

# DIPARTIMENTO DI INGEGNERIA GESTIONALE

MASTER OF SCIENCE IN
MANAGEMENT, ECONOMICS AND INDUSTRIAL ENGINEERING

Critical success factors of a travel blog.

Forecast of figures for a new travel blog.

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#### 1. INTRODUCTION

## 1.1. Justification of the study

It is really known the fact that the Internet is changing the way everything, and I mean literally everything, works. New business concepts, new relationships, fast communications, tons of information and tutorials are shaping this new era in which we are immersed.

Many academic studies are focusing on how these new relationships could affect: some aspects of life, success of businesses or the way we work. This study could be located within this group and more specifically in those analysing the success of the new internet business models. Blogs are one of them.

Initially, blogs were a way to express openly the thoughts of the writer but nowadays, even though they keep this feature too, blogs have become a business for many others and quite successful in some particular cases. Bloggers have turned into freelancers, marketing consultants or digital nomads. This way of working through the Internet and with no need of a fixed location is gaining adepts since the possibilities offered are countless.

Many of those new digital nomads live off their blogs. In this study the focus will be placed on travel blogs. It was necessary to narrow the scope of the study to have a better understanding of the logics, ways of marketing and features behind the niche studied. And why travel blogs? Here I have to speak in first person and basically it is because I am a passionate about travelling and I admire the way travel bloggers live. Thus, knowing that this way of living actually exists, it is worth analysing the source of income these digital nomads have.

Another feature of this study interesting to point out here is that the analysis of the critical success factors will be quantitative. There are quite a lot studies offering qualitative analysis about how important is SEO or Social network promotion but the special part of this one will be specific numbers offering this information. It should be noticed too that this analysis will be based on a sample of the travel blog industry and there will be some bias to be careful with, but some consistent trends and tips will definitely arise.

Finally, this analysis will serve as an initial guide for the blog that a friend of mine and I will launch by October 2015. In the second part of the thesis, the model will be applied to our travel blog idea, with its own features, and we will be able to have a trend and a guide on how well our travel blog is performing with respect to the industry. In addition, the analysis will be very useful to plan and control the figures we will get and to analyse ways of improvement.

## 1.2. Objectives of the study

The main two points of this study could be summarised by answering these two questions:

• What are the critical success factors of a travel blog?

• How could a new blog perform, having settled the initial strategy?

Through this study, both questions will be answered and the conclusions supported with statistical results from the data gathered throughout a questionnaire filled by travel blogs owners or writers.

The first objective will be a mean to reach the second objective, but the first objective has its own implications and importance by itself and could be even more interesting for the travel blog industry. Following, both questions will be deeper analysed:

#### 1.2.1. What are the critical success factors of a travel blog?

This is the main question and the one more time consuming to analyse. The reader should be aware of the difficulty of solving this question. There will be some important bias through the whole process lately analysed (questionnaire participants for example) and the complexity of the topic analysed.

Getting deeper in the complexity of the topic analysed, one should understand the high level of personalisation that a travel blog has. Somehow a blog (whatever the topic is), could be seen as a really personal part of the writer or writers and therefore, each blog may be considered as unique. No quantitative indicator or set of indicators could measure effectively all the particular features of the blog and even more difficult, the writer.

Another important issue to find out before getting into more details is: what is success in a travel blog? The respondents of the questionnaire were asked to answer the question below:

#### Why do you think your travel blog is/will be a success?

It is clear that the question why and what is not the same, but knowing what bloggers think about:

- 1. Why their blogs are successful
- 2. What they do to be successful
- 3. What they pursue to be considered successful

Lead directly to the answer of what they consider success in a travel blog. Almost all answers lead somehow to three different statements:

#### • My blog is successful because I make enough money to live off it

"I am able to live off it"

"We make money off our blog by creating tour packages which best complement our highest traffic articles"

"I have been making money from it for over three years and get travel perks every year worth thousands of dollars. It's a success because I have followers, enquiries, I make money and I get the perks"

"I'm very happy that my blog allows me to live and travel full-time now. I get most of my revenue through advertisement and sponsored posts, freelance writing and participation to blogger campaigns. As my audience continues to grow, I'll be creating products and starting with affiliate marketing"

"It's all about creating amazing evergreen content that's searchable and will have repeat value for travellers in the future. I definitely specialize more on itineraries and city/country guides. Success for me is about monetization at this point. The more money I can make the more success that will translate into"

"It is a success as I now earn an income which allows me to live a location independent lifestyle and work from anywhere in the world"

## • My blog is successful because I have a loyal and devoted audience<sup>1</sup>

"We already feel successful as we get high rankings for our posts, and good engagement, as well as trust in our content. We are becoming recognized as an industry innovator and leader in our niche of responsible tourism"

"My blog does not have the best writing, photographs, video, SEO, but I am good and learning at all of them. Plus, I think my personality fits a traveller, so people are interested in what I am doing"

"I've garnered a large number of accolades and awards over the years, and I've built up a fairly sizable and dedicated audience"

"If I can share my knowledge and inspire people, I consider the blog a success. Every time I get feedback from a reader, it is a success"

"Because we have a very engaged readership, we're working now on different ways to monetize it"

"I created a community where readers feel comfortable learning about travel, asking questions and really engaging with the site and with myself. I answer all of my messages, comments and emails personally and I write about the reality of travel, the good and the bad, not just trying to make travel sound 100% amazing all the time. My blog is open and honest"

#### • My blog is successful because thousands of people visit and follow it monthly

"My blog is successful because I have written it not only for dedicated readers, but also for SEO purposes which brings a lot of traffic"

-

<sup>&</sup>lt;sup>1</sup> Notice that this answer does not imply having a large audience

"I think my blog is successful because it continues growing in traffic and people come back more than once"

"I'd love 25,000 visitors a month and I'd like to get up to 200,000 followers eventually"

"I constantly update my blog with travel related news, travel tips, airline news, travel blogging how tos, hotel reviews, festivals and travel and food related events. To gain more traffic, I always make sure to provide fresh content which travellers are constantly looking for"

"I still don't think my blog is a huge success. I would like to increase engagement and visitors rates, publish content more regularly and land travel writing gigs in prestigious publications like Nat Geo Traveller, Lonely Planet etc"

"My specialisation is SEO. I am good at ranking in Google which is how I expect to keep building my traffic numbers (they have been raising by over 10% per month all this year)"

Some of the answers have obviously a mix of two or three statements above.

Taking into account bloggers' answers to the question "Why do you think your travel blog is/will be a success?" three definitions of success could be given to answer the question what a successful travel blog is:

- 1. A blog is successful if it makes money
- 2. A blog is successful if it is widely followed
- 3. A blog is successful if it creates a loyal audience

Now that it is clear what could be understood as a successful travel blog, the target is to find some indicators that are able to measure easily and clearly the success of a travel blog. The indicators must be clearly defined to allow a simple comparison between two different blogs.

Thus the following target indicators will aim at explaining the level of success of a travel blog: **monthly unique visitors** and **average time spent in a blog.** 

These two indicators aim at covering directly the definitions of a successful blog as something widely followed and with loyal audience.

The successful blog considered as one that makes money is essentially the consequence of accomplishing the two definitions listed above, meaning that, if a blog is widely followed and the audience is loyal and devoted, the money will come or at least there will be a chance to get it if this is the goal. Therefore, the study will not measure any indicator related to money explicitly. Moreover, there are three other conflictive points when trying to measure how much money the blog is making:

Participants may have some concerns when asked about figures due to confidentiality issues

• The boundaries of "money made on the blog" could be unclear. For instance, in the case in which a blogger use the blog just like a portfolio for freelance jobs, the blog could not be profitable by itself, but could be quite successful at providing a window display to the blogger for other jobs.

"It is a success when it helps spread my projects and my personal brand while paying for travel and gear. It opens doors and creates new opportunities. All of which is financially beneficial both directly and through secondary sources"

"While I would love to have many many more visitors, the people who need to see the blog see it. Sometimes that means inspiring someone to travel - sometimes it means someone e-mails me with a job or a desire to buy a print"

"Our goal was to create enough traffic to promote our book as well as travel while sponsored by various companies and tourism bureaus and we have accomplished that"

• Other bloggers (even having large audiences) are not interested at all in making money and their main reward is having a loyal audience.

"I've made a conscious decision not to monetize the blog. Right now, I'm simply writing for the fun of it - and I truly enjoy doing it. In that regard, it's a success. :)"

"I have no immediate interest in monetization - I simply want people to take their kids to amazing places, and I want to lead by example"

Considering that money is not equal to success for some bloggers and may result in problems when answering the questionnaire, it has been decided not to include an indicator measuring profits directly.

Therefore the only indicators of success will be: monthly unique visitors and average time spent in the blog. The main reasons to choose these measures are: the easiness to measure and the completeness. Both indicators are easy to track and immediately available. In the next two points these two indicators will be further explained and contrasted with other possible alternatives:

• Monthly unique visitors: first, it is necessary to understand what the meaning of unique visitor is. As written in Techopedia, (2015): unique visitor is a term used in Web analytics to refer to a person who visits a site at least once within the reporting period, a common period is a month. Each visitor to the site is only counted once during the reporting period, so if the same IP address accesses the site many times, it still counts as one visitor.

"Monthly unique visitors" is a popular metric for setting goals, pricing ads and other important activities. The measurement of unique visits is not perfect, as a single user could visit a site from three different IP addresses and count as three visitors. Also, many different users accessing the same machine would be counted as one (as happens with computers in public libraries).

This indicator is robust and more reliable in terms of traffic than, for example, page views that could be an alternative to measure traffic. **Page view** is defined by Techopedia (2015) as a Web analytics term that refers to each time a Web page is successfully loaded onto a user's Web browser. Every time a Web page is viewed in a browser, the site's analytical software will increase the total page view count by one, meaning that one unique visitor can generate many page views.

A high number of page views do not mean essentially a high traffic in terms of visitors and it could mean a really devoted audience formed by a bunch of people. Page views is somehow more related to fidelity than pure traffic and therefore unique visitor per month will fit better in this model since there will another indicator to measure fidelity.

Moreover, "monthly visitors per month" is more related to money and sponsors so that advertisement offers are generally guided by this one as said in Techopedia (2015). Advertisers are more interested in the outreach of their ads by total amount of people that could see it than by total number of times the ad is seen. Therefore, this metric is more aligned with the definition of successful blog as a money maker.

• Average time spent in blog: First, a definition of this indicator must be added although it is quite intuitive. As said in Webopedia (2015) time spent in a blog is a type of visitor report that provides data on the amount of time (in minutes or seconds) visitors have spent on a website.

It is necessary to point out some of the limitations of this indicator too. When viewing the time on site report in a Web analytics program the results can be misleading because in some cases the visitor may have been interacting with your pages and site content or they could have left the browser window open and were not actually viewing your page, Webopedia (2015).

Following Haile's (2014) definition of engagement as "the amount of time, measured in seconds that a person is actively interacting with their browser", it looks logical to use the indicator average time spent in a blog to measures the success in terms of loyalty and engagement a blog has.

#### Other alternatives could be:

• Shares on social networks: It is a quite specific metric and does not account the loyalty of readers that do not share. In addition, the link between what is shared and what is read is quite unclear as Haile (2014) stated in one myth of the internet "the more we share the more we read". He said that "A widespread assumption is that the more content is liked or shared, the more engaging it must be the more willing people are to devote their attention to it. However, the data doesn't back that up. We looked at 10,000 socially-shared articles and found that there is no relationship whatsoever between the amount a piece of content is shared and the amount of attention an average reader will give that content".

The following picture is quite representative of what Haile claims:

## DO WE READ THE ARTICLES WE SHARE?

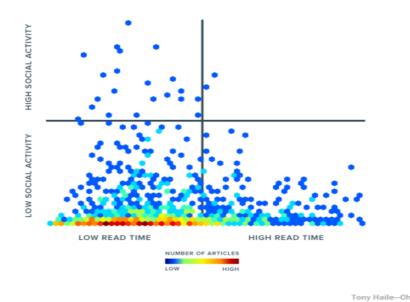


Image 1. Graph social activity vs read time of articles shared

In addition to these facts, the difficulty of measuring these metrics must be added. To track this indicator, the respondents to the questionnaire should know which social networks they should take into account and such complex questions could have increased the abandon rate of the questionnaire.

• *Number of comments per post*: Again, this measure could mislead the level of engagement of a travel blog. In many cases, a fair percentage of comments in a post, are comments written by other fellow bloggers aiming at driving some traffic to their sites and partnering with other bloggers.

Other fact is that "hated" posts could gather a huge number of comments but this could lead to future problems in terms of brand reputation.

In addition, this measure would not be easy to measure either because posts could be commented directly on the blog or in the posts on social networks, making really complicated to collect all the information.

• Ratio between page views and unique visitors: This metric means the number of times in a period that a unique visitor visits the blog. The ratio would be easy to measure but since it depends on the other indicator chosen (monthly unique visitors), an independent measure would add more information to the model.

Moreover, more visits in a month by one visitor do not mean directly a high level of engagement, since these visits could be just few seconds.

For all the reasons explained above, the alternatives would not be as suitable as the indicator average time spent in a blog.

At this point the reader should have understood what success in a travel blog means and how and why this success is going to be measured to create the model.

But the initial answer of what the critical success factors of a travel blog are, has not been answered yet.

For this purpose, multiple regression<sup>2</sup> methodology will be used and two models will be created. Each of these models will split<sup>3</sup> the target indicators (the ones that measure success and defined as dependent variables) into a sum of independent factors (named as *critical success factors*<sup>4</sup> or independent variables) multiplied by a coefficient that will designate the influence that a unit of a success factor has on the dependant variable.

To illustrate it with an example, if the target indicator is "monthly unique visitors" and the success factor is "likes on the Facebook page", a coefficient of 0.5 means that each like on the Facebook page, turns into 0.5 unique visitors per month.

With the analysis of the coefficients of the critical success factors and the magnitudes of these critical success factors, the influence that each factor will have on the success of the blog (in terms of the dependent variables chosen) could be found out. This may seem a bit complicated in the beginning but it will be deeper explained in upcoming sections.

Now that it is clear how critical success factors affect the target indicators, it is necessary to find and classify these factors. They will be classified in the following categories, understanding that the success of a blog is led by a good performance or a specific competitive advantage in at least one of these categories:

- **Author/s:** The author/s' abilities and expertise writing and inspiring readers will be an essential contribution to the success of a travel blog. In this category, it is possible to find critical success factors as: background of the writer, number of writers (more writers could add different points of view but could deteriorate the consistency of the brand due to different thoughts of the writers) or years of experience.
- **Blog:** The blog itself meaning visual presentation, amount of content or usability. The appearance of the blog will be the first contact between the blog and the user, so a good first impression will always benefit the success of a blog.

<sup>&</sup>lt;sup>2</sup> Further explanation in section 3, mathematical methodology.

<sup>&</sup>lt;sup>3</sup> Split: meaning that when the target indicators are real figures, these will be divided in a sum of dependant variables with different coefficients plus an error that would be the influence of the factors not included in the model (for a deeper insight, check the section 3, mathematical methodology).

<sup>&</sup>lt;sup>4</sup> Critical success factors should be understood as the key factors that will make a blog be a success

• **Promotion:** This category includes all the practices of promotion online and offline, presence on the social media and other techniques as SEO or partnerships with fellow bloggers.

In the section "3.2.4 About the answers", all the critical success factors forming the model will be classified in the sections above.

Before getting into details in the next question, the reader should be aware of a small detail. One may wonder why all blogs are valid for this study. The answer is that this study aims at offering the critical success factors of travel blogs as an industry not just successful blogs. If it were the case, the name would be critical success factors of successful travel blogs and not the current one. Thus, the sample needed for the study should take into account the whole industry.

## 1.2.2. How could a new blog perform, having settled the initial strategy?

To answer this question the same model got with multiple regression and explained in the previous section, will be used.

In this case the task carried out by the model will be to **forecast**<sup>5</sup> the success of a new travel blog model. The coefficients of the critical success factors are already known and at this point it is necessary to set up the strategy for the blog, for example:

- Expected number of social media followers and visitors
- Use of SEO or not
- Appearance and usability of the blog
- Subscriptions policy
- Amount of content creation

After setting the strategy, the model will only depend on "t" (time) so a graph of the success of the blog, in terms of the two target indicators defined, could be displayed.

The graph will show the evolution of the success of the blog over the time considering the initial strategy established in the beginning.

Of course, the initial strategy could change and many other factors could happen but the model will provide a guide to support future decisions and to measure the effectiveness of the different strategies.

To pursue the response of the two questions listed previously and aiming at answering them structurally, the study has been divided in different sections as follows:

<sup>&</sup>lt;sup>5</sup> Forecast: meaning that, when no real figure for the target indicators is available but there are some features, actions and forecasts of dependant variables available, the values of the dependent variables could be got by the model.

- LITERATURE REVIEW: brief description of what blogs are and the reasons of its increasing popularity
- METHODOLOGY: deeper explanation about the mathematical tools used and the survey process
- STATISTICAL ANALYSIS: analysis of the data gathered and creation of the model. Analysis of the influences of the critical success factors on the success of the blog quantitatively.
- FORECAST OF A NEW TRAVEL BLOG: application of the model to a particular strategy and display of the success over time.

#### 2. LITERATURE REVIEW

## 2.1. What is a blog?

A blog nowadays is something that everybody has heard of and probably has even followed before or do it currently. For Blood (2006) blogs are "a relatively new communication medium built atop the web that encapsulates informal interaction. Individual authors record personal journals of thoughts, stories, news and ideas of interest to a publicly-accessible web site".

Even though it is defined as a communication medium, at the end it becomes something more personal for their authors. As per Boyd's (2006) definition of medium, it "is an "extension of man" that allows people to express themselves. Blogs are precisely this; they allow people to extend themselves into a networked digital environment that is often tough to be disembodying. The blog becomes both the digital body as well as the medium through which bloggers express themselves".

"A personal blog is, in the end, a private playground, a place for self-expression without the criticism and hostility that can flame up in online forums" Boyd (2006).

The variety of blog is limitless and as stated by Brady (2005) "the type of information contained within a blog varies greatly from individual to individual. Authors of blogs can describe day-to-day observations in their lives, or more specific topics of interest to them, such as web design or cycling", for example.

The authors of blogs are the named "bloggers" and according to some statistics gathered in United States, "bloggers are younger, better educated, more likely to be urban dwellers, and avid online shoppers than the average population of United States" Guadagno (2007). They are younger because new generations are the ones more used to these tools and hand coding (programming), which was the way blogs were created in their beginnings.

Nielsen (2012) gives some interesting details about some facts and characteristics of bloggers:

- Women make up the majority of bloggers, and half of bloggers are aged 18-34
- Bloggers are well-educated: 7 out of 10 bloggers have gone to college, a majority of whom are graduates
- About 1 in 3 bloggers are Moms, and 52% of bloggers are parents with kids under 18 years-old in their household
- Bloggers are active across social media: they're twice as likely to post/comment on consumergenerated video sites like YouTube, and nearly three times more likely to post in Message Boards/Forums within the last month

The act of writing in a blog is called blogging and as Boyd (2006) claimed it "involves producing digital content with the intention of sharing it asynchronously with a conceptualized audience". Bloggers write about whatever comes to their mind but generally trying to attract like-minded people to share their thoughts with.

## 2.2. Why is the number of blogs growing so fast in the last years?

Now that something else is known about blogs, bloggers and their characteristics, it will be analysed their recent success and the reasons why they turned from something that a bunch of "young talented" people did to a mainstream spread all around the world, not differing between: ages, races, level of education, sex or countries.

The next images are quite representative of how blogs are becoming more and more popular.

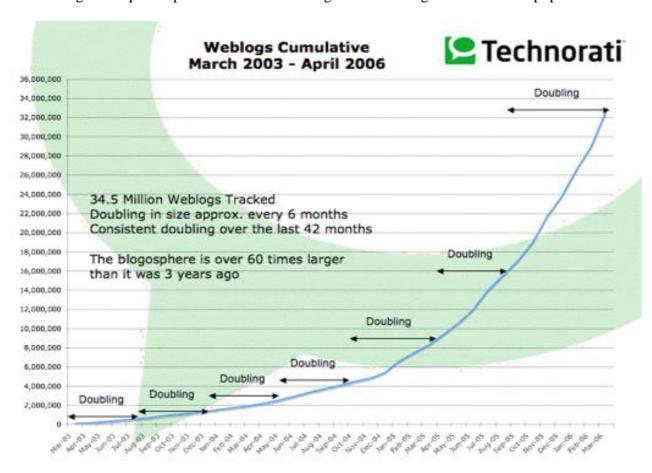


Image 2. Cumulative number of blogs from 2003 to 2006

From 2003 to 2006, the number of blogs has been doubled 7 times (image above). In October 2011, the total number of blogs is 173 million worldwide.

#### Number of Blogs Tracked by NM Incite

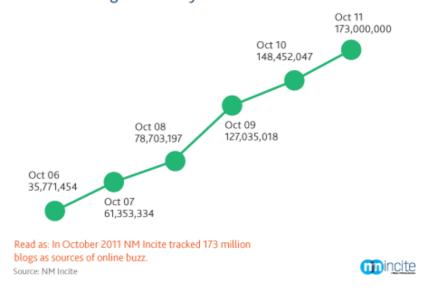


Image 3. Number of blog from 2006 to 2011

For the current date (2015) the number of total blogs has not been found but as for Statista (2015), Tumblr alone has more than 246 million of blogs. On February 2014, according to Wordpress (2014), it had over 75.8 million and Blogger, considered the most popular blogger service used today, do not make public their numbers.

But what is the reason behind its incredible success?

As claimed by Blood (2006), "in late 1999, several companies released software designed to automate blog publication. One of these products was called Blogger and the press couldn't get enough of it. For journalists, Blogger epitomized the dot-com era: Founders Meg Hourihan and Evan Williams were in their 20s, their free, wildly popular product had no discernible business plan, and their tagline, "Push button publishing for the people," promised to revolutionize the Web".

It has been mainly its increasing easiness of usability and range of options to personalise it, the reason why they are so widespread today.

But apart from the improvement of the technology that makes it easier now, the concept of blogging itself attracts new bloggers in a daily basis. As stated by Brady (2005) "a blog can be seen as being a personal as well as a public medium and it has been argued that the success of blogging is partly due to this. The benefits of blogging, therefore, can be seen as satisfying both personal and public motivations". People like sharing their thoughts and hear others impressions about them. Before social networks became as widespread as they are today, blogs filled this need of raising the voice publicly with the charm that anyone could notice one's thoughts.

"At a personal level, a blog is an efficient way to store and organise information. Blogs are sometimes described as 'notepads' as well as online diaries. For some bloggers, their blog is a way of keeping notes and useful URLs (web addresses) in an organised way" Brady (2005). For others, a blog is more like log book that they want to keep ordered and updated.

#### 3. METHODOLOGY

In this section, the methodologies and procedures to carry out this study will be explained. It will be divided in two sub-sections: mathematical methodology and about the survey process.

## 3.1. Mathematical methodology. Multiple regression

For the analysis of the data gathered, multiple regression will be used. This technique will be used to get the two targets of this study, a formula that:

- Splits the value of the target variable in a sum of various critical success factors with their coefficients
- Forecasts the evolution over the time of a travel blog, when fixing the independent variables or trends of these independent variables.

The objective of multiple regression is to explain a dependant variable (Y) in terms of a group of independent variables  $(X_1, X_2... X_k)$ .

For this purpose it is necessary a set of real data, "n" samples, to predict the parameters of the formula. The model of multiple regression is as follows:

$$Y_{i} = \beta_0 + \beta_1 x_{1i} + ... + \beta_i x_{ji} + ... + \beta_k x_{ki} + u_i$$
 For  $i = 1, ..., n$ , For  $j = 1, ..., k$ 

 $\beta_0$  = Average value of the Y when  $X_1 = X_2 = X_k = 0$ 

 $\beta_i$  = Measures the variation that suffers Y when  $X_i$  increases in one unit (j=1, ..., k)

u<sub>i</sub> = Error. Additional effect provoked by other variables not included in the model for not being relevant.

The methodology to follow to get the final parameters ( $\beta_j$  with j=0, 1, ...,K) and check their consistency is (De la Horra, 2013):

- 1. Punctual estimation of the parameters of the model
- 2. Confidence interval to estimate the parameters of the model
- 3. Contrast of hypotheses
- 4. Variance analysis
- 5. Assessment of the capability of the model

All these operations will be done with Microsoft Excel.

The mathematical and statistical calculations could make this part a bit tough and it is out of scope of this study. Thus, it will be skipped and explained just with computational purposes.

8	SUMMARY OUTPUT						
9							
10	Regression Sta	atistics					
11	Multiple R						
12	R Square						
	Adjusted R Square						
14	Standard Error						
15	Observations						
16							
17	ANOVA						
18		df	SS	MS	F	Significance F	
	Regression						
	Residual						
	Total						
22							
23		Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
	Intercept						
25	X1						
26	X2						

Image 4. Excel layout of the solution of multiple regression

Points 1, 2, 3, 4 and 5 will be displayed by Excel in three different exhibits as shown in the image above. This case is just for two independent variables to make the explanation simpler.

The interpretations of the Summary output are (Colin, 2007):

- In regression statistics exhibit:
  - Multiple R: or correlation coefficient and square root of R<sup>2</sup>. It gives information about the strength of the linear relationship. It must be between 1 and 0. 1 means a perfect linear relationship and 0 means no relationship at all.
  - OR square (R<sup>2</sup>): or coefficient of determination. It gives information about what percentage of points that fall in the regression "line". R<sup>2</sup> of 0.75 means that 75% of the value of the dependent variable is explained by the model.
  - O Adjusted R Square: it adjusts for the number of terms in the model. This will be meaningful when there is more than one independent variable.
  - o Standard error of the regression: it is an estimate of the standard deviation of the error "u"
  - Observations: Number of samples used in the regression (initially 60 in this study)
- In ANOVA exhibit (it aims at understanding the validity of the model as a whole):
  - Column Df (Degrees of freedom): It is the number of values in the final calculation of a statistic that are free to vary:
    - Df regression = k

- Df residual = n k 1
- Df total = n-1
- Column SS (Sum of squares): Excel will find the multiple regression parameters minimising the Residual SS.
  - Total SS = Regression SS + Residual SS
  - $\Sigma_i (y_i ybar)^2 = \Sigma_i (yhat_i ybar)^2 + \Sigma_i (y_i yhat_i)^2 \text{ with } i=1,..., n.$
  - ybar = mean of the sample  $(y_1, y_2, ..., y_n)$
  - yhat = predicted average of "y" value for a given set of independent variables  $(x_1, x_2, ..., x_k)$  found by using the regression equation
- O Column MS (Mean square error): It is a kind of error per variable. It won't be so useful for the considered study.
  - Regression MS = Regression SS/Df
  - Residual MS = Residual SS/Df
- o Column F: It gives the overall F-test of the null hypothesis which is:
  - $H_0$ :  $\beta_1 = ... = \beta_k = 0$  (the model as a whole is not valid)
  - $H_1$ : at least one of  $B_j$  (j=1, ..., k) does not equal zero (the model as a whole is valid)
- Column significance F: Associated P-value. If this value is 0.05 or less it means that with 95% of confidence or more, the model as a whole is valid.

If it is higher, better to remove one independent variables that has a P-value greater than 0.05 (explained in next exhibit) and retry again.

- In Regression coefficients exhibit:
  - Each row corresponds to an independent variable plus the intercept (which is the constant/fixed term)
  - $\circ$  Column coefficient: it gives the least squares estimates of  $\beta_i$  (j=0,1,...k)
  - Ocolumn Standard error: it gives the standard errors (i.e.the estimated standard deviation) of the least squares estimates of  $\beta_i$  (j=0,1,...k).

- o Column "t Stat": it gives the computed t-statistic for the null hypothesis:
  - H0:  $\beta_i = 0$  (the variable  $X_i$  is not relevant for the model)
  - Ha:  $\beta_i \neq 0$  (the variable  $X_i$  is relevant for the model)
  - Notice that in this case, this is not for the whole model but for the pertinent X<sub>i</sub>.
- o Column P-value: it gives the p-value for the previous test. The variables will be relevant in case the p-value is 0.05 or lower, it means that with 95% of confidence or more, the variable stand alone is relevant for the model.
- o Columns Lower 95% and Upper 95%: they define a 95% confidence interval for  $\beta_j$ . This percentage could be varied in Excel to for example 97.5% or 99%.

## 3.2. About the survey process

In this section, the process followed to conduct the survey will be explained. The survey was directed to people owning a travel blog. It was not necessary to have a successful travel blog and there was not any other constraint to participate in the survey.

Following, some details about: the questionnaire, questions themselves and answers, will be given to better understand the logic and the process behind the survey.

#### **3.2.1.** About the questionnaire

The format chosen to conduct the questionnaire has been a googledocs. This tool is simple and very intuitive to create a survey and the credentials are linked with the google account of the computer what makes really easy to access and modify the questionnaire whenever it is necessary.

One important feature of the survey is that all the questions could be seen before answering them. The aim of this characteristic is to show absolute transparency to the respondents and avoid questionnaires not completed in case they get bored in the middle of the process. In this case, they can decide in advance if their time is more valuable and can check before answering, if the whole questionnaire is relevant to them.

All the questions of the questionnaire have open answer, meaning that no pre-established values or options were given to the survey respondents. There are some clear drawbacks and advantages by following this approach:

• *Drawbacks*: definitely this approach requires much more work. Since the answers are not standardised, there could be problems with formats or non-understandable answers so it requires a further analysis to check all the answers and standardise them to fit in the model.

Open questions may be seen longer to fill and could discourage survey respondents.

• *Advantages*: in questionnaires with pre-established answers, there is an important component of bias. With open questions, the aim is to influence as little as possible in respondents' answers.

Moreover, given that the writer was not an expert on the field, open questions let respondents add extra information that may turn to be relevant. Actually, throughout the survey the respondents were constantly encouraged to give further information apart from the questions asked.

In the link here below, it is possible to access the definitive questionnaire after some modifications and addition of questions.

 $\underline{\text{https://docs.google.com/forms/d/1HOuDJTaU3BFhyiqRy0e49swY\_oN\_UXx90K21v0ObgjE/viewform?c=0\&w=1}$ 



## Questionnaire about your travel blog

First of all, thank you all very much for participating in this study. I am sure I can get really powerful outputs to share with all you and help improving your blogs.

About the questionnaire, I have left space in all answers so that you can explain further details in case they are necessary apart from the info asked. There 21 questions, some of them won't take more than some seconds, others will take a little bit more but in total it will be around 10 minutes.

I would like to ask you to be as much precise as possible in your answers to keep the quality of the study. I will analyse each answer one by one and will make a model so that numbers may be able to explain the data and characteristics of your blogs:)

Thanks again and have a great summer!;)

PD, if you think there is something not clear and with potential for improvement, please do not hesitate to contact me, email: <a href="mailto:s.molino.aguado@gmail.com">s.molino.aguado@gmail.com</a>; FB: sergio molino aguado:)

Image 5. Cover of the questionnaire designed to gather the necessary data for the study

## 3.2.2. About the strategy to reach survey respondents

The strategy to reach respondents has been varied but one turned to be the most effective (and time consuming).

The main cornerstone of the strategy was to emphasize on the value of the study and that it will be shared with the respondents once finished, having the possibility to improve their performances with the results and benchmark with respect to the average of the travel blog industry.

Another important point is that the first message was not offering directly the survey, it was sent once the potential respondent had shown some interest in responding it.

The two main strategies to reach respondents to the questionnaire were: posting on Facebook groups and emailing directly the owners of travel blogs. In the next 2 points, a deeper explanation will be given.

#### 1. Posting on Facebook groups

Completely ineffective. The following message was posted twice with an interval period of two weeks in the facebook group of "NOMADS - a life of cheap/free travel" and the result was just two people, having a blog, interested in answering the survey.

"Hey family! I hope your summer is going great! I have to do my thesis in these months and I require your help for that ©

My thesis will be in Digital marketing and I want to study the success factors behind a travel blog. The study will be done through statistical analysis of a sample of 200 blogs, analysing the most outstanding critical success factors.

So in case you have a travel blog (I am interested in all kind of travel blogs) and you want it to form part of my study, just send me a PM or write a comment with your blog.

I will send you asap a questionnaire with some questions. I am aware that the info you are giving to me has a value so in exchange I will send the results to all the participants so that they can improve the performance of their blogs  $\odot$ 

Thanks in advance and happy travels!"

This facebook group is really active and has more than 100.000 members that love travelling and the nomad life style. There are a lot of members too with travel blogs that sometimes post some of their posts.

The same was done in the group "<u>HitchGathering</u>" with over 10.000 members and the result was even worse, no one showed interest in it.

The same was tried in smaller groups more focused on the topic as:

- "Ultimate travel group" with 1150 members
- "Digital Nomads Entrepreneurs Meetup" with 1276 members

• "<u>Digital Nomads around the world</u>" with 3682 members

But again no success was found.

#### 2. Emailing directly the travel blogs owners

After the first failures, it was clear that the approach was not a success so the next step was to email directly some blogs. To find them, some ranks done by other bloggers and interviews were used. The main ones were:

- Nomadic Samuel's rank (<a href="http://nomadicsamuel.com/top100travelblogs">http://nomadicsamuel.com/top100travelblogs</a>)
- Travelocafe rank (http://www.travelocafe.com/p/top-50-travel-bloggers.html)
- Flipnomad blog, section "meet the nomads" with over 200 interviews (http://flipnomad.com/category/meet-the-nomads/)

Here, the message had to be more personalised and should give trust to the potential respondent. The first email sent was as follows:

"Hi (potential respondent's name)! I hope your summer is going great! I have to do my thesis in these months and I require your help for that  $\Theta$ 

My thesis will be on Digital marketing and I want to study the success factors behind a travel blog. The study will be done through statistical analysis of a sample of 200 blogs, analysing the most outstanding critical success factors.

So in case you want it to form part of my study, let me know and I will send you asap a questionnaire with some questions. I am aware that the info you are giving to me has a value so in exchange I will send you the results so that you can improve the performance of your blog  $\mathfrak{S}$ 

Thanks in advance and happy travels!"

This approach was much more successful but not as much as expected and just 15% of the emails sent, got an answer and were willing to participate in the survey (50 emails sent and just 8 answers). After checking again the email, it was still a bit impersonal so the first paragraph was modified as follows:

Hi (potential respondent's name)! I hope your summer is going great! I am Sergio (Sergio Molino Aguado on Linkedin) from Spain and I have to do my master thesis for Politecnico di Milano in these months. I would be extremely grateful if you could give me a hand  $\odot$ 

After this modification the answer rate showing interest grew from 16% to 24% (122 emails sent and 29 answers).

In the process, some answers to the email were regarding:

#### • Confidentiality issues:

"Hi Sergio, We completed it. One quick question for you: We do not want our specific data or numbers published in connection with our names or website name. Meaning: we only make our data available to you for the study to be shared in aggregate.

We do not wish our specific data to be shared or displayed to survey respondents, other travel bloggers or the public). It's a matter of our privacy. If this is not acceptable to you, we kindly request you to remove us and our data from the survey

Can you confirm (by email) that you agree to this?"

#### • Length of the questionnaire:

"Hi Sergio, If it isn't a long questionnaire, I'm happy to help"

"If the questionnaire is short and quick to do, I don't mind taking part..."

In order to cover the several concerns of the respondents directly in the first email, another one was written and presented as follows:

Hi (potential respondent's name)!! I hope your summer is going great! I am Sergio (Sergio Molino Aguado on Linkedin) from Spain and I have to do my master thesis for Politecnico di Milano in these months. I would be extremely grateful if you could give me a hand:).

My thesis will be on Digital marketing and I want to study the success factors behind a travel blog. The study will be done through statistical analysis of a sample of 200 blogs, analysing the most outstanding critical success factors. I have already received more than 50 answers but I need some more:/

I have selected your blog for my study so in case you are interested in giving me a hand, let me know and I will send you asap a questionnaire to fill:) (it won't take more than 12 minutes). I am aware that the info you will give to me has a value so in exchange I will send you the results so that you can improve the performance of your blog:)

I would like to add as well, that the data will be studied just by me and there won't be any link between your figures and your blog, the data will be shown as an aggregate so you don't need to be worried about confidentiality:)

Thanks in advance and happy travels!

Apart from the points included above that were common concerns of contacted bloggers, two more details were added.

• The first one was to say that their blogs were specifically selected for the survey. This created a sense of "being chosen" in the authors of the blog and increased the personalisation of the message.

• The second one was to add that there had already been a fair number of responses but more support was still needed. This added seriousness and removed the fear of being the only one doing this survey that could turn to be useless if just few answers are gathered.

With these little modifications, the answer rate increased up to 29% (128 emails sent and 37 answers), what is already a valuable rate.

After the first email showing willingness to fill the questionnaire, the email here below was sent:

"Hi (potential respondent's name),

In the link below you can access the questionnaire about your travel blog. It is a google doc with 21 questions, some of them really short, others a bit longer but won't take more than 10-12 minutes  $\odot$ 

<u>http://goo.gl/forms/pk8pg5t6oR</u> <-- Questionnaire here

Thanks so much and have a great summer!

PD. Feel free to pass this questionnaire to fellow travel bloggers that may be interested in the research and the results, more samples imply a better quality of the output :)"

The PD here below was not successful and just one participant passed the questionnaire to another blogger.

So finally, 300 emails were sent to 300 different travel blogs. 74 responses were positive and interested in filling the questionnaire (at this point the potential respondents had not seen the questions yet) what makes an average of 24.6% of positive responses. From these 74 responses, 62 actually completed the questionnaire and 61 answers were **qualified**<sup>6</sup> for the analysis.

The main reasons from those initially interested not to complete the questionnaire afterwards were mainly:

- Longer than what I expected and I am very busy
- I do not keep track of these figures
- You can find some of this info directly on the blog
- No answer was received after sending the questionnaire and several reminders

The initial target of 200 responses was quite ambitious from the beginning but that could show a higher level of seriousness to the potential participants and could have encouraged them to participate.

<sup>&</sup>lt;sup>6</sup> Qualified response has been defined as: those surveys that have at least a minimum essential number of single questions properly answered. These questions are the most important and most of them are quantitative.

Although the responses got are far from the initial target and, of course, the quality of the output will not be as good as the ideal situation, with these number of responses some trends can be found as it will be seen in next sections.

The extra work of sending 700 extra emails (keeping the average answer rate of the emails sent) was too time-consuming and inefficient having already a representative set of travel blogs and thus the initial target was drastically reduced.

It is interesting to notice that the questionnaire was sent mainly during July and August, dates in which travel bloggers are travelling the world to create new content and keep their blogs tuned.

From the not answered emails, 23 sent automatic replies saying that they were travelling at the moment or that they had limited internet access. The dates of the survey have been definitely a key factor not to get more responses and actually once the period of answers reception had already been closed, some contacted people replied showing interest in the study.

#### 3.2.3. About the questions

In this section, a quick review of the different questions asked will be done. It is necessary to understand the aim of each question and select them properly in order to create a clear, useful, and engaging questionnaire. This is fundamental due to some of the reasons listed below:

- 1. Do not ask ambiguous questions that could be wrongly misunderstood. The question should be clearly formulated to be answered as accurate as possible.
- 2. Engage the survey respondents so that they do not leave the survey before the end and answer all the questions.
- 3. Ask meaningful questions so that respondents feel their time is not being wasted. Due to random or nonsense questions, the potential respondents may leave the questionnaire or not answer all the proposed questions.

These 3 points have arisen with the own experience of the writer and problems occurred during the elaboration of the study.

In the previous section, it has been said that 61 answers were qualified. The questions not necessary to describe the response as qualified, were mainly to know the context and the audience of the blog, to get some hints about the drivers of the audience and to find hidden trends that the writer of this study could have not considered before.

Following, the definitive questions asked in the survey. There were 21 although some were added during the process, given that the writer increased the knowledge of the topic and thought of some other interesting questions and factors that could drive the success of a travel blog. Some other questions have been modified since they were not clear enough for some respondents.

Under each question, the aim of it will be explained as well as some other facts that came up during the survey process. "Q" will be added in those questions necessary to label the whole response of the survey as qualified.

#### 1. What is the name of your blog? (Q)

Even though the name is not essential and the questionnaire could have been done on an anonymous basis, it has been considered appropriate to link the numbers and responses to a particular blog. In this way, it is possible to check other features more subjective, like design or layout of the blog, and double check some of the data gathered.

#### 2. What is the age of the blog? (Q)

Before creating any model, this factor seems to be an important one and looks logical to think that in more years more content may be created, more experience accumulated and the awareness of existence of the blog could be higher.

3. Number of monthly unique visitors? To avoid high variability, you can use the average of the last 3 months (April, May, Jun) (Q)

The number of monthly unique visitors will be one of the dependent variables that will measure the success of a blog. As explained in previous sections, the more visits a blog has, the more successful it will be and the easier will be to monetise or reach more audience.

All flow variables have been measured on a monthly basis so as this. With this question, there were some problems during the survey process due to the inaccuracy of the initial question which was:

"Average number of visitors in the last 3 months (April, May, Jun)"

Some of the participants understood that the requested figure was the sum of 3 months instead of the monthly average taking into account the last 3 months.

This increased the workload and all the participants that had received the questionnaire with this ambiguous question were re-contacted again to assure the veracity of their answer. Around 30% of the responses were wrong and took into account the sum of the last 3 months.

The average of 3 months has been used to avoid variability between months and seasonality. As for some comments provided by some respondents, they stated that on holiday months, the number of monthly visitors grows quite a lot considering that people will travel more and have more time to surf on the Internet.

#### 4. Average time spent in the site by each visitor (Q)

This will be the second dependent variable that aims at explaining the success of a blog. The engagement and fidelity of the audience is another important factor and it is linked to the time spent on the site. A better user experience of the visitor is correlated with the time wandered around the blog too.

Although there are some other indicators like: shares of posts on social networks, comments on posts, subscribers or followers, the measure chosen is easy to understand and to compare and it is not correlated with the other dependent variable (monthly unique visitors) and can offer more information.

#### 5. Could you tell me the average number of articles/posts you post each month on your blog? (Q)

This variable may affect the number of monthly visitors. Normally new posts are marketed in social networks or via email to subscribers. It looks logical to think that the more number of posts are published, the more new content is being generated and more possibilities exist to offer fresh content on the social media.

It could benefit also the rank in search engines, since the sites with more activity usually rank better. The engagement could be improved too, if the fresh content is of a good quality.

#### 6. About the total amount of content, how many posts/articles do you have posted in your blog? (Q)

This variable could affect and influence the number of monthly visitors (mainly those coming from search engines or references to other blogs). The more content a blog has, the better will rank in search engines and probably has more total shares and have been more referred by other blogs.

It could affect the average time spent too, since there will probably be more content to read.

One may think that this indicator is the multiplication of the total number of months running the blog times the number of posts per month, but after analysing the survey, it is necessary to notice that the flow of new posts could vary a lot year on year, especially in mature blogs. Thus, it has been considered important to include this variable as an independent one.

#### 7. Number of subscribers to your newsletter/blog? (Q)

This indicator could clearly measure the fidelity to the blog since subscribers are usually the more devoted readers. It is logical to think then that the bigger the ratio subscribers/monthly unique visitors is, the bigger the loyalty of the audience will be and therefore the average time spent in the blog.

The monthly unique visitors could be influenced by this indicator.

#### 8. How many times per month do you send an email/alarm/reminder to your subscribers? (Q)

This independent variable aims at finding out how important sending reminders to subscribers could be. It is important to notice that a great number of subscribers could positively influence in the figure of monthly visitors but it will depend too on how the strategy is developed.

For example, some bloggers choose to send a reminder for each new post and others on a monthly basis. This strategy should be analysed along with the strategy of periodicity of posting and not stand alone.

Sending a reminder for each new post could be a good strategy for bloggers posting on a weekly basis, but it could be felt "spammy" if the posting activity is, for instance, on a daily basis and could even be counter-productive.

This question was not added in the first version of the questionnaire and has been included lately since it has been thought to provide relevant information to complete the model.

9. Could you please name all the social networks in which you have presence and the figures in brackets? (O)

This is probably one of the most key questions in which is asked to provide numbers of the main social networks supporting the travel blog.

The model will give quantitative results of which social networks are more valuable for the blog, meaning, which social network drives more visits. Is it better to have a like in the Facebook page or a follower on Twitter or a follower on Instagram? This question will be shortly answered.

The specific indicators got from this answer are:

- Likes on the Facebook page
- Followers on Twitter
- Followers on Instagram
- Followers on Google+
- Ratio views/followers on Google+
- Youtube suscribers
- Pininterest followers
- 10. Do you promote your blog in other channels apart from the ones already explained above?

The aim of this question is to figure out if there is any other un-common way to promote travel blogs widely used by travel bloggers apart from the typical social networks.

11. What is/are the language/s in which your blog is written?

Although this question is not included among the ones to make a response qualified (since it would be easy to check once the name of the blog is known), it is quite important. It may not have sense by itself (since all blogs chosen are written at least in English), but could be figured out whether the writer or writers are native combined with the next question, what might influence in the quality of the content.

Also it is interesting to analyse whether a blog written in more than one language is more successful than those written just in one language. It may be logical to think that with more languages more audience could be reached.

12. About the writer/s, could you please provide the following info about the people writing in your blog? Profession; Gender; Age; Native language; country; number of years writing (Q)

This question aims at finding out more information about the characteristics of the writer/s. The success factors extracted from this question are:

- Number of writers
- Full time dedication/blog professionalised?
- Native writer?
- Years of experience (writing or blogging)?
- Profession related to web/writer/journalism? (Related to the background of the writer/writers)

These factors could lead to better quality content, looking important the experience of the writers and the number of years they have been blogging.

13. From what countries do you get more visitors (please name at least 3)? Could you please include numbers?

This question aims mainly at adding further information of where visits come from and if language, topic of the blog or nationality of the blogger/s are somehow correlated with the origin of the visitors.

14. Do you use pop-ups with the option to subscribe? (Q)

This option could potentially affect the number of subscribers and thus the number of monthly visits. But generally, pop-ups notifications are not desired tools to improve user experience.

The objective of this question is to check whether it is preferable to use pop-ups to increase the number of subscribers, risking the user experience while wandering on the blog.

15. Do you use cookies in your web? (Q)

Cookies are mainly used to track user's movements and information. Therefore, this tool and information could be used by the travel blog to improve the user experience since the features of the site could change depending if it is the first time visiting the blog or the tenth.

16. Do you use SEO techniques in your blog? (Q)

SEO techniques are a trend nowadays and user friendly tools make easier to bloggers to optimise their posts to rank higher when some key words are introduced in the search bar.

With the answer to this question, it will be possible to find out how important SEO is in a quantitative way although the result will have its limitations as it will be commented in next sections.

- 17. Could you let me know the gender of your visitors?
- 18. Could you let me know the age of your visitors?

The two questions above were mainly to better know the audience of each blog and try to figure out hidden trends.

19. Do you support directly any social activity or have any charity project? (Q)

Philanthropy is a nice quality everybody would be proud of, so the objective of this question is to check whether philanthropy actions in the blog lead to more successful results than those who do not support any charity project or similar.

20. Do you have partners? In case you have, please name the ones you consider more important for the success of you blog (2-3 at most) and explain briefly the partnership you have with them

This question was quite open and in fact, some respondents had problems to understand what partnership was referring to. Partnership could be understood mainly as:

- Sponsors or companies paying or not and linking their brand and image to a specific travel blog
- Other travel bloggers that promote others blogs in exchange of promotion from the other side too

With this question, it will be possible to better understand if collaboration (meaning partnership) has something to do with success. There could be some limitations with this result given that no explanation of what partnership was supposed to mean was given.

21. Why do you think your travel blog is/will be a success (in terms of visitors, engagement and monetization)?

This question was the last of the questionnaire and gave the opportunity to participants to express what success means to them, aiming at improving the dependent and independent variables chosen for the model and better know the thoughts of travel bloggers.

After this review, it is essential to notice that all the comments above about possible influences of independent variables on the dependent ones are just some likely and logical options but no contrast with numbers has been done yet. In the section statistical results, further and contrasted results will be provided.

#### 3.2.4. About the answers

After receiving all the answers, the responses have been standardised to allow comparisons between different travel blogs.

One extra indicator has been included in the model although it was not asked in the questionnaire. This indicator, named **appearance and usability**, aims at explaining how important the design and the usability of the blog are for its success. The indicator has been accounted by the writer of this study following some guidelines to make the indicator as consistent as possible. The punctuation for each blog to measure this indicator has been:

- 0  $\rightarrow$  Old format + No easy access to "share buttons and no original features (maps, displays, others)
- 1 → Modern format + No easy access to "share buttons and no original features (maps, displays, others)
- $2 \rightarrow$  Modern format + Easy access to "share buttons and original features (maps, displays, others)

After including this new indicator the result is: a set of 23 indicators that are supposed to explain both target indicators.

Since the number of total figures is quite big to display it in this section<sup>7</sup> a summarised table with some characteristic metrics of the data and the classification of all indicators will be provided. The specific metrics are:

- The average and standard deviation from the data for each indicator
- The median of the data for each indicator (notice that the closer the median is to the average, the better the quality of the data will be)
- The classification for each critical success factor in the categories: Blog, Author and Promotion as it was explained in the introduction of the study

It is interesting to notice that some of the indicators will be binary. These variables are clearly defined in the exhibit below.

-

<sup>&</sup>lt;sup>7</sup> 60\*25=1500 figures

	Classification	Indicators	Average	Median	Standard deviation
1	Target	Monthly unique visitors	52980	32500	64884
2	indicators	Average time spent in the blog (min)	2,25	1,85	1,76
1		Pop-ups for subscription_bin (1=YES)	0,32	0,00	0,47
2		Suscribers	2393	1100	3715
3		Likes on FB page	14167	6077	24741
4		Followers Twitter	20970	11600	36206
5		Followers instagram	4906	1521	7703
6		Google+ followers	27134	275	193464
7	Promotion	Ratio views/followers in G+	1673	64	8988
8		Subscribers Youtube	253	22	471
9		Followers Pininterest	1469	753	2272
10		How many times per month do you send an email/reminder to your subscribers?	3,67	1,00	6,84
11		Do you use SEO techniques in your blog?_bin (1=YES)	0,83	1,00	0,38
12		Cookies_bin (1=YES)	0,33	0,00	0,48
13		Blog's age (years)	5,40	5,00	3,49
14	Blog	Appearance of the blog and usability (0=old format; 1= modern format; 2= modern format plus usability features ,easy access to sharing buttons)	1,57	2,00	0,62
15		Charity or social activity_bin (1=YES)	0,28	0,00	0,45
16		Articles per month	9,55	6,00	9,40
17		Total amount of content	932	500	1352
18		Number languages in which blog written	1,08	1,00	0,28
19		Number of writers? (BIN; 1= 1 writer/0 more than one writer)	0,79	1,00	0,40
20		Full time dedication/blog professionalised?_bin (1=YES)	0,77	1,00	0,43
21	Author	Native writer?_bin (1=YES)	0,79	1,00	0,38
22		Years of experience (writing, blogging,)	7,36	6,00	6,07
23		Profession related to web/writer/journalist?_bin (1=YES)  Exhibit 1 Summers of the definition of the d	0,55	1,00	0,50

Exhibit 1. Summary of the data gathered

This is a summary of all the answers. When the statistical analysis will be done in the next section, some figures will be removed since they are atypical and could damage the model.

The following pictures are the histogram of the two target variables "Average time spent on the blog" (ATSB from now on) and "monthly unique visitors" (MUV from now on) respectively.

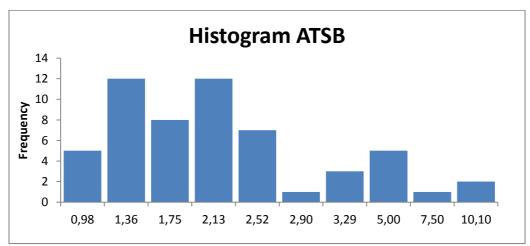


Image 6. Histogram of "Average time spent on blog"

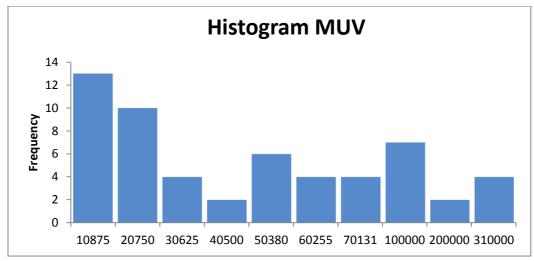


Image 7. Histogram of "Monthly unique visitors"

#### 4. STATISTICAL ANALYSIS

Before getting into details one limitation with the usage of excel will be explained. The idea was to include directly the 23 indicators (independent variables) in the multiple regression analysis for each target indicator (dependent variable) and then start removing those with the highest p-value that will not be relevant for the model and keep iterating until a convenient model appears.

The unexpected event was that excel can process just 16 independent variables each time. The logic is still the same but the workload has grown, being necessary more iterations than in the expected scenario.

Taking into account this unexpected, the process will be to first start including 16 independent variables, once the regression is done, the variables with the highest p-value will be removed and others will be included until all variables have been tested. After this point, the process will be as expected and the independent variables will be removed progressively from the highest to the lowest p-value.

The confidence interval has been settled in 95% so in case the p-value is lower than 0.05 the independent variable analysed will be considered as relevant and included in the model.

Depending on the model other variables with a higher p-value could be included too, depending on the particular situation. In fact, for this study and given the tight quality and amount of data available, independent variables with a p-value higher than 0,10 will be automatically considered as relevant.

## 4.1. Model for average time spent on the blog

To get this model 8 iterations were needed but should be said too, that the model got for the indicator of success "average time spent on the blog" is not consistent enough and does not explain properly the correlation between the independent variables tested and the dependent variable.

Further analysis on independent variables, a better quality of the data and a bigger sample could increase the percentage of explanation of the model. In any case the process will be shown and some interesting finding will be analysed.

The meaning of the table has been explained in the section mathematical methodology so here to avoid repetition just the relevant indicators will be taken into account.

In the **first iteration** the explanation of the model is really poor with a 25% of explanation. This figure starts to highlight that the model will not fit as good as expected.

Out of 16 variables just one, highlighted in green, is relevant with a p-value of 0.02. It looks quite logical to think that the time spent on a blog could be correlated positively with the number of articles posted per month. Each time the reader accesses the blog, some new content will be found and have the chance to spend more time on the site.

SUMMARY OUTPUT						
Regression statistic.	5					
Multiple R	0,507					
Risquare	0,257					
Adjusted R square	-0,020					
Standard error	1,778					
Observations	60					
ANOVA						
	df	55	MS	F	Significance F	
Regression	16	46,973	2,936	0,929	0,544	
Residual	43	135,876	3,160			
Total	59	182,849				
	Coefficients	Standard error	t Stat	P-value	Lower 95%	Upper 95%
Constant	3,324	1,49	2,23	0,03	0,32	6,33
Blog's age	-0,095	0,10	-0,96	0,34	-0,29	0,10
Subscribers	0,000	0,00	-0,07	0,94	0,00	0,00
Likes FB page	0,000	0,00	0,53	0,60	0,00	0,00
Followers Twitter	0,000	0,00	-0,91	0,37	0,00	0,00
Followers instagram	0,000	0,00	-0,48	0,63	0,00	0,00
Google+ followers	0,000	0,00	0,21	0,83	0,00	0,00
Ratio views/followers G+	0,000	0,00	0,05	0,96	0,00	0,00
Youtube (subscribers)	0,001	0,00	1,05	0,30	0,00	0,00
Pininterest	0,000	0,00	-0,87	0,39	0,00	0,00
Cookies	-0,318	0,55	-0,58	0,56	-1,42	0,79
Pop-ups	-0,265	0,58	-0,46	0,65	-1,43	0,90
Charity or social activity	-0,703	0,62	-1,13	0,26	-1,96	0,55
Articles per month	0,090	0,04	2,47	0,02	0,02	0,16
Total amount of content	0,000	0,00	-0,39	0,70	0,00	0,00
Number of languages in blog	-0,428	0,95	-0,45	0,65	-2,33	1,48
Number of writers? (BIN; 1= 1 writer	-0,309	0,64	-0,48	0,63	-1,60	0,99

Image 8. First ATSB iteration

The rest are still far from being relevant. The ones highlighted in red will be the first variables to exit the model.

The indicators related to the social media Google+ are quite weak in general if the average and the median are compared between each other in the section "about the answers" so this lack of relevancy could be expected. The standard deviation does not help either.

In the other hand, the indicator subscribers is robust and could be thought than more subscribers would imply a greater devoted audience and therefore a higher "ATSB" but as for the model, the coefficient is negligible and the p-value too high to consider it.

In the **second iteration** the new variables included are: native writer, appearance and usability and professional background. Although the percentage of explanation grows up to 31%, it is not high enough to consider the model relevant as a whole and moreover, there is still just one relevant independent variable.

Given that the situation does not get better, the data will be analysed in order to check if there is some atypical figure necessary to remove.

SUMMARY OUTPUT						
Regression statis	tias					
Multiple R	0,555					
Risquare	0,308					
Adjusted Risquare	0,051					
Standard error	1,715					
Observations	60					
ANOVA						
	df	55	145	F	Significance F	-
Regression	16	56,392	3,524	1,198	0,308	
Residual	43	126,457	2,941			
Total	59	182,849				
	Coefficients	Standard error	र जिल्ल	F-value	Lower 95%	Upper 95%
Constant	5,67	1,91	2,97	0,00	1,83	9,51
Blog's age	-0,10	0,10	-1,06	0,29	-0,29	0,09
Native writer	-0,78	0,78	-1,01	0,32	-2,35	0,78
Likes FB page						0.00
rikes i p bage	0,00	0,00	0,17	0,87	0,00	0,00
Followers Twitter	00,00 00,0	00,00 00,0	0,17 -0,98	0,87 0,33	00,00 00,0	0,00
. =			-	-	-	
Followers Twitter	0,00	0,00	-0,98	0,33	0,00	0,00
Followers Twitter Followers instagram	0,00 00,0	0,00 00,0	-0,98 -0,04	0,33 0,97	0,00	0,00
Followers Twitter Followers instagram Appearence/usability	0,00 0,00 -0,54 0,00	0,00 0,00 0,43	-0,98 -0,04 -1,25	0,33 0,97 0,22	0,00 0,00 -1,41	0,00 0,00 0,33
Followers Twitter Followers instagram Appearence/usability Youtube (subscribers)	0,00 0,00 -0,54 0,00	0,00 0,00 0,43 0,00	-0,98 -0,04 -1,25 0,91	0,33 0,97 0,22 0,37	0,00 0,00 -1,41 0,00	0,00 0,00 0,33 0,00
Followers Twitter Followers instagram Appearence/usability Youtube (subscribers) Professional background	0,00 0,00 -0,54 0,00 -0,15	0,00 0,00 0,43 0,00 0,54 0,00 0,54	-0,98 -0,04 -1,25 0,91 -0,28	0,33 0,97 0,22 0,37 0,78	0,00 0,00 -1,41 0,00 -1,24	0,00 0,00 0,33 0,00 0,94
Followers Twitter Followers instagram Appearence/usability Youtube (subscribers) Professional background Pininterest Cookies Pop-ups	0,00 0,00 -0,54 0,00 -0,15 0,00	0,00 0,00 0,43 0,00 0,54 0,00 0,54 0,55	-0,98 -0,04 -1,25 0,91 -0,28 -0,85	0,33 0,97 0,22 0,37 0,78 0,40	0,00 0,00 -1,41 0,00 -1,24 0,00	0,00 0,00 0,33 0,00 0,94 0,00
Followers Twitter Followers instagram Appearence/usability Youtube (subscribers) Professional background Pininterest Cookies	0,00 0,00 -0,54 0,00 -0,15 0,00 -0,23	0,00 0,00 0,43 0,00 0,54 0,00 0,54	-0,98 -0,04 -1,25 0,91 -0,28 -0,85 -0,43	0,33 0,97 0,22 0,37 0,78 0,40 0,67	0,00 0,00 -1,41 0,00 -1,24 0,00 -1,33	0,00 0,00 0,33 0,00 0,94 0,00 0,86
Followers Twitter Followers instagram Appearence/usability Youtube (subscribers) Professional background Pininterest Cookies Pop-ups	0,00 0,00 -0,54 0,00 -0,15 0,00 -0,23 -0,30	0,00 0,00 0,43 0,00 0,54 0,00 0,54 0,55	-0,98 -0,04 -1,25 0,91 -0,28 -0,85 -0,43 -0,55	0,33 0,97 0,22 0,37 0,78 0,40 0,67 0,59	0,00 0,00 -1,41 0,00 -1,24 0,00 -1,33 -1,42	0,00 0,00 0,33 0,00 0,94 0,00 0,86 0,81
Followers Twitter Followers instagram Appearence/usability Youtube (subscribers) Professional background Pininterest Cookies Pop-ups Charity or social activity	0,00 0,00 -0,54 0,00 -0,15 0,00 -0,23 -0,30 -0,67	0,00 0,00 0,43 0,00 0,54 0,00 0,54 0,55	-0,98 -0,04 -1,25 0,91 -0,28 -0,85 -0,43 -0,55 -1,21	0,33 0,97 0,22 0,37 0,78 0,40 0,67 0,59 0,23	0,00 0,00 -1,41 0,00 -1,24 0,00 -1,33 -1,42 -1,78	0,00 0,00 0,33 0,00 0,94 0,00 0,86 0,81 0,45
Followers Twitter Followers instagram Appearence/usability Youtube (subscribers) Professional background Pininterest Cookies Pop-ups Charity or social activity Articles per month	0,00 0,00 -0,54 0,00 -0,15 0,00 -0,23 -0,30 -0,67 0,08	0,00 0,00 0,43 0,00 0,54 0,00 0,54 0,55 0,55	-0,98 -0,04 -1,25 0,91 -0,28 -0,85 -0,43 -0,55 -1,21 2,38	0,33 0,97 0,22 0,37 0,78 0,40 0,67 0,59 0,23	0,00 0,00 -1,41 0,00 -1,24 0,00 -1,33 -1,42 -1,78 0,01	0,00 0,00 0,33 0,00 0,94 0,00 0,86 0,81 0,45 0,16

Image 9. Second ATSB iteration

After the analysis one figure that was damaging the model is removed and one more iteration with the same variables is done.

In the **third iteration** there is no new variable and just a correction of the data has happened. The percentage of explanation rises up to 40% but it is not enough yet. The variable appearance and usability shows up as a potential relevant one, although the negative coefficient could look not so logical.

The variables in red are removed and new ones will be included in the next iteration.

From now on and to save space the first part of the ANOVA table will not be shown given that it does not give relevant information for this analysis.

SUMMARY OUTPUT						
Regression statistics	-					
Multiple R	0,636					
Risquare	0,404					
Adjusted Risquare	0,177					
Standard error	1,392					
Observations	59					
ANOVA						
	df	55	145	F	Significance F	<del>-</del>
Regression	16	55,158	3,447	1,780	0,068	
Residual	42	81,345	1,937			
Total	58	136,503				
	Coefficientsit.	andard em	1 Stat	F-value	Lower 95%	Upper 95%
Constant	3,58	1,61	2,23	0,03	0,34	6,82
Blog's age	-0,04	0,08	-0,52	0,60	-0,20	0,12
Native writer	0,02	0,65	0,03	0,98	-1,30	1,33
Likes FB page	0,00	0,00	0,71	0,48	0,00	0,00
Followers Twitter	0,00	0,00	-1,25	0,22	0,00	0,00
Followers instagram	0,00	0,00	-0,24	0,81	0,00	0,00
Appearence/usability	-0,63	0,35	-1,80	80,0	-1,34	80,0
Youtube (subscribers)	0,00	0,00	1,13	0,27	0,00	0,00
Professional background	0,15	0,44	0,34	0,73	-0,74	1,05
Pininterest	0,00	0,00	-0,31	0,76	0,00	0,00
Cookies	-0,31	0,44	-0,69	0,49	-1,19	0,58
Pop-ups	0,06	0,46	0,13	0,90	-0,86	0,98
Charity or social activity	-0,54	0,45	-1,20	0,24	-1,45	0,37
Articles per month	0,10	0,03	3,44	0,00	0,04	0,16
Total amount of content	0,00	0,00	-0,74	0,46	0,00	0,00
Number of languages in blog	-0,43	0,81	-0,53	0,60	-2,07	1,21
Number of writers? (BIN; 1= 1 wri	-0,46	0,53	-0,87	0,39	-1,52	0,60

Image 10. Third ATSB iteration

In the **fourth iteration**, with the inclusion of the indicators: SEO, full time dedication and years of experience, the percentage of explanation keeps increasing up to a 44%. The same relevant variables continue as before. There is one more independent variable to check so just "Blog's age" indicator is removed.

SUMMARY OUTPUT						
Regression statistics						
Multiple R	0,666					
Risquare	0,443					
Adjusted Risquare	0,231					
Standard error	1,345					
Observations	59					
	Coefficients	andardem:	t Stat	F-value	Lower 95%	Upper 95%
Constant	3,01	1,42	2,12	0,04	0,14	5,88
Blog's age	0,02	80,0	0,21	0,84	-0,15	0,19
Full time dedication	0,34	0,56	0,61	0,55	-0,79	1,47
Likes FB page	0,00	0,00	0,57	0,57	0,00	0,00
Followers Twitter	0,00	0,00	-1,37	0,18	0,00	0,00
SEO	0,44	0,53	0,83	0,41	-0,63	1,51
Appearence/usability	-0,65	0,33	-2,00	0,05	-1,31	0,01
Youtube (subscribers)	0,00	0,00	1,22	0,23	0,00	0,00
Professional background	0,20	0,46	0,44	0,66	-0,72	1,13
Pininterest	0,00	0,00	-0,75	0,46	0,00	0,00
Cookies	-0,20	0,43	-0,46	0,65	-1,08	0,67
Years of experience	-0,06	0,04	-1,43	0,16	-0,15	0,03
Charity or social activity	-0,34	0,45	-0,77	0,45	-1,24	0,56
Articles per month	0,11	0,03	3,64	0,00	0,05	0,17
Total amount of content	0,00	0,00	-0,71	0,48	0,00	0,00
Number of languages in blog	-0,46	0,72	-0,63	0,53	-1,92	1,00
Number of writers? (BIN; 1= 1 w	-0,42	0,50	-0,85	0,40	-1,43	0,58

Image 11. Fourth ATSB iteration

In the **fifth iteration**, the independent variable "reminders" is checked. The explanation percentage of the model remains constant in 44%. At this point, all the independent variables have been checked so from now on those with a higher p-value will be removed progressively.

In this case, those are the independent variables: reminders (the last to enter the model), professional background and cookies.

For professional background, the coefficient could make sense since someone with skills in writing could be better at storytelling and engage more intensively the readers. The background could be related to some design skills so more beautiful or original appearance of the blog, may trap the reader more time than in other cases. However, the p-value is too high to consider the variable relevant for this model even though some relationship could be reasonable.

In the case of the cookies, two scenarios could happen. The first one is when the fear that some readers have to cookies, make them quit the page quite fast, so having cookies could be considered as a drawback (as seen in the model). In the other hand, cookies could help to improve the user experience and increase the time spent in the site (case not supported by the model). In any case, since the p-value is too high, this variable must be removed.

SUMMARY OUTPUT						
Regression statistics						
Multiple R	0,667					
Risquare	0,444					
Adjusted Risquare	0,233					
Standard error	1,344					
Observations	59					
	Coefficients		१ जिल्ल	F-value	Lower 95%	Upper 95%
Constant	3,04	1,33	2,29	0,03	0,36	
Reminders	0,01	0,03	0,37	0,71	-0,06	
Full time dedication	0,34	0,56	0,61	0,54	-0,78	
Likes FB page	0,00	0,00	0,60	0,55	0,00	0,00
Followers Twitter	0,00	0,00	-1,39	0,17	0,00	0,00
SEO	0,44	0,51	0,85	0,40	-0,60	1,47
Appearence/usability	-0,64	0,33	-1,92	0,06	-1,30	0,03
Youtube (subscribers)	0,00	0,00	1,26	0,21	0,00	0,00
Professional background	0,18	0,45	0,39	0,70	-0,73	1,09
Pininterest	0,00	0,00	-0,77	0,45	0,00	0,00
Cookies	-0,21	0,43	-0,49	0,63	-1,09	0,66
Years of experience	-0,05	0,04	-1,27	0,21	-0,14	0,03
Charity or social activity	-0,37	0,45	-0,83	0,41	-1,27	0,53
Articles per month	0,10	0,03	2,91	0,01	0,03	0,17
Total amount of content	0,00	0,00	-0,69	0,50	0,00	0,00
Number of languages in blog	-0,45	0,72	-0,62	0,54	-1,91	1,01
Number of writers? (BIN; 1= 1 w	-0,42	0,50	-0,86	0,40	-1,42	0,58

Image 12. Fifth ATSB iteration

In the **sixth iteration** and after removing the already commented independent variables, four other variables are targeted to abandon the model and two more are found as relevant by the multiple regression.

SUMMARY OUTPUT						
Regression statistics						
Multiple R	0,661					
Risquare	0,437					
Adjusted R square	0,275					
Standard error	1,306					
Observations	59					
	Coefficients	Standard error	t Stat	F-value	Lower 95%	Upper 95%
Constant	3,06	1,26	2,42	0,02	0,52	5,60
Full time dedication	0,44	0,48	0,91	0,37	-0,53	1,41
Likes FB page	0,000005	0,00	0,58	0,57	0,00	0,00
Followers Twitter	-0,000012	0,00	-1,73	0,09	0,00	0,00
SEO	0,34	0,48	0,72	0,48	-0,62	1,30
Appearence/usability	-0,63	0,31	-2,07	0,04	-1,25	-0,02
Youtube (subscribers)	0,00063	0,00	1,50	0,14	0,00	0,00
Pininterest	-0,00008	0,00	-0,91	0,37	0,00	0,00
Years of experience	-0,06	0,04	-1,68	0,10	-0,13	0,01
Charity or social activity	-0,31	0,43	-0,73	0,47	-1,17	0,55
Articles per month	0,11	0,03	4,11	0,00	0,06	0,16
Total amount of content	-0,00016	0,00	-0,69	0,50	0,00	0,00
Number of languages in blog	-0,47	0,70	-0,67	0,51	-1,88	0,94
Number of writers? (BIN; 1= 1 writer/0 n	-0,36	0,46	-0,80	0,43	-1,29	0,56

Image 13. Sixth ATSB iteration

With the **seventh iteration** and since the variables lately removed have a higher p-value than the first ones, the level of explanation of the model as a whole decreases a little bit to 42%. "Youtube subscribers" is seen as relevant by the model and "number of writers" outstands as the next one to leave the model.

SUMMARY OUTPUT						
Regression statistics						
Multiple R	0,649					
Risquare	0,421					
Adjusted R square	0,315					
Standard error	1,270					
Observations	59					
	Coefficients	Standard error	t Stat	P-value	Lower 95%	Upper 95%
_						
Constant	2,21	0,69	3,19	0,00	0,82	3,60
Constant Full time dedication	2,21 0,56	0,69 0,46	3,19 1,22	0,00 0,23		
				-	-0,36	3,60
Full time dedication	0,56	0,46	1,22	0,23	-0,36 0,00	3,60 1,47
Full time dedication Followers Twitter	0,56 -0,000014	0,46 0,00	1,22 -2,48	0,23 0,02	-0,36 0,00	3,60 1,47 0,00
Full time dedication Followers Twitter SEO	0,56 -0,000014 0,36	0,46 0,00 0,46	1,22 -2,48 0,78	0,23 0,02 0,44	-0,36 0,00 -0,56	3,60 1,47 0,00 1,28
Full time dedication Followers Twitter SEO Appearence/usability	0,56 -0,000014 0,36 -0,60	0,46 0,00 0,46 0,29	1,22 -2,48 0,78 -2,07	0,23 0,02 0,44 0,04	-0,36 0,00 -0,56 -1,18	3,60 1,47 0,00 1,28 -0,02
Full time dedication Followers Twitter SEO Appearence/usability Youtube (subscribers)	0,56 -0,000014 0,36 -0,60 0,000666	0,46 0,00 0,46 0,29 0,00	1,22 -2,48 0,78 -2,07 1,72	0,23 0,02 0,44 0,04 0,09	-0,36 0,00 -0,56 -1,18 0,00	3,60 1,47 0,00 1,28 -0,02 0,00
Full time dedication Followers Twitter SEO Appearence/usability Youtube (subscribers) Pininterest	0,56 -0,000014 0,36 -0,60 0,000666 -0,000082	0,46 0,00 0,46 0,29 0,00	1,22 -2,48 0,78 -2,07 1,72 -0,96	0,23 0,02 0,44 0,04 0,09 0,34	-0,36 0,00 -0,56 -1,18 0,00 0,00 -0,13	3,60 1,47 0,00 1,28 -0,02 0,00 0,00

Image 14. Seventh ATSB iteration

The **eighth iteration** will be the last one. Five relevant variables have been found and although the other three does not have a p-value enough to be considered as strongly relevant, the removal of one of those will worsen the percentage of explanation of the model which is already quite poor (42%). Moreover the

coefficients of these weaker independent variables are quite logical and match with the presentiments about them.

SUMMARY OUTPUT						
Regression statistics						
Multiple R	0,647					
Risquare	0,419					
Adjusted R square	0,326					
Standard error	1,259					
Observations	59					
	Coefficients	Randard em:	t Stat	F-value		Upper 95%
Constant	Coefficients 2,13	Randardem: 0,66	<i>t Stat</i> 3,25	<i>P-value</i> 0,00	<i>Lower 95%</i> 0,81	
Constant Full time dedication						3,45
	2,13	0,66	3,25	0,00	0,81	3,45 1,47
Full time dedication	2,13 0,56	0,66 0,45	3,25 1,24	0,00 0,22	0,81 -0,35	3,45 1,47
Full time dedication Followers Twitter	2,13 0,56 -0,00001	0,66 0,45 0,00	3,25 1,24 -2,47	0,00 0,22 0,02	0,81 -0,35 0,00	3,45 1,47 0,00
Full time dedication Followers Twitter SEO	2,13 0,56 -0,00001 0,35	0,66 0,45 0,00 0,45	3,25 1,24 -2,47 0,78	0,00 0,22 0,02 0,44	0,81 -0,35 0,00 -0,56	3,45 1,47 0,00 1,27 -0,05
Full time dedication Followers Twitter SEO Appearence/usability	2,13 0,56 -0,00001 0,35 -0,62	0,66 0,45 0,00 0,45 0,28	3,25 1,24 -2,47 0,78 -2,19	0,00 0,22 0,02 0,44 0,03	0,81 -0,35 0,00 -0,56 -1,19	3,45 1,47 0,00 1,27 -0,05 0,00
Full time dedication Followers Twitter SEO Appearence/usability Youtube (subscribers)	2,13 0,56 -0,00001 0,35 -0,62 0,00067	0,66 0,45 0,00 0,45 0,28 0,00	3,25 1,24 -2,47 0,78 -2,19 1,75	0,00 0,22 0,02 0,44 0,03 0,09	0,81 -0,35 0,00 -0,56 -1,19	3,45 1,47 0,00 1,27 -0,05 0,00

Image 15. Eighth ATSB iteration

First, some comments about the relevant variables chosen by the model will be added:

• **Followers on Twitter**: The independent variable is relevant for the model but since the coefficient is really low, the effect will be seen after having a high number of followers, around 10.000 followers.

The effect would be negative and this thesis could make sense. In the introduction, the statements of Haile (2014) claim that success in social networks does not mean engagement, as the model says.

To increase this last effect, it should be added that there are some tools that manage twitter automatically, meaning that a program is posting randomly posts from the blog every x, being x a predefined period of time. This practises could influence in the inability of Twitter to engage readers.

• **Appearance/usability**: This case is quite strange and completely contrary to what could be thought. A better design and more original features apparently should increase the average time spent on the blog but it is not the case. Moreover the coefficient is quite negative and the difference for blogs with old designs and modern features could be of 1.24 minutes less for the last ones.

One possible explanation could be that readers with old designs are some of the most successful ones. They started their blogs more than 5-6 years ago when friendly design tools were not widespread yet. Nowadays, almost all new blogs are designed with advanced tools and easy to use and therefore, the nice design has become a kind of commodity available for everybody.

• Youtube subscribers: In the case of this social network, the effect on the average time spent on the blog is positive. Again, the influence is quite low and it will start to be influential with more than 100 subscribers.

It is necessary to highlight that Youtube is not a spread tool for bloggers as Twitter is, but it looks useful for those that use it. In general, videos will last some minutes and when viewing them, two options may happen: the first one is that the video is viewed directly in the web and therefore that time will count. The other option could be to open Youtube or the blogger's channel in another tag keeping the blog opened and the time running.

Moreover, videos could increase the engagement of readers since they are watching directly the author or authors of the blog, feeling a higher sense of closeness and commitment to the blog and bloggers.

• Years of experience: This result is a bit illogical at a first glance. More ages of experience should increase the expertise of the bloggers and therefore the engagement of readers through a better quality of the content.

The explanation for this situation, it is not so straightforward. In this case, the reason could be that some old blogs of more than 8 years have decreased drastically the activity and do not find the necessary features to reinvent themselves, failing at engaging new followers of blogs.

Moreover, this indicator takes into account the experience writing but not just in the blog. In this case, people with many years of experience but that are not able to materialise their expertise in engagement, distort highly this indicator.

• Articles per month: To finish with the statistically relevant indicators, this last one makes sense comparing to the expectations. More articles per month and therefore activity in the blog may increase engagement of readers, improving their ranks in search optimisation engines and therefore attracting people searching a specific topic. As stated by Haile (2014), normally visitors coming from SEO stay more time in the site than those coming from social media.

Apart from these ones, there are other 3 independent variables that although they are not statistically relevant, could offer some interesting and logical results:

- Full time dedication: this indicator is related to the level of dedication that bloggers have in their blogs. It seems logical to think that those dedicated professionally to their logs could get better results and levels of engagement. In fact, in the model, this variable accounts in almost a minute, what is not dismissible at all since the average time spent of the whole sample is of around two minutes.
- **SEO:** The logic is the same that has already been explained for the independent variable articles per month, and therefore, by writing for SEO purposes, the average time spent on the blog could be improved.

• **Pininterest:** The logic would be the same as for Twitter followers, the influence is a bit higher but not crucial.

After reaching the best compromise (although not enough) for the model, it would be defined as per the following formula:

ATSB = 2.13 + 0.56\*Full time dedication (bin 1=YES) + (-0.00001)\*Followers Twitter + 0.35\*SEO (bin 1=YES) + (-0.62)\*Appearance/usability + 0.00067\*Youtube Subscribers + (-0.00009)\*Pininterest + (-0.07)\*Years of experience + 0.1\*Articles per month

Having an explanation percentage of the model of 41.2%.

## **4.2.** Model for monthly unique visitors

To get this model 9 iterations were needed but in this case, the model is statistically relevant and 7 independent variables have turned to be relevant with p-values lower than 0.10.

The format and methodology has been the same as previously explained for ATSB.

In the **first iteration**, a percentage of explanation of 73% has already been reached. This level is already acceptable as it is but there are some irrelevant independent variables that should be removed, indicating that the level of explanation could even be improved.

Another good point of the model for MUV is that already in the first iteration there are 4 relevant independent variables and some other with good levels of p-value.

SUMMARY OUTPUT						
Regression statistic	75					
Multiple R	0,854					
Risquare	0,729					
Adjusted R square	0,628					
Standard error	39583,221					
Observations	60					
	Coefficients	Standard error	t Stat	P-value	Lower 95%	Upper 95%
Constant	9995,45	40301,09	0,25	0,81	-71279,45	91270,34
Blog's age	2825,60	2499,02	1,13	0,26	-2214,14	7865,35
Subscribers	9,35	1,87	5,01	0,00	5,58	13,11
Likes FB page	1,20	0,28	4,28	0,00	0,63	1,77
Followers Twitter	-0,25	0,23	-1,12	0,27	-0,71	0,20
Followers instagram	-1,38	0,89	-1,54	0,13	-3,18	0,42
Google+ followers	0,04	0,03	1,17	0,25	-0,03	0,10
SEO	-25444,42	15818,76	-1,61	0,12	-57345,98	6457,14
Youtube (subscribers)	18,79	13,84	1,36	0,18	-9,13	46,70
Pininterest	1,66	2,89	0,57	0,57	-4,16	7,48
Appearence/usability	15674,65	9732,00	1,61	0,11	-3951,81	35301,10
Pop-ups	-2339,61	13227,92	-0,18	0,86	-29016,25	24337,03
Charity or social activity	-10052,26	14175,11	-0,71	0,48	-38639,10	18534,58
Articles per month	1710,30	819,05	2,09	0,04	58,52	3362,08
Total amount of content	-8,13	8,31	-0,98	0,33	-24,89	8,63
Number of languages in blog	2337,09	21863,44	0,11	0,92	-41754,74	46428,93
Years of experience	-2553,23	1196,83	-2,13	0,04	-4966,86	-139,61

Image 16. First MUV iteration

With the removal of the four variables highlighted in red, other 4 will enter the model, which are: full time dedication, cookies, reminders and professional background. In the **second iteration**, the independent variables that recently got into the model are the next to exit, since they have the higher levels of p-value. The percentage of explanation stays more or less constant, showing the reliability of the model as a whole.

The variables that will get out (in red in the image below) could look quite logical to be considered as relevant and the coefficients match with the potential expected results.

The professional background on favour of something related to writing or designing could take advantage of the skills to attract more visitors, and the same could be applied for full time dedication as shown for the ATSB.

Cookies could have a double effect as previously explained but in this case, it is seen as a positive fact by the model if we look at the coefficient, but totally irrelevant if the p-value is checked.

Same situation could be exported to "reminders", they could be felt as "spammy" but the model recognises them as useful since the influence is positive. In any case, the p-value is too high to consider this coefficient and variable interesting.

Regression statistics						
Multiple R	0,853					
Risquare	0,727					
Adjusted R square	0,626					
Standard error	39701,348					
Observations	60					
ANOVA						
	df	55	NS	F	Significance F	-
Regression	16	1,80613E+11	1,129E+10	7,16	1,2324E-07	
Residual	43	67776474055	1,576E+09			
Total	59	2,48389E+11				
	Coefficients	Standard error	र जिल्ल	F-value	Lower 35%	Upper 95%
Constant	5978,67	26290,78	0,23	0,82	-47041,74	58999,08
Blog's age	3009,79	2469,93	1,22	0,23	-1971,30	7990,87
Subscribers	8,79	1,68	5,24	0,00	5,41	12,18
Likes FB page	1,21	0,28	4,33	0,00	0,65	1,77
Followers Twitter	-0,24	0,23	-1,03	0,31	-0,71	0,23
Followers instagram	-1,20	0,86	-1,39	0,17	-2,94	0,54
Google+ followers	0,03	0,03	1,10	0,28	-0,03	0,09
SEO	-23371,25	15995,21	-1,46	0,15	-55628,66	8886,16
Youtube (subscribers)	18,58	13,77	1,35	0,18	-9,18	46,34
Full time dedication	2168,33	15942,31	0,14	0,89	-29982,41	34319,06
Appearence/usability	14947,07	10072,90	1,48	0,15	-5366,88	35261,01
Cookies	3152,86	12754,47	0,25	0,81	-22568,98	28874,71
Reminders	225,74	1042,35	0,22	0,83	-1876,36	2327,83
Articles per month	1531,96	1059,23	1,45	0,16	-604,19	3668,10
Total amount of content	-6,90	8,47	-0,82	0,42	-23,98	10,17
Professional background	7215,08	12926,09	0,56	0,58	-18852,87	33283,02
Years of experience	-2965,88	1277,00	-2,32	0,03	-5541,20	-390,56

Image 17. Second MUV iteration

In the **third iteration**, 4 new variables enter the model. These are: native writer, ratio views/followers G+, number of writers and Pininterest. As shown in the image below, three out of these four variables will abandon the model following their p-value.

SUMMARY OUTPUT						
Regression statistics						
Multiple R	0,856					
Risquare	0,733					
Adjusted Risquare	0,634					
Standard error	39258,218					
Observations	60					
	Coefficients	Randardem:	t Stat	F-value	Lower 35%	Upper 95%
Constant	4311,70	27916,01	0,15	0,88	-51986,31	
Blog's age	2890,35	2527,77	1,14	0,26	-2207,39	7988,08
Subscribers	8,70	1,68	5,17	0,00	5,31	12,10
Likes FB page	1,20	0,29	4,17	0,00	0,62	1,78
Followers Twitter	-0,25	0,22	-1,13	0,26	-0,70	0,20
Followers instagram	-1,43	0,87	-1,64	0,11	-3,18	0,33
Google+followers	0,04	0,03	1,37	0,18	-0,02	0,10
SEO	-25836,28	15275,86	-1,69	0,10	-56642,99	4970,43
Youtube (subscribers)	18,25	13,48	1,35	0,18	-8,93	45,44
Pininterest	1,27	2,73	0,47	0,64	-4,23	6,77
Appearence/usability	13164,53	9476,40	1,39	0,17	-5946,45	32275,51
Number of writers? (BIN; 1= 1 writer)	14596,84	13710,49	1,06	0,29	-13053,00	42246,67
Ratio views/followers G+	0,22	0,61	0,37	0,72	-1,00	1,45
Articles per month	1578,32	825,06	1,91	0,06	-85,56	3242,21
Total amount of content	-5,29	8,48	-0,62	0,54	-22,39	11,82
Native writter	517,97	15697,28	0,03	0,97	-31138,62	32174,56
Years of experience	-2897,16	1159,48	-2,50	0,02	-5235,47	-558,86

Image 18. Third MUV iteration

In the **fourth iteration** and since the percentage of explanation looks high enough to be considered a good model, the next step will be to start removing the independent variables highlighted in red without replacing and cleaning data from atypical values.

In this case as seen in the image below, one independent variable (SEO), consistent as per its p-value, will be a candidate to exit since the coefficient is completely non sense. In this case, there have been clear limitations with the measure of this indicator.

The main one is related to the level and expertise of SEO. There were just two levels or possibilities to answer the question proposed to get this indicator. Do you use SEO? Yes or No. The point is that the level of expertise matters. While some were just getting started and optimising some headlines, other were renowned experts in the field but both of them accounted as a Yes in the answer of the question.

Moreover, some of the non-users of SEO are acclaimed bloggers that do not write for SEO purposes because they already have a loyal audience that will look specifically for them and not just by topics. Therefore, they do not need this tool to rank high in search engines.

For all this reasons, it has been considered fair to remove this independent variable to not distort the model and always considering that SEO is a useful and key technique to improve the visits of blogs.

SUMMARY OUTPUT						
Regression statist	XIS					
Multiple R	0,855					
Risquare	0,731					
Adjusted Risquare	0,655					
Standard error	38111,013					
Observations	60					
			_			
	Coefficients	Standard error	t Stat	F-value	Lower 35%	Upper 95%
Constant	5720,26	24341,16	0,24	0,82	-43275,94	54716,47
Blog's age	2547,76	2350,52	1,08	0,28	-2183,60	7279,12
Subscribers	8,53	1,59	5,37	0,00	5,33	11,73
Likes FB page	1,22	0,27	4,60	0,00	0,69	1,76
Followers Twitter	-0,22	0,21	-1,07	0,29	-0,65	0,20
Followers instagram	-1,37	0,83	-1,66	0,10	-3,04	0,29
Google+ followers	0,04	0,03	1,41	0,17	-0,02	0,10
SEO	-25434,35	14717,30	-1,73	0,09	-55058,73	4190,03
Youtube (subscribers)	19,59	12,83	1,53	0,13	-6,23	45,41
Appearence/usability	13577,22	9155,48	1,48	0,14	-4851,81	32006,25
Number of writers? (BIN; 1= 1 v	15622,29	13128,22	1,19	0,24	-10803,44	42048,02
Years of experience	-2811,90	1077,68	-2,61	0,01	-4981,16	-642,63
Articles per month	1533,06	791,25	1,94	0,06	-59,65	3125,77
Total amount of content	-5,25	8,19	-0,64	0,52	-21,73	11,23

Image 19. Fourth MUV iteration

In the **fifth iteration** and since a relevant variable has been removed, the percentage of explanation will inevitably decrease. Since there are still a lot of variables for the model and all with relatively low values of p-value, some atypical data will be looked for in order to increase the percentage of explanation and check if any other independent variable stand out to be removed.

SUMMARY OUTPUT						
Regression statistics						
Multiple R	0,840					
Risquare	0,705					
Adjusted R square	0,638					
Standard error	39042,782					
Observations	60					
	Coefficients	Randard em:	१ जिल्ल	F-cake	Lower 95%	Upper 95%
Constant	-13728,77	19345,51	-0,71	0,48	-52625,54	25167,99
Blog's age	2404,32	1846,62	1,30	0,20	-1308,57	6117,21
Subscribers	8,34	1,62	5,14	0,00	5,08	11,60
Likes FB page	1,12	0,26	4,37	0,00	0,61	1,64
Followers Twitter	-0,25	0,18	-1,40	0,17	-0,61	0,11
Followers instagram	-1,32	0,85	-1,56	0,12	-3,02	0,38
Google+ followers	0,04	0,03	1,33	0,19	-0,02	0,10
Youtube (subscribers)	18,02	12,39	1,45	0,15	-6,89	42,94
Appearence/usability	12852,41	9277,35	1,39	0,17	-5800,95	31505,77
Number of writers? (BIN; 1= 1 writer)	16622,78	13022,30	1,28	0,21	-9560,32	42805,87
Years of experience	-2899,74	1103,11	-2,63	0,01	-5117,68	-681,80
Articles per month	1303,20	740,67	1,76	0,08	-186,01	2792,42

Image 20. Fifth MUV iteration

In the **sixth iteration** no variables has been removed (no figure highlighted in red above) and just the removal of 5 figures has happened. Moreover, the two variables previously removed with the highest p-value have entered the model again; Piniterest and Total amount of content.

Two indicators about social media are clearly out of context after this iteration and therefore the next independent variables that will exit the model.

As seen in the image below, the percentage of explanation has recovered previous values.

SUMMARY OUTPUT						
Regression statistics						
Multiple R	0,856					
Risquare	0,733					
Adjusted R square	0,648					
Standard error	39737,207					
Observations	55					
	Coefficients	Standard error	t Stat	F-value	Lower 95%	Upper 95%
Constant	-23271,33	23373,39	-1,00	0,33	-70474,84	
Blog's age	5033,81	2524,03	1,99	0,05	-63,58	10131,19
Subscribers	8,35	1,72	4,85	0,00	4,88	11,83
Likes FB page	1,44	0,32	4,56	0,00	0,80	2,07
Followers Twitter	0,00	0,27	0,02	0,99	-0,53	0,54
Followers instagram	-1,23	1,34	-0,92	0,36	-3,94	1,48
Google+ followers	1,32	1,66	0,79	0,43	-2,04	4,67
Youtube (subscribers)	0,17	16,70	0,01	0,99	-33,56	33,90
Appearence/usability	13100,94	11505,49	1,14	0,26	-10134,88	36336,75
Number of writers? (BIN; 1= 1 writer)	12286,81	14686,91	0,84	0,41	-17374,01	41947,63
Years of experience	-3397,60	1419,23	-2,39	0,02	-6263,79	-531,41
Articles per month	2114,04	972,98	2,17	0,04	149,07	4079,01
Pininterest	2,33	3,86	0,61	0,55	-5,45	10,12
Total amount of content	-20,39	11,81	-1,73	0,09	-44,25	3,47

Image 21. Sixth MUV iteration

In the **seventh iteration**, the percentage of explanation remains as in the previous one and two other social network indicators will be removed. At this point, there are already 6 variables relevant for the model with a p-value lower than 0.05.

SUMMARY OUTPUT						
Regression stati	istics					
Multiple R	0,856					
Risquare	0,733					
Adjusted Risquare	0,665					
Standard error	38802					
Observations	55					
_						
	Coefficients	Standard error	र जिल्ल	F-value	Lower 95%	Upper 95%
Constant	-23204,99	22602,92	-1,03	0,31	-68788,11	22378,14
Blog's age	5029,86	2399,61	2,10	0,04	190,59	9869,13
Subscribers	8,36	1,65	5,07	0,00	5,04	11,69
Likes FB page	1,44	0,28	5,12	0,00	0,87	2,00
Followers instagram	-1,23	1,30	-0,95	0,35	-3,86	1,40
Google+followers	1,32	1,54	0,86	0,40	-1,79	4,43
Appearence/usability	13079,19	11163,92	1,17	0,25	-9435,00	35593,38
Number of writers? (BIN; 1	12257,55	14260,95	0,86	0,39	-16502,41	41017,51
Years of experience	-3397,97	1385,56	-2,45	0,02	-6192,22	-603,71
Articles per month	2114,02	935,62	2,26	0,03	227,16	4000,88
Pininterest	2,37	3,21	0,74	0,46	-4,09	8,84
Total amount of content	-20,28	8,40	-2,42	0,02	-37,22	-3,35

Image 22. Seventh MUV iteration

In the **eighth iteration**, two more independent variables are highlighted as per their p-value and will be removed in the next iteration. The situation remains as in the image below.

SUMMARY OUTPUT						
Regression statis	tios					
Multiple R	0,849					
Risquare	0,722					
Adjusted R square	0,666					
Standard error	38726,676					
Observations	55					
	Coefficients	Standard error	t Stat	P-value	Lower 35%	Upper 95%
Constant	Coefficients -27863,71	Standard error 21879,59	t Stat -1,27	<i>P-value</i> 0,21	<i>Lower 95%</i> −71931,46	<i>Upper 95%</i> 16204,04
Constant Blog's age						
	-27863,71	21879,59	-1,27	0,21	-71931,46	16204,04
Blog's age	-27863,71 4864,37	21879,59 2386,22	-1,27 2,04	0,21 0,05	-71931,46 58,27	16204,04 9670,47
Blog's age Subscribers	-27863,71 4864,37 8,25	21879,59 2386,22 1,62	-1,27 2,04 5,08	0,21 0,05 0,00	-71931,46 58,27 4,98	16204,04 9670,47 11,52
Blog's age Subscribers Likes FB page	-27863,71 4864,37 8,25 1,40	21879,59 2386,22 1,62 0,28 1,18	-1,27 2,04 5,08 5,08	0,21 0,05 0,00 0,00	-71931,46 58,27 4,98 0,84	16204,04 9670,47 11,52 1,96
Blog's age Subscribers Likes FB page Followers instagram	-27863,71 4864,37 8,25 1,40 -0,98 16517,72	21879,59 2386,22 1,62 0,28 1,18	-1,27 2,04 5,08 5,08 -0,83	0,21 0,05 0,00 0,00 0,41	-71931,46 58,27 4,98 0,84 -3,36	16204,04 9670,47 11,52 1,96 1,40
Blog's age Subscribers Likes FB page Followers instagram Appearence/usability	-27863,71 4864,37 8,25 1,40 -0,98 16517,72	21879,59 2386,22 1,62 0,28 1,18 10783,26	-1,27 2,04 5,08 5,08 -0,83 1,53	0,21 0,05 0,00 0,00 0,41 0,13	-71931,46 58,27 4,98 0,84 -3,36 -5200,87	16204,04 9670,47 11,52 1,96 1,40 38236,32
Blog's age Subscribers Likes FB page Followers instagram Appearence/usability Number of writers? (BIN; 1= 1 writ	-27863,71 4864,37 8,25 1,40 -0,98 16517,72 11182,73	21879,59 2386,22 1,62 0,28 1,18 10783,26 14130,36 1061,03	-1,27 2,04 5,08 5,08 -0,83 1,53 0,79	0,21 0,05 0,00 0,00 0,41 0,13 0,43	-71931,46 58,27 4,98 0,84 -3,36 -5200,87 -17277,27	16204,04 9670,47 11,52 1,96 1,40 38236,32 39642,74 -549,84

Image 23. Eighth MUV iteration

After **the ninth and last iteration** the situation and the final model is as seen in the image below. There are 7 independent relevant variables, all with a p-value equal or lower than 0.08 and a percentage of explanation for the model as a whole of 71.4 %, what could be considered as a good and consistent percentage.

SUMMARY OUTPUT						
Regression stat	tistics:					
Multiple R	0,845					
Risquare	0,714					
Adjusted Risquare	0,671					
Standard error	38412,502					
Observations	55					
	Coefficients	Standard error	t Stat	F-value	Lower 95%	Upper 95%
Constant	Coefficients -25141,50		₹ <i>5</i> ₹.a₹ -1,17	<i>P-value</i> 0,25	<i>Lower 95%</i> -68520,25	<i>Upper 95%</i> 18237,26
Constant Blog's age		21562,80				
	-25141,50	21562,80	-1,17	0,25	-68520,25	18237,26
Blog's age	-25141,50 5428,68	21562,80 2307,20 1,58	-1,17 2,35	0,25 0,02	-68520,25 787,18	18237,26 10070,17
Blog's age Subscribers	-25141,50 5428,68 8,36	21562,80 2307,20 1,58 0,27	-1,17 2,35 5,28	0,25 0,02 0,00	-68520,25 787,18 5,17	18237,26 10070,17 11,54
Blog's age Subscribers Likes FB page	-25141,50 5428,68 8,36 1,36	21562,80 2307,20 1,58 0,27 9444,20	-1,17 2,35 5,28 5,07	0,25 0,02 0,00 0,00	-68520,25 787,18 5,17 0,82	18237,26 10070,17 11,54 1,91
Blog's age Subscribers Likes FB page Appearence/usability	-25141,50 5428,68 8,36 1,36 16629,44	21562,80 2307,20 1,58 0,27 9444,20 1047,58	-1,17 2,35 5,28 5,07 1,76	0,25 0,02 0,00 0,00 0,08	-68520,25 787,18 5,17 0,82 -2369,85	18237,26 10070,17 11,54 1,91 35628,73

Image 24. Ninth MUV iteration

The model will be finally composed by the following variables:

• **Blog's age**: It is logical to think that the older the blog is, more expertise professionalised may be and a more renowned name and brand across the industry will have. However, there could be an inflexion point somewhere after 8-9 years where the initial followers have probably changed their

- preferences and new bloggers are innovating and gaining more and more share of visits in the market.
- **Subscribers**: Defined usually as the most devoted audience, they have an important contribution to the MUV. The more subscribers a blog has the more popular and followed it will be.
- **Likes FB page**: In this case the same situation as with subscribers happens. In this case the difference is that the influence per unit is lower than for subscribers, what may make sense since normally it is easier to get Facebook followers than subscribers.
- **Appearance/usability**: In this model, the coefficient of this independent variable does make sense and increasing the level of design and features will be translated into a more followed travel blog.
- Years of experience: This case is quite curious and goes against the information provided by the indicator blog's age, having the first one a negative influence in the MUV. The explanation for this situation could akin to the one explained for ATSB.
- Articles per month: This independent variable has a positive and important influence in the MUV. More articles will attract more visitors via Social media and SEO and could create more awareness of the brand or blog in the industry. Given that in the model for ATSB, this variable was influencing positively the target indicator, it will be one to take into account when trying to improve the success of a blog.
- **Total amount of content**: The influence of this variable is a regulator in the increase of MUV across time and therefore softens the possible growth that will not take place after many years, reaching a constant or null growth.

The cycle of a travel blog for MUV, could follow a sort of logarithmic function, with a great increase once it takes off (if it does) and then a much lower growth but keeping it for a long time.

In this model, the lack of a SEO indicator is an important limitation to consider since, as explained before, is key for almost all bloggers to drive visits to their sites. Part of the success not explained in the 71.4%, of the model could be related to SEO influences. However, part of SEO success could be included in the coefficient of articles per month, since a higher activity influences directly in the MUV through search engines.

Another point to highlight is the circular influence. When checking the model one could think, that more Facebook likes imply more MUV, but another could have thought the inverse implication, more MUV would imply more Facebook likes. Indeed, both may be right. The point here is which variable is chosen as independent and which as dependent. If the model had been for Facebook likes, it would have appeared another model but probably with a fair level of explanation since both variables are directly related.

The final model is described as for the formula below:

```
MUV = -25141.5 + 5428.68 *blog's age + 8.36 *subscribers + 1.36*Likes FB page + 16629.44*A/U + (-2598)*Years of experience + 2361*Articles per month + (-22.49)*Total amount of content
```

Having a percentage of explanation as a whole of 71.4%.

To finish this section, two images will be displayed as summary for each model with the independent variables that influence them and their classification in the categories: Promotion, blog and author.

Classification	Indicators
ATSB	Average time spent in the blog (min)
	Youtube subscribers
	Followers Twitter
Promotion	Followers Pininterest
	Do you use SEO techniques in your blog?_bin
	(1=YES)
	Appearance of the blog and usability (0=old
	format; 1= modern format; 2= modern format
Blog	plus usability features ,easy access to sharing
	buttons)
	Articles per month
	Full time dedication/blog
Author	professionalised?_bin (1=YES)
	Years of experience (writing, blogging,)

Image 24. Relevant variables for ATSB model

Classification	Indicators
MUV	Monthly unique visitors
Promotion	Suscribers
Promotion	Likes on FB page
	Blog's age (years)
	Appearance of the blog and usability (0=old
	format; 1= modern format; 2= modern format
Blog	plus usability features ,easy access to sharing
	buttons)
	Articles per month
	Total amount of content
Author	Years of experience (writing, blogging,)

Image 25. Relevant variables for MUV model

# 5. FORECAST OF A NEW TRAVEL BLOG

This study is based in the interest of the writer in the topic and because he has an idea to put on the field shortly. The next sections will clarify, first, the features of the travel blog idea in general and in particular for the indicators defined previously, and second, an estimation of the numbers expected according with the two models reached.

## 5.1. Features of the new blog and strategy

In this section, the writer will speak in first person of plural to better explain his thoughts and reasons of the strategy.

GREAT VALUE. This is the summary of what we want our blog to provide. This is a common characteristic that everybody nowadays says it is provided by their services/products but we are really committed with this.

Even though the study is about travel blogs, to offer GREAT VALUE, we are aware that we should write about something that we both really love and are passionate about These topics are:

• **Travelling:** my colleague and I have travelled intensively in the last years, both across Europe, America, Africa and Asia, and we will definitely keep doing it for a long time. We strongly believe that travelling will make this world a better place; when you travel you open your mind; you do not listen to prejudices and become more tolerant.

In this part we want to talk about our travels but not exactly as a travel guide and focusing more on storytelling and experiences that is what is really remembered after all. We want to inspire people to travel and follow their thirst of visiting awesome places. Value by inspiring.

• **Entrepreneurship:** As young and curious engineers, we love entrepreneurship and everything related to it. Especially start-ups and their ability to conquer the world with no limit in few years and change the way people do everything (examples as Facebook, Airbnb or Uber).

We both have strong background in businesses and economics. My colleague, aeronautical engineer has a certification of expert in financial and commercial management and he is coursing an MBA in Beijing right now. I am Industrial engineering with a master of science in Management engineering in Milan and coursing at the same time a bachelor in Economics.

In this section, we have thought about two main sections:

Start-up of the week: Once per week we will publish an interview with the CEO of an interesting start-up that we think it may provide value to our readers. This could be an interesting channel of publicity for the start-up too and will help us to promote our site.

o <u>Entrepreneurship advices and strategies</u>: When I have worked recently in a multinational I realised that the knowledge got in the university was barely applied in general. It looks like once you get out of the university everything you learnt there, has no value.

Since we believe that the connection between university and companies should be much stronger, we will write about strategies learnt at university and that could be perfectly applied to the real world. We will be more focused on start-ups that do not have the resources to pay the fees of McKinsey or Boston Consulting Group to define their business models and strategies.

With this section we aim at offering advises and showing new strategies to keep up the innovation in start-ups. Another target of this section would be to create a community of start-ups in which value and ideas could be shared to help out each other and collaborate. Value by advising and promoting.

• <u>Strong people</u>: I would really like to name this section as "people with balls" but could be misunderstood and may offend someone. Therefore strong people would be enough although not as graphic as I would like.

Here the objective would be to tell our readers the stories of awesome people out there that are doing amazing things but do not have enough resources to raise their voice. We aim at being their speakers. This would be the caring part of our blog and we would like to support personally and through the blog people with charity projects. Value by raising voices.

So this is the summary of our value: value by inspiring, value by advising and promoting and value by raising voices.

Why are we going to be so obsessed with the value?

- People share things that make them learn or inspire
- People follow webs or blogs that make them learn and are relevant to them. In this moment there are literally millions of blogs out there and to stand out something special should be provided. We do not aim at writing about the typical 10 thing to do in a city that anyone who has been in a city for a day could write
- When you share something on a social network you do not think of the favour you are doing to the writer of the post you are sharing, you are sharing a piece of you, something that you are proud of and defines you in some way.

One could wonder, what is the point of having such a mix of topics in the same blog?

Normally, blogs cover one topic but we aim at being an online magazine talking about different things and different sections. Moreover, there is a clear connection between these three topics, and this is ambition.

Ambition not just as a way to make money, but a way to pursue dreams and passions. All the people that will be interviewed in the blog will have this common characteristic and our readers too.

A person who travels is someone that follows a desire/dream and do not pay attention to what others say. And the same could be applied to entrepreneurs and strong people. They want something, they believe in something and they start doing things to reach the goal.

The umbrella under which all these great people will fit is: **Ambitious Tracks.** That will be the name of our blog.

Why could we accomplish the task of joining all these people and offering great value to all of them?

- <u>Pay attention to the audience</u>. We want our readers to help us to improve Ambitious Tracks. If they are not receiving great value, we want to know it and work to change that. The method will be by offering easy ways to rate the value under each post.
- <u>Different channels of promotion</u>: Initially since all topics will be joined we have decided to target each topic mainly to one social network but being open to check other combinations.
  - o **Linkedin:** for Entrepreneurship (obviously is the social network more business oriented)
  - Twitter: for Strong people (easy to quickly raise a voice with features as trending topic and retweets)
  - o **Facebook:** for Traveling (more convenient for travelling since pictures with a piece of text are available. The promotion via other Facebook related groups will have an important place in the beginning)
  - o **Instagram:** for everything (this is just about pictures and here everything can be mixed, but mainly the pictures will come from the traveling section)
  - o **Google+:** as it is the little brother of Facebook and we do not have real hopes on it, we could start mixing all the topics in this channel to check how it works.

If the point in which each section could stand alone arrives, we will think about splitting the web and offering each topic in each social network, through three or maybe two different websites.

• <u>SEO practises:</u> This is one of the main points we want to work on. We aim at having an engaged readership and for that, we have to rank good for the people searching on search engines what we are offering.

Moreover, the traffic would be quite benefited too.

After this introduction, it is clear that our **mission** is related to offering **GREAT VALUE** to our readers.

But what is our **vision**? We aim at creating a brand with whom everybody that has a dream could find the energy and strength to pursue it. What is excellence to Apple will be **energy and motivation** to **Ambitious Tracks**.

# 5.2. Performance according to the model created

Now that the main cornerstones have been defined, it is time to get into details and define the strategy quantitatively.

The model will be applied for a period of 5 years and all the independent variables of the model will be defined for this period. The values will be presented in a table to better summarise everything. Some comments will be added afterwards about the estimation of the variables.

		NEW MODE	L STRATEGY				
	Classification	Indicators	1st year	2nd year	3rd year	4th year	5th year
1		Pop-ups for subscription_bin (1=YES)	0	0	0	0	0
2		Suscribers (1)	500	2000	4000	5500	7000
3		Likes on FB page (1)	5000	20000	40000	55000	70000
4		Followers Twitter (1)	2000	8000	16000	20000	26000
5		Followers instagram (2)	0	1000	2000	4000	6000
6		Google+ followers (3)	500	1500	4000	5500	7000
7	Promotion	Ratio views/followers in G+ (3)	200	500	1250	3125	7810
8		Subscribers Youtube (4)	0	0	0	0	0
9		Followers Pininterest (4)	0	0	0	0	0
10		How many times per month do you send an email/reminder to your subscribers?	1	1	1	1	1
11		Do you use SEO techniques in your blog?_bin (1=YES)	1	1	1	1	1
12		Cookies_bin (1=YES) (5)	0	0	0	1	1
13		Blog's age (years)	1	2	3	4	5
14	Blog	Appearance of the blog and usability (0=old format; 1= modern format; 2= modern format plus usability features ,easy access to sharing buttons) (6)	1	1	2	2	2
15	- 0	Charity or social activity_bin (1=YES)	1	1	1	1	1
16		Articles per month (6)	16	16	20	20	20
17		Total amount of content	192	384	624	864	1104
18		Number languages in which blog written (7)	2	2	2	2	2
19	Author	Number of writers? (BIN; 1= 1 writer/0 more than one writer)	0	0	0	0	0

20	Full time dedication/blog professionalised?_bin (1=YES) (8)	0	0,5	1	1	1
21	Native writer?_bin (1=YES) (9)	0,5	0,5	0,5	0,5	0,5
22	Years of experience (writing, blogging,)	1	2	3	4	5
23	Profession related to web/writer/journalist?_bin (1=YES)	0	0	0	0	0

Exhibit 2. Strategy for Ambitious tracks by indicator

- (1) These three indicators will be the key ones for promotion (apart from SEO techniques) and therefore the growth is the same for them. We see Facebook as our centric point of promotion.
- (2) Instagram is not supposed to be a cornerstone and will not be initially included. It is likely to be included from the second year.
- (3) Google+ will not be a cornerstone either and the aim is to mix all the topics in this social network. If the strategy works here, the same will be translated to Facebook and Google+ will remain in any case as a secondary option.
- (4) For Youtube and Pininterest there is not a special interest in the horizon analysed.
- (5) Cookies could be introduced in the 4<sup>th</sup> year once there is a devoted audience and the web is more complicated and with more features.
- (6) The division has been thought in 8 posts per month per member of the team, making a total of 16. Out of these 16, 4 will be for the section start-up of the week. This will happen the first 2 years. From the third, the idea is to keep writing but around 10 per month by us in the core topics. The idea is that the rest are written by collaborations and guest posts reaching the figure of 20 posts per month.
- (7) The blog will be written in Spanish (in which we both are native) and English
- (8) The first year both of us will have other dedications and therefore is 0. The second year I will be completely available for Ambitious Tracks so the indicator is 0.5 (average of both situations) and the third year both of us will be fully immersed in the project and the indicator is 1.
- (9) As explained above, we are native in one language, but not in the other so the indicator is 0.5.
- \* The reader should notice that these assumptions have been measured in the same way as the data have been collected, especially for points (8) and (9).

After applying the models, the summary and the results are as follows (first for ATSB and then MUV):

		1st year	2nd year	3rd year	4th year	5th year
ATSB	Tot ATSB Coeff	3,40	3,53	3,42	3,29	3,14
Constant	2,13	2,13	2,13	2,13	2,13	2,13
Full time dedication/blog professionalised?_bin						
(1=YES)	0,56	0,00	0,28	0,56	0,56	0,56
Followers Twitter	-0,00001	-0,03	-0,11	-0,22	-0,27	-0,36
Do you use SEO techniques in your blog?_bin						
(1=YES)	0,35	0,35	0,35	0,35	0,35	0,35
Appearance of the blog and usability (0=old format; 1= modern format; 2= modern format plus usability						
features ,easy access to sharing buttons)	-0,62	-0,62	-0,62	-1,24	-1,24	-1,24
Subscribers Youtube	0,00067	0,00	0,00	0,00	0,00	0,00
Followers Pininterest	-0,00009	0,00	0,00	0,00	0,00	0,00
Years of experience (writing, blogging,)	-0,07	-0,07	-0,13	-0,20	-0,27	-0,34
Articles per month	0,10	1,63	1,63	2,03	2,03	2,03

Image 26. Solution for ATSB model

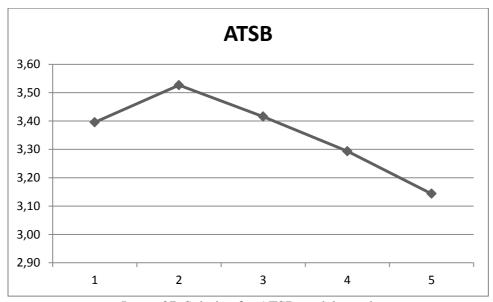


Image 27. Solution for ATSB model, graph

As per the model, the success in terms of engagement is decreasing from the second year in advance. The main reason is the rise in the usability and appearance. If this finally happens in the reality we will analyse carefully all the indicators to keep the level of engagement.

It should be said that during these 5 years, the engagement would be in any case above the average of the industry of travel blogs.

·		1st year	2nd year	3rd year	4th year	5th year
MUV	Tot MUV Coeff	38.780	70.302	137.821	168.264	198.706
Constant	-25141	-25.141	-25.141	-25.141	-25.141	-25.141
Blog's age (years)	5429	5.429	10.857	16.286	21.715	27.143
Suscribers	8,36	4.180	16.718	33.436	45.975	58.514
Likes on FB page	1,36	6.824	27.294	54.588	75.059	95.530
Appearance of the blog and usability (0=old format; 1= modern format; 2= modern format plus usability						
features ,easy access to sharing buttons)	16629	16.629	16.629	33.259	33.259	33.259
Years of experience (writing, blogging,)	-2598	-2.598	-5.196	-7.794	-10.392	-12.990
Articles per month	2361	37.776	37.776	47.220	47.220	47.220
Total amount of content	-22,49	-4.318	-8.636	-14.033	-19.431	-24.828

Image 28. Solution for MUV model

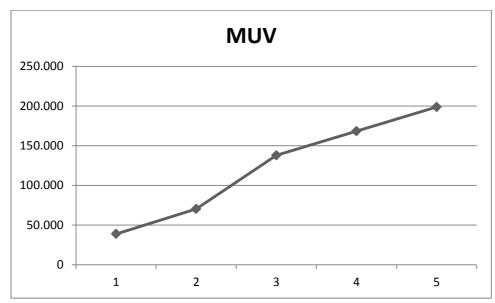


Image 29. Solution for MUV model, graph

Something should be highlighted here. When the figures of the  $1^{st}$  year, for example, are displayed, the numbers considered are just for the last month of the year.

The graph shows an inflexion point at the end of the second year. The first and the third year will be the years of more growth taking the second one as more of consolidation. From the third year in advance, we expect to dedicate less time and dedicate our time to other activities related with Ambitious Tracks, but not blogging itself. Something more related to getting long term sponsors, events and researching new ways of expanding the brand.

Until now, just two ways of being successful have been analysed and modelled. But what about a blog as a money maker?

With the figures of MUV of the model, there could be an income from the first year via Google ads and affiliate marketing. But the aim of Ambitious Tracks is to make long term relationships with sponsors and leave Google Ads and affiliate marketing as a secondary source of income.

We will look for sponsors that want to transmit the same values and philosophy that we do, to keep our brand loyal to its mission and vision over time.

With the figures got in the model, from the second year some sponsorships could take place that could be really profitable if the evolution of MUV follows the numbers of the model. The good values of engagement would definitely help to increase the profitability through sponsorship.

#### **GLOSARY**

**Affiliate marketing:** is a type of performance-based marketing in which a business rewards one or more affiliates for each visitor or customer brought by the affiliate's own marketing efforts. The industry has four core players: the merchant (also known as 'retailer' or 'brand'), the network (that contains offers for the affiliate to choose from and also takes care of the payments), the publisher (also known as 'the affiliate'), and the customer

**Cookies:** Cookies are small files which are stored on a user's computer. They are designed to hold a modest amount of data specific to a particular client and website, and can be accessed either by the web server or the client computer.

This allows the server to deliver a page tailored to a particular user, or the page itself can contain some script which is aware of the data in the cookie and so is able to carry information from one visit to the website (or related site) to the next.

**Median:** is the number separating the higher half of a data sample, a population, or a probability distribution, from the lower half. The median of a finite list of numbers can be found by arranging all the observations from lowest value to highest value and picking the middle one (e.g., the median of {3, 3, 5, 9, 11} is 5).

If there is an even number of observations, then there is no single middle value; the median is then usually defined to be the mean of the two middle values (the median of  $\{3, 5, 7, 9\}$  is (5 + 7) / 2 = 6), which corresponds to interpreting the median as the fully trimmed mid-range.

The median is of central importance in robust statistics, as it is the mostresistant statistic, having a breakdown point of 50%: so long as no more than half the data is contaminated, the median will not give an arbitrarily large result.

**P-Value:** is a function of the observed sample results (a statistic) that is used for testing a statistical hypothesis. More specifically, the p-value is defined as the probability of obtaining a result equal to or more extreme than what was actually observed, assuming that the hypothesis under consideration is true. Before the test is performed, a threshold value is chosen, called the significance level of the test, traditionally 5% or 1% and denoted as  $\alpha$ .

If the p-value is equal to or smaller than the significance level  $(\alpha)$ , it suggests that the observed data are inconsistent with the assumption that the null hypothesis is true and thus that hypothesis must be rejected (but this does not automatically mean the alternative hypothesis can be accepted as true).

**Page views:** Each time a user visits a Web page, it is called a page view.

**SEO**: Search engine optimization is the process of affecting the visibility of a website or a web page in a search engine's unpaid results - often referred to as "natural," "organic," or "earned" results. In general, the earlier (or higher ranked on the search results page), and more frequently a site appears in the search results list, the more visitors it will receive from the search engine's users. SEO may target different kinds

of search, including image search, local search, video search, academic search,[1] news search and industry-specific vertical search engines.

As an Internet marketing strategy, SEO considers how search engines work, what people search for, the actual search terms or keywords typed into search engines and which search engines are preferred by their targeted audience. Optimizing a website may involve editing its content, HTML and associated coding to both increase its relevance to specific keywords and to remove barriers to the indexing activities of search engines. Promoting a site to increase the number of backlinks, or inbound links, is another SEO tactic.

**Unique visitors:** Unique visitors refers to the number of distinct individuals requesting pages from the website during a given period, regardless of how often they visit.

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### **BIBLIOGRAPHY**

BCG. Introduction to multiple regression. BCG Comp Chapter 4. 2014.

Blood, Rebecca. "How Blogging Software Reshaped the Online Community", Communications of the ACM. 2006

Boyd, Danah. "A Blogger's Blog: Exploring the Definition of a Medium.". 2006.

Brady (2005) 'Blogging, personal participation in public knowledge-building on the web', Chimera Working Paper 2005-02>. Colchester: University of Essex.

Colin Cameron , A. *Excel 2007 Multiple regression*. Dept. Of Economics Univ. of California 2007. http://cameron.econ.ucdavis.edu/excel/ex61multipleregression.html

De la Horra, Julián. Modelo de regresión múltiple. Departamento de Matemáticas UAM. 2013.

Degrees of Freedom. "Glossary of Statistical Terms". Animated Software. Retrieved 2008-08-21. 2008

Guadagno, Rosanna E. "Who blogs? Personality predictors of blogging. 2007

Haile, Tony. CEO of Chartbeat. <a href="http://time.com/12933/what-you-think-you-know-about-the-web-is-wrong/">http://time.com/12933/what-you-think-you-know-about-the-web-is-wrong/</a>, 2014.

Nielsen. <a href="http://www.nielsen.com/us/en/insights/news/2012/buzz-in-the-blogosphere-millions-more-bloggers-and-blog-readers.html">http://www.nielsen.com/us/en/insights/news/2012/buzz-in-the-blogosphere-millions-more-bloggers-and-blog-readers.html</a>. 2012

Simon, Gary. Multiple regression basics. Documents prepared for use in course B01.1305, New York University, Stern School of Business. 2005.

Statista. http://www.statista.com/statistics/256235/total-cumulative-number-of-tumblr-blogs/. 2015

Techopedia. https://www.techopedia.com/definition/1611/unique-visitor, 2015

Techopedia. https://www.techopedia.com/definition/1553/page-view-pv, 2015

Webopedia. http://www.webopedia.com/TERM/A/average\_time\_on\_site.html, 2015

Wordpress. "Stats. Accessed February 20, 2014". Wordpress.com. Retrieved 2014-02-20. 2014

## **APPENDIX**

## List of participants in the questionnaire

http://crankyflier.com/

http://blog.malaysia-asia.my/

http://www.traveldudes.org/

http://uncorneredmarket.com/

http://holeinthedonut.com/

http://www.wanderingearl.com/

http://twenty-somethingtravel.com/

http://www.globotreks.com/

http://intheknowtraveler.com/

http://onestep4ward.com/

http://www.ourawesomeplanet.com/

http://www.timetravelturtle.com/

http://outoftownblog.com/

http://www.justonewayticket.com/

http://www.dreameurotrip.com/

http://twomonkeystravelgroup.com/

http://www.mappingmegan.com/

http://goingawesomeplaces.com/

http://www.wheressharon.com/

http://bucketlistjourney.net/

http://wonderfulwanderings.com/

http://iamaileen.com/

http://turkishtravelblog.com/

http://europeupclose.com/

http://travelbabbo.com/

http://www.gypsynester.com/

http://www.everywhereist.com/

http://www.dangerous-business.com/

http://etramping.com/

http://www.theprofessionalhobo.com/

http://francistapon.com/

http://www.nerdseyeview.com/blog/about-nerds-eye-

view/

http://familyonbikes.org/blog/

http://virtualwayfarer.com/

http://www.changesinlongitude.com/

http://www.heatheronhertravels.com/

http://dontstopliving.net/

http://travelexperta.com/

http://xpatmatt.com/

http://travelingted.com/

http://www.adventuresofagoodman.com/

http://1000fights.com/

http://www.chasingtheunexpected.com/

http://www.maitravelsite.com/

http://www.idreamedofthis.com/

http://www.amordeviaje.com/

http://laviwashere.com/

http://www.elenastravelgram.com/

http://charlieontravel.com/

http://nextstopwhoknows.com/

http://wanderingon.com/

http://flightsandfrustration.com/

http://www.travelsintranslation.com/

http://theramble.org/

http://www.indefiniteadventure.com/

http://www.born2travel.it/

http://mytanfeet.com/

http://psimonmyway.com/

http://www.vengavalevamos.com/

http://wheresidewalksend.com/

http://www.thecrowdedplanet.com/

http://www.albaluna.es/