



A Study on Marketing Analytics: Boon in 21st century for Marketers and Educational Institutions

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ABSTRACT

With advances in technology, especially data mining, marketing analytics has become an invaluable tool and should be viewed as an equal component of the marketing research toolkit. Analytics requires marketers to use data to understand customers at every touch point throughout their lifecycle with the business. In the realm of marketing, research has traditionally focused on quantitative or qualitative methodologies to provide customer insights.

Academic Marketing departments must internalize analytics into their overall curriculum in order to provide students with a compelling career advantage. Academics can also use these in the classroom to promote and demonstrate the importance and benefits of marketing analytics.

The value of this paper is that it presents marketers with a strong argument for the integration of marketing analytics into their practice of researching marketing issues and problems. Analytics completes the research triangle of qualitative, quantitative and data mined information gathering, analysis, and interpretation. It is hoped that this paper will generate additional research in this area and, especially, the adaptation of analytics as a standard research tool by marketers and by academician.

The purpose of this paper is to discuss the current state of marketing analytics and how it should become a standard marketing research tool in the twenty-first century, data is collected through secondary source of information.

Keywords: Analytics, Datamining, Integration, Marketing Analytics

I. INTRODUCTION

Successful brands need to have a solid understanding of the landscape they operate in, including knowledge of their competitors and customers. Market analysis is the process of researching the market to understand the threats and opportunities and how prospects and clients will react to your products or services.

Market analysis can range from an in-depth research dive employing specialists who will cover as many aspects as possible. Alternatively, brands may adopt a simpler approach using more readily available data. Marketing analytics is a composite set of processes and technologies, which enable marketers to measure campaign success via tangible metrics. Marketing analytics covers important metrics such as website engagement, return on investment for specific digital marketing campaigns, customer attribution, and other key areas.

As organizations explore new channels to target customers, various technologies have emerged to support these initiatives. However, deploying tactics like SEO, social media marketing, email automation, etc. in isolation can lead to a fragmented campaign. Marketing analytics combines and collates this data on a single dashboard, helping you make smarter decisions. For example, you can identify which touchpoints are bringing in the most customers (via attribution analytics), and double-down on your efforts in that specific area.

Marketing analytics can offer profound insights into customer preferences and trends. Despite these compelling benefits, a majority of organizations fail to ever realize the promises of marketing analytics. However, with the advent of search engines, paid search marketing, search engine optimization, and powerful new software products from Word Stream, marketing analytics is more powerful and easier to implement than ever.

Thus, to better understand the situation of marketing analytics in practice and to analyse the differences and similarities of this concept with marketing analytics research through various software's which are used in the industries as well in education institution. While regression appears as the most common method even in the conceptual map, there are various software packages used, including Excel, SPSS, R, as well as different tools, such as competitive analysis, quantitative strategic planning matrix, Monte Carlo analysis decision model, conjoint analysis, promotion analytics, and budgets for traditional and social media. The focus is on teaching students the basics of data analysis, to make decisions and come up with models from data collected. There are various universities offering complete course on Marketing Analytics.

The main function of marketing analytics is to import the business metrics, such as ROI, and marketing attribution into the core of the marketing game. In other words, the analytics job is to gather data from across all marketing channels and to combine it with the consumer databases then and consolidates it into an insightful marketing view. From this analytical view (360° Knowledge Graph), marketers can extract real-time analytics and actionable insights that can provide the steering wheel for effective targeting and personalized marketing efforts.

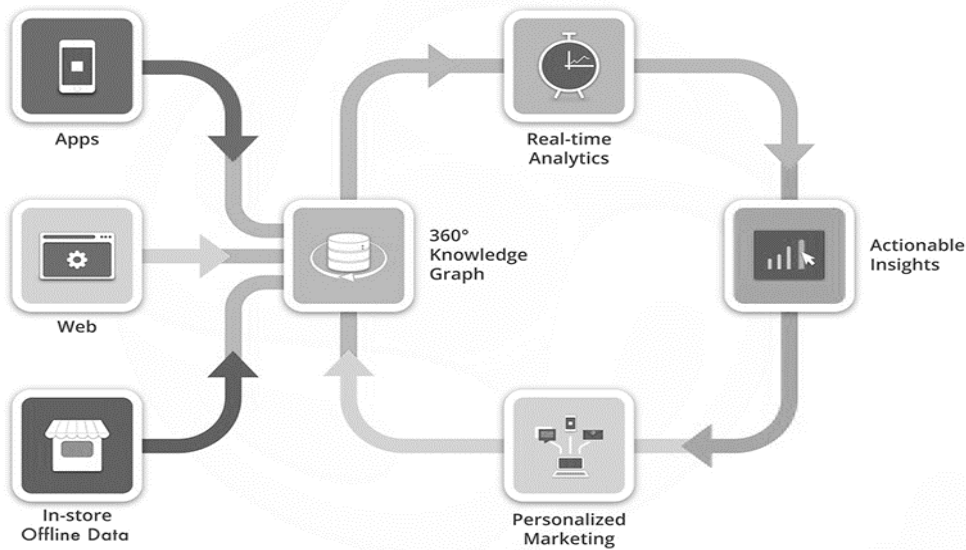


Fig 1: Marketing Analytics

Marketing Analytics: The Challenges of Technology

Over the years, as businesses expanded into digital marketing techniques and the need for advanced targeting and tracking is becoming the main focus of marketing initiatives. With the higher demand for efficient solutions for analytics, the challenges started to rise.

- **Isolated environments:** The new technologies were typically deployed in isolations and the result was a huge set of tools and platforms of disconnected data environments. Marketers would have to implement several tools and platforms to monitor all the data sources (Google Analytics, Social Media tools, SEO tools, CRM platform, Automation platform, etc.). This would require several resources including talents, API integration, IT capabilities, and multiple data aggregations.
- **Data Discrepancies:** There will be always instability and mismatching results coming from different platforms. For instance, comparing Google Analytics and Facebook conversions will reveal a big difference since they use different tracking. At the end of the day, you will be facing the issue of which data source is the most reliable for making a decision?
- **Customization:** Each business has its own technology stack and infrastructure. Connecting Sales data with online data is sometimes one of the biggest challenges for marketers.

II. LITERATURE REVIEW

1. Marketing researchers have noted that marketing science and practice are going through an analytics disruption, considering the explosion of data, the emergence of digital marketing, social media, and marketing analytics (Moorman 2016; Verhoef et al. 2016)

2. Researchers also note the advantages of big data and analytics in better understanding shopping patterns using carts with RFIDs, mobile phone apps, or video cameras. These technologies are helpful in managing supply chain and business processes (Davenport 2006; Venkatesan 2017)
3. The new analytics have even affected marketing research, providing researchers the opportunity of using web-based interactive survey tools, online qualitative analysis, mining, and analysing large databases (Hauser 2007)
4. The Internet and social media brought an explosion of real-time data, coupled with improved data generation and collection, reduction in computing costs, and advances in statistics (Verhoef et al. 2016).
5. In current times, businesses are using analytics as a significant competitive advantage not just because they can, but also because they should (Davenport 2006)

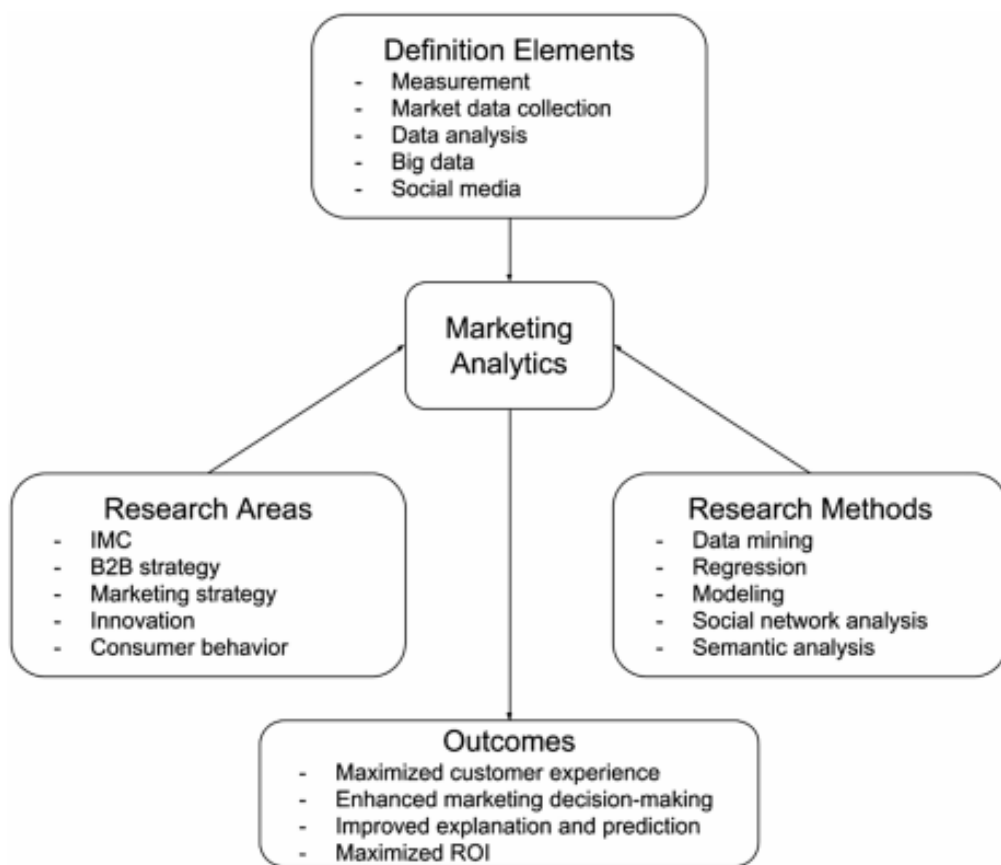


Fig 2: Marketing Analysis in Practice

Objectives

1. To study marketing analysis in market and in education sector.
2. To Improve the overall quality by using different marketing tools.
3. To Suggest areas for improvement in areas of marketing and education sector.

Tools for Data Collection: Data is collected through Secondary source like journal articles, research papers and from various weblinks.

Why Marketers should conduct market analysis

Market analysis should underpin your business plan. Once you have an understanding of the market, you can plan out how best to beat the competition and reach the consumers. This map of the landscape will then allow you to plot your course, optimizing factors that are within your control. These factors are the marketing mix, known as E. Jerome McCarthy's 4Ps.

- **Product** — Your product can be improved based on market trends, what your competitors are doing, the different market segments you are trying to reach, and your key success factors.
- **Price** — The industry costs and market profitability, as well as a more detailed understanding of your competitors, will help you set the right price that keeps both customers and shareholders happy.
- **Place** — The understanding of your distribution models, combined with a better understanding of the market, may be able to highlight new opportunities. From new sales opportunities with franchises and resellers to the logistics of production and distribution.
- **Promotion** — Brands need to have different marketing strategies to effectively reach different demographic and geographic segments. This may include different product lines or differentiated marketing.

Marketing Analytics Techniques

Getting the most out of your investment in marketing efforts requires a firm understanding of marketing data analysis: how it is performed, data tolerances, pulling together disparate data sources and more. Advanced solutions that include predictive analytics tools are also being incorporated into web analytics software, helping marketers understand and predict what that all-important "next-best-action" will be for specific guests. The reason that this type of prediction is still in its infancy is that there are a plethora of data points and it still requires a great deal of individual analysis before a machine can learn to discern the important data points from those that are simply noise.

Predictions based on past purchases is one of the ways that this type of marketing analysis is being used. A perfect example is with Amazon.com and other large retailers. If you purchase an item every three months throughout the year, chances are that the item will be recommended to you not long before you're set to run out. By shifting the buying cycle in this subtle way, retailers can offer a helpful service but also shorten the overall purchase cycle and increase their annual revenue. When you multiply simple effect times millions of customers, you can truly see the value of predictive analytics and next-best-action for sellers. In order to sustain this level of commitment to your analytics, you will likely need an internal data scientist -- or at least a very strong vendor partner that will be able to provide you with ways of measuring analytics in an actionable fashion.

Marketing Analytics can process data to offer three kinds of insights:

1. **Historical trend analysis:** Marketing analytics can report on historical data, giving you a comprehensive view of past performance to take better decisions in the future.
2. **Dynamic metric analysis:** Marketing analytics dashboards can also give real-time visibility into customer behaviour, preferences, and sentiment.
3. **Predictive analysis:** This type of marketing analytics uses a combination of past information and predictive models to throw light on future possibilities. We are also witnessing the emergence of prescriptive analytics, which directly recommends the next best action for marketing.

Importance of Marketing Analytics:

When you utilize marketing analytics to track campaign activities, you are able to pull together marketing analytics, web analytics, and business analytics to create a cohesive view of your marketing activity and results. The data that you capture and analyse could come from a broad spectrum of activities -- everything from social media shares and engagements to website visits and phone calls generated by particular campaigns. When you have a firm grasp of your web marketing analytics, you are even able to track specific campaigns and determine whether they are driving eCommerce sales, too. Where marketing teams of all sizes struggle is in attempting to determine which marketing, metrics are providing the useful insight that you need to make good decisions about your budgets.

Marketing Analytics in Education Sector

Academic marketing departments should include marketing analytics into their overall curriculum to provide students with a compelling career advantage, considering the research and especially practitioner (and job market) interest in this area. This line of coursework presumably begins with a solid statistics class, another in marketing research, and then could span out to cover different types of models for different kinds of data, at least for MBAs and possibly also for advanced undergraduates.

Academic marketing departments should also provide their students with real-world opportunities to practice marketing analytics, data collection, analysis, interpretation, and decision making. This can include collaboration with local businesses on practical projects, internships, and student business incubators. Doing so would help students understand our usual cautions in generalizing results, dealing with populations (as opposed to samples) and biased samples as the basis for understanding customers, in making decisions and developing theory. Much like interpreting qualitative research, the results of non-random samples cannot be generalized.

Exposure to one or more big data datasets will help students understand that with large samples and populations, every effect becomes statistically significant despite being of no importance whatsoever. There are also many proprietary performance measurement models available that are subjective and have no theoretical basis. Finally, one element of education that can be implemented relatively quickly is executive programs.

Traditionally, changes in full-time programs require more bureaucracy and vetting, whereas executive programs can be developed, advertised, staffed, and run with relatively little delay. There is likely a currently unmet demand for such retraining and retooling among marketing practitioners, who would not have been exposed to such material during their MBA or undergraduate days but who can appreciate the need to be facile with the concepts and analytical tools to be part of today's marketing dialog.

Some colleges also have degrees in marketing analytics, such as a Master's in Marketing Analytics .The University of Pennsylvania has developed the Wharton Customer Analytics Initiative, an academic research centre focusing on the development and application of customer analytics methods and has the Marketing Analytics: Data Tools and Techniques course on the free MOOC platform EdX. Other universities, such as the University of California at Berkeley and Columbia University also offers free marketing analytics courses, besides there are courses, on EdX.

Fortunately, there are several free digital marketing analytics course options that will help you gain the knowledge that you need quickly and efficiently. Finding the right digital marketing course that will help you supplement your current knowledge and support the unique needs of your organization can be a challenge.

Here are a few options that you may want to consider:

Udacity: Marketing Analytics and Digital Marketing

edX: Marketing Analytics courses

Udemy: Marketing Analytics courses

Coursera: Marketing Analytics courses

III. Conclusion

Getting the right mix of analytics for your marketing team doesn't happen overnight and is a continual process that could easily take months or years as tactics evolve and new channels for communication emerge. It can be easy to see how marketers could become overwhelmed with the flow of information, which is why it is so important to have tools that will help you bring together marketing analytics, website analytics and digital marketing analytics into a holistic view of your marketing activities.

Marketing analytics help boost the performance of campaigns and ROI by carefully reviewing various metrics, defining benchmarks and utilizing that information to help build future campaigns that are more effective.

As organizations explore new channels to target customers, various technologies have emerged to support these initiatives. However, deploying tactics like SEO, social media marketing, email automation, etc. in isolation can lead to a fragmented campaign. Marketing analytics combines and collates this data on a single dashboard, helping you make smarter decisions.

Academic marketing departments should also provide their students with real-world opportunities to practice marketing analytics, relationship between academia and industry for marketing analytics, perhaps closer than for many other topics areas within marketing, academics and practitioners might benefit for further improve research.

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