Consumer Analytics Whitepaper

Ian Sherratt - SCC’s CTO
David Willmott –IBM Software Specialist
July 2015
We enable people to do business. We make IT work through partnership, knowledge and passion: trusted to run IT infrastructure and services for leading business across Europe for 40 years.
## Contents

Introduction ......................................................................................................................................... pg. 04  
Scene Setting ..................................................................................................................................... pg. 04  
Market Development ........................................................................................................................ pg. 05  
Dispelling the Myths about Analysing Data ................................................................................ pg. 06  
Drivers of Value .................................................................................................................................. pg. 08  
Consumer Interaction Lifecycle ..................................................................................................... pg. 09  
Analytics and the Consumer Journey............................................................................................. pg. 10  
Consumer Behaviours .................................................................................................................. pg. 10  
Consumer Analytics Storyboard ................................................................................................... pg. 12  
Potential Use Cases ........................................................................................................................ pg. 14  
Technology Glossary for Marketeers............................................................................................. pg. 15  
Next Steps .......................................................................................................................................... pg. 17
Introduction

Many businesses have started to explore the value of analytics in the engagement with their customers – while some have been left behind.

Have you achieved the customer insight and engagement that you set out to? Can you market to the individual successfully?
Can you customise the experience, deliver value and insight, and drive brand loyalty?
Do you have a single, coherent customer view? And can you use this to sell effectively to existing and future customers?
Analytics is a major contributor in being able to answer these questions.

This whitepaper explores how the dynamic between brand, customer and data is the most important connection you will ever make.

If you’re unable to answer ‘yes’ to all of the above, read on.

Scene Setting

In this highly challenging new world, how do you use marketing and technology skills combined to perform the miracle of consumer engagement?

In retail, ‘multi-channel’ is the buzz word for operating in multiple fulfilment channels simultaneously.

But – and it’s a big but – does this dilute or enhance what businesses know about their customers?

There are several questions that need answering to deliver a truly uniform and exciting digital experience:

- Do multiple channels detract from a personalised experience?
- Can you keep the experience consistent between platforms?
- How do you use analytics to improve knowledge, consumer experience and consumer spend?
- How do you identify an individual as an individual when they engage via an App, the Web, in-store, or all these mechanisms during the buying process?

This leads to one much simpler question:

“How do I identify my consumers and their preferences, values and choices?”

This is where analytics plays such a big part by creating insights from the vast amounts of data necessary to understand the answer to this question.
Market Development

The ease of information availability, alongside the vast number of consumer businesses providing an online presence means we now have more socially informed, and tech-savvy, consumers than ever.

This massive change means you need to ensure not just the traditional alignment of people, process and technology but also that business culture, including staff, is flexible enough to attract and retain consumers at the right cost profile.

The old adage of ‘people buy from people’ has long been held to be true. Where this is appropriate, staff need the right skills, information and tools available to maximise every consumer contact point.

In the modern world, with so much information available to businesses, finding the right information when it’s needed has become a significant challenge.

Having the right capabilities available to both staff and consumers has never been more important and having the right type of connection to the consumer has become the challenge.

With the potential for significant volumes of consumers, automated solutions with enough information and intelligence to provide the right kind of consumer experience are required.

Solutions need to intelligently harvest information from all sources to ensure information is collected and collated, leading to a positive outcome.

The digital world has also created businesses that have very few overheads or assets, leading to real challenges for more traditional models.

Having the right financial and organisational structures is important to realising market potential. Without these, you will have the wrong cost or interaction model, leading to poor consumer communications.

The availability of information to consumers means businesses now need to cope with change far more frequently.

With so many examples of high-flying businesses closing shortly after reaching prominence, there is a need to consider change as the constant.

This change should make you consider who your stakeholders are and what their motivation might be.

A business that is a partner today can become a competitor overnight. For many, the ability to adapt will have a direct impact on whether they ultimately succeed or fail.
Dispelling the Myths about Analysing Data

Let’s begin with removing some of the common misconceptions about the analysis of data.

**MYTH 1:** You need to be a rocket scientist to use or understand analytics

You need to understand the dynamics of your business, as well as have the right partners. You also need to look at the right tools and technologies to help you.

It’s easy to be mesmerised by flashy graphics and a sexy interface. The reality is that you’ll need to be organised and use the strengths of your ecosystem to succeed. Gaining insight and making decisions quickly is key.

**MYTH 2:** You need a data warehouse before doing any analytics

It may help as a good source of internal information. Exploit it as much as possible but be aware that some forms of analytics will rely on data typically not found in a data warehouse.

Combining sources and being aware of how much you can trust the data usually lead to higher quality insights.

**MYTH 3:** ‘Playing’ with data usually leads to poor results

Taking a data set and looking at it in different ways may or may not yield new insights.

Traditional techniques for the access and manipulation of data often don’t allow for experimentation that might yield new insights.

An example is looking at sentiment as part of Social Media data. Being aware of the influence this may have on decision making is an important step to understanding this kind of data.

**MYTH 4:** You need to wait a long time to get tangible benefits from analytical solutions

Many businesses already have a good base of data that can be used with the right partners, tools and techniques to deliver new insights.

Modern approaches to analytics can deliver rapid benefits when applied to existing data sets.

**MYTH 5:** Big data on its own is a silver bullet

There is a lot of hype and interest around big data – but on its own it won’t solve all the data challenges organisations have.

There are many useful tools, techniques and best practice applications that you can and should be taking advantage of. Finding the best fit for any new sources of data, while blending those with existing ones, will be key for organisations to achieve business value.

**MYTH 6:** You need to be a big company to get benefits from analytics

Analytics doesn’t require a large investment in people, processes or technology to start delivering value.

Smaller businesses may have more of an advantage in that they are able to be more flexible in the ways of collecting and assessing new sources of data.

**MYTH 7:** These tools and skills are cheap

Like many things in life, you get what you pay for with analytics. You can have everything from low cost, entry-level solutions all the way up to more expensive, sophisticated solutions.

Working with the right partner will help you to navigate the range of options available to find the optimal solution for any organisation, large or small.
DISPELLING THE MYTHS ABOUT ANALYSING DATA

Myth 3: ‘Playing’ with data usually leads to poor results

Myth 4: You need to wait a long time to get tangible benefits from analytical solutions

Myth 5: Big data on its own is a silver bullet

Myth 6: You need to be a big company to get benefits from analytics

Myth 7: These tools and skills are cheap
Drivers of Value

Business analytics has the capacity to generate value in a wide range of areas. Here are three most common.

**Consumer / Citizen Insight**

Whether it is for a commercial organisation or a public sector body, understanding the consumer or citizen is vital. Capturing information about their experiences with business, as well as the wider community, can produce insights into what consumers want or don’t want. Building a profile of a consumer’s journey in order to understand their preferences, likes, dislikes and habits, is an important factor in ensuring their expectations are met. Analytics takes this information to help shape the strategies around what form of engagement a consumer requires, as well as what action to take next.

Giving users the same experience viewed in different ways – ‘same User Experience, different User Interface’ – helps underpin the relationship between provider and consumer.

**Product / Services Insight**

Using analytics to understand which current products or services are right for specific consumers is vital to understanding the health of your business.

Demographic insight and application of techniques to focus market messages plays an important part in whether a product or service is hitting its market audience.

Using analytics, you can start to model whether new products or services will be more or less applicable, and hence what part they play in the operation.

Questionnaire analytics enable you to gain dynamic and immediate insight into which products or services are fulfilling market demand while having no overhead upon the consumer.

**Research and Development Insight**

Combining consumer insight with product / services insight provides a rich platform of information that any R&D business can use as input into its planning process.

Understanding what consumers wish to buy or what issues there are with an existing product helps designers quickly plan new offerings that are more market aligned.

For businesses with long product development timescales, understanding the impact of change during the development lifecycle helps them plan and budget accordingly, while setting the correct expectations with their consumers.
Due to the availability of information, consumers have become much more able to research products and services information from a variety of sources including a much wider social network. This requires organisations to recognise and respond to consumers in a manner most suited to their chosen approach. Consumer styles identify typical types of consumer engagement and are key to understanding why analytics need to be applied to maximise the contact opportunity.

*(Examples of consumer lifestyles – see left)*

We also must recognise that a given consumer engagement will change with frequency, urgency and their knowledge of that market. Here are two simple examples to highlight how a consumer journey can change from their initial engagement to future engagements:

**First time around**
- Research and knowledge gathering;
- Lack of familiarity, i.e. it’s all new;
- Excitement of the experience;
- Where to go / how it works is all new;
- Was it a positive experience? Would they do it again?

**Next time around**
- How much has already been purchased?
- How does familiarity impact the experience?
- Less experience excitement;
- What have they bought and what do they buy now / next?
- Is there an opportunity for add-on or upsell?

Thinking about the overall consumer journey and the consumer style helps shape what experience is required. So why is this important? Recognising the characteristics of consumer styles mean you can now better align appropriate offerings to relevant stages in the overall consumer journey.

You can also begin to predict likely spend and activity patterns, enabling you to influence the direction of the consumer journey and more effectively manage the supply chain.
Analytics and the Consumer Journey

Capturing relevant data and executing relevant analytics is an important part of maximising the ability to interact and influence choices and decisions. Understanding consumer behaviour enables organisations to react accordingly and create the best opportunity to influence follow-on actions and choices. The interesting aspect of this is that we can also operate in a blended mode. This leads to a number of interesting questions including:

- When does switching between modes occur and why?
- What is the trade off between convenience and availability?

Consumer Behaviours

The experience of a consumer in a given market drives behaviour. This can be broadly categorised into two key styles; “Consumer” and “Prosumer”. At any point in time, all consumers exhibit one behaviour or the other.
Consumer Analytics Storyboard
CONSUMER ANALYTICS STORYBOARD

Why is it important to know this?
- Did we/how did we influence?
- Broader Marketing planning
- Brand development

What information is collected?
- Basket details
- Funding type
- Route to supplier
- Web analytics / channel data
- Co-worker feedback
- Social media sentiment/feedback

How is this data collected?

Why is it important to know this?
- Brand / product details
- Web site usage / channel data
- Offer details
- Brand development
- Next Best Action
- Feedback
- Price / offer refinement

What information is collected?
- Consumer’s insight
- Basket data
- Offer insights
- Funding details
- Web site usage data
- Influencing factors

How is this data collected?

TECHNOLOGY

INTERNET OF THINGS
The use of mobile devices is creating data and also changing the type and volume of data created. This new dynamic makes data harder to interpret, as it is unstructured and requires a different approach to analysis.

APPLICATION
An app for everything seems to be the modern mantra. There are many good examples in the market of really well executed apps, & so many more dreadful ones.

OMNI-CHANNEL
Consumers will use all channel options (web, app, physical, phone etc.) available to research product/service, offers and availability, pricing and convenience.

SOCIAL MEDIA
Social media has created a vast amount of new sources and forms of data that can potentially yield significant insights.

DATA CLEAN
Treating data as a commodity. Business analytics will provide the right information, the quality of the data is high enough.
Potential Use Cases

Use cases demonstrate how businesses have used analytics to drive improved outcomes. Here are two examples of the potential use cases available and highlights the approaches businesses are adopting to gain benefit from analytics.

**Retail Example**
Gaining competitive advantage with a highly popular console game:

- Previous versions of the game had sold extremely well. It was discovered that retailers that reacted quickest to the demand had a distinct advantage;
- A retailer would use analytics to understand patterns and trends to predict demand:
  - Combining existing sales data, industry data and social media information;
  - Predict areas of greatest demand by developing predictive models based on identified data;
  - Create demand patterns for the right number of games required, through the appropriate channels;
- A retailer would use analytics to understand price optimisation:
  - Real time business analytics help the retailer understand its competitors and synchronise prices against demand and inventory;
- A retailer would use analytics to identify customers who are likely to purchase the new game:
  - Segmenting customers according to expected buying behaviour;
  - Making contact with the prospective purchasers, in the right location, in an acceptable and appropriate way;
  - Engage the prospective purchaser with up-to-date, personalised offers;
- A retailer would use analytics to determine what other items the purchaser might like:
  - Perform deeper analytics on all data to find meaningful patterns and hidden insights;
  - Using patterns and insight to create new bundles associated with the new game.

**Telecommunications Example**
Gaining competitive advantage by identifying customers that might churn and preventing this from happening:

- Telecommunications companies would often find out a customer is churning when they call to cancel. This leads to loss of revenue and the increased expense of gaining a new customer;
- A telecommunications company would use analytics to identify non-renewal and defection patterns:
  - Combine structured, semi-structured and unstructured data together and apply textual analytics;
  - Use analytical techniques to provide insight into causes of churn or identify patterns that lead to customers churning;
- A telecommunications company would use analytics to predict customer churn and create retention policies and processes:
  - Use predictive modelling techniques to calculate the probability of non-renewal for each contract;
  - Create recommendations of incentives for each customer to renew, based on insight;
  - Communicate incentive through the appropriate medium;
- A telecommunications company would use analytics to continually monitor causes of churn:
  - Continual monitoring of customer, contract and social media data to identify any new churn insights;
  - Incorporate new sources of data to enhance predictive models.
When we consider the changes in the consumer market we cannot ignore the changes and trends in the underpinning technologies, and the effect on a modern consumer interaction.

**IoT/Data proliferation**
Data is exploding at an ever-increasing rate. Its growth is accelerated by the Internet of Things (IoT), with everything from cars to fridges creating data and reporting back to the ‘brand mothership’ – as well as social media.

The use of mobile devices is creating data and also changing the type and volume of data created. This new dynamic makes data harder to interpret, as it is unstructured and requires a different approach to analysis.

**‘Appification’**
An app for everything seems to be the modern mantra. But like all things, all apps are not created equally.

There are many good examples in the market of really well executed apps, and so many more dreadful ones. Impressing users is getting harder to do, and a successful app needs to consider:

- Joining up the digital, ecosystem and in-store experience;
- Consumer behaviour and mechanisms to drive people into premium range offerings;
- Convenient payment processing, moving towards the electronic wallet;
- Linkage and information about the consumer and better use of app capabilities to drive digital footfall;
- Increased adoption of ‘clientelling’ to provide a differentiated experience.

**Mobile / Platform**
The main challenge is the sheer volume and rate of change of the mobile and mobility market.

Simply put, it is vital to ensure that the platform you design will not only work on the proliferation of modern platforms but can also embrace changes in that same market.

This includes payment mechanisms, security and communications.

**Social Media and Accuracy / Trust of Data**
Social media has created a vast amount of new sources and forms of data that can potentially yield significant insights.

Consumers are expressing what they really think by the sentiment shown when they comment on social media, so this has the ability to unlock a great deal about what people really think and what they really want.

One challenge is to try and determine if content is accurate and truthful or not. For example, when somebody writes the word ‘bad’, do they mean that it is bad or do they mean that it is good?

Understanding the real intent of the contributor is important to gauge how relevant the content really is.

**Data Quality Challenges**
Business analytics will only ever be able to provide the right informational outcomes if the quality of the data it uses as input is high enough.

The old adage of ‘rubbish in, rubbish out’ is even more significant with the advent of social media content.

For businesses to trust the output from analytics solutions, they will need to have sufficient trust in the data inputs.

Treating data as a corporate asset is key.
Big Data
The explosion in data requires new analytical processing to cater for a combination of new characteristics, such as data at speed, data in doubt, data at volume and data variation.

Predictive Analytics
All of the available data will eventually lead to a single, logical point to help understand why decisions are made and what action should be taken next to achieve a specific aim.

Predictive analytics is a data driven process by which data is used, with analytical techniques, to help predict the likelihood of an outcome.

Business Intelligence (BI)
Traditional BI provides understanding of the historic and current state of a business.

To meet modern consumer needs will also require combining real time data availability, big data insights and predictive analytics together with traditional BI to provide the level of information required to properly interact with modern consumers.

Web Analytics
With so much importance around utilising web-oriented channels, there is a need to apply sophisticated tools and techniques to capture as much data as possible through multiple consumer interaction points.
Next Steps

SCC’s dedicated analytics team will help you explore the potential of consumer analytics and will incorporate ways in which other, similar businesses have gained benefits from analytics:

• Understanding examples of how consumer analytics has created value for other organisations;

• Identifying use cases for areas that would lead to value creation;

• Identifying potential styles or types of analytics based upon use cases.