A step-by-step **data transformation guide** by Appsbroker

The Road to **Data Parity**

How to drive **real-time data** into every decision to stay relevant in today's global retail landscape

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Introduction

Data is now widely-accepted as the world's most valuable resource. However, its role in business is rapidly changing — from useful and informative to vital and transformative.

Organisations that seize upon the potential of their data will achieve significant improvements in areas right across the business from responsiveness to sales performance to operational efficiency and supply chain management. Those that don't, will struggle to remain competitive when faced with the new demands that an evolving retail environment brings.

In today's climate, the new hallmark of organisational success is a high-frequency, high-performance culture that responds rapidly to dynamic circumstances with relevant, accurate information, and uses this information to make better more informed decisions.

> Data-driven organizations are 23 times more likely to acquire customers, 6 times as likely to retain those customers, and 19 times as likely to be profitable as a result.
>
> **-McKinsey & Co, 2016**

Imagine a world in which every relevant metric is dynamically visualised and on permanent display, supported by data that is accurate to the second. For the first time, the barriers to understanding consumer behaviour and how customers react to different stimuli are removed.

Moreover, the outcome of the slightest change can be assessed in real time, creating a new way of learning and adapting for both humans and machines.

This vision is not that of dystopian surveillance. Rather, organisations that can realise this optimal use of their data — or, those that reach data parity — are simply better able to utilise the information that they already produce to work in a more effective way.

What is data parity?

Data parity refers to a state in which an organisation has realised the full potential of its available data and has integrated data into the heart of its operations.

Organisations that achieve total data parity are able to use all available data points, such as physical transactions, online customer reviews, social media engagements, legacy system outputs and competitor activities, to draw high-level conclusions and even forecast and simulate trends with accuracy.

Ultimately, data parity transforms how businesses think about information and how employees react to data, enabling them to keep pace with the speed of changing trends and circumstances — creating business longevity while sealing critical competitive advantages.

It is not too late to achieve data parity, but businesses need to act now or the data deficit will be too great to make up before old ways of working cease to be relevant and viable.

This white paper will examine the current data deficit faced by the retail sector, which is one of the fastest-changing industries, and consider the steps that can be taken to achieve data parity in an acceptable timescale.

Retail's data deficit

Retail is one of the world's most data rich environments.

The global retail industry, encompassing the complete journey of a good or service, is forecast to amount to sales of $26.07 trillion dollars in 2020 alone — or more than a quarter of the total gross world product. Every single stage of the lifecycle of a product or service creates an enormous number of data points.

But despite all this potential, use of data frequently remains peripheral rather than central, and vast quantities of data are extremely underutilised by retailers. This creates a data deficit, with most retailers a considerable way from achieving parity.

There is no better example than during peak trading events — such as Black Friday and Singles' Day — which can see customer demand skyrocket in time-limited windows. Getting peak trading right is essential for retailers, as they can make (or lose) 60% of their entire annual revenues in these trading periods alone.

To better understand why retail data is not used in the most effective way or to its full potential, we can examine the two primary types of retail organisation:

Traditional retailers

Predominantly focused on running physical stores, and dependent on ageing technology systems to try to keep pace with digital advances.

Digital-native retailers

Typically 'born in the cloud', with hyper-optimised supply chains and networks to deliver products at pace to their customers.

How effective is your data?

Many traditional retailers have long histories as well-established high-street brands, but the digital natives are rapidly catching up and even setting the pace. eCommerce has doubled its market share of global retail sales between 2015 and 2019 and forecast to continue apace.

In just the third quarter of 2019, for example, Farfetch reported growth of 89.9% in revenues to $255.5 million, which the company primarily attributed to a 44% increase in digital platform services revenue. Equally, online-only retailer Boohoo saw its revenue surge by 43% to £564.9m in the six months leading up to August 2019.

This changing dynamic can be attributed to a number of factors, with the adoption of newer, more adaptable technologies by the digital natives playing a significant role.

Digital natives are successfully using data to drive continual improvements. In contrast, traditional retailers are held back by legacy challenges, such as ageing infrastructure, traditional work culture and operational structures, all preventing them from exploiting the latest technological innovations.

As a first step, we will compare the success of some of the most effective digital natives with legacy retailers to examine key learnings. But it is important to consider that digital natives also have their own set of challenges preventing them from reaching data parity — those that simply utilise analytics and have not successfully implemented the data culture still have work to do.

99.5% of all data gathered from peak trading events is completely unused every year

Key Learnings from the Digital Natives

01
Data is at the heart of business

02
Nudge theory leads to marginal gains

03
Technology enables automation; automation enables success at scale

04
The vision is achievable

01 Data is at the heart of business

As early as January 1997 — just two and a half years after founding Amazon — Jeff Bezos convened his team at the Sleeping Lady resort, two hours' drive out of Seattle, for a collaborative workshop over the course of several days. His aim was to create a 'culture of metrics'. Soon after, Amazon hired its first chief scientist: an expert in Artificial Intelligence (AI). Today, this focus has enabled Amazon to grow into one of the world's largest companies.

By putting data at the core of their operations from their earliest days, digital natives have gained a significant head start. Moreover, they have already had to address and overcome all sorts of challenges, such as setting up effective data product teams, and integrating the use and display of data into everyday functions. The result of this has been the development of working cultures that are accustomed to making informed decisions at speed, and adapting operations based on observed behaviours rather than instinct.

In traditional retail environments, data science teams typically sit outside of technology, whereas data scientists in digital natives can expect to be fully embedded in cross-functional product teams with colleagues representing different areas such as business and technology. This aids the data-enabled culture by providing continual education to the decision-makers, who then have rapid information at their fingertips and understand the value of this operational model.

The resultant high-frequency way of working can be illustrated by Amazon, which is famous for making changes to its website once every 1.6 seconds, a direct result of embedding data directly into the core of the business.

For many legacy retailers, it is a struggle to make a single change in a whole week — and even when changes are made, there is no way of understanding its impact (for better or for worse) without the use of data for measurement. This leads to slow response times, inhibits learning and testing, and creates a competitive disadvantage.

> "They happen to sell products, but they [Amazon] are a data company."
>
> **- James Thomson**
> former Amazon executive

02 Nudge theory leads to marginal gains

Nudge theory, n. (common)

A concept in behavioural science of subtle persuasion through a series of nudges, which use positive reinforcement and cumulate in more notable results than step changes.

Continual and incremental improvements are critical to the enduring success of the digital native model. Effective use of technology enables every element of the business — however minor — to be measured, tested and optimised, squeezing marginal gains at every opportunity. By continually analysing and reacting to real-world environments, this approach also makes digital natives more adaptable.

More recently, the increasingly widespread availability of Artificial Intelligence (AI) capabilities provides new options for speeding and scaling up these marginal gains. A good example comes from Amazon, which has developed a service that automatically detects the quality of fruit and then sorts it accordingly, using machine learning to continually improve its recognition. When fully live, this will create more reliability for online grocery shopping for customers, and a significant reduction in food waste.

This vision of technology is a far cry from the technology roadmap of the typical traditional retailer, but its implications for efficiency and quality gains are overwhelmingly evident.

The Trailblazers

Small changes make a big difference. Famous examples of companies driving success using nudge theory include:

amazon

The world's largest online retailer drives one third of all sales through the proprietary product recommendation feature.

Google

In 2005, the world's leading search provider tweaked the colour of their adverts using A/B testing methodology, which directly drove an extra $200 million in revenue.

NETFLIX

The world's biggest streaming service subjects its customers to 16 different A/B tests at any one time.

03 Technology enables automation; automation enables success at scale

Machine learning is an extremely effective method of automation and continual improvement, but even less complex technology can be used to effectively test, automate and scale.

Netflix uses cloud technology to automatically measure its conversion rate — whether people choose to watch a programme or switch it off — against each of its infrastructure stacks, which may be running different algorithms or layouts. From this, the same sorts of marginal gains can be continually implemented.

Traditional retailers do not have the same technological options as digital natives such as Netflix, especially as they often operate sprawling and inconsistent ICT estates. A *Chaos Monkey* (see right) unleashed on this sort of infrastructure would be catastrophic.

Faced with the immediate detriment of even seconds of delay or service unavailability, zero downtime is a critical component of a successful modern retailer. Maintaining this during business-as-usual periods can be challenging enough, but when peak trading events cause enormously spiky workloads, the demand on infrastructure is extreme. Any loss of service can quickly escalate into an overwhelming loss of revenue.

Examples such as Netflix demonstrate how the correct technological and cultural approach can safeguard service and revenues even during worst-case scenarios.

One of Netflix's most famous innovations comes in the arena of automated testing, with its chaos engineering suite, which continually probes infrastructure. Examples include *Chaos Monkey*, a tool that randomly takes down production instances, and *Chaos Gorilla*, which randomly takes down entire availability zones (such as the whole USA West Coast).

The goal is to ensure that the global network can always compensate, even in worst-case scenarios. The theory was proven in 2017, when an entire region of the Amazon Web Services (AWS) infrastructure went down, yet Netflix's service continued unfazed.

The impact of this four-hour outage on retailers was significant. On average, the top 100 retail sites were slowed down by 20%, but in the extreme, Disney's website was 1,165% slower than usual, and Target's 991% slower. In the retail world, a one-second delay in load time normally equals an 11% loss in page views and 7% loss in conversions, making these incidents hugely impactful.

04 The vision is achievable...

When the digital natives have such a head start, it can seem impossible for legacy retailers to catch up and guarantee survival. But this is certainly not the case, provided the correct approach is taken to the organisational transformation that is required.

In fact, the success of the digital native model proves that with the right approach to technology, culture and data, retailers can drive enormous business improvements in short time periods. And fears about the cost of implementing new technology and different ways of working can be quickly allayed by examining the economics behind cloud-based technologies.

With the world transitioning firmly into the data age, traditional retailers need to invest now in new capabilities before they get left too far behind. Those that are successful will challenge the digital natives, who in turn will have to look for new ways to maximise their untapped data when striving for parity.

The Road to **Data Parity**

About this Guide

The road to data parity is a journey, and must be taken in stages. Success is not simply an exercise in choosing the best technology — it is also about understanding your business and its objectives while working out how best to usher in the high-performance culture that is required.

In this chapter, we will guide you through each pivotal step you can expect to experience on your journey to data parity, and how the right implementation partner can assist you along the way.

1 Understand your key metrics

Decide which areas of your business are most critical when it comes to generating income, collecting data, and reporting. This will help you to identify what needs to change the most.

2 Understand your culture and colleagues

Once you know what metrics are most important to the business, you can begin to create a foundation for change within your company's culture, in order to make sure everyone is aligned and on board.

3 Gear up for real-time working

It's time to start investing in new technology that will help you to make better use of your data. Working closely with an experienced consultancy partner will help you to achieve this.

4 Use visualisation effectively

You're beginning to harness your data properly, now investigate how you can display that information to people across the business, and what effect it will have on the way they work.

5 Redefine performance management

With real-time data now available, explore how this will be used to monitor and incentivise performance throughout the business.

6 Take a nudge approach to implementation

Every step is an opportunity to learn. Focus on what you can improve with each phase of implementation, and how your implementation partner can help you.

7 Set more informed business targets

With enhanced self-awareness, the business needs to be steered more pragmatically using the new insight available.

8 Implement continual education programmes

You're getting closer to your destination, so ensure you can effectively communicate your vision of the future to the rest of the organisation.

9 Encourage innovation and continual learning

As a new age of data parity dawns, it's important to continue adapting and learning along the way.

PREPARE

IMPLEMENT

IMPROVE

1 Understand your key metrics

PREPARE IMPLEMENT IMPROVE

Understanding the metrics that are most important to your business — irrespective of your current reporting capabilities — is a vital first step. Which areas generate the most income? Which areas have the most unexplored potential? Which areas are going to give you a vital competitive advantage?

This needs to be looked at from a holistic perspective, not just through examination of isolated business units. Successful users of data consolidate all their distinct information sources and then see the bigger picture, while also being able to drill down into granular detail when necessary.

For example, an important metric that you are not currently able to assess might be the global performance of a particular product as affected by television advertising. Nevertheless, this should be one of the target metrics as you formulate your strategy. It is important to remember that the technology exists to deliver these insights, and that businesses like your own have already been able to take this step — so it is certainly possible.

Bear in mind...

The vision is to have all relevant information constantly visualised such that your colleagues can make rapid decisions, so prioritising low-impact metrics can be unhelpful in the early days. On the other hand, your ultimate objective will be to embrace the tenets of nudge theory, so additional metrics should remain on the roadmap.

Key Insight

This process can be a significant undertaking, so you should consider working with a data consultant who can provide an external perspective and map out your core focus areas.

2 Understand your culture and colleagues

PREPARE IMPLEMENT IMPROVE

Metrics are going to be vital, but you are going to have to instil cultural change in your colleagues (see *Key Considerations: Culture* for more information) as you will be changing your fundamental way of working.

You should conduct an audit of your current organisational structure and consider how reporting is currently utilised. It is likely that you will be on the 'second wave' of Business Intelligence, with a limited number of power-users creating reports from systems where available. Transitioning to the third wave — insights from all relevant business users at the point of work — is your objective.

Once you have an understanding of the current setup, then you should consider what the vision is. Which groups need to utilise your target metrics the most? Which metrics do all of your business units need to be able to make effective decisions? How could this be visualised for maximum effect?

This is an exercise in matching business requirements of your colleagues to the metrics that you want to understand.

Remember!

This step should also be implemented in a staged approach. Which users need insights first? It may be that your data scientists will benefit the most from real-time, high-level insights, and be able to deliver the most business value in the shortest time. This unit then becomes your priority.

Key Insight

The way teams work together will change, so it's worth considering moving towards a matrix structure, wherein individuals have multiple cross-business touchpoints. This will be important to ensuring data parity can be implemented as effectively as possible.

3 Gear up for real-time working

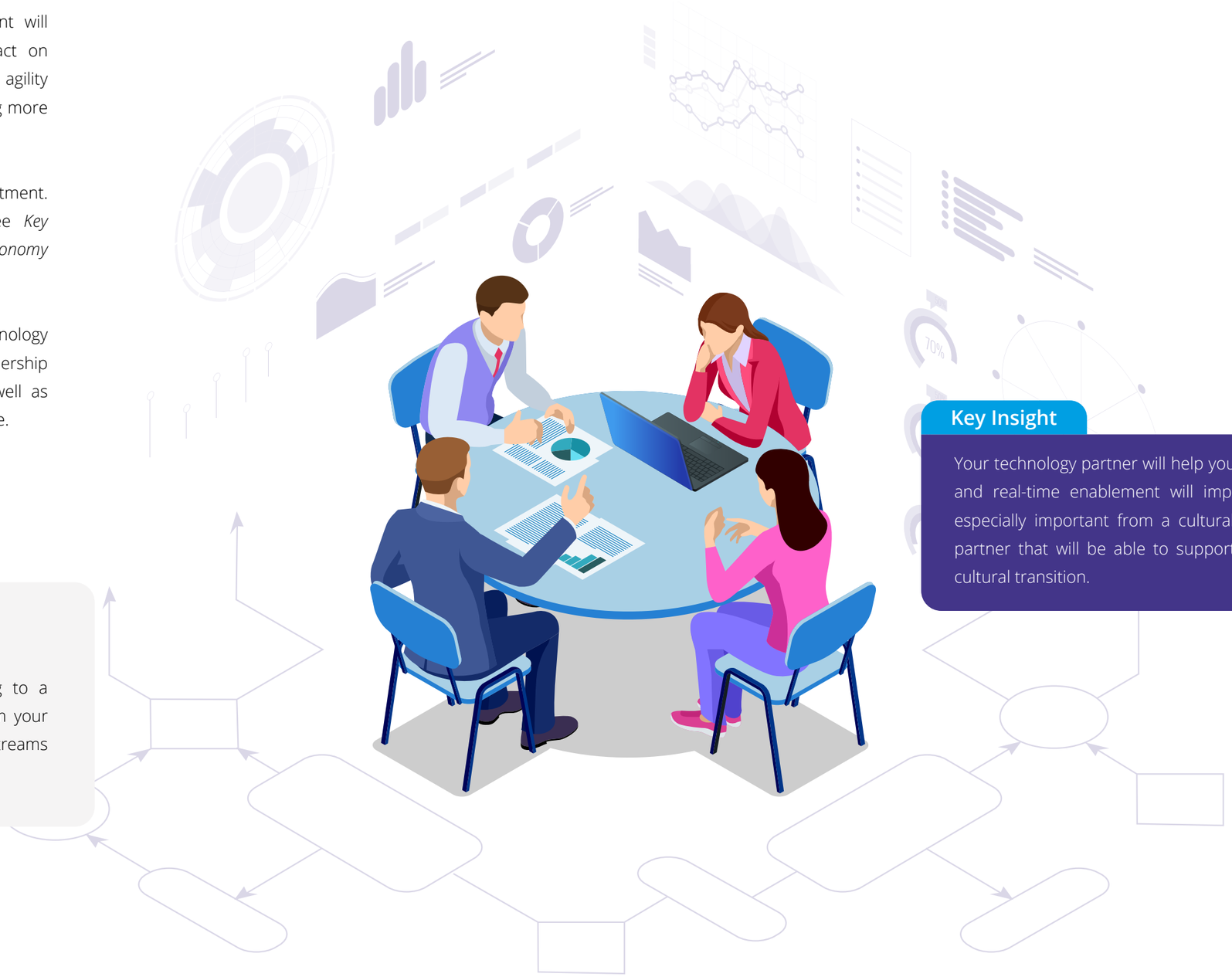
The most important technological improvement will be the ability to receive, understand and act on information in real time. This gives you the critical agility needed to adapt to a retail climate that is changing more rapidly than ever before.

This will require significant technological investment. Cloud capabilities are highly recommended (see *Key Considerations: Technology* and *Key Considerations: Economy* to better understand why).

It is recommended to work closely with a technology provider that is experienced in consultancy and partnership approaches to implementation of solutions, as well as successful delivery of technological solutions at scale.

Something to consider...

You should begin to consider how transitioning to a high-frequency working environment will transform your working culture, not just how your incoming data streams will be affected.



Key Insight

Your technology partner will help you to understand how data reform and real-time enablement will impact your organisation, which is especially important from a cultural perspective. Be sure to find a partner that will be able to support you through the challenges of cultural transition.

4 Use visualisation effectively

Visualisation is an important aspect of reaching data parity: you want to display the best information to the right people. This can be as simple as giving all users, whether in the head office, in branches or remote, access to personalised dashboards that they can use to improve how they operate through to a strategy and control room in the heart of your business.

But it should also be a way to make data more engaging for teams and the wider business. Colleagues should not fear death by dashboard, but rather buy into its importance and ability to improve the working day and outputs.

Why would a team not want to work together to drive up performance once they can collectively understand how joint actions can have rapid improvements? The real-time nature of data parity also creates more immediate rewards, so colleagues will know quickly if they are achieving success.

This also promotes the matrix structure, by allowing teams across different disciplines to collaborate and driving better, faster results if they do so.

Bear in mind...

Ultimately, your objective is to have all colleagues and teams fully committed to the new working culture, so any way you can show them immediate returns on both the technological and cultural investments will be helpful.

Key Insight

A large-scale display in the operational nerve centre, or even several larger displays in communal areas, can convey important information and foster greater teamworking.

5 Redefine performance management

With better reporting, you will also become better able to manage performance. Your teams will know almost immediately how they are performing, and whether new actions have had positive or negative impacts.

You should therefore rethink your approach to how performance is managed. If colleagues can see real-time responses then limiting them to annual performance reviews will seem archaic and out of touch.

Rather, consider nudge theory again and provide more performance-management reviews more regularly in order to generate a cumulatively large improvement in not just colleague performance, but ultimately team and business performance, too.

Remember!

Setting individual targets against the always-visible data streams will seem like the easiest approach here, but it's important that performance is not only guaged on the numbers.

Key Insight

Real-time data will allow your business to take a more dynamic approach to performance management with regular, quantifiable feedback that will help teams to feel more engaged with a common goal.

6 Take a nudge approach to implementation

Your implementation of new technology should be carried out in phases with your technology provider.

You should take each phase as a microcosm of your wider transformation project. See how you can generate data on the improvements to work out if there are better ways of deploying the next phase. Again, your technology provider should assist you on this journey.

Something to consider...

An agile approach will help ensure that your learnings from each phase are applied as effectively as possible. With guidance from your technology partner, explore ways that you can use nudge theory to improve as you go.

Key Insight

Agile working combined with continual, data-based evaluation and learning has transformed the delivery of technological solutions of all complexities. Work with a technology provider with significant experience in data projects as well as agile methodologies to ensure you gain the benefit of best practices.

7 Implement continual education programmes

PREPARE IMPLEMENT IMPROVE

You are moving away from a lift-and-shift, step change mentality. Your education and training should also evolve to reflect this.

Regularly ensure that any new phases of technology are explained during roll-out to your teams, including the value proposition. Regular, lighter-touch workshops will encourage better engagement than forcing colleagues to sit through three-hour training sessions.

Encourage the use of best-practice groups composed from cross-organisational colleagues, and have them share their learnings and success (and failure) stories so you can adapt and improve as quickly as possible.

Bear in mind...

Cultural change also changes the way organisations look at education. The better you can engage with your employees with training and learning, the more they will seek to understand and engage with these new ways of working.

Key Insight

Your partner should be able to support you in effectively delivering internal communications, helping to educate the organisation on the new ways of working and securing buy-in from your teams.

8 Set more informed business targets

PREPARE IMPLEMENT IMPROVE

Key Performance Indicators (KPIs) can be useful for defining targets, but often defining KPIs themselves becomes an exercise in estimation.

Your business is transitioning to a state of improved self-awareness and understanding, and you will be able to set business targets at more regular intervals, based on the information you now have available.

Because you are operating in a dynamic environment, your measures of success may also vary. Targets can take into account wider trends and adapt accordingly — for example, by lowering expectations for a particular region becoming less engaged in a certain product range due to political or cultural factors.

In order to compensate, it may be that alternative pricing and advertising strategies are employed to boost sales in unaffected regions. Having the data available allows you to react and recover, but also allows you to consider the impact on your business objectives.

Remember!

Ultimately, revenue and profit will almost always be the top level targets for organisations. However, in data culture, the constituent parts that build up to these metrics can be better measured and targeted for maximum effectiveness. The whole then becomes more than a sum of its parts.

Key Insight

Challenge yourself and others to inherently change the way your business sets targets. Again, your technology partner may be able to give you examples of how this can be done.

9 Encourage innovation and continual learning

PREPARE IMPLEMENT IMPROVE

Along the way, an open attitude to continual learning is essential. Once you launch a new phase of the project, consider retrospectives that analyse both positives and negatives. A lean approach, while building processes to empower your teams (and technology partners) to success, is fundamental to achieving your business goals.

Take the same information-based approach to mistakes. Errors do occur, so consider using data to work out why, and transition away from a blame culture. Typically, failures occur when processes are not sufficiently tight, and this is your opportunity to create scalable processes that promote success over time.

There is a big focus on personalisation in modern eCommerce. Your competitors are getting better at making appropriate recommendations to their customers, so you should too, and you can do this through trying different methods of recommendation and using data to better speak to consumers.

Something to consider...

Communicating change within the organisation can be one of the most challenging elements of the transition, particularly when faced with large numbers of teams that are accustomed to working in a certain way with a certain technology.

Key Insight

Encourage innovation — try new ideas out, experiment, and fail fast. Innovation funds are useful ways to seed projects and drive a start-up mentality throughout the business.

Key Considerations

"Today, organizations are collecting data from a much larger variety of devices and data is growing at a much faster velocity.

Monthly reports generated from legacy data sources often provide a historical data point rather than competitive advantage and intelligence.

It is no longer enough to simply correlate the transactional records of sales and marketing, but also a variety of other sources from end-user habits, real-time mobile and IoT feeds, and a diversity of other near-real time unstructured sources.

The traditional on-premises EDW is simply not agile or scalable enough to keep up with the ever-changing demands of today's next-generation data warehouse (DW) requirements.

For IT agility and effective global consolidation of data sources, organizations must look to the cloud."

- Enterprise Strategy Group 2019

Technology

Choosing the right technology is a critical factor in preparing to reach data parity.

Adaptability, ease of use and scale are the three most important areas to consider. The retail landscape is changing more rapidly than ever before, and this will only continue to gain momentum.

You need to invest in technology that can seamlessly scale to handle the enormous spikes in demand during peak trading events, continue to adapt and change such that the core functionality is always match-fit, and also ensure that your colleagues find it a smooth experience. This will likely require customisation to fit both the unique requirements of your business, and also to deliver on your roadmap objectives.

Cloud platforms such as Google Cloud Platform are highly-recommended, as these have a rich functional base, enormous scalability (and security), evergreen development and continual feature updates as well as substantial customisation and analytics facilities. Google Cloud Platform in particular is unrivalled in its data capabilities, which gives you a natural advantage when you are migrating to a data-centric culture.

You should also look to use a partner experienced in implementing solutions on your chosen platform for a range of organisations, as they will have navigated many of the challenges typically faced during implementation and cultural change.

Recommendations

- Understand which metrics matter to you and your business, and which will make the most impact, and look for a solution accordingly
- Look to a cloud platform rich in data functionality
- Ensure that on-demand scalability can be met, without losing analytical capabilities during peaks such as Black Friday
- Work with an experienced consultant to identify which parts of your existing infrastructure will continue to add value, and which can be phased out
- Implement only technology that is adaptable and future-proofed — the speed of change will continue and you need to be future-proofed
- Consider the technologies that best support your long-term migration plans, and remember that the journey to data parity is staged

Culture

Achieving cultural shift of the magnitude required is a significant challenge. From a technology user perspective, we can consider the evolution of the three waves of Business Intelligence:

1. Complex systems operated by experts at a slow pace
2. More powerful tools used by reporting specialists at medium pace
3. Easily-digestible analytics used by business users in real time

The ideal data-driven organisation in the new third wave has analytics woven into its fabric, and data readily available at the point of work, giving every business unit the information they need, when they want it. This enables faster, better-informed decision-making.

Your solution should be designed to empower businesses and teams, so you need to ensure that regardless of the function of the teams, they can understand what their core objective is, and how it can be solved with these new capabilities.

For your existing data teams and reporting specialists, it is an opportunity to use faster, more accurate data to achieve greater insight than was ever previously possible.

Continual education of your teams — and ensuring that they are committed to the idea and that they see the value — is absolutely critical. You should also encourage innovation.

Consider working with a technology partner that is experienced in delivering technology projects that have significant cultural impacts, and can help you to ensure as smooth a transition as possible .

Recommendations

- Empower your technology teams to understand the business problems they are solving
- Empower your business teams to understand why technology change can be difficult
- Build t-shaped, cross-functional teams, bringing tech and business together
- Standardise language across the organisation
- Understand what the business challenges are that might be improved by better use of data
- Make everyone clear on KPIs and let them see how their work improves those KPIs
- Build Centres of Excellence, encouraging standardisation that is grass-roots led, not imposed via the business architecture from an 'ivory tower'
- Deliver and celebrate success

Economics

Investments in technological and business-wide transformation programmes can seem financially unviable, especially when significant investments have already been made in technologies such as existing data solutions and reporting systems.

However, cloud-based technologies can actually significantly reduce Total Cost of Ownership (TCO) in relatively short time periods, eliminating capital costs of tens of millions of dollars.

Furthermore, the hidden costs of not improving your data capabilities can be enormous losses in revenue and, even more extreme, ultimately succumbing to the relentless competition.

Particularly for legacy retailers, the single most important route to success is to make the most of what you already have. Achieving data parity is not an exercise in ripping up and replacing systems you have invested tens of millions in, but rather an opportunity to take those systems and supercharge the value you generate from them.

In direct comparisons, cloud models for data management offer tremendous reductions in TCO over best-in-class premises-based systems, or even best-in-class hosted systems.

Google Cloud Platform's BigQuery data solution demonstrates both functional depth and cost-efficiency.

According to data collected by the Enterprise Strategy Group for 2019, on average, businesses report a 41-52% reduction in TCO when moving EDW (enterprise data warehouses) to BigQuery.

Consider working with a technology partner experienced in delivering large-scale data projects on such a platform in order to maximise your economic advantage.

Recommendations

- Consider the advantages of migrating your intelligence hub
- Choose a solution that can make the most out of your existing investments
- Ensure that extra capacity used during peak events is appropriately charged
- Maximise the use of your existing data analysts. Deploy them to drive more powerful trend analysis and insight than ever before
- Consider long-term economic impacts

Conclusion

Achieving data parity is challenging but essential for any retail organisation, but particularly important for legacy retailers.

As the competitive environment becomes more and more fast-paced, these organisations need to act immediately and begin the necessary transformation projects.

Choosing the right technology partner and platform (preferably cloud) will be critical, and due to the complexity of the cultural shift that must occur in order to create the adaptability needed to flourish in the data age, it is recommended to find a partner that is highly-experienced in managing significant transformation projects from both a technological and cultural perspective.

Travelled properly, the road to data parity will unlock boundless unused data potential and enable any retailer to compete and transition to a high-performance, high-frequency way of working. As a result they will become well-equipped to adapt to extremely dynamic market conditions and stay ahead of the curve, rather than lagging increasingly further behind.

A step-by step **data transformation** guide by

appsbroker

How can Appsbroker help you?

With over a decade of delivering enterprise solutions using cloud technology, Appsbroker is recognised by the world's largest organisations as a leading digital transformation partner.

We are specialists in all things cloud, and work excluisvely with Google Cloud to offer best-in-breed technology solutions to customers across a range of sectors, including Retail, Manufacturing and Financial Services.

Appsbroker is the largest Google Cloud-only practice in Europe, and the only Google Cloud Premier Partner in the UK to achieve specialisations in Application Development and Data Analytics.

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