Internet Retailing

Customer Data Platforms

Creating and leveraging
a persistent customer view

RedEye

Sponsor's Introduction

> **And now, here we are – with a market that finally seems willing to invest in living up to a much-maligned phrase: delivering data driven marketing**

The Customer Data Platform (CDP) solves one of, if not the, greatest issue of modern marketing – the lack of good customer data for marketers. For RedEye, it is that important. For businesses who implement it, it can be a game changer, a real point of competitive advantage.

I acknowledge, however, that such a statement needs some back up!

Since the advent of the first catalogues and direct marketing, the goal for success was accurate data. But as the internet expanded, the number of potential customer touchpoints has mushroomed. And, unfortunately, data management platforms and solutions have simply not kept pace.

The last couple of years have seen a litany of reports and research that highlight one of the key issues for marketers is not only access to data, but the quality of that data. Without access to quality data, a variety of applications - Campaign Management, Analytics or Business Information – do not reach their potential value. An effective multi-channel Single Customer View is key to the success of future marketing endeavours.

It is easy to understand marketers' concerns. For instance, how can you maximise multi-channel marketing automation without multi-channel data? How can organisations implement Predictive Analytics built only on transactional data? Or build true multi-channel (née omni-channel) strategies using databases that can only identify customers through a single identifier – their domestic address?

Bearing all this in mind it seems a little odd that it's taken so long for us to start properly addressing this issue. The term Customer Data Platform has, after all, been around since 2013. But one of the biggest problems for exponents of the value of data, and therefore the significant benefits of the CDP, is that, in the glamorous world of marketing, data isn't... well, it's just not... sexy.

Is it?

No Marketing Director ever said at the start of their tenure 'my mission is to sort out this business's single customer view'!

But times are changing. I'm certainly not going to try to persuade you that data has become sexy, but what is now accepted is that data is the fuel for stuff that is! Things like Artificial Intelligence and Predictive Analytics. There is an increasing acceptance that the successful exploitation of data can give organisations a competitive advantage... truly knowing your customer is a powerful weapon.

And there is another shift that changes the landscape in favour of CDPs. Increasing levels of automation and integration means that the high charges for manual database builds are increasingly a thing of the past. To create an effective single customer view is now vastly more cost effective, both in terms of set up and ongoing charges.

At RedEye we have always sought to leverage the power of data. We saw the power of behavioural data in the early 2000's in helping to personalise and target emails. In 2005 we built a cross device tracking component into the core of our single customer view solution. And we built a cross-channel database solution that allowed brands to pull together online and off line data, helping to end the concept of stand-alone digital marketing teams.

And now, here we are – with a market that finally seems willing to invest in living up to a much-maligned phrase: delivering data driven marketing.

Matthew Kelleher, Chief Commercial Officer

RedEye

Introduction

For more than 20 years retailers have been working on perfecting personalisation using technology. Ever since the beginnings of ecommerce, there has been a drive to leverage the growing amounts of data digital interactions can generate for retailers and turn that into better ways of understanding the customer, understanding the customer journey and ultimately marketing them so effectively that they simply purchase more.

As a result, marketing departments across retailers have become central to collecting, cultivating and managing this customer data and creating from it the kind of 'personalised at scale' interactions that most consumers now expect as standard from the retailers they deal with.

But wait, don't we already have customer relationship management (CRM) and data management platforms (DMP) to handle all this? Well yes, but for most businesses these technologies have grown up and developed piecemeal across the business, often featuring fragmented data silos, incompatible systems in different departments and don't feature the necessary tools to manipulate the data that they have with the flexibility and agility needed to create an often real-time view of customer behaviour that can be acted on in different ways depending on what the marketing department and the overall business wants to achieve.

As a consequence, many retailers have increasingly searched for an affordable and effective solution to their customer data needs. And they have found one – customer data platforms (CDPs).

CDP is defined by analysts at Gartner as an "integrated database managed by marketers that unifies a company's customer data from online and offline channels to enable modelling and to drive customer experience".

In short, CDP offers the technology for marketers to pull together all that they know of a customer and manage how they use that data to interact with them. But where CRM is an IT tool, CDP is an enabler: it is a tool that can be applied across all the data that you have from CRM systems. DMP systems and any other source of customer data can help marketers understand multichannel behaviour across all channels, create more personalised experiences and more compelling marketing content for individuals but at scale and create and drive campaigns.

CDP is also going to underpin Artificial Intelligence (AI) and machine learning driven marketing systems that are poised to sweep through retail marketing departments in the next 12 to 24 months. The data and understanding that both AI and machine learning create will need to be curated and managed in new and more effective ways and CDP holds the key.

And that is why you are reading this white paper. All retail businesses need to move to marketing that is personalised and driven by the needs and habits of individuals – and that requires technology to gather data and understand data on a scale never before seen. That is where AI and machine learning come in. But without data, these futuristic marketing technologies are useless: you need a CDP strategy first and foremost to gather data, store data and make sense of data before you can apply more technology to being truly innovative with that data.

In this white paper you will learn what CDP is and the components from which it is assembled, where its business case lies, how to measure its success and scope out ROI, what it means in terms of the skills your company needs – and the skills it will create – and how CDP and AI work together going forward.

Paul Skeldon is mobile editor, InternetRetailing

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ABOUT THE EDITOR

Paul Skeldon is the mobile editor at Internet Retailing covering all things mobile, AI and data driven

WHAT IS CDP?

At its most basic level, CDPs do something relatively simple: they collect and model data, unify it to create a single view of the customer, create segments of customer types and allow syndication of marketing to these types through all available channels.

In practice this would look something like this: data is gathered from a huge range of sources, be they online and mobile browsing, searching or transactions, in-store behaviour, spending patterns and more (whatever data you wish to try and get hold of); the system then unifies it to create a unique data 'picture' of each customer so that you have a view of everything they do. These customers views can then be segmented by the system into whatever you want to categorise them as – for instance, deal seekers, high value one offs, moderate spending loyalists, newbies etc... – and then, the marketer can select what groups or types he or she is looking to target and then syndicate what they will be marketed with and through which channel or channels.

Looking at these stages, it is easy to see that many of these functions can, to some greater or lesser extent, be performed by other technologies such as CRM, data management hubs, predictive marketing systems and so on.

However, what CDP brings is that it not only handles all of these functions, it integrates them so that they all work together to create something that the marketing department – or indeed any other facet of the company – can use to create the kind of customer groupings to suit the marketing push that needs to be done on any given hour, day, week, month or year.

What makes a CDP?
So what does a CDP have to have to function in this way? Well, CDP is of course a collection of software that delivers these attributes, rather than a set of boxes you plug in at various stages of your marketing and data process. What makes it a CDP system are the following attributes:

- **Manages marketing** – The marketing function within retailers, if not all customer facing businesses, has taken on new importance in the digital age. Understanding who the customers are, what they are doing and what you need to sell to them has become the crucial part of understanding what a retail business does and its reason for existing. Hence, CDP systems are in essence a marketing department tool and need to be built to serve the purposes of the marketers. They should be easy to add data to – especially new data sets, once you have managed to pull in all your existing and on-going data – and they need to be easy for marketers to pull data out, segment data and customer types and be agile enough to facilitate the creation and implementation of rapid new ways to connect with customers. In short, CDP needs to be a practical tool that can be used in the field, not something that marketers need to ask the IT department to do for them (sorry IT guys!). Naturally, IT will have a hand in integrating and deploying the technologies needed to roll out a CDP and they will have to maintain it, but it has to be built to be used by marketing for marketing.

- **Uses first party data** – The focus of any CDP project should be around using your own first party customer data and continually building and refining what you know about everyone. Direct marketing platforms (DMPs) can use third party data – and often do – but CDP relies on your first party data. This data should be all the first party data that you have: names and addresses; email addresses; data from website visits; mobile numbers; and, where you can, device history – so data on what devices they come to you on and what they tend to do – as well as any in-store data you have. This is the power of CDP: to pull all this together and provide a single view of what your customers do – and where and how they do it.

- **Produces a single, persistent record** – The main goal of your CDP is to provide a single and persistent view of each customer. This covers their identity,

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device and channel behaviour and habits and purchase history all set against their demographics, context and location. And this can be 'live': their behaviour – especially device, location and contextual attributes – are likely to be a moveable feast and something that needs to be persistently updated. This is the true power of the CDP: it can be used to gather and manage this data and to constantly update, amend and re-categorise consumers as their behaviours change and their locations and contexts shift. This may be as simple as from first time shopper to loyal repeat buyer, but more likely it will be those shifts along with moving from mobile browsing to purchase on a mobile, or mobile showrooming in-store to buying on the High Street then buying other things online. Consumers no longer follow a linear purchase path and leap from channel to channel and change where they do different aspects of the purchase process depending on their context, location and, hardest of all to model, their whims. This is why CDP is so important to the modern retailer.

- **Real time** – To effectively cater to these ever-changing behaviours of consumers, CDP systems need to be able to cope with rapid data changes, even as far as to handling real-time data streaming. While part of this is a software and processing issue, it is also a design function, with CDPs having to be able to allow for rapid and easy input of data and real-time creation of customer views, segmentation and syndication of marketing channels. On the other side of the same coin, they also need to be quick and easy for marketers to extract data and formulate new categories and new customer groupings to facilitate new marketing outputs as triggers and requirements change.

RISK FACTORS WITH CDP

While there is much to trumpet about CDP, as with any project like this there are risk factors that need to be considered as off-sets to the above benefits. Executed properly, a CDP implementation should already have the risks noted, but it is worth just touching on them here for the sake of completeness.

- **Incomplete data** – Your CDP and the subsequent marketing and business analysis you do from it is only as good as the data you have. Unless you know everything about every customer, then there will be blind spots, mis-categorisations and so on. Making sure you have as complete a data view of the customer as possible will yield ever better results, so when starting out on the CDP road, make sure you have as much up to date data as you can muster and keep on top of it. It must be updated all the time to keep that customer view as accurate as possible. One particular area of weakness is linking a customer's mobile device to their browsing history requires that you have a way to link the two, often through getting a user to log in so that you can tie device to email address so that you can see 'who' they are. This can be tricky and not always possible.

- **Privacy issues** – Customers are increasingly happy to share data with brands and retailers in return for a better service, but you still have to tread very carefully. With General Data Protection Regulations (GDPR) coming into force in May 2018, all brands and retailers need to be legally very careful about the data they collect, how they use it and how they store it.
  But more prosaically, from a consumer point of view, data used out of context, too much personalisation, and over use of data can all appear a bit creepy and can be harmful to the brand rather than generating better sales. CDP should be used to gather, curate and manage data profiles, but marketers themselves need to exercise thought and discretion as to how, how often and when this data is put to use.
  However, there is an upside for CDP to GDPR: under the terms of these new rules, data needs to be handled more effectively and retailers need to be able to access it more readily and manage it more easily. The single customer data view that CDP affords and the single repository of data that it delivers, actually makes complying with GDPR easier to do. So, while there are issues with privacy and data that have to be taken into account, GDPR actually offers a very compelling reason to invest in CDP.

" Making sure that your system can deliver the right kinds of testing is essential and must be a key part of your procurement "

The components of a CDP

As stated previously, CDP isn't a box that you buy and plug in and away you go, it is a technology platform that can pull together the data you have and help the company work out how best to use it across the marketing channels at its disposal. While there is no one typical map of a CDP, the factors you need to consider when assessing third party CDP providers are as follows:

- **Data connections** – Perhaps the most significant part of any CDP deployment is how it manages and mines data and how it matches it to the channels you have at your disposal. The first key element of any CDP deployment is which of your existing data tools it supports and how it uses that data. It is also vital to make sure that however it interacts with your existing databases and data tools, it also offers suitable safeguards against data protection breaches, privacy violations and that it can handle third party data under the same aegis.

- **Data processing capabilities** – Any CDP needs to be able to handle both batch and streaming data processing and to be able to do it in near real time. As stated, CDPs need to be able to handle data 'live' as well as in batches to create both planned and timely marketing campaigns as well as supporting personalised interaction on the fly with websites, apps and more.

- **Segmentation capabilities** – Your CDP needs to clearly show how it can segment customer data and what sorts of persistent customer profiles it can create and maintain. Your CDP system will need to be as flexible as you want it to be here and this is a vital consideration as it underpins the business process and marketing efforts across the whole business.

- **Outbound channel support** – Collecting, curating and managing data is just part of the CDP process: it also has to be able to use that data and those personalised views of customers to help create the right kind of outbound marketing. While look and feel therein lies with the brand and the marketing department, when choosing a CDP provider you need to look for the right channel capabilities. Are you mainly driven by email marketing? Do you want to drive app experience? Is text messaging your main channel? Are you looking at direct mail? All these things need to be assessed across all the segments of your database that you are likely to use. You may find that you want to use SMS on newbies and stick to email and app experience for high value repeat customers. You may find it works better the other way around. When choosing a CDP supplier you need to assess what their channel strengths are and how flexible the system is.

- **Agnostic versus 'integrated'** – Building on the idea of outbound channel support above, it is also worth looking at agnostic CDP versus those that are more integrated. Any CDP needs to have the capability to plug easily into other best of breed platforms – such as Marketing Automation (MA) tools –but some, such as RedEye's plugs into the company's own propriety MA platform, providing integrated solutions.

- **Operation** – Do you need your CDP to orchestrate the actual cross channel marketing against your predefined rules? This is a key question when implementing a CDP system as that level of 'last mile' functionality can be make or break. You may wish to trigger and create your own campaigns against the data groups you have yourself, or more likely you will look to let the CDP manage personalised experiences on things like app or website interaction automatically for you, based against your own predetermined set of rules. Making sure you have the functionality in your CDP to do this from the get go is vital to the success of the project.

- **Analytics** – As we shall see further on in this white paper, measuring what your CDP is doing is vital not only for the business case of investing in it in the first place, but also in making sure that it delivers what you want against an ever-changing backdrop of customer behaviour. Making sure that your system can deliver the right kinds of testing, as well as being able to analyse and quantify what it is delivering in terms of uplift and sales is essential and must be a key part of your procurement.

THE BUSINESS CASE FOR CDP

Five years ago, the problem faced by most retailers and retail marketers was that data was silo-ed and hard, if not impossible, to pull together and reconcile. Today, most leading companies have overcome this silo-ing issue, but as a result have created another problem: too much data.

CDP fixes this. It pulls together the vast amounts of data and attributes it to people and creates profiles of them based on all the data you have on them. This turns the data into something much more manageable that, in turn, plays into the overriding need for personalisation, customer experience and journey optimisation.

It also allows for more targeted and personalised marketing that should reach out to the right people with the right message on the right device at the right time. It provides the connective tissue between all the data and the need to view that data as the people it pertains to.

So what does this mean in terms of a business case? The arguments for CDP are almost overwhelming and certainly compelling.

- **Deeper understanding of the customer** – Put simply you get better value for money from your data as you can turn it all into a better view of each of your customers. While there are clear benefits for the customer (see below), what this deeper customer view brings is more efficient and, hopefully, more effective marketing. Having a deeper view of the customer leads to better targeting of marketing, more co-ordination of marketing efforts, better personalisation, better customer experience and, eventually, better sales. It can also lead to reduced churn, which offers a cost benefit of sorts in itself.

- **Better use of multiple channels** – In the multichannel world that retailers now live in, finding the right channel for the right customer at the right time is an increasing business driver. No longer can a retailer just look at online versus in store, instead it has to be assessed as to where in the online, mobile and real-world each customer is doing what part of the retail journey for any given purchase. CDPs can not only collect and collate this data, but can also deliver indications as to how best to contact customers through the channels you have available. This can reduce duplicate efforts, as well as removing the annoyance-factor of customers being emailed and texted and DM-ed all at once. This is not only a vast efficiency gain for the retailer, but also leads to happier customers with the inherent loyalty and reduced churn that go with that.

- **Better device conversion** – Being able to understand more accurately what devices consumers use – not just to receive your marketing, but also to do their own interactions with you on – can help a business target conversions on particular channels. This means that a retailer can look to enhance and drive mobile sales to those that show a propensity to actually purchase on mobile and not drive such a marketing force at those that don't. This can help generate better device attribution for sales – a useful business fact to have when it comes to looking at technology investments going forward – as well as looking at how to make the right offers and create the right experiences on the different channels.

- **Better customer experience** – Taking the above together leads to the ability to create the right kinds of customer experiences for customers on each channel and device type, as well across marketing in different channels.
The first port of call with improved customer experience is using CDP's customer view to 'recognise' customers as they come in to you on whatever channel and, perhaps, adapting that experience dependent on the channel – web, mobile or app – and on what they last did.

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Secondly, this better customer experience can be tailored to offer the right kind of content and images to the user based again on the device they are using and what they did last time, as well as the location and context of this visit. This is where it gets clever: using all the data you have about each customer means that you can start to appear way more tailored not only to them personally – which is already a big win – but also to where they are located and what they are potentially doing.

Of course, care needs to be taken to not appear as if you are spying on them and know their every move, but if done right it offers a whole new level of personalisation that only CDP can deliver.

- **Improved analytics and business intelligence** – The ultimate outcomes of a single repository for customer data is greater depth, speed and accuracy for analytics (and, ultimately, as we shall see, being ready for AI and predictive marketing), as well as greater ability to influence Lifetime Value.

- **Better end results** – The measure, of course, is in sales and engagement. Does your CDP investment produce an uptick in sales and more clicks, more social and all the other metrics you want to measure? The main reason for investing in CDP is that it produces more loyalty, lower churn and increased sales. If you have good data then you can start to make better use of it, which should yield better results from happier customers.

There are also the benefits, as seen, of marketing efficiencies that CDP brings – not only extracting better value for the data you have, but also in focussing the right marketing efforts to the right segments of shoppers.

There are further gains to be made in cutting churn and increasing loyalty, as well as using excellent customer experience to create more buzz about you on social media, which in turn can lead to greater sales, influx of new customers and more.

It also sees you make better use of your first party data.

- **Business-wide benefits** – Much of this white paper discusses the marketing potential of CDP, but it pays to remember that, while CDP is a tool that can make data-driven marketing, personalisation and customer experience the cornerstone of how you sell, gaining single persistent views of all your customers and what they are doing, the devices they use, the places they use them is all vital information for the running of the whole business.

While the marketing department needs the customer view to improve engagement and drive sales, the rest of the business needs to see who its customers are, what motivates, delights and, indeed, upsets them to help spot developing trends. A single persistent view of all your customers can be used to run the business on a day to day basis as well as providing great data to review and extrapolate to help with planning and future development of the company.

❝ If you have good data then you can start to make better use of it, which should yield better results from happier customers ❞

KPIs FOR CDP INVESTMENT

There is a strong business case for CDPs as outlined in the previous section, but what can you measure to offer a tangible vision of what it can deliver? For marketers with multiple point execution tools and a wealth of customer data, it can be hard to pinpoint what KPIs need to be looked at as the end results being chased are often intangibles such as 'personalisation' or 'customer experience'.

However, there are ways and means of assessing just what a CDP deployment is achieving or is set to achieve. Here's how.

- **Conversions** – The true test of the effectiveness of any marketing IT project (well, any project) is does it produce more conversions or higher value conversions? Sales are the name of the game in retail and the acid test of CDP is does the project lead to more conversions? This is readily and easily measured: what were your sales before and what are they after implementation.
  Once it has been proven that initial CDP investment is yielding results, further expansion of how it is used can be undertaken and again measured against conversions.
  For more subtle conversion KPIs, the CDP can be used to see how conversion across different devices and channels work, how different campaign types and segmentations can produce different results and so on.
  As with all technology implementations, the testing against KPIs is ongoing, forever tweaking and testing and measuring to perfect every aspect of segmented marketing.
- **Engagement** – Second only to conversions, engagement of consumers is an increasingly important metric for all retailers and, since two of CDP's key deliverables is customer experience and personalisation, understanding how these impact the bottom line is key. Of course, it is very hard to measure engagement quantitatively, but clicks from marketing material through to your site and then on to conversion (or other measureable activity) is actually something CDP can help with.
  Having such a holistic view of each customer allows you to also track what they do – thus enabling you to 'measure' how engaged your customers are, what engaged them, how much it led them to spend, and when.
- **Influence** – Another measurable facet of the impact of CDP on your engagement strategy is to look at how it leads to your customers being influential across social media. A great customer experience often leads to favourable social media updates and can set your most loyal shoppers up to be hugely influential for your brand. This is another 'double-bubble' benefit of a CDP strategy. CDP allows you to create and deliver excellent customer experience and personalisation; it also allows you to track how those engaged shoppers then behave. By offering them such a good experience and logging how they react socially – again as a data input into the CDP itself, you can see how engaging your UX is and how much influence on social that UX delivers. You can then look at how social media feeds may be then generating more sales, neatly tying influence on social media, engagement and conversion together – all in the CDP.
 It is this collection of KPIs that really sell CDP.
- **Faster data** – While conversion, engagement and influence are all hard KPIs that deliver real numbers behind real business benefits, there are also a number of softer KPIs that are also worth mentioning and measuring. One of these is faster data. Centralising data around customers through a CDP also means that you can also gain much quicker access to data, to slice and dice it in other ways. Quick access to what is going on across your business is a tangible business benefit for any digital retailer, as the marketplace moves fast.

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• **Better data** – Building on this idea of faster access to data, CDP should also lead to better data. This works in two ways: firstly, the company should strive to make its data as good as possible to make the CDP as useful as possible, so data gathering and curation becomes a much more central art to the company. Secondly, by making the data more useful and viewing each bit of data not on its own, but as part of a whole view of a customer, the data becomes more valuable and more useful. If data is the new oil, the CDP allows you to get more energy from each bit of data, if you will.

• **Better customer understanding** – Another 'soft' KPI for CDP is in better understanding your customers. As touched upon in earlier sections, creating single, persistent views of each customer – that can change in near real time – means that the whole business can garner a much better understanding who it has as a customer base and what each individual customer is about. Knowing this, the business can more clearly direct its future operations and can use the CDP to forecast new markets, assess what may happen in new territories and help drive the business forward.
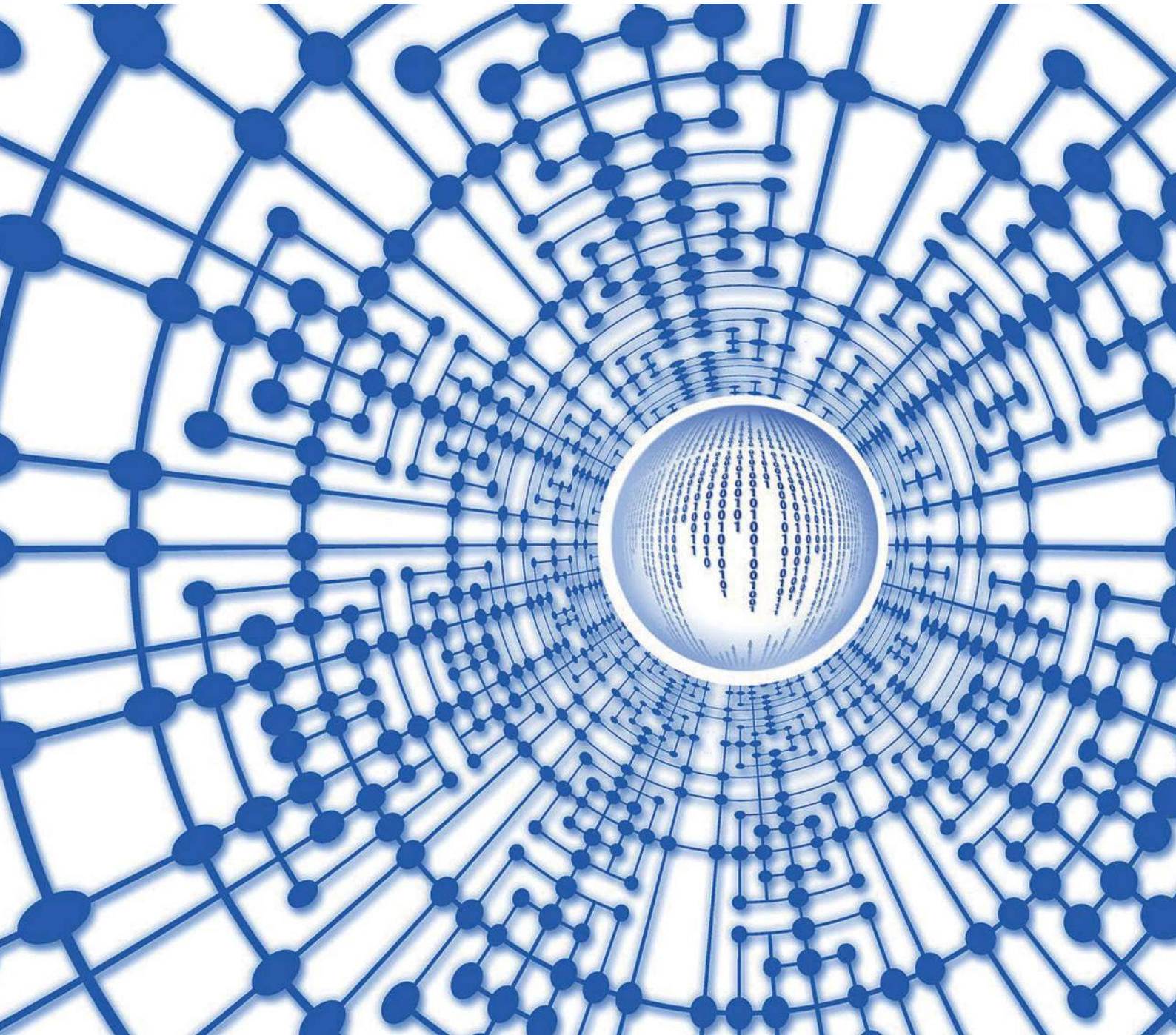
HOW TO IMPLEMENT A CDP STRATEGY

As we have seen, CDP isn't a thing but more a strategy – so how do you make it happen across your business? The first thing to realise is that CDP is a set of software, algorithms and code that is used to pull together all the data feeds that you have and collate and curate them, hopefully pushing out single, persistent views of customers that can then be used in more elaborate and constructive ways.

What to consider before deployment

With this in mind, there are several steps you need to follow to start to implement a CDP strategy across your business. But first you need to consider a few things.

- **What you want to achieve** – The starting point has to be to look at what data needs to be stored in the CDP, with considerations for GDPR, and identify the resource needed to extract that data. Consider the marketing campaigns and channels that you would want to use to ensure the right data is stored in the CDP. Also consider whether the data needs to be merged in a certain way dependant on the need for synchronisation with other platforms in the tech stack.
- **IT support** – While CDP is not an IT tool it does need the IT department's buy-in and support to make it work. The databases, CRM systems, enterprise data management (EDM) and many other systems and data sources all usually fall under the remit of the IT department in most retailers. The IT department is also largely responsible for running, maintaining and keeping the data systems, marketing systems and all the computers working. So, while IT may not be the end-users of the CDP, they are going to be making it work.

  From an integration point of view, IT is essential so that any third-party CDP provider knows what is being worked with and what needs to be plugged in – so IT has to be on board from day one.

  Getting IT buy in should be easy: data and databases are the cornerstone of most businesses these days and IT rightly sits at the centre of making that work. However, for many IT departments, marketers who need CDP have for a number of years been trying to get the IT department to squeeze CDP-like outputs from CRM and other systems that can't easily deliver it.

  Taking this major headache away from IT departments is a big plus for most IT Directors. Stressing that IT still needs to make sure the database and CDP plug ins all work together, but that execution of what the data delivers will be something done by marketing, should get them on board.
- **Deep understanding of the tech stack** – IT's role is also essential in the early days of preparing for the CDP deployment as retailers need to fully understand the technology stack being provided by any third parties so that in house data and systems can be prepared for integration to create the CDP. This isn't as easy as you'd think: really knowing how data systems work and what the third-party data stack has to offer is an often herculean task, since many in-house systems have been developed over a number of years, often in a piecemeal fashion and working out how to integrate with them when they have been integrated together in unusual ways is a huge challenge. Here again, you need to get your IT department to work closely with third party suppliers to make it all work.
- **Data knowledge** – The next step is to make sure that you understand your data and what you want to do with it. Data is often a vast and rolling mass of information, stored in different silos and formats and not necessarily clearly compatible with other sets of data. The CDP, as we have seen, is designed to turn this mass of unruly data into individual views of customers, giving insight into all that they do. But to build such a CDP system, means starting with a total overview of what data you have, in what formats, in what databases and how accessible it is. Knowing this is paramount

to then working out how to build out a proper CDP system that can pull all this together and produce meaningful data insights.

How to deploy CDP

Once you have worked out the preliminaries of what you have, what you are trying to achieve and what data you have, and with IT buy in there are essentially four basic steps to deploying a third-party CDP.

Step 1) Project Planning

Start by considering what you want to achieve with CDP. It is worth looking at what DMP features and functions you have already invested in and how they may help you. The same applies to CRM systems, and any others that hold data that you may need to integrate to achieve what you are looking for.

Next, identify key stakeholders in the company that you need to work with, as well as looping in the ultimate end users and create your project team. Pick a project manager and all the people that are likely to run channels in your company that will need to play a role in the implementation. These typically will include data analyst, CRM, website, web developer, digital media marketing executives. Make sure all these people have an input in to your implementation plan and timeline.

It is worth laying out some KPIs and success metrics at this stage – playing out what the project will be delivering and looking like in three, six and nine months from start.

Step 2) Data Strategy

As we have seen data plays a key role in your CDP deployment and you have to totally understand what data you have and what you want to do with it. What does this look like in reality? Well, there are several things to work on:

- **Identify data capture methodologies** – There are different technologies and techniques to capture, ingest, and normalise data from different sources and channels. For website and mobile web data, you'll need tags, but the data these tags need to capture will depend upon your use cases. If you're satisfied with just linking these visitors to media impressions, cookies will suffice. But if you'd like to link these website visitors to existing customers in your CRM database, you'll likely need to pass an anonymous identifier to the tag.

  For mobile app data, you may need to integrate your DMP's SDK. For media data, you'll need to be able to tag your ad creative or plan to ingest a log file from your ad server. For CRM data, you'll likely need to use an offline on-boarding provider.

- **Identify actionable data attributes that could yield actionable information** – What specific attributes are both available and likely to be useful for your intended DMP use cases? Consider hierarchical relationships between attributes and the projected volume for each potential attribute. Consider, also, the appropriate level of granularity – and remember, more granular is not necessarily better.

- **Think through your taxonomy requirements** – How will your data need to be organised to allow you to derive relevant insights and take action, most efficiently? Here you need to understand the methodology your DMP uses to develop the taxonomy and classify data, and plan accordingly to ramp that up across a CDP. Understand what is necessary to integrate third party technologies – if you'd like to send data out to third parties in real time – such as your website personalisation tool for example – there may be additional setup required.

Step 3) Implementation and Integration

Here you need to create the data capture/ingestion mechanisms, where relevant tags, data and more are pulled into the CDP in accordance with your defined data strategy. This requires coordination with third party technologies or cross-functional groups, where relevant.

Then you turn on the pipes and let the data flow. Take a look at the data and fix any problems. Then you have to "rinse and repeat' the process to keep ironing out the problems with data anomalies and other technical hitches.

You may need to wait a few weeks to allow the data to accrue, so in the meantime you also need to look at teaching others in the organisation how to use the system.

Step 4) Use, Measurement and Optimization

Measure your results – as per your pre-defined measurement plan, success metrics and KPIs, as outlined before – and learn from what is happening. As with all IT and technology deployments, it will need to keep being worked on. Remember, your CDP deployment is an ongoing process and will never be 'finished'. So try, try, try and learn, learn, learn.

THE NEW EXPERTISE

Implementing something as strategic as CDP across a business often requires not just a technology rethink, but also needs some degree of reskilling of the workforce and changes in the mindset and business processes of the whole company.

CDP is no exception. While the technology is there to realise the dream of the marketing department of being able to be ultra personal and really understand their customers, it does push a rethink in how they operate, as well as who else they need to work with within the company.

So what are the skills changes that CDP brings about?

- **IT and the tech stack skills** – As we have seen in the previous section, while CDP is essentially a marketing tool, you can't implement or run it without the buy in of the IT department. To start with, IT needs to be able to understand what is being done and what is being asked of its existing systems and databases to allow for the integration. Here third-party CDP integrators are needed to explain what is being done and, on a technical level, what is going to happen. These skills come from outside and are usually associated with the provider of

DAY IN THE LIFE OF A DATA SCIENTIST

Commercial data scientists are now an accepted part of many forward-thinking retail businesses and, if you are going to fully exploit CDP then you need to understand the role of the data scientist.

So what do they do? Let's take a look at a fictitious data scientist – we'll call him Tim – and what he does.

Tim starts the day with a coffee and then takes a look at the proposal to CDP-enable the company. Tim has more coffee and sets to work talking to the marketing department about what they want to achieve.

Tim returns to his office and starts to look at what data is going to be needed, where it is located and what format it is in.

The CDP third party stack specialists arrive mid-morning and together they and Tim continue the hunt through the available data to work on what is needed format-wise.

Tim then sets his team to work on ETLs (extract, transform and load) and visualisations of how this will work.

Tim, the team and the CDP integrators then take a look at transforming the data into the forms that are needed. Simple you may think, it is just a case of reformatting it and plugging it in, but often there are nondeterministic things that need to be done and need to be done with high accuracy. Since this is a new project, Tim is likely to spend 60% of his time coding, 5% looking at results, and 35% researching new ways to fill in the gaps in his analysis for the next few months.

With CDP implemented Tim's job will become more central to the business than it was and he will also be involved much more closely with both marketing, the day to day running of the company and the future direction and development of products, strategy and more.

Once up and running, a lot of Tim's time is spent monitoring and digging into metrics to understand where the system is under or outperforming. If the business is developing a new feature, Tim will be working with engineers to ensure that all logging is up to par and communicates as expected with any backend services involved in the feature. If the marketing department is brainstorming future direction for a product, Tim will be pulling data and performing analysis that help inform the conversation.

the CDP systems used. They should be on hand to reskill the IT department so that, going forward, you can run the CDP internally.

- **Data knowledge skills** – Understanding your data, the data integration capabilities of the CDP and how to improve your data are all essential new skills when CDP-enabling your business. If you have in-house data expertise, then they too will need to work with the third-party CDP tech suppliers and IT to understand how it is going to work and get to grips with advanced data knowledge of APIs and so on, to aid integration in to the CDP of the existing silo-ed data. They also need to look to the future of what data you may need to add and how that is best going to work. Data scientists can also be used to make the data you have – or any data you add – ready for the CDP once it is up and running, working in conjunction with the IT department who manage the physical operation of the data systems.

- **Web development skills** – As we have seen from the overview of how to implement a CDP stack, there is a need to be skilled in web dev, typically taxonomy and tagging. Tag management is critical for effective data integration and understanding how to tag and what to tag is going to be a central part of creating a CDP strategy in your business. Again, these guys need to work closely with the IT department, data scientists and third-party stack specialists, but they also need to be close to the marketing department to understand what they are going to want the CDP to do. This is crucial to understanding how to tag data and how to integrate silos.

- **Marketing skills** – the 'data out' aspect of CDP should be simple and clear: there is no point creating such a system if it is really hard to use, so in theory the marketers using the output of the CDP shouldn't have to learn new skills other than how to do really cool things now they have a persistent view of the customer. However, they will need to be involved in the creation of the CDP from day one so need to understand at some level how it works and how it will work in their company or team. No, marketers don't need to become data scientists or IT specialists per se, but they do need to work at understanding what these roles are and how to use them.

Case studies

O ver the past few pages we have seen how CDP works in theory, where you need to apply it and even how you need to apply it to get it working for your business. But what of the real world? While CDP is a fledgling technology, one of the key areas it promises to enable is Predictive Analytics and AI. While this too is in its early stages, there are some examples of where it has been put to use. Here we take a look at two early-adopter case studies.

John Greed Jewellery: using Predictive Modelling to cut unsubscribe rates

John Greed is one of the UK's leading online jewellers, stocking Pandora, Links of London, Thomas Sabo Jewellery, Swarovski and Nomination. The company also has a vast in-house collection of jewellery for any occasion and offers a market leading engraving service to allow for full personalisation of gifts.

However, like all successful online retail businesses, the company wanted to reduce unsubscribe rates across all its campaigns and subscriber groups, without impacting spend. The marketing team at the retailer also were assessing whether, at the same time, they could potentially increase the number of targeted campaigns by leaving out individuals with a high likelihood to unsubscribe from regular campaigns.

The solution was to work with RedEye on implementing a black box solution customised to work with John Greed's data held within the RedEye's database. This black box solution was engineered specifically for the problem with machine learning-driven algorithms working to create a bespoke model for the jeweller.

These algorithms consider all the variables stored by RedEye, including additional variables or model outputs which can be fed in through an API.

The system was set up to exclude individuals with a high likelihood to unsubscribe from all campaigns and to include an additional campaign to all individuals, this additional campaign would usually carry the risk of a high rate of unsubscribes.

And the results speak for themselves. The campaigns produced an overall reduction in unsubscribes of 31.05% and, more tellingly, the campaign to target 'extra send' produced a 47% lower unsubscribe rate with the low engaged segment showing a 75% drop in unsubscribes.

The extra send allowed for an increase in revenue of 103.83% compared to a typical 3 newsletters only week.
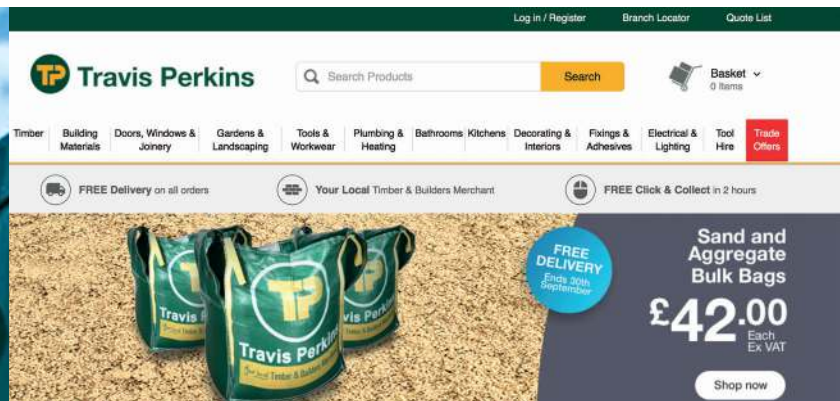
Travis Perkins: boost the value of low LTV customers

Travis Perkins are the UK's go-to Timber and Builders Merchant. Providing everything tradesmen and DIYers need for a successful build, Travis Perkins have been sorting out our one-off projects or large scale building works for nearly 30 years.

Travis Perkins, however wanted to increase the value of customers who had the lowest predicted lifetime value (LTV) over the coming 12 months. Knowing who these people were was the first challenge and then understanding how to best predict their behaviour and target them with the right marketing to up their spend was the second.

To do this the company turned to RedEye, which created a black box solution based around customised algorithms that offered Travis Perkins machine learning and predictive analytics across their customer data. The algorithms consider all variables stored by RedEye and can include additional variables or model outputs which can be fed in through an API.

With the system predicting who the lowest LTV customers were likely to be, the company then instigated a cross-channel marketing campaign with multiple touchpoints based on engagement with emails and website.

And the results were stunning. The campaigns saw a 27.5% increase in value for the lowest value, disengaged prospects and a 96% increase in prospect response (purchase) rate over the control cell.

Moreover, the average value of prospects in the test cell were 468 times that of prospect in the control cell and LTV of the test cell is predicted to be 2.4 times more than that of control cell over the next 12 months.

12 learnings from the best

So what are the 12 key takeaways as to how to plan for, implement and measure the success of CDPs?

1. You need better control of data
The digital age has created many things, but chief among them has been a vast and ever-growing amount of data. For most retailers, this data has grown up in silos across the company and is not being used to its full potential. You need to get control of that data and use it much more effectively, not least in your marketing function. This is why you need CDP – it offers the chance to pull together all those strands of data and make much better use of it.

2. More than just CRM
Don't think that if you have a CRM system – or even a DMP or marketing dashboard – that you have CDP already. CDP is a combination of technologies that not only plumbs in all your data to make better sense and use of it, but can also feature machine learning to use data on an ongoing basis to see trends and more among your customers.

3. Create a single view of the customer
The over-arching reason for implementing a CDP strategy is to gain that all-important single view of the customer and this is really the nub of why CDP is so important. Rather than having a collection of silos of data, CDP aims to form a database of customers, each one fully profiled and understood. It takes in all their attributes and can start to make sense of their cross-channel behaviour. It can also do it live, so that location and context start to be data points that can be used effectively.

4. Personalise and improve experience
All this means that the marketing department can achieve the level of personalisation that customers now demand. Having a single view of the customer, that can be updated and tracked as they change location, device and habits, means that the level of personalisation that can be delivered becomes huge. And thanks to the machine learning attributes built into many CDPs, you can do this at scale as you spot groups of like-minded individuals.

5. Work with IT
To make CDP happen for the marketing department you have to work with IT. Unlike your CRM system, CDP is a marketing tool, but the IT department are key to its functioning as they run the databases and keep the 'pipework' that flows data into your CDP working. Getting their buy-in early is essential – and one key way to do this is to show them how it takes away a lot of the problems they have with trying to create personalisation from the data they have.

6. Work with third parties
While IT plays an essential role, you also need to work with third-party CDP integrators to make this work. You know what data you have, IT knows what format and in what silos, but you need a CDP expert to bring the software and algorithms that will make it all work as a nice neat single view solution for marketing. Deploying CDP is hugely collaborative.

7. Bring in new skills
Alongside a third-party CDP specialist, you may also need to look at new skills among your existing staff. CDP works on data and you will need data scientists to understand what data you have, how to format it for CDP and then how to manage the ongoing collection of data. You will also need web dev skills to help

with database taxonomy and tagging. Marketing will also need to look at how to make better use of this new, unified customer view and get creative.

8. **Beware GDPR**

    General Data Protection Regulations (GDPR) come into force in May 2018 and bring some changes to how businesses gather, store and use customer data. Too lengthy to spell out here, it is worth making sure that everyone working on any CDP deployment is aware of the GDPR regulations and that you design your system accordingly.

9. **Measure conversions and engagement**

    To see how your CDP is performing you need to simply measure conversions and engagement. Better, more personalised marketing and better customer experience across all brand touchpoints aren't just nice to have, they are there to generate more sales. The true test of the CDP is that it is generating growth. And this you can measure. What CDP also allows you do it is see how engaged customers are at different points in their purchase journey, which again you can leverage to improve measurable conversions.

10. **Also measure softer KPIs**

    It is worth noting that it is also worth measuring softer KPIs such as efficiency gains in handling data, better speed to marketing for marketing materials and more adaptive business processes as trends and markets change. These are all things that CDP delivers that have benefits outside of direct increase in sales that will also impact the bottom line.

11. **Business wide benefits**

    As noted above with the softer KPIs that you can measure with CDP, such platforms and the single, persistent view of the customer that they yield mean that CDP isn't just a marketing tool, but something that can inform and shape the whole business. Having an in-depth and detailed view of all your customers can help identify trends, new markets and new products, as well as potentially heading off problems before they begin. CDP leverages data that helps the whole business.

12. **You need CDP to be ready for AI**

    The biggest trend in marketing is for personalisation at scale and the only way to deliver this is through artificial intelligence (AI). But AI lives and dies by the data that gets put in it. CDP, which already features a degree of machine learning, is soon going to be essential for rolling out AI as it corrals data so that AI can be applied to it. CDP has many advantages in the here and now, but it is also essential for the next step in marketing and you can't afford to miss it.

SUMMARY

For 20 or so years, retail marketers have striven to overcome the problems of siloed customer data and have pushed to get a single view of the customer. As digital retailing has grown, so too has the amount of data. And the problem has spiralled. More data. Harder to make sense of it.

Now every marketer's dream of turning all this disparate data into a single view of the customer has come to pass. Customer Data Platforms offer marketers and Boards the ability to take all that data and use it to create a single, persistent view of each customer – bringing about better personalisation, better customer experience, more targeted marketing and, hopefully, more sales and greater engagement.

While it isn't easy to do, deploying a CDP strategy can be achieved by understanding your own data, finding the right third-party CDP providers to work with and with a clear view of where you want to take your business.

In this white paper we take a look at what CDP is and the components from which it is assembled, where its business case lies, how to measure its success and scope out ROI, how to implement it and what it means in terms of the skills your company needs.

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