

# Gaining Advantages using Web Analytics: A case study on Ryanair

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**Abstract** - In this fast growing world where every person is reliable on internet for his/her important work, the website owners also have a huge task on their side to attract more and more users for their website to gain profit and compete other companies while maintaining a good profile in the internet market. They need to analyze what the user looking for, whether he can easily use the website, what pages is he surfing the most, etc. Web analytics is the measurement, collection, analysis and reporting of web data for purposes of understanding and optimizing web usage. Web analytics is not just a tool for measuring web traffic but can be used as a tool for business and market research, and to assess and improve the effectiveness of a web site. Web analytics applications can also help companies measure the results of traditional print or broadcast advertising campaigns. It helps one to estimate how traffic changes to a website after the launch of a new advertising campaign. Web analytics provides information about the number of visitors to a website and the number of page views. It helps gauge traffic and popularity trends which is useful for market research.

**Index Terms** - Web Analytics, users, website

## I. INTRODUCTION

Without a doubt the Internet has become the favorite media for all results-oriented marketers. This is because every action by visitors on the site can be collected and analyzed. As the current economic situation is forcing more companies to show accountability for their investments, it is going to further encourage companies to put more of their marketing budget to the online channel. This trend has positioned web analytics as a central piece of their marketing efforts as more companies rely on their web data to gain a competitive advantage. However, most companies today are not leveraging the full potential of web analytics. Many different vendors provide on-site web analytics and monitoring software and services. There are two main technical ways of collecting the data. The first and older method, server log file analysis, reads the log files in which the web server records file requests by browsers. The second method, page tagging, uses JavaScript embedded in the site page code to make image requests to a third-party analytics-dedicated server, whenever a page is rendered by a web browser or, if desired, when a mouse click occurs. Both collect data that can be processed to produce web traffic reports.

The majority of web analytics practitioners today use web analytics in order to improve their web site's performance. These improvements include optimizing visitor paths, eliminating conversion bottlenecks, improving site navigation and optimizing site content. There has been a great deal of success to date in this area. However, even the most optimized sites are leaving money on the table. With conversion rates hovering around 2%, 98 out of every 100 visitors leave the site without completing a transaction. While not every single visitor is going to convert, there's still a great deal of qualified and engaged visitors that can be converted at higher rates.

The objective of Web Analytics is to first and foremost improve the experience of online customers, it is not a technology to produce reports; it is a virtuous cycle for website optimization. The process will enable companies to measure customer interaction with the website, to segment visitors and understand how each group behave, to analyze campaign Return On Investment (ROI), and to optimize the website in order to increase profitability.

## II. CASE STUDY

### *About Ryanair*

Ryanair is Europe's original low fares airline and continues to be Europe's largest low fares carrier. In 2000 Ryanair carried over 67 million passengers on more than 800 routes across 28 European countries. Ryanair is the World's favorite airline and operates more than 1,500 flights per day from 44 bases and 1200+ low fare routes across 27 countries, connecting 160 destinations. Ryanair operates a fleet of 262 new Boeing 737-800 aircraft with firm orders for a further 49 new aircraft (before taking account of planned disposals), which will be delivered over the next year. Ryanair currently has a team of more than 8,000 people and expects to carry approximately 73.5 million passengers in the current fiscal year.

Ryanair was established in the year 1985 and it is Europe's only low fare carrier. Ryanair has revolutionized the air travel industry by providing cheap air fares and at the same time becoming more reliable than any other airline service providers. The air travel became more easily accessible which has in turn opened up avenues for tourism in Europe. Ryanair operates from 72 bases and has 1600 daily flights. They connect as much as 189 destinations across 30 countries and they have fleet of over 300 Boeing aircraft. All these make Ryanair Europe's favorite airline. 99% of Ryanair's bookings are made through its website making it the company's single most important marketing tool. The website collects bookings and revenue for airfares across its network but also operates an affiliate model via its website for ancillary partners who provide accommodation, car hire, airport parking and other services. In

a low cost, no frill and more revolutionized B2C (Business to Customer) aircraft model industry, Ryanair is one of the Europe's leading and largest aviation businesses. Ryanair is very much focused on and committed to bring its customers to on-time flights and lowest fares out of all its competitors, so that customer get what they want and no competitor can compete with them. Since 2013, Ryanair has been the largest European airline carrier for scheduled passengers.

Ryanair uses their website as a platform for marketing. Majority of the business for Ryanair gets generated through their website. Ryanair collects all the bookings and revenue for airfares through their website. Apart from their business marketing, Ryanair has also an affiliate model established on their website which showcases other business houses like accommodation providers, transportation providers, Airport parking providers etc. associated with Ryanair.

Ryanair had web analytics set up in their website but the information acquired using this web analysis was not easily accessible. As a result Ryanair was not able to interpret the data properly. Ryanair's major objective was to partner with a solution provider to make the web analytics environment more easily accessible and help them attain their online objectives. Ryanair was looking for a solution partner rather than provider.

### ***The Challenge***

Digital marketing has started acting as a trap which has managed to attract the businesses irrespective of their area of expertise or size. A successful presence on the internet has become mandatory these days. Websites have become the main source for generating business for an organization. The website of an organization does not only provide information about a company but also acts as a platform for advertising, displaying organizational achievements, changes in products, different types of offers etc.

The success of a business depends on how well it collaborates with other people involved in helping the business run. Many vendors, small service providers etc. are associated with the main organization who help to carry the business activities effectively. These small players look upon the bigger company to boost their business as well. The mention of these small players on the website of the main organization will help them to fetch new business. Thus, it becomes the organization's responsibility to keep up their reputation, manage their data well, develop better strategies, keep the website updated etc.

Ryanair was in a similar situation where it had to manage its website efficiently to improve their business as well as the associated businesses.

Ryanair already had a Web Analytics solution in place but the information was difficult to access and they were looking for a solution partner rather than provider. AT Internet was selected as an organization with whom their Web Analytics environment would not stand still and one where all their online intelligence needs could be taken care of within a single, intuitive user interface. As the global economic environment has clamped down on consumer spending, the low-cost airfare market has suffered price erosion, making visitor traffic conversion an even higher priority. In order to make improvements one must first understand the requirements and be able to effectively measure and analyze current results. Ryanair chose AT Internet as their solution partner. AT Internet is a leading web and mobile analytics solution provider. They have presence in over 9 countries. AT Internet is a pioneer in data integrity and customer centric approach. They have been awarded with 2009 Platinum Distinction for European seal of E-Excellence. AT Internet has helped many organizations to enhance their marketing intelligence and business effectiveness. Ryanair collaborated with AT Internet to manage their online presence which helped Ryanair to manage their online intelligence and improve the conversion rate despite global economic environment affecting the customer spending abilities adversely.

### ***Objectives***

1. To re-design their homepage in order to better convert visitor traffic
2. To increase the visitor traffic driven to their partner pages Client Ryanair Industry Low cost air travel, B2C Vendor AT Internet Products Analyzer NX & Data Explorer

Business Objectives of Ryanair The following were the objectives of Ryanair:

- To efficiently access the information generated by web analytics.
- To increase the visitor traffic conversion rate.
- To redesign the website to convert visitor traffic.
- To increase traffic to the partner pages.

Ryanair's Business Objective: Having a Web Analytics at place is not sufficient. Every business needs to understand what is behind the web analytics. What does it tells you and what it does not? Same happened in Ryanair case. Though they were having Web Analytics but they were unable to fetch and access information and come up with an outcome. So they hired a solution partner called At Internet. Ryanair's goal was to hire an expert's support to handle all its online intelligence needs and intuitive user friendly interface so that it could be taken care of. As the economy has clamped down and inflation has risen up is the reason of low consumer spending, causing profit erosion to airline industry also. Thus, in order to retain customer traffic and its conversion, it was at most important for Ryanair.

Hence, it had two basic objectives:

- To redesign Homepage
- Increase Traffic

### **III. APPROACH / STRATEGY ADOPTED BY RYANAIR**

To get deep understanding of its online market, Ryanair selected two products from AT Internet which are Analyzer NX and Data Explorer. Ryanair then tracked visiting pattern of people, bounce rate, some prime locations where user is spending more time. After gathering all this information, Ryanair redesigned its homepage. With the help of analysis solutions, Ryanair uplifted

personalize marketing campaign through emails. They also focused on conversion funnel to identify the point where people are exiting or entering the site mostly or regularly. Thus, they developed a strategy around same and added some extra feature pages and user friendly interface so that they can drive maximum traffic and make visitor's whole journey very simple from identifying flights for bookings.

#### IV. THE SOLUTION

Web Analytics solution at Ryanair has been designed to help drive your performance in real time on social networks, applications, Intranet and the web etc. The solution offers all of the features which are essential to carrying out an advanced analysis of your audience as standard, by integrating specific business modules: e-Commerce tracking, multichannel campaign analysis, performance monitoring, rich media tracking, dash boarding, data management (data import/export), etc.

Their Web analytics tool which is easy and quick to implement and their complete and flexible platform will allow one to measure, structure, cross and segment online data providing you with the agility that is necessary for extracting decision-making information that is essential to your company's competitiveness.

The use of Web Analytics meant that Ryanair could learn about how their visitors wanted to interact with the site, allowing them to see where people entered and left the site, use heat maps to identify prime locations, etc. This knowledge allowed them to significantly improve the homepage design. The first step to driving conversion was to understand the contribution of each traffic source, using AT Internet's analytics solution allowed Ryanair to identify that the traffic they received from natural searches was quite low. As a result this is now something they are able to focus on developing whilst being able to directly monitor any improvements gained. Due to the fact that AT Internet provides measurement and analysis solutions, not only for the web but also for other marketing channels, Ryanair was also able to identify, and prove, that personalizing and increasing the relevance of their emails provided significant campaign uplift. The data collected from the campaign is cross-referenced with the financial systems in order to verify the data and the revenue generated. Having maximized the way that people initially find the website and by driving them to 'step one', identifying flights, Ryanair then wanted to understand if there were any weaknesses in the conversion funnel, i.e. was there any point in the process at which they suffered visitors exiting the process? This feature allowed Ryanair to review the whole visitor journey and to concentrate on specific strategies to address increasing traffic to ancillary partners and to destination and feature pages. The use of Web Analytics meant that Ryanair could learn about how their visitors wanted to interact with the site.

Ryanair selected AT Internet's Analyzer NX and Data Explorer Products. These products help Ryanair gain a deeper understanding of its online marketing landscape.

##### ***AT Internet's Analyzer NX***

Analyzer NX, the successor of Analyzer II, was released in April 2009. This version of AT Internet's web analytics tool provided improved user experience as well as a more user-friendly interface with increasingly detailed dashboards.

Analyzer NX was replaced by Analyzer III in October 2012.

##### ***Data Explorer***

Data Explorer is a true data exploration tool.

In addition to the web analytics segmentation module, used for pinpoint targeting, Data Explorer III comes with two work spaces (Custom Metrics and Data Query) allowing you to customize metrics, cross web analytics data and export data to create made-to-measure web analytics dashboards reports.

- High-performing web analytics segmentation: create segments on the fly for all metrics on all analysis levels, response times of less than one minute for traffic volumes of more than one billion pages, and apply segments to real time traffic, and analyze cohorts to evaluate visitor engagement. Read more on visitor segmentation.
- A la carte Custom Metrics: create custom metrics, combine them and cross them with segments. Adapt metrics to meet your needs irrespective of your business and sector of activity.
- Data exports with Data Query: an interface for organizing and structuring data to create custom exports in different formats (CSV, Excel, XML, API) and web analytics dashboards which can be updated in real-time.

##### 1.Key benefits:

- Visitor segmentation: Target and analyze changes in Internet user behavior from one period to the next as well as any other item from your web or mobile site (technical data, geolocation etc.).
- Unparalleled levels of customization: create custom metrics adapted to your KPIs, current business requirements and business needs.
- Create made-to-measure reports, which can be updated in Excel in real time, thanks to an advanced data modeling tool.

##### 2.Benefits:

Web Analytics solutions, Analyzer and Data Explorer have allowed Ryanair to:

- Enhance strategic decision-making..
- Increase conversion rates.
- Increase website revenue.
- Increase visitor traffic by 16% to strategic pages.
- Double revenue generated from their email campaigns.
- Enabled strategic decision making.

- Increased conversion.
- Increased website revenue.

### 3. Strategies Used By Ryanair:

In order to bring any change to the website, it is very important to understand the requirements first and formulate strategies to measure the results achieved. The analyzed data helps the organization to make many strategic decisions. Ryanair used AT Internet's Analyzer and Data Explorer Products which helped them to understand their online marketing performance. The following were the strategies implemented by the Ryanair to attain their objectives:

1. Ryanair used Web Analytics to learn about the visitor's movement on their website. Details like how the visitor entered the website, where they left the website, identifying the prime location on the website etc. could be seen. All these details helped Ryanair to improve their website design. The most important change for customers has been the re-design of the website. Its previous incarnation was often lauded as one of the worst on the web from a usability perspective. The main issues included the cluttered pages, the number of clicks it took to complete a transaction and additional costs that were added to the advertised price of the flight like taxes. The new site is much cleaner and the customer journey is vastly improved. The significant reduction in the number of tabs on the homepage makes it extremely easy to find what you are looking for quickly. Flight costs are now displayed including taxes and while there are still a number of other 'optional extras' en route to making a reservation, it is easy to move pass them without incurring any accidental charges. These usability improvements have been extremely well received by Ryanair's most important audience – customers and potential customers. A shift towards customer focused web design is something we have noticed over the last year or more. Ryanair have worked with the Health and Safety Authority and the National Transport Agency on the UX (user experience) of their websites to ensure existing and potential customers can access the information they need or complete tasks quickly and easily. This is achieved primarily by narrowing the number of options facing the visitor from many to very few.
2. There are many sources of traffic generation for a website. Ryanair used AT Internet's analytical tool to assess the traffic sources to their website. Ryanair could see that the traffic generated through natural searches were very low. As a result, they could focus on the search parameters and assess any improvement. One of the most important benefits to analyzing your Web statistics is that you are able to learn information about the visitors to your website. In addition to seeing how much traffic the site receives, analytics show you how people are finding the site, how long they're staying and even the approximate area in which they live. You can also monitor where your traffic is coming from, the IP addresses of your visitors, the browsers they are using, the total time they stayed at the website and their actions in sequence with the time stamp. This information is especially important if you run a commercial site like Ryanair. For example, if you see that a significant amount of your traffic arrives through social networking, one should investing more in social media. Getting the visitors to your site is only 10% of the part. We can have a valuable customer who can be a repeat buyer. In order to do this, we need their information such as where they came from (country, referring site, search engine), what Operating System are they using (Mac User with 1536×960 resolution), why they came (keywords), what was the entry page, exit page, how much time was required to load the page, the links through which they entered the website. Here Web analytics has proved a perfect solution for Ryanair to find out the users data, analyse it and use for the websites performance.
3. Now consider if one is not using web analytics so he's unaware of the things that are going around, the needs and comfort of the user, the way he can attract more users for his website. Web analytics has been gaining steady popularity among the online community, and is showing no signs of slowing. It is a great device to look at your latest internet site trends and your visitors' or users' preferences in terms of site features. With web analytics, you know how long your visitor stayed on your site, who they are and what source they came from. It is possible for you to know their clickstream activity, the keywords they may have used to access your site, and how they came to enter your site in the first place. You can also see the number of times a visitor returned to your site and which pages took preference over the others. All in all, very useful information vital in order to make constructive website changes. Also the entry and exit pages of the user can be analysed. Once you have carefully studied the actions of your visitors, you will be able to action some changes. This puts you in a great position to write better-targeted ads, strengthen your marketing initiatives and create higher converting websites. You can improve, streamline or reshape site navigation to better assist your visitors, and improve their overall browsing experience. The way visitor's use your website speaks volumes about the quality of its content and how easy it is to navigate. Analysis will help you to develop the site, improve your ability to meet your objectives and up your conversion rates - sales. Find out what proportion of people coming to your website do what you want them to do and convert to your desired objective. If conversion is low, look at how much time visitors spend on particular pages, think about the steps they need to take to complete their journey and identify any obstacles. Visitors may, for example, click away from stale or impractical content too quickly - or stay too long on pages that they should pass through quickly; it is not all about keeping visitors on your site for ages. Steps such as simplifying an online application form or installing faster payment software will mean that your web visitors will spend less time on your site but will give you a higher conversion because they're more likely to complete the process. The process is everything, and your analytics package should tell you how effectively yours is working. But there's no point getting the results of your web analysis if you're not going to do anything about it. If you interpret your results and make a 1-2% improvement each quarter, that makes it worthwhile.

4. AT Internet also helps to improve the marketing channel solutions. Ryanair changed their email marketing strategy by making the contents more relevant and personalized. This helped Ryanair to uplift their email marketing campaigns. The email campaign proved to be very successful. The data generated using email campaign was then analyzed and cross-checked with the financial system to get complete details about data and revenue generated. Many websites rely on advertising to earn revenue. Thanks to analysing Web statistics, a website has the potential of increasing its revenue by providing this statistical data to potential advertisers. Not only will a high visitor count allow the website administrators to charge more for ads, a statistic showing that a high percentage of visitors come from a certain geographic area is appealing to a business from that area that wishes to advertise. Web analytics applications can also help companies measure the results of traditional print or broadcast advertising campaigns. It helps one to estimate how traffic to a website changes after the launch of a new advertising campaign. Web analytics will be able to assist you in the preparation of an e-marketing plan. This will be more effective because your plan will be based on solid facts and not mere probabilities. You'll know what is popular on the site, and what your market likes and wants. By tracking highly-viewed items, you will learn which features receive the highest interest. You can even use analytics data to enhance other programs that you already have in place. Then you can work on expanding your client base, as well as retaining your current customers.
5. Analyzing the conversion funnel is very important for a website. The conversion funnel helps the user to identify the stage at which the visitor experiences any problem and exiting from the process. The complete path of the visitor's movement on the website can be clearly visualized. Ryanair could identify their visitor's path using the analytical tool and address any problem in the conversion funnel. As a result, Ryanair could improve their visitor experience which in turn helped to improve the traffic to their website as well as to the ancillary partner's websites.
6. Search Engine Optimization: Following its re-launch Ryanair plummeted in Google's search engine results pages because old web pages were not correctly redirected. For example Ryanair was not appearing on the results page for 'Flights to Poland' which is a popular and important route. Once the issue was highlighted it was resolved quickly but it shows the need to constantly review and iterate when it comes to your online presence.
7. ROI in web analytics: Web analytics can and must play a leading role in calculating profit. The ability to use any analytics feature in a company is certainly a prerequisite for any ROI question related to online marketing. Getting the most abundant and accurate details essential to correctly calculating ROI. Web Analytics is used to support efforts in determining the performance of investments allocated to digital platforms, in terms of campaigns, customers and a company's profitability. Web analytics plays an important role in measuring the contribution that web investments make to a company's overall profits. We believe that this is one of the fundamental objectives of web analytics. Online measurements should allow companies to update how and to what extent online investments form part of the company's overall development. Without Web Analytics, how can we determine how much revenue has been generated by the web? How can we determine the web's strong points such as the increases in sales turnover that it creates, savings in expenditure and increases in customer satisfaction. The more Web Analytics plays an essential role in establishing any ROI evaluation of a company's online marketing, the more we can evaluate web analytics with its own ROI. Few functions within a company can clearly expose the impact that analytics has on a company's results. With the analytics tool, essentially a measurement tool, it is easy to link a company's results and recommendations with the profits gained. We support the idea that the clarity of web analytics. ROI should be established as one of the measurements of success of an online analytics tool. If we think about it more, carrying out as much analytics as this should definitely increase revenue, reduce costs and increase customer satisfaction. What is the point of web analytics if it is to contribute, albeit unclearly, to these three dynamics which are fundamental to a company's development?

## V. CONCLUSION

With the help of Web Analytics to understand visiting behavior and to make optimize use of information available, Ryanair's click-through rates got increased by 200% and bounce rate decreased by 18% at the same time. Head of advertising at Ryanair Dara Brady said that by improving the homepage design they were able to increase traffic by 16% to various pages and by personalize

Increased Revenue generating from Web Site email marketing they were able to double their revenue. The three most important benefits they got out of it are:

1. Optimized Strategic Decision making ability
2. Increased Traffic and conversion

In this paper, we have presented the advantages of using web analytics for a website using a case study on rynair. Though In In this paper, we have presented the advantages of using web analytics for a website using a case study on Rynair. Though still a relatively new invention, web analytics is becoming an increasingly popular—and effective—web site optimization tactic used by online business owners. By providing deep insight into the who, what, when, why and how of web site traffic and visitor behavior, web analytics tools can help you improve the usability of your site and boost sales. Ultimately, your main objective is to create a web site where visitors want to browse and buy. One of the most common online issues to overcome is visitor confidence in the security of transacting online. You can optimize your web site for online transactions by using a secured and efficient tool. Web analytics are a necessary part of measurement. Since web analytics technology has some limitations and most organizations sell products and generate sales leads through offline channels, web analytics might not be the ROI measurement system. Although analyzing Web statistics can be quick if you're familiar with how to interpret the data, the process is time consuming for someone new to analytics.

If you run a website by yourself, you might not have enough time to spend on analyzing the stats, and the time you spend doing so can eat into the time you would otherwise use for building or contributing to your website. The most important task to drive conversion was to analyze the contribution of every traffic source using Web Analytics solution allowed Ryanair to identify that the traffic they were receiving was quite low. Thus, they learned on what things to focus and how to improve business model. The use of their strategic decision meant that Ryanair now could learn about how their visitors wanted to interact with their web site and accordingly they can customized it in most optimized way.

Dara Brady, head of advertising at Ryanair comments: "As a result of improving the homepage design we were able to increase visitor traffic by 16% to destination and feature pages, as well as to ancillary partners. And by personalizing our emails we were able to double the revenue generated from our email campaigns." Brady continues, "It was very important to Ryanair that we found a partner with whom we could travel on the journey through the constantly changing world of digital marketing. We did not want an out of the box product that would not meet our future needs. We insisted on a trial period before finally selecting our supplier and now I'm confident to say that in AT Internet we feel we have that partner."

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