UNIFY ALL YOUR CUSTOMER JOURNEYS

PUT THE 1ST BRICK OF YOUR DATA LAKE AND YOUR DATA-DRIVEN GROWTH



In the context of data-driven growth, the unification of the Customer Journey is a key challenge to analyze the impact of the marketing budgets invested, but also to optimize the targeting of day-to-day operations. It is essential today to fully understand the interactions of consumers with the advertiser's marketing operations. And of course, it is equally essential to consolidate the data collected at the level of each individual by unifying its different terminals

Concretely, this unification allows to correct a recurring weakness of our industry: the measure in silo of the performance of operations on the different terminals. For a long time, this lack of data consolidation at the consumer level has penalized the mobile. Today, this absence continues to blur the tracks and analyses.

Indeed, the consumer's tendency to reserve terminals for certain uses (i.e. a mobile for impulse repurchasing/a fixed position for a first purchase or a complex transaction) disrupts the performance analyses of customer conquest operations and resale in the absence of a unified Customer Journey. These analyses are thus disturbed at the levels:

Foreword

- Of the user's profile (prospect/client/ premium customer)
- 2. Of terminals used
- 3. Of the purchase typology (cart/product type).

Distortions that could lead to mistakes in the budgetary arbitrations detrimental to the profitability of marketing operations and to the achievement of business objectives. Thus, there is no time to lose, unify its Customer Journey is a priority must be set up now!



Emmanuel Brunet CEO - Eulerian Technologies

CONTEXT

CONTEXT .

The thread of the story becomes more complex Weaving the thread of the story

Identify the thread of the story Reconciling all the threads of the story

.....p.4

Make the Data Science benefit from it Make the Marketing benefit from it Take advantage of it efficiently & gradually

PART 3: TOMORROW'S STAKES	,
REFERENCES	
THANKS	-



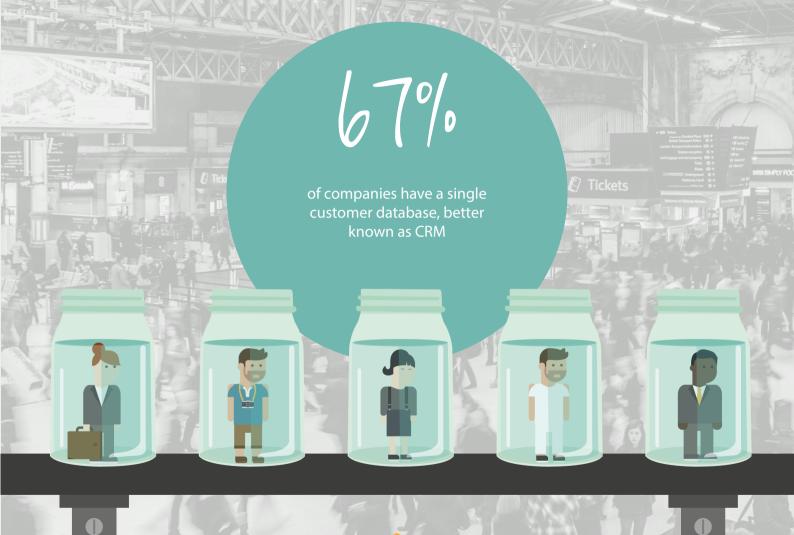
Just like King Arthur in the quest for the Grail, marketers are now on the lookout for data-driven growth. Over the last 20 years, the uses and devices have greatly evolved, which has significantly impacted the volumes of datas available and explodable by brands. Data is gradually being placed at the heart of the stakes of business growth. The data-driven was born.

At this date, 67% of companies have a single customer database, better known as CRM1. Their stakes? Address a single strategy per consumer. Indeed, it is this customization that is the keystone of a successful Datadriven growth. According to a study by Boston Consulting Group2, companies offering their customers personalized experiences see their incomes increase from 6% to 10%, two to three times faster than those that do not.

Because Yes, for his part, the consumer is already expecting personalized, proactive and adapted messages according to his relationship with the brand and his positioning in the Customer Journey. 93% of the 15-60-year-olds know that their information is used to receive personalized advertising, that their interests (75%), their geographical position (70%), and browsing history (70%) "recovered" in the same optique3. In 2016, 72% of global consumers were already expecting companies to know most of this information during their interactions. Thus, 77% of consumers had a more favorable view of brands communicating in a proactive manner4.

In this context, it is essential to respond to these new challenges, at the risk of losing its customers and to negate all efforts initiated to recruit new customers.

Understanding the relationship between the user and the brand is therefore essential. This relationship becomes more complex, the evolution of a pure CRM logic towards a logic where the brand seeks to reunite the journey of each user - Customer Journey - seems unavoidable. Indeed, this reunification is the element to control the thread of the story that is created between the two protagonists.

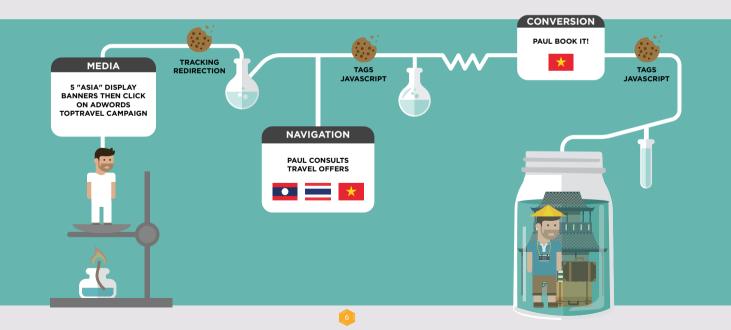


The thread of the story becomes more complex

This is Paul's story. Paul is a young active, a travel enthusiast who wants to discover Asia. He has not really started his research yet, but he thinks about it. Paul browses the web from his personal computer and is impacted by "travel" Display banners (addressed by an advertiser travel).

Intrigued, he finally clicks on one of them and consults the "Vietnam", "Thailand" and "Laos" sheets. He finds the offers interesting but decides to think about it. He does not want to engage on a whime. Especially since the US is also tempting him. The next day, after a check on the app during his lunch break, he realizes that this US trip is too expensive (especially for 3 weeks) and decides to focus on Asia. Three days later, he will book a trip to "Vietnam" on one of the pages of the site, from his tablet.

He will not forget to contact the call center a week before his departure to learn about the excursions and spend 2 days later in the agency to book them.



Paul's journey is far from unique. According to a survey of more than 50 customers at Eulerian Technologies, 60% of advertisers have journeys that convert into more than one media touch.

The travel and retail sectors are relatively similar. However, advertisers selling home furnishings stand out with a larger percentage. For some of them, it can go up to 77%.

One third of the multi-touch journeys are made between 2 and 5 touches while more than a quarter are realized in more than 5.

For a third of advertisers, journeys with more than 5 touches have a rate greater than 30%.

Media journeys: percentage of number of touches according to sectors					
	GLOBAL	RETAIL	TRAVEL	HOME	
More than 1 touch	60%	59%	58%	65%	
Between 2 and 5 touches	33%	33%	32%	38%	
More than 5 touches	26%	25%	25%	26%	
2 touches	13,5%	13%	13%	15%	
3 touches	9%	9%	8,5%	10%	
4 touches	6,5%	6%	6%	8%	
5 touches	5%	5%	5%	5%	

Weave the 1st thread of the story right now

In a context where data support the growth, whose keystone is the unified knowledge of each individual, many market players have started to address the subject of technology (or have already simply addressed). For others, it's time to move on.

Data Lake is, for all these players, a response to the creation of a data receptacle within the company. It is a space for storing and processing any type of data (structured or not) with unlimited processing capacity and being accessible to all the activities of a company: Data Science, Marketing or even CRM. The Data Lake can thus be considered as a base structuring the strategy of the company from a global point of view. It makes it possible to integrate data from diversification and / or acquisition of activities or even alliances. The Gravity or Verimi alliances are good examples. Players who are joining forces today to create a stronger data capital and put it at the heart of growth.

As part of a data-driven growth, the Data Lake is a project that must be addressed. However, it is nonetheless a receptacle that must be fed. With this in mind, the challenges of collecting and unifying the Customer Journey must be taken into account now.

Failing to regain control over the unification of the Customer Journey in the shortest possible time, or worse

continue to subtract / send this data to third parties, is to expose oneself to not owning its data assets and even to make its growth dependent on other players who would build it for you (or who could build theirs with your data). Finally, it exposes itself seriously to the risk of a model of growth twice as expensive: by paying at the same time the cost of the marketing action and the cost of the data ... A data of which you could have dispose as you wanted.

It is therefore important to regain control of the link established with each consumer, without any intermediary and now. The unification of the Customer Journey no longer has to wait.



EMMANUEL BRUNET - CEO AT EULERIAN TECHNOLOGIES

Unifying consumer data is the guarantee of having an unbiased view of the behavior of customers and prospects. This unification is based on both the ability to analyze the performance of the company's marketing operations, as well as the optimization possibilities for activation or reactivation campaigns.



Today, it seems obvious that data is the most important development territory for advertisers. Access to user data allows us to improve our overall strategy - business management, investment optimization, and especially to better address our consumers.





UNIFY THE CUSTOMER JOURNEY

The first decisive step towards Data Driven Growth is the unification of the Customer Journey. This stage consists of two inseparable axes:

- The identification of each consumer interaction
- Reconciliation of user-journey interactions

IDENTIFY THE THREAD OF THE STORY

The first interaction of a brand with an individual is, in the vast majority of cases, an advertising interaction. With the increase of online investments, the identification of media interactions in the Customer Journey has become essential.

Moreover, in 2017, according to the Advertising Expenditure Forecasts5 report, advertising investments in the Internet exceeded the share reserved for television. According to the European Programmatic Market Sizing 20166, in Europe, the total market for Display advertising investments increased from \notin 5.7 billion in 2015 to \notin 8.1 billion in 2016, an increase of 42.7%. The growing performance of the Display has placed it, little by little, as a complementary channel to the Search to relay the growth.

One of the objectives of the Display is to develop brand awareness and influence the individual upstream. So it's not just about placing a tracking link to identify the click on an Adwords campaign, but to track all the interactions - in clicks and impressions - of an individual with the different channels that make it progress in its buying process.

These elements are numerous and complex. In fact, according to an Eulerian Technologies study, an advertiser has an average of 7 paid channels and 18 partners (up to

35 partners for some) in his marketing mix. Among these channels, differences are clearly noticeable. For example, a single channel can cover 50% of partners.

Tracking allow to retrieve the interactions related to a media campaign: name of the channel, media partner, name of the campaign ... and more if affinity! Two tracking methods are possible: redirection tracking and parameter tracking. The prioritized method is tracking by redirection because it is considered «cleaner». It avoids attributing to an individual «fake» media interaction.

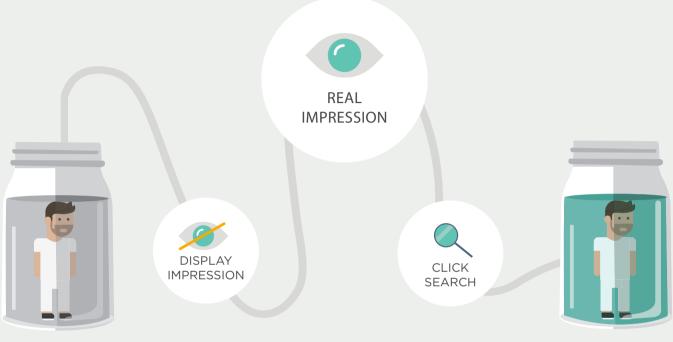
For example, when a user saves a URL in his favorites, it may be from a Facebook campaign. The saved URL will have kept the information related to this campaign in its settings. Each click of the user on this favorite could thus be attributed to Facebook. But here, Facebook no longer comes into play.

PROPERLY TRACKING

The redirection tracking allows, when clicking on a campaign or impression, that a redirection (as the name implies) takes place on the server of the collection tool. All information is stored there. The cookie is placed in the browser before the user accesses his destination page.

Tracking by settings, on the other hand, stores the information in the destination URL. The information is retrieved (during the visit of the user on the site) by the JavaScript tag of the collection solution.





CONVERSION

At a time when fraud is a major issue for advertisers, it becomes essential to go even further in this logic of collecting post-impressions by recovering the real impression, it means an impression actually seen by a user.

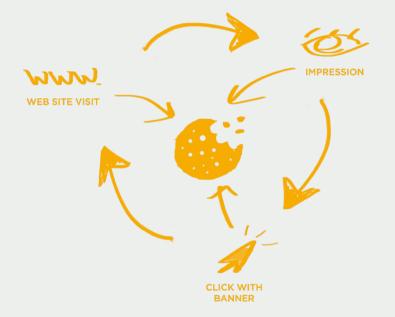
According to the IAB, an impression is now considered visible when more than 50% of its area (ie 50% of the pixels) is present for at least 1 second on the user's screen.

There are also several techniques for recovering this data available on the Ad Server, DSP or directly in visibility measurement tools.

Make a link between the media journey to the on-site journey

Tracking an individual's journey on the website is probably the issue that has been addressed most quickly by the advertiser. This tracking is possible thanks to the installation of JavaScript tags on each page of the site.

For all the interactions that take place in a web environment (such as visiting a page or interacting with an advertising campaign), as seen above, the user's identification requires the installation of a cookie in his browser. It is this cookie which will make it possible to make the link between the media journey of the user and the on-site journey. When advertising or clicking on a campaign, at the time of redirection via the server, a cookie will be deposited on the browser of the user. This same cookie will be **exploited when the JavaScript tag is triggered** when the user visits the page. In this way, the link will be made between the media journey and the on-site journey.



Maximize the placement of cookies

A special attention should be paid to the cookie. The JavaScript tag that is triggered on the page during the user's visit may set a cookie in 1st or 3rd party. The 1st party cookie is filed with the same domain name as the domain of the visited page, while the 3rd cookie drops it with another domain.

URL: www.annonceur.com					
	1ST PARTY COOKIE	3RD PARTY COOKIE			
Technical specification	 Is installed with the advertiser's domain example: www.annonceur.com Not blocked by Safari and chrome browsers * Not subject to adblockers 	 Is installed with another domain example: tracking.com Is blocked natively by browsers Safari and chrome * Is natively subject to adblockers 			

If the 1st party cookie, being associated with the domain visited by the user, is treated relatively favorably by thirdparty tools and browsers (although Apple limits its use to 24 hours7), the 3rd party cookie, as for he is in bad shape.

The adblockers have made it their target. They block the installation of 3rd party cookies from domains in the adblocking lists. In fact, some browsers do the same*: the version of the Safari 11 web browser blocks the technique of tracking users advertising via a feature called Intelligent Tracking Prevention⁸, Google has launched a native AdBlock for its browser Chrome⁹. Currently, the adblocking rate is around 32% in Europe¹⁰. The climate is not necessarily the most favorable for monitoring online courses. In this context, identifying a maximum of Customer Journeys undoubtedly seems to go through a technological solution based on a 1st party base.

Process the mobile identification

Of course, focusing on the web environment would be reductive. Because yes, the number of devices per consumer continues to increase. According to The State of Consumers and Technology: Benchmark 2016, US¹¹, US consumers used, on average, at least 4 connected devices. So mobile counts too. He even counts a lot. Application navigation accounts for two-thirds of "digital time"¹². It is, of course, necessary to be able to identify these interactions.

To recover the interactions of a user on an application (mobile or tablet), it is necessary to integrate the "first cousin of the tag" mobile side, the SDK. At each visit to a page of the App, the technology is called and identifies the user by collecting the data around the device ID of the user (Android ID for Google App and IDFA for Apple).

The user identification guide The methods	
Click on a campaign	Tracking by redirection
Advertising impression	Redirect tracking pixel
Visit and conversion on a site	JavaScript
Visit and conversion on an App	By SDK or API
Cookie	1 st party



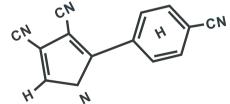
CHALLENGES OF IDENTIFICATION

1. Identify interactions with media impression

2. Make the link between media and on-site journey

3. Maximize the installation of cookies

4. Dealing with mobile identification





BUT FLAWS PERSIST

The axes of identification of each consumer story are beginning to be well known in the market. Yet the Customer Journey is still struggling to be identified in its globality. Too many advertisers still have issues, often because of difficulties they could solve with appropriate solutions:

• Integrate post-impression in the reflection on the Customer Journey:

At a time when programmatic channels are capturing a growing share of advertising investments, cutting off post-impression signals in the analysis of a consumer's overall journey represents a real strategic risk. In order to simplify the implementation, it is possible to rely on Ad Server's macros, Trading Desk, or a third-party visibility measurement tool: IAS, Adloox, etc. To do this, it is sufficient to copy / paste the tracking URL of the collection tool - upstream of the tracking of the Ad Server - and retrieve, after, the granularity related to the interaction (campaign, location, banner) by API. The integration time will then be divided by 2 or even 3.

For example:

...?ead-publisher=example&ead-name=\$campaign&ead-location=\$location...

The implementation constraint of a new SDK:

Some advertisers probably give up out of fear of having too many SDK in their Apps and so burden them. Yet, there is a possibility of getting around this difficulty:

- Case 1: The App calls the SDK SDK triggers a call to the API of the solution
- Case 2: The App calls the API of the solution directly

This collected data will be streamed to the collection solution in server-to-server. The reconciliation key between the two systems will then be a CRM ID.

RECONCILING ALL THE THREADS OF THE STORY

Identifying is not enough. Reconciling environments is therefore essential to access a global vision of the relationship between the brand and each consumer. Two major challenges must be met to face this challenge: bringing together the journeys that have been realized in different online environments and making the link between the online and offline worlds.

Reconcile the online

The online world is victim of silted navigation. If we take the example of Paul - our young active looking for a trip - during his quest, we could identify that he had navigated on 3 different devices: desktop, mobile and tablet. It is not a one of a kind profile!

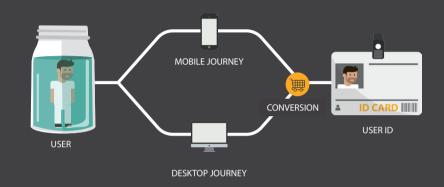
The use of devices is multiplying, it's a fact. The mobile and the desktop are the main ones concerned by these crossdevice journeys. According to an Eulerian Technologies study, 70% of cross-device journeys are paths that involve only the desktop and the phone (30% involve the tablet). In almost half of the cases, the courses are initiated from a smartphone and end on desktop.

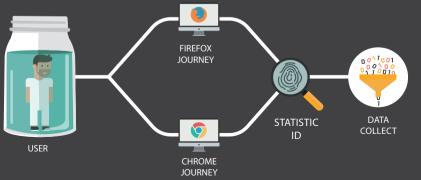
Cross device journ	ney DESKTOP>MOBILE	MOBILE>TABLET		DESKTOP>TABLET		TABLET>MOBILE		TABLET>DESKTOP
48%	22%	7%		7%		5%		11%
7	0%		-					

This multiplicity of device is nonetheless problematic in the unification of data. Yet, solutions exist to destroy these silos, two types of reconciliations are possible:

Deterministic reconciliation

Deterministic reconciliation is an approach based on an ID retrieved by a user action, most often: a CRM ID, an email address or a phone number (encrypted). This ID is retrieved during a purchase, an account creation or a newsletter subscription. The opening of email is an alternative way to link the email and cookie of the user. We generally speak of "keys of reconciliation" because it is the key that will make it possible to make the link between two journeys on two different environments.





Probabilistic reconciliation

Probabilistic reconciliation is a purely statistical approach. It is usually based on things like the IP address of a household or the Statistical ID. The algorithm then combines the different elements retrieved during navigation to create an identifier.

THEN, WHAT PRIVILEGED?

Although the probabilistic reconciliation proves to be not very restrictive for the advertiser (complete outsourcing of the reconciliation logic), this method does not make it possible to formally certify that it is the same person who has been navigating from, for example, the same device (this is the home IP that is considered and not a personal Identifier).

In addition, some advertisers, with the aim of increasing their reconciliation rates, may lose sight of the fact that the search for quantity can be done at the expense of quality (the reconciliation is not formal). Some biases can still be reduced by limiting the reconciliation over time, increasing the likelihood that the person behind the device is the only one.

Deterministic reconciliation, on the other hand, represents the choice of safety and therefore of quality. The reconciliation is based on the ID formally retrieved from the user which allows to identify him with certainty. This method requires an action from the user: in the vast majority of cases, that of filling the fields of a form.



As mentioned, even if the advertiser is faced with optimizing reconciliation rates, the quality of this reconciliation remains to be favored.

Indeed, a badly reconciled history will have a more harmful impact on a future interaction with a consumer than an un-reconciled history. However, <u>simple optimizations of its online identification strategy</u> can nevertheless bring spectacular results. Rewarding techniques (a login = a discount coupon) can be put in place and represent a proven solution. The integration of specialized partners on the subject, such as Customer Identity platforms, also has very significant percentages of login increases.

0 0 Different elements can explain variations on login rates: Propose the login at the right moment in the buying pocess. Have APPs that require the user to log in. Have a persistent log-in system to avoid asking the user to log in again. Maintain sustained CRM pressure to reconcile e-mail and cookie.

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CRISTEL ALVES GARCIA - HEAD OF PARTNERSHIP + ALLIANCES AT REACH FIVE

Today, all advertisers agree on the importance of a 360 ° view but in reality, barely 20% of them have managed to build this vision. With the awareness of repositioning the customer at the heart of our thinking, we see the arrival of alternative solutions that meet these new challenges. ReachFive's Customer Identity and Access Management (CIAM) platform enables you to create a seamless journey with the brand by removing the first point of friction, namely, creating the customer account while collecting and centralizing customer consents to meet the challenges of the GDPR.

We will therefore implement authentication strategies that meet the situation of the art of authentication and offer the brand a range of possibilities ranging from the classic password email, to the use of an identity provider like Social Login (Facebook, Google, Twitter, Weibo, France connect ...) but also more innovative devices like passwordless, chatbots, etc. The goal is not only to accelerate the Customer Journey but also to federate identities to form a 360 ° vision through a unique identity repository.

The deletion of the process of creating an account as we know it today through the filling of the famous form creates a very high rate of loss (up to 2 accounts out of 3). The goal is to position the customer at the heart of the organization and to offer a personalized and especially simplified experience across all channels.

This need is identified in all industries but the strategies will vary depending on the type of client or sector of activity of the advertiser. Undiz, which has a typology of millenium customers, has increased its usage rate by around 80% by setting up an account creation strategy in just a few clicks thanks to the integration of Social Login. A company like Engie will opt for an account management both by email / password but also by the provision of a Google Social Login.

And of course, to increase the rate of account creation, it is imperative to integrate into thinking a UX strategy to validate the Customer Journey. It is by doing so that customers like Lacoste or Histoire d'Or, by going back to the most relevant fields on their pages, have exponentially increased their connections. We are in a visual society, every little detail is of enormous importance.

TIPS TO INCREASE LOGIN RATE



Pay attention to the relevance of his request and not saturate the users. For example, it is useless to ask the customer for an address if it is not useful in the immediate future.



Set up login techniques without password (passwordless). They work like Slack's "magic link". It is a simple device that allows through the mobile number or email of the customer, to send in real time a unique, personal and secure link that will allow him through a single click to create his account client without password. It is a perfect device to capture the customer during a purchase in store.



Perform AB test on the Customer Journey and in particular on the positioning of the connection devices to identify what can increase the conversion of the customer account.



Differentiate login strategies based on your audience. Example: Social Login for young people, Microsoft login or Google for older or pro target.



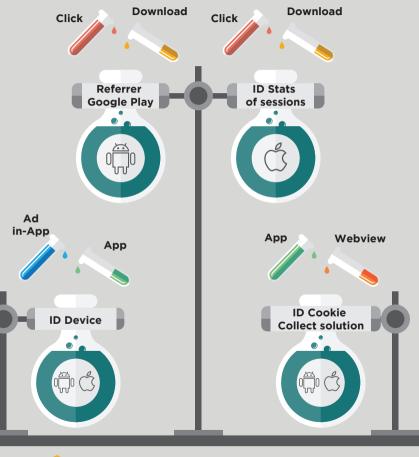
Prepare tomorrow and integrate reflections on innovative solutions such as the Touch ID & Face ID or even identification in the use of chatbots. Eventually, the latter will allow through Google Home or HomePod, proceed to the purchase of suggested products with its own data or retrieve his bill via a simple voice command.

THE SPECIFIC MOBILE CHALLENGE IN THE ONLINE RECONCILIATION

When we talk about "reconciliation", it seems inevitably to evoke two different online environments. However, it can be located in a single environment, as in the case of the mobile.

The browsing of mobile users is difficult to follow. The consumer can both interact with the brand from an application or a browser. He can open Google Chrome from his mobile to access a web page, then open the mobile application of the brand and, when browsing the app, find himself again on a web page, a webview ... In short, complex we tell you!

Manage the link between the click on an advertisement and the download of the application, the passage of an app page to a webview within an app or adapt to an iOS environment as well as Android are essential elements to take into account for a complete reconciliation of the Customer Journey.



Although at the present day, it seems that few advertisers reconcile online data with those of the offline universe, obtaining a global vision of the story that is created between a consumer and a brand is an absolute necessity for a lot of brands. The challenge for them is to be able to identify (then reconcile) certain stages such as the discovery of the brand and / or its consideration. These steps are done globally online. The conversion that will follow (hopefully) will be in "tangible" in a store or agency.

Two worlds to reconcile: on & off

Deterministic reconciliation is the method to reconcile online and offline. The link will be made thanks to the recovery in each environment of a common identifier (customer ID, encrypted email, etc.). In store, an identifier can be retrieved through a loyalty card at the time of purchase. To link these two worlds, an offline sales synchronization has to be realized, it means that the store sales will have to be sent in the collection tool via a batch (ie file deposit) or by API (ie Application Interface of Programming).



DAVID NEDZELA - DIGITAL MARKETING DIRECTOR AT FNAC & DARTY

Continuously, we do not have a global vision, but we regularly analyze the buying behavior of our members (which are therefore known during the checkout store and on the web). Omnichannel sales represent 45% of the Group's web orders.



Synchronizing your CRM using deterministic reconciliation brings us back to the issue of reconciliation rates. Optimizing the online identification strategy is a first step to link up a maximum of cookies and CRM IDs. Optimizing CRM synchronization is a second step. The third is to activate a CRM Onboarding (practice by which the offline data of a CRM are used to find and touch its customers online).

The on / off reconciliation does not stop at the link between a discovery (or phase of consideration) of the brand online and conversion to offline. It is also in the opposite direction, for example, the link between the identification of a passage in store and the purchase on the website (or application). The problem will lie in the search for ways to identify this famous passage in the store. Here are some examples of techniques used: the consultation terminal, the connection to the wifi in exchange for an identifier, registration for a newsletter.





GOOD PRACTICES OF AN ONBOARDING CRM



- 1. Pseudo-anonymize (irreversible hash algorithm) all personal data and not just email before making your file available to the onboarder
- 2. Provide a maximum of keys to maximize the matching rate. For example, adding the date of birth allows you to earn 4 to 12 points
- 3. Refine your CRM qualification and include your segmentation in the file to know the potentials for each target segment
- 4. Check the freshness of the cookies made available to your DMP / DSP for an optimal matching rate
- 5. Adapt your creations. Indeed, you do not need to segment and then send the same message to everyone
- 6. Coordinate business and legal teams to break silos and secure trade
- 7. Privacy Mandatory for the implementation of the GDPR, make sure of:
 - The good management of the collection of consents of your customers and their traceability: (e.g. banner cookies, consent newsletter)
 - managing your customers' opt-out flows

JIMI FONTAINE - CEO AT GRAPHINIUM

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Onboarding CRM is the practice by which the offline data of a CRM is used to be able to find and touch its customers online. Individuals are identified by a cookie or a mobile identifier, mostly thanks to the 2nd party data collected from the partners of the onboarder.

This practice allows companies to recognize and target their customers on the Internet without them necessarily being logged in or they have already visited the site of this company.

This is the case of Graphinium which has developed a native connector with Eulerian Technologies to feed the DMP with non-logged profiles or customers who have not visited the site.

To this date, the challenge remains to attain a maximum reach and to be able to recognize and match individuals through a deterministic reconciliation and cross-device.

Graphinium allows this reconciliation to be done in real time and can be used to board all segments of a 5M database in less than one hour.

To optimize your onboarding CRM, it is important to collect the most data upstream and, above all, to qualify them well. The expertise of the business lines makes it possible to be pragmatic and to prioritize the CRM segments available now for activation (gender, age, RFM segmentation ...). Finally, we must work on the incremental by adding the profiles matched by our platform of onboarding to those already recognized by the DMP. Thus, for a retailer, onboarding can strongly contribute to the digitization of customers who have bought only in-store. In this context, do not forget to adapt your creations according to customer profiles. This being the case, it is not necessary to overcomplicate its demands: 12 combinatorics can achieve between 60-80% of the performance.





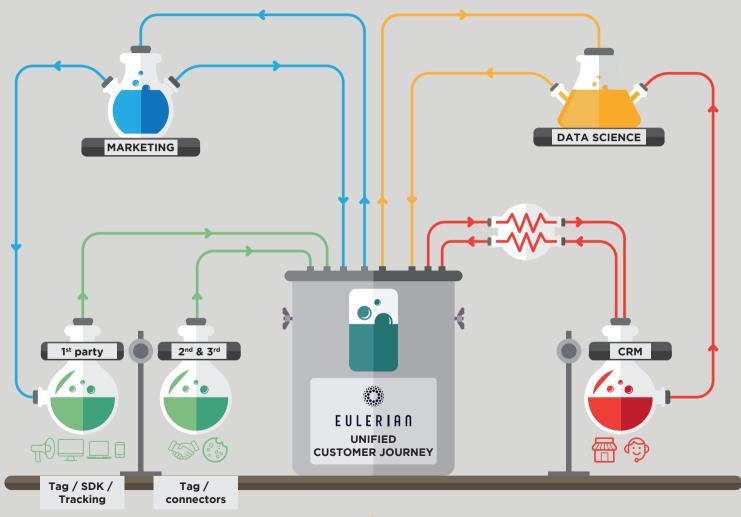
DAVID NEDZELA - DIGITAL MARKETING DIRECTOR AT FNAC & DARTY

Having a 360 ° view of the Customer Journey is essential. Today, our stakes are about on / off reconciliation, which will help us better understand all our customers touchpoints and Customer Journey. A good part of this reconciliation is based on the checkout thanks to the credit cards of the various Fnac programs. The many advantages on the web and in store encourage our members to use this service on both worlds, which allows us to improve customer knowledge. On the Darty side, we have set up vendor tablets in 170 stores that allow us to optimize our sales processes through better customer knowledge.

Part 2

HOW TO TAKE ADVANTAGE OF A UNIFIED CUSTOMER JOURNEY?

Equipping a technology to launch the Data Driven growth helps to meet the goal of unifying each Customer Journey. But it also allows you to benefit by making this data available to each department of the company. The departments mainly concerned are Marketing and Data Science.



The collection technology must be able to communicate with the different tools used by each department so that the data can be made available to them. To do this, different connection methods exist:

Connection methods						
	TOOLS	METHODS				
DATA SCIENCE	Data Lake, Data Warehouse	Streaming data in real time or sending of data flow/batch				
MARKETING	DMP	Activation in server-to-server in progress campaign to update to profile or batch in pre-audience population				

However, communicating with each tool globally is not enough. This communication must be done at the user level, to enrich the profile of each individual. For this, it is important to have a reconciliation key between the tools. Here are two possible options:

- If each tool has an identifier on which it is possible to rely (usually an encrypted email or a device ID), this ID will be used as a reconciliation key.
- If none of the tools has a common identifier but everyone has a cookie, the reconciliation will be based on cookies. A cookie matching cookie match tables will be created continuously.

MAKE THE DATA SCIENCE BENEFIT FROM IT

The subject of the artificial intelligence (AI) is trendy and on everybody's lips.

Impossible to escape! Forrester had predicted an increase in investment on it in 2017, approaching 300%¹³. That same year, around the world, 30% of marketers thought it had become a priority¹⁴.

By 2019, 40% of digital transformation projects will include an IA component and three quarters of development teams will integrate these skills¹⁵. AI and Data Science are a central focus for leveraging a unified Customer Journey (eg creating new offerings & actions, new services).

Artificial Intelligence and Machine Learning are now key concepts in our daily lives.

The association of information from different sets of data is a common use of AI. For example, predictive analytics allow Netflix to make recommendations based on viewing history, time of day, and even clicked locations on the screen¹⁶. This type of cluster algorithm continually improves the suggestions, allowing users to get the most out of their subscription. The company estimates that these algorithms allow it to save more than \$ 1 billion a year (through customer loyalty).

The apparel company Under Armor is one of many companies to have worked with IBM Watson on the subject¹⁷. It combines user data from its Record application

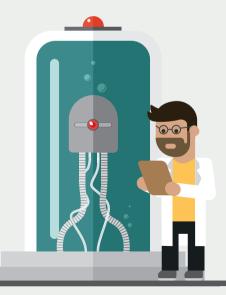
with third-party data and fitness or nutrition research to provide users with personalized advice (training plan, meals, etc.).

Al is also at the center of browsers and has been for a few years now. In 2015, Google admitted that it was using RankBrain (an Al system) to interpret a "very large" portion of search queries¹⁸. It is also at the heart of social networks: feelings analysis, products recommendations, image and voice recognition - there are many areas in which artificial intelligence allows them to improve on a large scale.

Overall, by optimizing bids for advertisers, the algorithms will get the best cost per acquisition (CPA) from the available inventory. Moreover, integrating first and third party data into a clustering algorithm, and then using the results in a CRM system or a custom experience system is a burgeoning use of Machine Learning. Specialized companies¹⁹ enable Marketing specialists to optimize e-mail and web-based communications by constantly learning about users' behavior.

Artificial intelligence systems have changed the game and provide a better understanding of how and when to engage consumers and offer them a better shopping experience²⁰.

Dynamic price optimization using Machine Learning can also help them correlate price trends with sales trends by using an algorithm and then aligning it with other factors such as category management and inventory levels. Finally, about the fraud, the analysis of credit / debit card usage patterns and access to devices allows security specialists to identify the points of compromise. Retailers are particularly concerned by this aspect mostly because they can be subject to significant data breaches. Implementations such as those used by the United States Automobile Association (USAA, which provides financial services to ex-servicemen), can identify behavioral anomalies, even in the first instance²¹.



Al has clearly become a societal topic that drives many debates: will the human be replaced by Al?

In any case behind these orientations, a certainty: a human made a first decision, that of unifying the Customer Journey. Moreover, without the intervention of the human to structure a clear and coherent taxonomy, the AI remains mostly artificial.

THOMAS RAVERA - DIRECTOR OF CLIENT KNOWLEDGE STRATEGY LA POSTE GROUP



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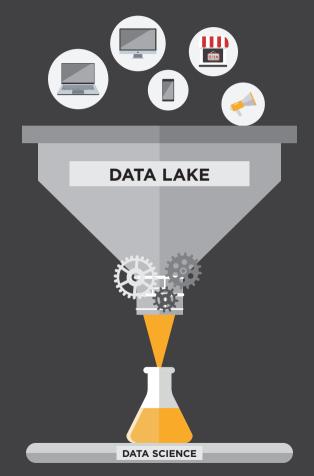
Taxonomy is a method of classifying information in a scalable architecture that defines information to meet customer challenges and organize them hierarchically according to their relevance. This must above all be business thinking in an omnichannel logic. Within La Poste, there are a lot of channels: postmen, post offices, website, etc. A clean taxonomy thus helps to set up a coherent customer management. The first challenge is to properly prepare your data, to have a clean architecture (which requires several years of work).

How to feed the Data Science?

The Data Lake, as previously mentioned, is the receptacle used by the company to gather all data sources. The collection tool must be able to stream the data in real time to this Data Lake. The data from the Customer Journey unification tool will typically be structured around an ID. This ID identifies the user as a client ID or encrypted email. Data Lake, on the other hand, will bring together other unstructured data, such as inventory management data.

All the impressions, clicks and visits gathered around the user will then be made available to the Data Lake. Every data scientist can use Data Lake as a source of work, regardless of whether his team is internal or external to the company.

The best-known Data Lakes are Amazon Kinesis, Google Cloud Platform, Microsoft Azure, and those based on Hadoop / Spark platforms.



DAVID NEDZELA - DIGITAL MARKETING DIRECTOR AT FNAC & DARTY





Although we are fond of all the possibilities offered by the AI, we remain very pragmatic. We seize the opportunities available to us. For example, recently, thanks to the company Tiny Clues, we have been able to detect the appetites of our customers at an extremely fine level of granularity, thanks to the integration of a maximum amount of data.

CHARLES RAVANNE - DIGITAL MARKETING & E-COMMERCE EXPERT AT LINEUP 7

On the market, there is a growing interest in reconciling all points of contact with the consumer in the preparation or the actual act of purchase (on & off line).

In this type of data project, our first recommendation is, before anything, to set our objectives with a view to defining a strategy of means. The choice of the tool (s), the most suitable (s) to achieve it, will naturally follow. It is important to exploit use cases to determine the IS marketing transformation roadmap and not the other way around.



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In addition, Machine Learning is increasingly used to predict the finest possible way consumer behavior. It's a bit like chess where you try to anticipate the other's move before you even think about it, but there's no notion of adversity. To be effective, marketing must meet the expectations of the consumer.

THOMAS RAVERA - DIRECTOR OF CLIENT KNOWLEDGE STRATEGY, LA POSTE GROUP

Today, I lead a Customer Knowledge department that integrates a Datamining pole. It is thus necessary to validate the foundations before anything else and to consolidate the customer repository. Customer knowledge must be at the heart of a company's strategy. This customer knowledge feeds Marketing, Sales and the entire company to drive and achieve all customer actions.

And finally, where are we?

The terms Data Science and AI still generate a lot of fantasies on the current market. The first cases of use are often simple. They still push a little further existing logic, such as user Scoring. They also allow the improvement of existing mechanics such as merchandising (i.e. product presentation optimization) or Yield management (i.e. tariff management system of available capacities). Currently, customization via Machine Learning is on the rise - one in three (33%) marketers use it through algorithms and predictive analytics to dynamically present recommendations and experiences at the individual level. Of those who do not, 32% plan to do it²⁰.





TAKE ADVANTAGE OF IT EFFICIENTLY & GRADUALLY

Always looking for new ways to drive the company's growth up, the Marketing Department is also looking forward to the unification of the Customer Journey.



For the Marketing department, this is an extraordinary opportunity to create a unique relationship at each point of interaction with the consumer and specifically at each stage of the buying process.

Thanks to the logic of audience and segmentation, it becomes possible to personalize the relationship according to the position of the individual in the buying process and try to push towards him the message adapted to each step.

According to the study "DMP strategies in France", although only 17% of decision-makers surveyed would have already implemented a DMP solution in 2017, they would be more than one third to consider using a data management platform in 2018. Thus, many advertisers are launching Data Management Platform projects.

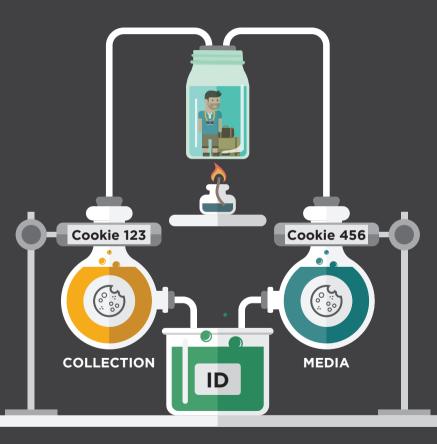
In this context, the unified Customer Journey must be enabled to the Ad Tech environment to increase the performance of campaigns conducted by media partners. This is called activation of data to Retargerting, Display or Affiliation partners and a connection to be established with Trading Desk Agency, DSP or Ad Server. As mentioned, the data can be activated periodically (in campaign launch) or in real time (when a campaign is in progress).

The challenge of the reach

To take advantage of a unified media Customer Journey, the challenge lies in the number of profiles that can be addressed in campaigns: the reach media. With a few exceptions, the key to communication between the two tools is the cookie.

The problem is therefore to have significant levels of cookie matching between the tools and thus, to be able to refresh them regularly.

The level of cookie matching between the collection and activation tools depends on the context of the advertiser (media pressure, visit recurrence, etc.).



Address the Customer Journey

The purpose of this white paper is not specifically to go into a specific detail of the use cases that can be addressed to personalize the customer acquisition journey, but simply to look at this axis that allows you to take advantage of a unified Customer Journey. Here is an example of a Customer Journey in retail and on which marketing actions can be carried out.

Customer Journey		
	SEGMENTATION	ACTIONS
Unknown but enriched with third party data (which qualifies a potential buyer)	Prospect with potential purchase	Increase bid buying impression + push tablet
Visit 3 products pages tablet	Prospect undecided	Increased pressure + push discount tablet
Customers	Recent and active customer (buy a tablet and open newsletters)	Push of the loyalty program in media and on the site

SANDRINE KLEIN - DIGITAL ANALYTICS MANAGER AT FDJ

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To begin the People-based turnaround, our process began with a redesign of the organization of our customer marketing department to be driven according to our targets and their key journeys. At the same time, many projects were carried out in order to be able to reach our users at the right moment, in the best possible way.



DAVID NEDZELA - DIGITAL MARKETING DIRECTOR AT ENAC & DARTY

Our projects are clearly focused on CRM optimization. The idea is to go out of the «generic» newsletter thanks to a personalized, oneto-one newsletter, based on the historical customers with our brand, their appetite for certain products but also their moments of life. For example, customizing emailing has allowed us to gain 10 to 12% of the click rate (compared to static content).

Optimizing the acquisition, but not only ...

Time passes, mentalities evolve, the monetization of its data is no longer a taboo subject on the advertiser side. Better than that, monetization has become a more than credible axis to take advantage of a unified Customer Journey. Indeed, successfully identifying an individual's positioning in purchasing process is valuable. It allows you to recreate moments of life that will be monetizable. For a banking brand, knowing that a user is looking to buy a property, it's worth the "cost". For a telecom, knowing that a web user will move - because he has subscribed a property insurance - is an opportunity for him to push new offers. The entire value chain is to be created.

CHARLES RAVANNE - DIGITAL MARKETING & E-COMMERCE EXPERT AT LINEUP 7



There is a real awareness of the contributions of (our) data. The retrieval of information on the various points of contact can be a real financial asset, or even be the first channel of ROI.

Publishers are starting to rethink their advertising devices by streamlining them, and advertisers will benefit from less quantitative but more qualitative exposure. Currently, between 15% and 20% of advertisers monetize their data directly, but the potential for additional revenue is so important that this number will increase very rapidly.

Sanctuarize our data? There is an awareness of the market: it is important to control its data (the GDPR is not unrelated to this phenomenon). Setting up an environment such as a CDP (or a DMP) will become a convenience, just like a Datamart or a Unique Customer Repository.

TAKE ADVANTAGE OF IT EFFICIENTLY & GRADUALLY

The difficulties that arise on a journey towards a Data Driven growth are not limited to a story of wanting to unify and benefit from the Customer Journey. Other obstacles are to be overcome, such as a coherent and structuring approach of his project.

Benefit from it effectively

With the proliferation of data subjects, the collection sources have been multiplied: Web Analytics, DMP, Tag Management, etc. This multiplication of tools can even be found within the same department of a company.

Various tools, with sometimes overlapping functionalities, and tools sometimes disconnected from each other... A real technological project! The reasons for this beautiful chaos are multiple: a decentralized decision-making power, departments that work in silos, a vision oriented towards the short term... Regardless of the reason, the consequence is the same in many cases: marketing departments have to juggle with different licensing costs for identical functional recovery, data workflows are complicated or unmanageable on the DSI side, data is scattered for the company from a global point of view. More importantly, how can the company deliver data-driven growth and an effective peoplebased strategy without consistent, unified data?



THOMAS RAVERA - DIRECTOR OF CLIENT KNOWLEDGE STRATEGY, LA POSTE GROUP

It is essential that teams work together to serve the business with the most factual customer's horizontal data usage possible. The unification of customer knowledge helps us, with the primary goal of consolidating all data into a single Data Lake and a single customer repository. We create a unique hub that facilitates data management.

DAVID NEDZELA - DIGITAL MARKETING DIRECTOR AT FNAC & DARTY



It is obviously necessary to find the right technology & the right partner (competent in the matter). But above all, it is important to define its upstream objectives in order to set up the appropriate strategy and avoid complicating things what should not be. Several questions must be asked in this process. For a company launching its data-driven growth and its people-based strategy, it will simply identify the tool that can unify all the Customer Journeys and feed the tools of other departments. For a company that must rethink its structure, it will address the following points:

- What are the tools that collect the data?
- Are they able to unify the Customer Journey? If yes, what are the functional areas covered and can they still be addressed if a tool is deleted?
- How flexibly can this unified customer knowledge be made available to partners for any marketing action?

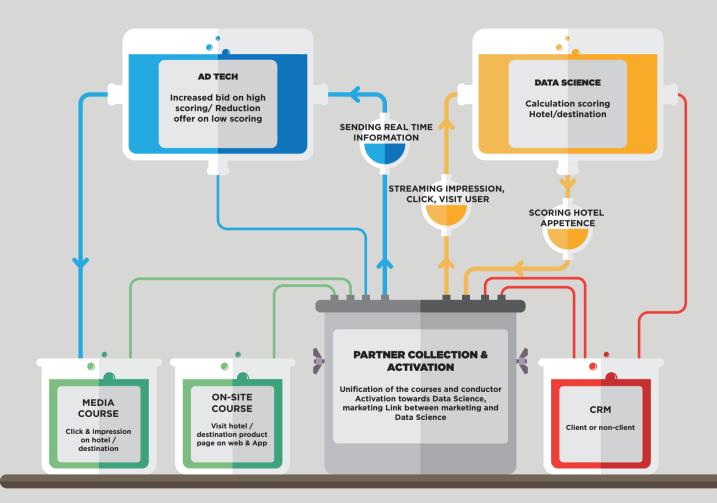
Going toward a clear organization of its technological ecosystem is going to many benefits. For example, a hotel chain may use unique technology to unify and activate its Customer Journeys. Thanks to a clear ecosystem, this channel can be able to work smoothly over the entire chain: from data collection to Data Science to the media.

This is an excellent example of a successful ecosystem. Each interaction is identified and the consumer journey is reunited.

The data is made available to a Data Lake built by a partner. This one can carry out actions of Data Science there to calculate probabilities of purchase. This data

is returned in the collection tool that enriches the user profile. It is then made available to media partners who can now optimize campaigns.

Having a clear ecosystem means allowing each of the company's poles to be able to communicate in a fluid way and thus to gain in efficiency. Today for some people, tomorrow for others, it is about providing the opportunity for Marketing and Data Science to work together. This is to ensure that the CMO and the Chief Data Officer can settle on the same wavelength. For this hotel chain, it was about making purchase predictions. This mechanism has great prospects in front of him, especially in view of creating the offers and services of tomorrow.



THE BENEFITS OF A SINGLE PARTNER

Thus, a centralization of the unification & activation of the Customer Journey can achieve a smooth operation, and the resulting benefits are numerous:

- Acculturation that can be set up around a common tool
- Clear structuring of the technological ecosystem: Ad Tech, Mar Tech, Data Science, CRM
- Rationalization of infrastructure costs: fewer tools, less licensing costs
- Simplification of IT infrastructure maintenance by ISD
- Limitation of technical risks that can alter the customer experience

Finally, difficult to ignore, the new European regulation (General Regulation on Data Protection – GDPR) will be applicable end of May 2018. In front of it, a centralized collection will provide a clear view of the location of data. Access to them, their modification or their return will also be facilitated. It will be possible to ensure compliance with the RGPD and demonstrate it.

DAVID NEDZELA - DIGITAL MARKETING DIRECTOR AT FNAC & DARTY

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A single tool simply provides a unified view of the customer. If the information is silenced, the customer experience is impacted. On the market, we could mention 1000 examples of dissatisfied customers who continue to push an offer when they explicitly expressed their disappointment via a chat, a call center or social networks. A single platform would avoid this kind of inconvenience. Moreover, a collection and storage of data with a single actor clearly simplifies the activation that can be made thereafter.





One of our first advice to customers is to sanctuarize their data in a secure way and especially to avoid the dispatcher, mainly in the face of the arrival of the GDPR. Choosing a FullStack or taking the «best» of each technological brick, is really at the heart of current questions. There is, however, no standard answer. This choice is obviously based on the specificities of the technological ecosystem (SI Marketing) and the marketing activation environment (channels, devices, cross channelality, etc.) existing.

THOMAS RAVERA - DIRECTOR OF CLIENT KNOWLEDGE STRATEGY, LA POSTE GROUP

Having a single data platform makes it possible to be consistent in its customer actions and to personalize them. If in the various departments of the company, the platforms differ, the data architecture also differs, the speech to the customer can not be identical. This makes it possible to have a real visibility on the data, to avoid them being exploded, to have easy access, to carry out coherent and personalized customer actions: as many aspects to take into account.

SANDRINE KLEIN - DIGITAL ANALYTICS MANAGER AT FDJ

In terms of collection, the types of data collected are so varied that it seems rather complicated to depend on a single actor. On the other hand, centralizing data in a single platform is essential to ensure consistent orchestration in this complex ecosystem.



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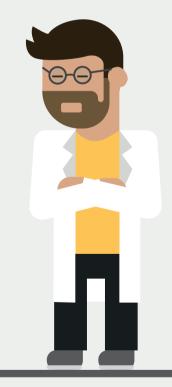




Benefit from it gradually

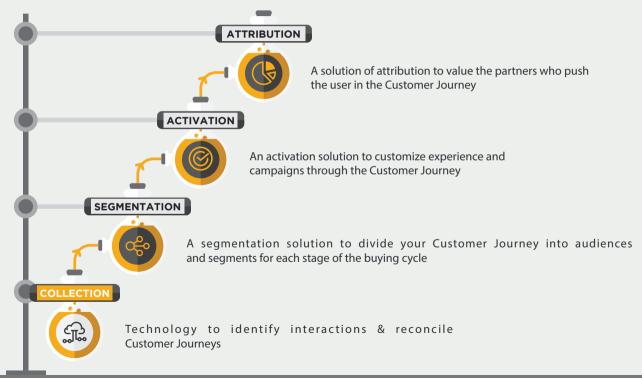
The unification of the Customer Journey is an asset for the company as a whole and for each of its departments. It is also rare to find fierce opponents. However, issues of business context, resources or (simply) priority, can get in the way of its implementation.

Nevertheless, as mentioned, the market and the current competition do not wait. There is no time to lose to take, at least, the hand on his datas & the unification of his Customer Journey. Publishers, having taken the measure of this context, have adapted their technological offers in order to allow brands to approach their data-driven growth progressively.



CUSTOMER DATA PLATFORM LONG TERM

The platform identified on the market to address all these issues has a name: Customer Data Platform. This platform can obviously be launched now if all planets converge. The implementation of a data-driven strategy will be accelerated!

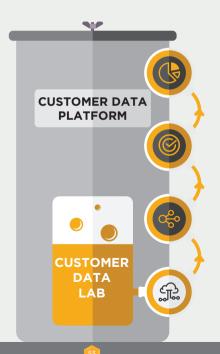




CUSTOMER DATA LAB TO PREPARE TOMORROW

It is important to have a vision of the structure of its "target" technological ecosystem and how to get there. Starting an immediate exploitation of your data, Marketing or Data Science, may be premature.

Use the Customer Data Lab to unify Customer Journeys and feed, for example its Data Lake (keeping in mind that the Customer Data Platform will link to the Ad part Tech later), is a great way to launch its datadriven strategy intelligently.



Part 3

TOMORROW'S STAKES



DAVID NEDZELA - DIGITAL MARKETING DIRECTOR AT FNAC & DARTY

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The Customer Journey will continue to become more complex, it's a certainty. It had to adapt to omnichannel. It was necessary to face the synergy on / off. The Customer Journey is in motion, it is necessary to adapt to it and even to anticipate it, by integrating the IA into the purchasing process to personalize the right offer, on the right device, at the right moment, anticipating the needs of the customer.

A tidy data allows ease of activation and so customization. The AI will set up models of reflection, but it remains a «way» to do things: it will never take the role of the Marketer. It is obviously necessary to take the best of technologies to optimize our daily life. The machine improves the work of the human, but it remains necessary to the control of the campaigns. It's all about keeping the emotion alive.

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CHARLES RAVANNE - DIGITAL MARKETING & E-COMMERCE EXPERT AT LINEUP 7

The devices continue to mutate, the points of contact will continue to become more and more complex, the way we consume is changing. It is difficult to predict what will be tomorrow, but in the next 5-10 years, evolutions will gradually appear. In the long run, campaign management functionalities will become automated. Machine Learning and Artificial Intelligence will streamline operations and reduce costs. However, the human will remain present on several levels: strategic (for the understanding and the implementation) but also hierarchically (with the control of the machines).

The human allows to introduce emotions and nuance in these activities, that the machine can not (yet) anticipate. But before that, in the short term, the challenge that needs to be taken into consideration is the organizational structure of the data in the company. All entities must be able to communicate with each other and have common goals in order to move forward. And above all, the consumer must remain at the heart of these objectives.

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EMMANUEL BRUNET - CEO AT EULERIAN TECHNOLOGIES

The big challenge, beyond the technical question of raising the matching cross device rate, is the allocation of behaviors on shared terminals, especially on connected TVs. The AI is not at all a miracle solution, but it must provide solutions to allow marketers to reconcile this data, automate the optimization of their marketing operations and especially to take full advantage of large volumes of data concerning the behavior of consumers collected today.

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Over the last 5 years, new technological developments have come to offer a wide range of options for marketers to develop their technological ecosystems. However, all these options are not yet exploited. The immediate challenge is therefore to set up the fundamentals for collecting and storing unified data. These must provide a solid foundation on which to build a Data-Driven strategy that will make the most of the latest technological iterations.

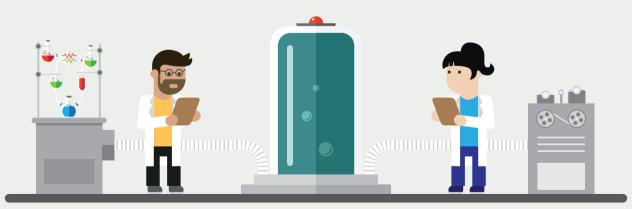




THOMAS RAVERA - DIRECTOR OF CLIENT KNOWLEDGE STRATEGY, LA POSTE GROUP

Too often, it is the consumer who has to face the constraints of the company when it should be to the company to adapt to the consumer. Companies must adapt to Customer Journeys. Today, in an environment in full technological change (digital, big data, AI, etc.), we must first focus on the foundations, on customer knowledge. Then we can add a Data Lake, connectors, etc. Technologies are facilitators from the moment the pedestal is solid. It is when this level of maturity is reached that we can turn to AI. However, we must not neglect the human aspect linked to it. Will it please customers? This is a factor to consider.

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