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Measuring the Web Site

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Course: BA Creative Digital Media

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Deadline: 28th April 2008

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1.0 Introduction

The aim of this report is to define objectives and targets in gathering user data from the website so we may better understand our users and then tailor the web experience to better suit them. I also wish to identify key behaviour and performance metrics of the web site so that we may analyse and make adjustments to the defined metrics.

Currently the REMOVED project website is defined as a brochure site as it offers basic company information and little to none commerciality options. Over the next few years the REMOVED project would like to be transformed into a catalogue site offering sales solutions for the REMOVEDs services directly via the website as well as traditional methods such as phone and mail which the REMOVED project is currently doing well in.

2.0 Metrics

“Web analytics is the study of the behaviour of website visitors. In a commercial context, web analytics especially refers to the use of data collected from a web site to determine which aspects of the website work towards the business objectives; for example, which landing pages encourage people to make a purchase.

Data collected almost always includes web traffic reports. It may also include e-mail response rates, direct mail campaign data, sales and lead information, user performance data such as click heat mapping, or other custom metrics as needed. This data is typically compared against key performance indicators for performance, and used to improve a web site or marketing campaign's audience response.” [1]

“Capture the Customer Experience

Analyze the Customer Experience

Optimize the Customer Experience" [2]

I recommend we collect numerous amounts of web data for analysis and study so we may better reach our goals as company and as a website.

2.1 Visitors

We should most definitely be collecting the amount of unique visitors our website attracts each day, as this will identify if our website is actually receiving traffic and from which sources.

Along with logging how many visitors we should also log where each visit originated from. Did the user get directed to our website from a search engine, or was he redirected here from another website or maybe he came directly to the site via no external sources apart from knowing the web address.

All these are valuable assets when collecting web data as we can use these to see where our strong and weak points are and where we need to better motivate ourselves to achieve maximum web traffic.

We can use the visitor data to see if our search engine plan is working and to see what keywords are the driving forces behind the sites traffic. We can also monitor advertising campaigns and their effectiveness on sites traffic using page views as we log visits by date which we can match up with when new media is launched or new advertisement campaigns are launched to see their effectiveness.

Logging page hits will also identify weaknesses with in the website relating to pages which are not being accessed as much as we would like them to be, whether this is by not capturing the users' eye or merely poor optimisation of the page in question.

“There’s a sucker born every minute” [3]

“In any statistical endeavour, the first step is to define what is being measured. In this case, the common denominator is human events, clicks on a website, which are defined as page views.

Specifically, the statistics discussed here are a translation from raw data, clicks, and server-browser dialogues, into a user interface from which patterns can be discerned. The goal of web metrics is to extract patterns which tell you what is happening. The next step is to create actions, i.e. what to do about your traffic patterns.

Web metrics and analytics is an exciting field at this moment, because there are not many patterns being sought. An example might be comparing ‘bounce rate for first time visitors’ with ‘bounce rate for returning visitors’, which has not become a standard of analysis (aggregate bounce rate stats tell you how far into your site visitors are clicking).” [4]

2.2 Key pages

Some pages offer more ROI than other pages when it comes to analysing the page with our goal in mind, our goal being to spread knowledge of the REMOVED project as far as possible but yet also get sales hits of our service from the website itself.

The key pages which we should be tracking in more detail than other using the following data in sections 2.3 and onwards are as follows;

- **Contact page** - We should collect data about this page as it would be beneficial to see if our viewers are using the contact page to actually contact at us. When a sale is made we ask said person(s) to fill out a form

giving feedback on our service which also includes a question on how they heard about us, which lists the website as a possible choice. With this in place we can measure the amount of users who visited the contacts page against the amount of users who actually decided to make contact with us because of the website.

A feature of the contact page is a form mailing script which users may use to directly email the sites administrators regarding information relating to purchases or feedback. The amount of emails received relating to purchases will be analysed alongside page views of the contact page to see how many users actually used the contact form.

- **About us** - As one of our primary goals is to spread knowledge of the REMOVED business, the about us page will be a key aspect in this area. We need to measure this pages statistics very carefully and apply recommendations accordingly. Hits for this page will be under scrutiny and any page hit which is under ten seconds in length will not be counted, this is because it takes on average 15-20 seconds to read the about us page and take the details in, which would suggest the user did not really read the page and was only viewing out of curiosity if the view time is below this threshold.

Implementing this strategy of analysing this page will lead to more accurate results in our web metrics findings and offer better results when analyzing the data to see if users are viewing this page.

- **Pricing** - We should measure this pages statistics closely and by doing this we will be able to see the users making inquiries about information relating to the services offered by the REMOVED business and will be able to make website adjustments accordingly, if hits are not meeting expectations. I believe users who visit the contact page are likely to view

this page also to retrieve information relating to pricing of the services offered by the REMOVED project.

Users who view this page are most likely thinking about making a purchase from the REMOVED business and are checking prices and terms of employment.

The statistics below will be recorded for the entire site but analysis of the key pages outlined above will be more vigorously because of the ROI of these pages when in comparison of other pages. The REMOVED project website is looking for a way of spreading knowledge of the business to local residents and in turn making sales contacts via the website itself. Using these as the two primary goals, I believe the chosen pages above and the statistics gathered will reflect well on the operation of the site and its ability to meet the goals outlined.

2.3 Location

Monitoring the location of the IP address at the time of visit would be prudent, as we could use this data to better our services to the customers coming from the areas we are concentrating on and help us achieve the business goal outlined below in Jim Sterne's presentation on the ecosystem of web metrics.

"Make more money, spend less money, increase customer satisfaction" [5]

We can see whether our target market is actually visiting the site as our services are sold and concentrated locally at the moment. Logging the users' location also gives us an insight into where we could possibly expand our business in the future.

Example being, a substantial amount of traffic may be generated from the London area via keywords of "supply teacher" or "percussion drum teacher", this

gives us insight into the needs of people in that area and in the future we may want to expand the business to said area if profitable.

2.4 Time

We should also be looking into logging the amount of time the user spends on the website and its pages. From this we will be able to see pages of higher interest to our users and will be able to tailor these pages accordingly.

Not only will we see pages with longest view times but we will also see the pages the users spend the least amount of time on, this could range from the home page to the contact page and will help us resolve the issues relating to the lack of interest and in the end, meeting the users' expectations.

The amount of time a user spends on each page gives a great insight into the pages contents and its ability to keep users on the site instead of leaving and we should monitor this carefully.

2.5 Traffic Sources

By measuring where the traffic is coming from we can see if our SEO plan is working correctly and in what areas. Traffic which is generated by users searching Google for phrases maybe bringing in more traffic than say MSN Live search, by recording this data we can see where our SEO plan is working and in what parts. We can use this data to hone in on problems which are resulting in less traffic from specific sources and then tackle them accordingly and we can also see where the majority traffic is originating from which will give us an overview of what particular practises of our SEO plan are driving the users towards the site, whether it be keyword searching or direct traffic. Using this data we can identify what sources are generating the most traffic to our site and then

edit the site accordingly to better suit the experience of the user and overall gather more attention to the business.

2.6 Key Words & Phrases

We should most certainly measure these as the keywords and phrases will play a vital role in making choices into how to optimise the web site for better results with in the search engine area and also will benefit us when creating an ad-words campaign.

With this data we will be able to identify stronger keywords and phrases than others and capitalise on this by tweaking the site in favour of these words and phrases to raise our ranks with in the search engine table.

3.0 How to measure them

The REMOVED website should utilise key data gathering tools relating to web metrics in its task to gather the recommended data, the foremost tool in this field is a Google analytics account which provides a plethora of data which is gathered and logged via a simple script placed into each page of the website and in return the data can be easily viewed via a browser from the Google portal homepage under analytics.

As well as using Google analytics, the REMOVED project should use the already well placed data gathering system Advanced Web Statistics within the framework of the website, as this has been a core part of data gathering for the REMOVED website for many months and it will be of great value when analysing the data recorded and I believe having both Google analytic data and Advanced Web Statistics' data, we will be able to make better judgments on the areas effecting the sites performance.

As the Advanced Web Stats plug-in is already in place and is currently gathering data for the REMOVED website, no setup is required for this.

The script needed for Google analytics to gather data has already been inserted into the pages of the REMOVED website and so little setup is required on behalf of the web team. Minor adjustment may have to be made in the Google analytic control panel for this account, so we may achieve the best possible results when analysing the data.

“What’s the problem?”

What are the root causes?

How might we measure that?

How might we use this information?” [6]

By gathering this data and using these tools, we should be able to solve the questions layout by Jim Stern, when you look back at the REMOVED site.

4.0 Measurements

The REMOVED project has collected vast amounts of data relating to the key pages and the goals which were outlined in this document above, we will use this data to better tailor the user experience in hopes of meeting customer demands.

4.1 Visits and Page views

Using the data gathered we can clearly see the growth of the site since its launch in early 2008 as the number of unique visits are climbing steadily.

Monthly visitors and page views for the REMOVED website

Month	Visits	Unique Visitors	Page views
January	228	189	388
February	279	226	612
March	815	548	794
April (so far)	17	17	66
Total	1339	980	1860

As you can see from the results above, the site is doing well in generating traffic for a small local business. During the month of February to March the site saw a massive surge in traffic, this can be accredited to school holidays coming up and local schools and parents are trying to find activities for the sons of daughters.

4.2 Key pages

We shall now use this data to examine the pages I identified as key points of interest and analyse them closely.

The contact is the most important page with in the REMOVED website, as this REMOVED project is a small local business we rely on sales of our services to survive and if the contact page is not delivering this for us then there is something seriously wrong with the website as its purpose is failing.

Monthly page hits for the contact page

Month	Page views	% of total page views	Bounce rate %
January	203	52 %	28 %
February	348	56 %	23 %
March	510	64 %	21 %
April (so far)	21	31 %	7 %

The above table shows that the majority of the REMOVEDs page views for each month are a result of the contact us page, now this could mean great things for us if indeed all these viewers were to phone up and purchase services from the REMOVED project.

As stated before, when a customer purchases a service from the REMOVED project we ask them if they are willing to fill out a short questionnaire. Throughout the months the site has been running only 21 customers said they got the contact details through the web. This is disappointing and I believe something is wrong with contact page and it needs to be corrected quickly to boost the amount of people referred from the site to a maximum.

4.3 About us

A very disturbing fact is revealed when looking for the stats for this particular page, as this is one of my key pages and a high priority in spreading the name of REMOVED and what it stands, I would have hoped this page to have been well visited.

No data has been gathered for this page, page views are 0 as is time spent on the page and actual visit to the page. Google analytics is not showing any data logged for this page what so ever which is leading me to believe there must be a major error with the page itself.

I will discuss this page and what the problem is in detail at the end of this report in my recommendations

4.4 Pricing

Monthly page hits for the pricing page

Month	Page views	% of total page views	Bounce rate %
January	100	25 %	27 %
February	202	33 %	23%
March	90	11 %	33 %
April (so far)	9	13 %	32 %

The data collected here shows a decline in users viewing the pricing page and a bounce rate for this page which is high and increasing slowly.

4.5 Location

Origin of page views in January

Countries	Pages	Bandwidth
Great Britain	88	2.04 MB
European Country	83	1.76 MB
United States	70	1.4 MB
Spain	57	0.98 MB
Germany	52	0.86 MB
Australia	36	0.77 MB
South Korea	2	0.01MB

Origins of page views in February

Countries	Pages	Bandwidth
Great Britain	151	3.86 MB
United States	119	2.78 MB
European Country	110	8.23 MB
Germany	91	2.13 MB
Spain	72	1.43 MB
Australia	57	0.93 MB
South Korea	12	0.15MB

Origins of page views in March

Countries	Pages	Bandwidth
Great Britain	168	3.98 MB
United States	152	3.43 MB
Spain	147	3.23 MB
South Korea	141	3.01 MB
European Country	103	2.21 MB
Australia	82	1.69 MB
Germany	1	0.01 MB

Origins of page views in April

Countries	Pages	Bandwidth
Great Britain	29	0.57 MB
United States	23	0.43 MB
European Country	11	0.11 MB
South Korea	3	0.07 MB
Spain	0	0.00 MB
Australia	0	0.00 MB
Germany	0	0.00 MB

4.6 Time

Overall visit duration in January

Number of visits: 228 - Average: 214 s

Visit duration	Number of visits	Percent
0s - 30s	101	44.2 %
30s - 2mn	53	23.2 %
2mn - 5mn	36	15.7 %
5mn - 15mn	29	12.7 %
15mn - 30mn	5	2.1 %
30mn - 1h	3	1.3 %
1h+	1	0.4 %

Overall visit duration in February

Number of visits: 279 - Average: 185 s

Visit duration	Number of visits	Percent
0s - 30s	126	45.1 %
30s - 2mn	67	24 %
2mn - 5mn	54	19.3 %
5mn - 15mn	23	8.2 %
15mn - 30mn	4	1.4 %
30mn - 1h	4	1.4 %
1h+	1	0.3 %

Overall visit duration in March

Number of visits: 815 - Average: 249 s

Visit duration	Number of visits	Percent
0s - 30s	383	46.9 %
30s - 2mn	191	23.4 %
2mn - 5mn	118	14.4 %
5mn - 15mn	69	8.4 %
15mn - 30mn	29	3.5 %
30mn - 1h	13	1.5 %
1h+	12	1.4 %

Overall visit duration in April

Number of visits: 17 - Average: 381 s

Visit duration	Number of visits	Percent
0s - 30s	4	23.5 %
30s - 2mn		
2mn - 5mn	5	19.4 %
5mn - 15mn		
15mn - 30mn		
30mn - 1h	1	5.8 %
1h+		
Unknown	7	41.1 %

4.7 Referrers

Links from an Internet Search Engine January

7 different referring search engines	Pages	Percent
Google	118	73.7 %
Unknown search engines	23	14.3 %
Ask Jeeves	8	5 %
Yahoo	5	3.1 %
MSN	3	1.8 %
Splut	2	1.2 %
Tiscali	1	0.6 %

Links from an Internet Search Engine February

8 different referring search engines	Pages	Percent
Google	125	74.8 %
Unknown search engines	13	7.7 %
MSN	11	6.5 %
Yahoo	10	5.9 %
AOL	5	2.9 %
Tiscali	1	0.5 %
Ask Jeeves	1	0.5 %
InfoSpace	1	0.5 %

Links from an Internet Search Engine March

9 different referring search engines	Pages	Percent
Google	375	80.8 %
Unknown search engines	27	5.8 %
Yahoo	25	5.3 %
MSN	14	3 %
AOL	8	1.7 %
Ask Jeeves	8	1.7 %
Splut	4	0.8 %
Tiscali	2	0.4 %
AllTheWeb	1	0.2 %

Links from an Internet Search Engine April

4 different referring search engines	Pages	Percent
Tiscali	5	50 %
Google	3	30 %
Splut	1	10 %
MSN	1	10 %

4.8 Key Words & Phrases

Search Keywords (Top 10) for January

different keywords	Search	Percent
workshops	102	27.8 %
REMOVED	57	15.5 %
tees	41	11.2 %
valley	35	9.5 %
recycled	28	7.6 %
percussion	28	7.6 %
instruments	21	5.7 %
fun	15	4 %
teacher	14	3.8 %
curriculum	14	3.8 %
extra	11	3 %

Search Key phrases (Top 10) for January

different key phrases	Search	Percent
REMOVED workshops	74	49.6 %
Tees valley music teacher	11	7.3 %
Fun teacher tees valley	10	6.7 %
REMOVED supply teacher	9	6 %
Experienced workshops	9	6 %
Extra curriculum workshops	8	5.3 %
Specialist teacher percussion	8	5.3 %
Tees valley clubs	6	4 %
Outside school workshops	6	4 %
Fun supply teacher	4	2.6 %
Recycled instruments	4	2.6 %

Search Key phrases (Top 10) for February

different key phrases	Search	Percent
REMOVED workshops	14	8.5 %
Tees valley percussion workshops	12	7.3 %
REMOVED teacher	11	6.7 %
Fun supply instrument teacher	8	4.8 %
Extra curricular percussion	7	4.2 %
Recycled instruments tees valley	6	3.6 %
Outside of school learning awards	6	3.6 %
Experienced fun workshops	5	3 %
Tees valley clubs	4	2.4 %
REMOVED fun supply teacher	4	2.4 %

Search Keywords (Top 10) for February

different keywords	Search	Percent
REMOVED	99	22 %
Percussion	67	14.8 %
workshops	58	12.8 %
fun	57	12.6 %
teacher	56	12.4 %
experienced	38	8.4 %
tees	26	5.7 %
curriculum	23	5.1 %
recycled	10	2.2 %
instrument	8	1.7 %
valley	8	1.7 %

Search Key phrases (Top 10) for March

different key phrases	Search	Percent
REMOVED project	234	52.1 %
REMOVED percussion	46	10.2 %
Recycled percussion instruments	38	8.4 %
Fun supply teach tees valley	33	7.3 %
Special teacher instruments	27	6 %
Recycled fun teacher	16	3.5 %
workshops	13	2.8 %
Tees valley outside school workshops	11	2.4 %
Outside school fun	11	2.4 %
Extra curriculum tees valley	10	2.2 %
Fun tees valley	10	2.2 %

Search Keywords (Top 10) for March

different keywords	Search	Percent
REMOVED	243	20.1 %
percussion	185	15.3 %
recycled	178	14.7 %
drummer	152	12.5 %
Clare	122	10 %
project	107	8.8 %
supply	73	6 %
instruments	68	5.6 %
fun	27	2.2 %
Tees	27	2.2 %
valley	26	2.1 %

Keywords used on search engines in April

7 different keywords	Search	Percent
REMOVED	4	28.5 %
fun	3	21.4 %
tees	2	14.2 %
valley	2	14.2 %
percussion	1	7.1 %
recycled	1	7.1 %
instruments	1	7.1 %

Key phrases used on search engines in April

4 different key phrases	Search	Percent
REMOVED tees valley	1	25 %
Recycled percussion instruments Tees Valley	1	25 %
Fun teacher Tees Valley	1	25 %
Percussion instruments	1	25 %

5.0 Recommendations

My recommendations for this report and its findings are partly based on a well known philosophy within the marketing profession.

“Who are the different types of people who visit my site? Who are my most valuable visitors?

Why do people come to the site? What are they looking for?

Who are the visitors that display the most interesting or valuable behaviour?

Why do people leave my site without converting? Did they achieve their goals? If not, why not?” [5]

Using the above philosophy as my basis I have made several recommendations in the following paragraphs which will affect the websites performance in terms of our goals.

5.1 About Us

The first thing I would like to bring to attention is the problem with the about us page and its inability to harvest data via Google Analytics. After close inspection it is in fact the page itself which is causing the problem, as the code which sends data back to Google is wrong and is therefore causing the error.

Currently this is embedded with in the page;

```
<script type="text/javascript" src="http://www.google-analytics.com/"> </script>
```

This code should be this;

```
<script type="text/javascript" src="http://www.google-analytics.com/urchin.js">  
</script>
```

The top one is missing vital information from where the source of the java script file is located and therefore cannot execute properly when loaded causing the missing gap in data.

This error should be fixed immediately as currently we have no way of tracking the data from the about us page. As one of the goals of the website is to spread the knowledge of the REMOVED project, the situation with the about us page is unacceptable as it is devastating in our attempts of analyzing the pages performance.

5.2 Contact Us

As we can see from the results of the questionnaires, the contact page seems to be doing its purpose slightly. I believe we can increase productivity of this page easily by simple edits to how the page works.

Currently the contact us page houses phone numbers and emails to contact if you wish to purchase a service from us. I recommend we include a form on the page which the viewer fills out which is then sent directly to a member of staff at the REMOVED project. This will cut out the need for the customer to contact the REMOVED project via phone or email and I believe will affect sales positively.

5.3 Key Words

The key words at the moment seem to be working brilliantly and our position with the Google search engine seems to be increasing steadily. I believe a submission to DMOZ to be the next best course of action when trying to drive traffic to our site.

5.4 Location

We seem to be gathering a lot of traffic from foreign countries and especially the United States. Although this would be ideal if we were a multi national company but as we are not, this I think needs to be refined.

We should optimise the sites contents so that it leans more towards the local region which will hopefully get more visits from within this region.

If the REMOVED project ever decides to open business services abroad or the owners decides to immigrate then this data will provide us with valuable insight into where the business would be most popular.

5.5 Time

After looking over the reports from the average time spent on the site it is clear that users are not staying as long as we would like them too. In my opinion this is because of the sites content as it is at the present time. I do not feel the content is engaging enough as it could be and fails to capture the user's attention enough to draw them into the site and in turn increasing time spent browsing.

A rewrite of the sites content would be a good start in solving this problem and will lead to longer view times and less bounce rates for the pages. A rewrite would have to be carefully done as to not upset the sites key words and will have to maintain these in the future if a rewrite of the sites content is chosen.

5.6 Overall

Overall I think the site is growing in proportion with the success of the REMOVED business within the Tees Valley region and only a few changes are needed to progress the business further in relation to the websites performance.

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