scale-ups and companies already focusing on this market, we can assess that the researched market offers openings for new business proposals while also projecting huge growth potential for the years to come.



4. Business Proposals

After an extensive market research we came up with four different approaches that Comunica+A could take into consideration to profit from voice assistants:

- 1) Focus on customers exposure and visibility through voice assistants
- 2) Developing ad-hoc skills/actions for brands
- 3) Creation of an voice-integrated application to gather the best deals for users
- 4) Making money for enriching user experience through "In-Skills Purchasing"

4.1 Improving customer visibility and exposure

We talked about how searches through voice assistants already account for a fifth of the total searches and how this number is only expected to grow. Furthermore, according to a survey conducted by Yext²¹, 73 percent of high-intent traffic for businesses is going to services like search engines, voice assistants, maps, apps and chatbots, rather than a business's website.

Voice-enabled assistants often only share one "best" answer to queries that, if typed on a browser, would normally return multiple results. Instead of giving the user a few options to choose from, asking for "the best Italian restaurant close by" would suggest only one specific place.

Consequently, business must compete with their similar ones to grant themselves that best result spot and, to do so, they must understand how to provide the necessary digital knowledge and carefully design a strategy to come out on top.

4.1.1 Improving exposure and visibility through VA

To achieve that, one important step is for the business to be able to automatically provide answers to detailed questions like "What time do you close?" or "Do you take reservations?" on voice command. Delivering those answers and coming out ahead of the competition to be the single answer in a voice search requires companies to understand what questions their customers will ask and how to organize and serve their digital knowledge but, by

 $^{^{21}\} https://www.gainsight.com/pulse/2018/recap/assets/pdfs/The \%20 Power \%20 of \%20 Purpose \%20 in \%20 Customer \%20 Success.pdf$



effectively serving up that kind of information to voice assistants, businesses can increase their exposure to potential customers and drive revenue.

4.1.2 An example with C+A and NH Hotels

Comunica+A has the chance to work with a customer like NH Hotels on building such an ecosystem of "answers" and integrating it into their ad campaign strategy to get the most out of it.

For example, when Google Assistant is asked "What's the average (or minimum) price per room per night at NH Hotels?" it is unable to answer. The same happens if users ask about which kind of rooms are currently available or what their restaurant is offering.

NH Hotels could provide the data necessary to understand which questions need to be answered by harvesting information from their customer care and helpdesk services, to try and foresee all the possible responses need while automating some of the features users may look for in their website.

Comunica+A could either use the data to help in planning which questions to include or also avoid taking care of the development and let the company do it. It's goal in working is instead to design and roll out ad campaigns on all their other channels that aim at boosting this new service as an added value, inviting users to try and ask "What's the minimum price per night at the closest NH Hotel" in order to drive traffic towards them.

This would also help in setting a preference for users that, on their devices, try to ask the question to see how it works while in the meantime setting a precedent that could link NH Hotels to future accommodations searches.

Conclusions

Since, as of today, tech industry leaders haven't figured out a way to push ads on voice assistants, creating awareness and driving more people to your business through these means must be accomplished using different channels that compel the user into basically asking for information on a specific deal or company.

We believe that in this case, even without taking care of the development of specific skills/actions for a client, Comunica+A could find a valid and profitable business proposal in this kind of collaboration, specializing in highlighting voice assistant features with ad campaigns on different platforms with the goal of setting a preference and make sure to be the first result whenever a "generic" question they could answer is asked.



4.2 Development of skills for customers and its push

Skill creation can be thought to be an extension of the previous chapter. While before the queries onto the knowledge base were performed through standard skills, in this case we want to create the methods to query it in a more customized fashion.

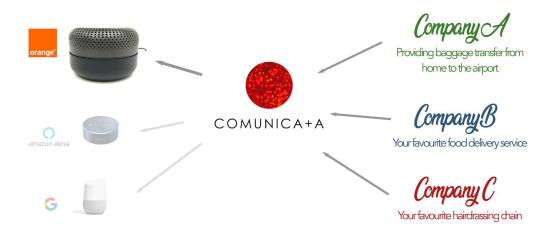
In chapter 3.2.1 (Brands' educational use of voice assistants) we have provided an example of how Moët Hennessy USA, the importer and marketer of luxury wines and spirits created a campaign to deliver educational messages to their customers to teach spirits tasting.

In the same way we propose COMUNICA+A to exploit their communication skills and their established network to create possible product selling point that would potentially change their customer journey. On this section we propose to accomplish this in two phases: a first one of skills and actions creation that implies a creativity process and a stage of engineering, and a second of action/skills publication.

4.2.1 Skills Creation, Engineering and Publishing

As mentioned before the skill creation process configured includes the selection of type of interaction that we may want to instantiate between consumers and brands. The range of possibilities described in the chapters back goes from a more educational-oriented approach to a plain product purchasing.

Once the skill have been created, COMUNICA+A would publish it through the voice assistants that the brand want to invest to. This model would make COMUNICA+A to assume an intermediary role between platform's voice assistants and brands.





4.3 A Platform with all the Ads

As we can clearly see from the results of the surveys stated in the section 3.4, we will have to be more conscious when we think of how to integrate ads on voice assistant devices. While keeping in mind to not push too much on the most personal and sensitive of channels. So it's clear that we got to start with the customer problem and then built on it accordingly. With chatbots, the customers are giving you unprecedented access to their most personal digital space, so pushing an ad to a user may not be a really good strategy.

While keeping this argument in mind one business proposal for an ad company like Comunica+A could be to use a model which would look more like pull strategy in the most convenient and personalized way possible.

4.3.1 A Successful business model with pulling strategy

Let's take an example of an online platform known as "DoveConviene" founded in Italy in 2010, which also work in the other countries like U.S by the name of "shopfully" is a leading digital platform used by over 30 million users worldwide when getting ready to go shopping in their neighborhood. The platform contains a variety of information including details about promotions, new products, shops, opening times and contacts of the main retailers and brands in each shopping category, geolocated in one place and easily accessible to users. By engaging consumers in the 'last mile', while they are in the process of planning their shopping, ShopFully has a strong impact on drive to store (88% of users effectively go on to purchase offline after seeking the information online) and on the consumers' choice of retailer's (66% choose a different retailer after having consulted Shopfully consultation). In addition, ShopFully significantly influences the 'intention to buy', impacting it up to 25% (source: Nielsen 2013-2014).

4.3.2 How it can be used with standalone VA

How it works is that it collects all the ads and offers going on nearby and a user can go through each ad which helps them to make a decision which product to buy and where to buy it from. This kind of business model is really interesting for this study case as on the voice assistant device user can directly get the same amount of information in a really convenient way. Not only this kind of model is helpful but also really convenient for the user as they are more used to of this process while making a decision where to go for shopping. This can also be used for online shopping too, where a user is maybe looking for a specific product available on sale online. This will not only target more customer to advertise from C+A platform but it would also give the confidence to the end user that they will find exactly



what they are looking for in a more humanize and natural way possible in a way quicker time.

So C+A can be a platform provider where they target not only there existing clients but also new clients for this new way of advertising the ads. But this case they may also have to invest more on the user experience and provide all the possible options available in terms of offers, where they can prioritize the paid content first and the rest of the information afterwords. There is a clear business opportunity for C+A but they may have to invest a lot in terms of resources and supply the user not only the ads but more of a service.

4.4 Monetize using "In-Skills Purchasing"

Skill or action creation have a direct and indirect impact on the benefits that COMUNICA + A can gain, and they mainly regard the ability to collect customers data and to sell additional content through skills. Collecting customer data is a primary key aspect based on better profilation of Skills usage, meaning that the company would be able to use the data collected in different contexts to improve marketing of other brands. Moreover, the retention of a consumer to a skill can be translated into a purchasing action.

Additionally, if via skill, consumers are able to enrich new experiences, new content, they would start using the skill permanently. To access the additional content in the skill, consumers need to pay for it. This way, Comunica+A can earn bit more through this provision as well. This is called "In-Skills Purchasing", which means getting payed for the additional content on the skills that are being popularly used by consumers as it boosts their user experience.

In-skill products can provide three types of 'In-Skill' purchasing as listed below. Subscriptions or On-time purchases would be useful for Comunica+A.

Subscriptions: This type offers access to premium content of the skill. The consumer is charged on recurring basis. They will not be charged if they cancel the subscription.

One-time purchases: This type provides access to consumers to have access to content and features by purchasing it only once and having it with them to use forever.

Consumables: These are content and features that can be purchased, consumed, exhausted and purchased again. For examples, hints for a puzzle, etc.



5. Recommendations for the company

To properly use this new technology to their advantage, Comunica+A can offer a variety of solutions to its customers, offering them to take responsibility for the integration of voice assistants in their business models and supporting it with their knowledge and capabilities on what regards advertisement.

5.1 Generic skills/actions and ad-strategy

As stated before, the keys for a company's success with said technology are visibility and relevance. Assistants will only offer one single solution to a query that, when fed to a web search engine, would result in thousands of different hits. This means that the end-goal for a company should be being the source or the subject of the answer given to a user asking a question related to a specific field. To increase the chances of success, much like what we wrote in the business proposal section 4.1, they would have to modify their website and online-available information to make sure that the assistants can find them whenever asked for; since this constitutes the backbone of a company's plan to make use of voice assistants, it should be the top priority.

This is, per se, something every company could do by themselves. The crucial added value for the clients comes from Comunica+A's ability to use their advertisement capabilities, applied through other media channels like tv or radio, to teach users how to speak to an assistant and how to ask for specific information, driving new users to try the service and boosting the traffic on their website, thus increasing the company's chance of being the chosen by the assistant as source for an answer to a generic question.

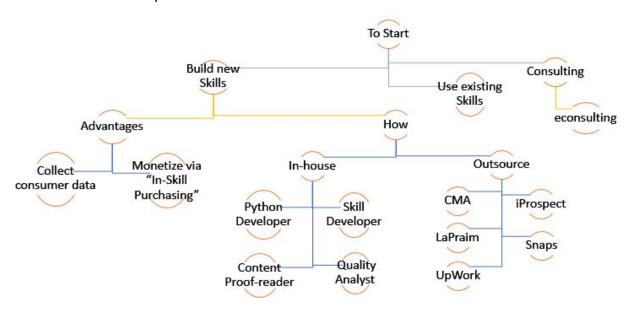
To further use the capabilities of the technology, Comunica+A could offer to take on the development of specific skills and actions, not developed by Amazon or Google and only capable of answering questions regarding one or more specific businesses. That said, in order to drive users to use them, the previously explained steps are even more a necessity than before: specific skills and actions cannot be *pushed* to users at random time, they must be *invoked*, *pulled* by them and this requires said users to learn about their existence through other means, let them be Comunica+A's made ads or specific skills, and be taught how to use them.



5.2 Specific skills/actions development

Considering the market research and the options available the business proposal early described we recommend COMUNICA + A to adopt a combination of the first and the second option.

This will give the COMUNICA + A's customers the choice to considerably increase their basic presence on voice assistants and eventually, develop personalized skills or action to make the final users have a personalized interaction with them.



Since, Comunica+A wants to utilize the voice technology for advertising brands and their products, it's recommended that they also consider to offer to develop new Skills or Actions and to publish them on different voice assistants. Benefits of this are:

- 1. Comunica+A would be able to collect consumer data. This is one of the primary and crucial requirement for Comunica+A as it would also benefit their customers in understanding the consumer behaviour and preferences.
- 2. Comunica+A can make money through "In-Skill Purchasing"²². If via skill, consumers are able to enrich new experiences, new content, they would start using the skill permanently. To use the additional content on the skill that enriches their user experience, consumers need to pay for it. This way, Comunica+A can earn bit by bit through this provision as well.

²² https://developer.amazon.com/alexa-skills-kit/make-money



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As per "Let's Nurture"²³, to develop Skills would require an expert team with at least following resources:

- 1 Python/IoT Developer
- 1 Skill Developer (Alexa or any other)
- 1 Project Manager
- 1 Content Proofreader
- 1 Quality Analyst

It follows that, to offer said skills, Comunica+A can either outsource the development to a third party company, or build them in-house, assembling a team and relying on the offered guidelines (e.g. Alexa skills kit²⁴).

5.2.1 Outsourcing Development

To outsource the work for developing custom Skills:

- 1. Content Marketing Association (CMA)²⁵: It an association for marketing, publishing, advertising and social agencies. They are content specialists and promote the use of content as an effective marketing tool to client marketers and showcase the channels it can be used for.
- 2. iProspect²⁶: iProspect is the UK's leading performance marketing agency. It creates and delivers innovative marketing programs for some of the world's most successful brands helping them to stay ahead of the competition.
- 3. LaPraim Digital Agency²⁷: Among several other services, on of their services is to create voice applications to create brand awareness and convenience with a voice-based application.
- 4. UpWork²⁸: Free-lance Skills developer, python, chatbot developer, etc. can be hired from UpWork. Skills developer would charge around 80 USD per hour.
- 5. Snaps²⁹: Snaps makes conversations easy, fun and more effective. They believe in a creative, connected and conversational world where they can bring joy to consumers through conversation.

²⁹ https://snaps.io/aboutsnaps/



 $^{^{23}} https://www.letsnurture.com/how-much-would-it-cost-to-develop-amazon-alexa-skills-for-smart-home-automation-system.html\\$

²⁴ https://developer.amazon.com/alexa-skills-kit/learn

²⁵ http://the-cma.com/events/digital-training/

²⁶ http://the-cma.com/cma-members/media-agencies/iprospect/

²⁷ https://lapraim.com/voice

²⁸ https://www.upwork.com/hiring/for-clients/voice-assistants-monetization/

Cost Estimation

The expenses to develop the set of below mentioned skills has been taken from "Let's Nurture"³⁰ website. This is just to know the approximation of the cost that could be incurred by Comunica+A if they outsource to develop skills. The cost is limited to just the set of skills mentioned below, it would highly vary depending upon the skills to be developed or used. Alexa Skill development and integration for home appliances:

Alexa Skiill Users	
	Turn on/ Turn off lights and appliances
	Thermostat and refrigeration units
Features	Calendar/ Schedule Management
	Smart lock with Face & Voice recognition
	Automated sprinkler management
Cost of Alexa Skill Development	USD 6000 -8000

5.2.2 In-house Developing

Developing Skills is not very difficult as far as one knows how the content needs to be approached and presented using voice technology. For example, Alexa provides a quick guide to develop Skills from scratch. Alexa's Skill building journey³¹ includes four major tasks:

- 1. Learn: Get to know the Alexa Skills kit.
- 2. Design: Design your voice interaction.
- 3. Build: Build your Skill in the cloud. Steps to build Skills are available online³².
- 4. Launch: Launch your Skill in the Alexa Skills Store. Before the Skills are available on the voice assistant, these Skills needs to be verified and certified. The certification requirements³³ and tips for Skills certification³⁴ is also clearly stated on the referenced links.

³⁴https://developer.amazon.com/blogs/alexa/post/61d4a6ff-ed80-475a-b95e-d927989bc1de/tips-for-successful-alexa-skill-certification



³⁰ https://www.letsnurture.com/how-much-would-it-cost-to-develop-amazon-alexa-skills-for-smart-home-automation-system.html

³¹https://developer.amazon.com/alexa-skills-kit?&sc_category=Owned&sc_channel=WB&sc_publisher=Website&sc_conte nt=Content&sc_campaign=TopNavProduct&sc_funnel=Discover&sc_country=US&sc_medium=Owned_WB_Website_Conte nt_TopNavProduct_Discover_US_newdev&sc_segment=newdev

³² https://developer.amazon.com/docs/custom-skills/steps-to-build-a-custom-skill.htm

³³https://developer.amazon.com/docs/custom-skills/certification-requirements-for-custom-skills.html

External Consultants

Effective marketing means being clear on the skills and activities you need to succeed, combined with simple, accessible and modern ways of working. For this purpose, the company named econsulting³⁵ comes handy to receive consultancy on effective marketing.

5.3 Preparation for the medium-to-long term

According to the 2018 Gartner Hype Cycle for Emerging Technologies³⁶, Voice Assistants are in the peak of inflated expectations phase. With the technology being relatively new and rapidly changing, its future is set to be hard to predict and competition is going to be tough. That said, there are a few more measures Comunica+A could take to try and get an edge over the long term.

First and foremost, with voice assistants comes the problem of having and always on microphone that's waiting for someone to say "Ok Google" or "Alexa tell/ask/let's...". Even though major brands keep advertising all the safety precautions they're implementing this still is, for many, a potential threat to the customer's privacy. In the medium to long term a company should try to stress how its data privacy policies are advanced and well-developed, trying to get an edge over the competitors by positioning itself as *the brand to trust*.

This should run parallel to an increase in the company's PR effort: getting the brand to a high enough level of respect and recommendation given by journalists and reviewers could be crucial to staying relevant in the market and maintaining said level of trust.

Finally, assuming, as forecasted, that the Voice Assistants' market is going to be dominated by a handful of companies, it should be considered imperative to forge strategic partnerships for voice integration with retailers and service brands, such as the ones mentioned in section 3.5, to ensure inclusion in their services and, if possible, to be among the recommendations.

³⁶https://www.gartner.com/doc/3885468/hype-cycle-emerging-technologies-



³⁵ https://econsultancy.com/consultancy/

6. Appendix: Team experience and lessons learned

This project gave us the opportunity to not only expand our personal knowledge on voice assistants but also to learn how to work with a team remotely. The methodologies we used to organize the work and tasks are very traditional but effective and include a good planning and a good repartition of the work to do.

The process that brought us to write this document started with the with a first phase of small research, followed with a generation of ideas and hypothesis (diverging process). In a second phase, given the suggestions of the company and thanks to the help of our professors, we conducted a deepen market research that lead us to identify four possible alternative or Business Proposal (converging process).

Finally based on the data collected and the thorough market research performed we reached the recommendation for the company, that consists of a combination of the first two business proposal.

Working on a project where one is tasked at making simultaneous technical, business and market predictions along with a quantifiable outlook for the future is one of the most creative, complex and scintillating experiences. The inherent complexity of the project was further enhanced by the fact that all the team members were operating from geographically distant locations. The speculative nature of the project meant, that we delved into many topics which were argumentative in nature and required great deal of brainstorming.

The focal challenges of the project eventually turned into the very best learning experiences. We learnt to research in a collaborative fashion, pooling ideas from all sorts of areas. The geographical distance led us to enforce a strict and regular Skype meeting schedule which streamlined our workflow. In conclusion, the project not only led us to work hard but also demanded a work ethic, which has taught us to work remotely in a collaborative fashion, while respecting the time and merit of the fellow team mates.



7. Other references

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