Measuring the influence of bloggers on corporate reputation

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Contents

Introduction

The corporate world has discovered blogging. There are two diametrically opposed views of it. It is either a phase shift in corporate communications ("Blogs will change your business" Business Week 2nd May 2005) or a new corporate apocalypse "Attack of the blogs" (Forbes 14th November 2005).

Blogging seems to be evolving from a fringe phenomenon into something more widely adopted in society as a whole. Blog search engine Technorati now indexes 22 million blogs[1].

This white paper – the first of two - sets out to answer questions we are often asked by customers:

- How important are online commentators to my business?
- How important are bloggers in particular?
- Can their influence be measured?
- If so how?
- Are bloggers really a unique threat to corporate reputation, as Forbes suggests, or a huge opportunity as Business Week implies?
- And if so why?

In our next white paper we will deal with the issues that flow from this:

- Is there anything I can do about it?
- If so what?

Google offers any website a general measure of relevance – Page Rank. It was our hypothesis that this approach underestimated the impact of bloggers. In this white paper we look at a more specific measurement of blogging influence, one that is particular to a theme or topic. This, we argue, gives us a new metric of relevance more appropriate to the way the internet works, where websites have authority as a result of having relevant links from websites which are themselves authoritative.

We take as an example the blogger Jeff Jarvis and his blogsite Buzzmachine. Jeff Jarvis had a faulty Dell laptop and a negative experience of Dell's customer service. He blogged about this and brought the story into mainstream coverage from the Washington Post, The Guardian, the Wall Street Journal and the New York Times. Our study examines whether Jeff Jarvis has had any impact on the public perception of Dell's customer service.

[1] www.technorati.com: 30th November 2005

Background

The online community of consumers is no longer a sub-group. 60% of the UK population is now online. One UK-based financial services company recently informed the authors that 80% of their new customers came to them online. Online consumers and searchers are the same people who might previously have telephoned a company or visited a store to business with them. Now they are online. They blog, they visit messageboards, they chat, exchanging news and views.

This means that they can be powerful advocates for a company's products or services. Conversely it also means that they if they are disappointed they may go on the record about it in a message board or a blog.

The key point is that if they blog their criticism is

a)   Search-engine friendly
b)   Published to multiple sites simultaneously
c)   Permanent

The fact that a blog page exists and is indexed by search engines indefinitely means that others who have similar interests, or even similar problems, are very much more likely to find and to link to a critical comment. Each link that a commentator makes tends to be in the context of relevant keywords such as e.g. "iPod Nano scratch", giving a huge Google boost to the visibility of the critical remark on relevant searches such as: "iPod Nano"

Figure A

The above search for iPod Nano, as well as turning up Apple's own content, has produced stories from the BBC and the Register alluding to customer service issues with scratched screens. This effect matters: 75% of all customers who use Google or another search engine are looking to transact with a company[2]. Research shows that the Google search for a company (e.g. Ford Motors) is likely to be much more heavily trafficked than their own home page[3]

The consumer's strategy will be to input the name of the company or product, and sometimes another defining word. Often the defining word is a negative quality: "problems", or "reliability".

[2] Georgia Institute of Technology survey, quoted by Alan Webb of Abakus Internet Marketing
[3] Speaker presentation, Graham Hansell, Sitelynx. In the City, ICA London, 7th June 2005
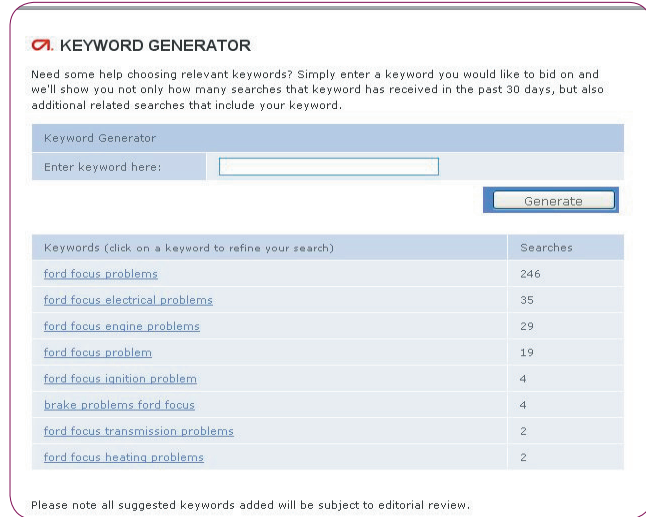
Figure B
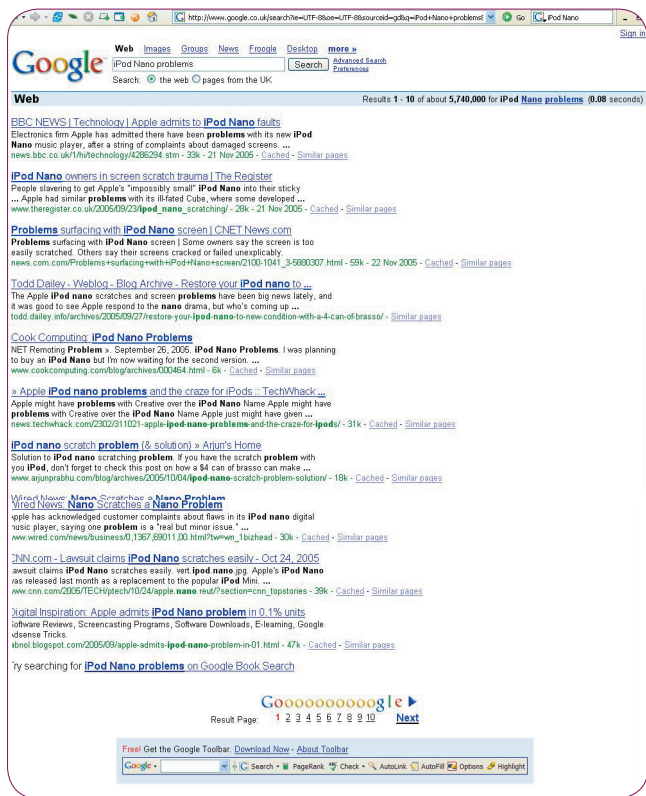
Search for 'Ipod Nano problems' and five out ot the top ten entries are from blogs. Entries 4, 5, 6, 7, 10 are from Todd Dailey, Cook Computing, Newswhack, Arjunprabhu, Labnol. The permanence of the blog postings means that other bloggers and web surfers are likely to discover these comments.
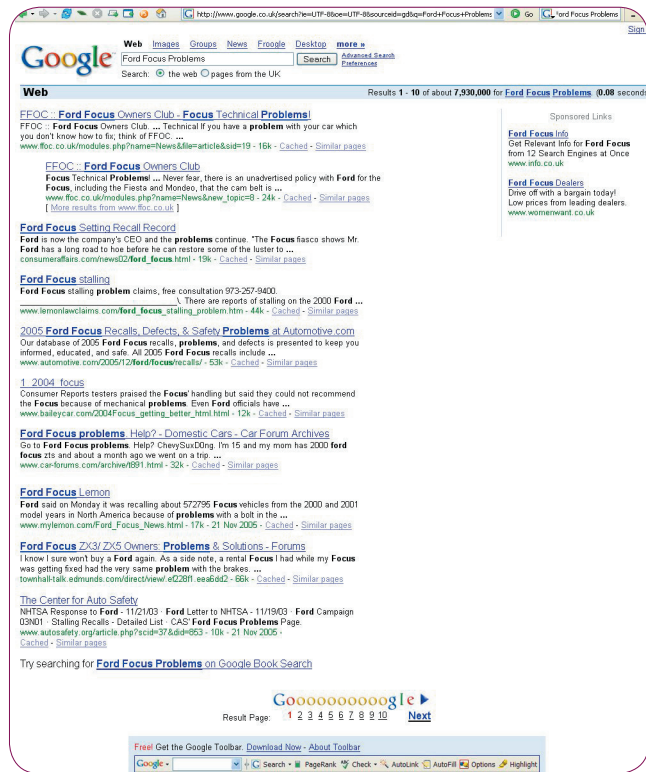
This effect doesn't just work for technology products like the Nano. Ford customers looking to purchase, or existing owners of the Ford Focus are – according to statistics offered by the search engine marketing experts Miva – searching in large numbers for "Ford Focus problems".

Figure C

And this is what those searchers find when they get to Google:

Figure D

…a variety of user-generated commentary about problems with the Ford Focus in the US and UK.

All this shows that where there is negative commentary about companies on the Internet, much of it seems to be blog-generated.

But how much how real influence do these bloggers have?

Measuring the influence of blogs

There have been several attempts to measure the influence of blogs.

The conventional techniques of measuring the influence (or "relevance" or "authority") of a blog would all use conventional ways of measuring the success of any website:

a) the number of links
b) the number of sites linking in
c) the volume of web traffic

The problems with the above approaches are
a) Number of links: the links can all be from one site that does not have any influence
b) Number of sites linking in: this assumes that all sites have equal influence. This is not just counter-intuitive, it is also wrong: The New York Times is more influential than a single blogger.
a) and b) also fail to measure indirect influence. If A influences B and B influences C, A may be said to have influenced C.
c) Volume of web traffic: what does the traffic relate to? is it relevant? The visitors could be very important opinion makers or people who are not relevant to
the topic.

The problem is that general influence measurement, even when done well, for example by Google, suffers from one major flaw: a site has only one measure of influence. This means that the context is not taken into account. A site's influence – according to Google – is the same on every subject. The New York Times is judged by Google to be equally influential on local NY Restaurants, US Politics and the local birds of the London parks. Conversely the influence of marketsentinel.com is the same on blogging and on New York restaurants. This is not in fact the case.

This is one of the reasons we suggest that the measurement of a website's **issue-relevance** (or **issue influence**) is a better measure of the impact of a website on a particular topic, or company than **general influence.**

This paper is about a new model to define online influence, where influence is defined.

a) per topic
b) using keywords

Case study – Dell and Buzzmachine

In June 2005 blogger Jeff Jarvis complained about his new Dell on his blog Buzzmachine. It appeared that despite his paying extra for the machine to be repaired by an engineer at his home, the company was not in fact able to provide this service.

As soon as Jeff started blogging about this, he discovered a large group of other aggrieved Dell customers. One of them even rebuked Jarvis for not Googling on the search "Dell customer service problems" before he bought the computer.

Jeff Jarvis is a communications professional and a blogger, and his series of increasingly agitated complaints about Dell brought him first hundreds and then thousands of links, emails and comments from other angry Dell customers. He became their spokesperson.

Here are the first ten results of the 2.4m Google results on the search term "Dell Hell".
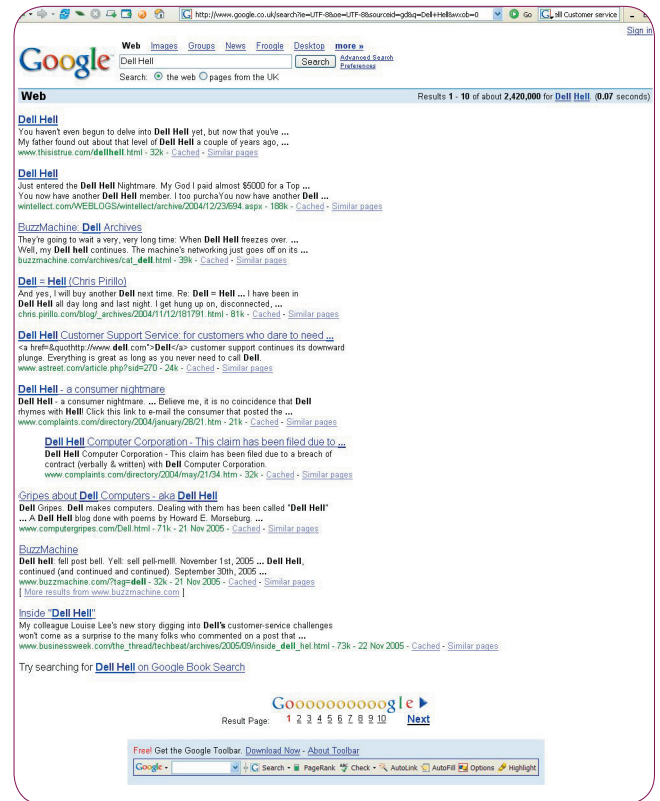

Figure E

Dell came to prominence as the first mass mail order, telephone and online computer outlet. By manufacturing computers to order and making optimum use of stock control to cut its inventory costs, it cut down on the cost of computers to consumers and put many of its rivals out of business. It provided an acclaimed model of telephone and internet-driven customer support.

Here is a conventional account of the Dell story. From 2001, as part of continued moves to cut their costs, Dell offshored its customer service to India and cut back on engineer visits to customers' homes. However it continued to sell packages that promised such visits. Customer complaints mounted[4]. However, the stock price rose in response to Dell's increased margins.

4 The company's American Customer Satisfaction Index for example reported a fall-off: http://www.theacsi.org/second_quarter.htm

Figure F
Dell Stock Price

Dell ramps up off-shoring on its customer services

2005, Jeff Jarvis drew attention to Dell's failure to repair his defective laptop at his house (as promised by his service agreement) in this blog post.

Dell lies. Dell sucks

I just got a new Dell laptop and paid a fortune for the four-year, in-home service.

The machine is a lemon and the service is a lie.

I'm having all kinds of trouble with the hardware: overheats, network doesn't work, maxes out on CPU usage. It's a lemon.

But what really irks me is that they say if they sent someone to my home -- which I paid for -- he wouldn't have the parts, so I might as well just send the machine in and lose it for 7-10 days -- plus the time going through this crap. So I have this new machine and paid for them to FUCKING FIX IT IN MY HOUSE and they don't and I lose it for two weeks.

DELL SUCKS. DELL LIES. Put that in your Google and smoke it, Dell.

Over the next few days and weeks, other aggrieved customers and interested bloggers discovered and responded to his problems. Dell responded to Jeff Jarvis by offering a refund. One of its spokespeople commented that the company had a "look don't touch" policy about blog commentary. In July 2005 Dell closed down their popular online customer service forum. Whether coincidentally or not, Dell's sales stalled. In October 2005 Dell issued a profits warning.

In the case study we decided to take a look at Dell, in relation to their quality of customer service, which was one of Jeff Jarvis's key issues. The question we wanted to address was this:

• To what extent have public attitudes towards Dell's customer service really been affected by Jeff Jarvis's account of his experience (the shorthand we used here is the phrase "Dell Hell")?

• While this is a high profile story in the blogging and PR community, has Jeff Jarvis – a single consumer writing about his faulty computer - really had any impact on this huge brand?

If Jarvis had an influence beyond the blogging and PR community, we wanted to discover the characteristics of that influence and from there determine what this might tell us about the ability of bloggers to mould public opinion.

Topic One: "Dell Hell"

In order to do this analysis, we examined two key search terms. First was "Dell Hell" itself – an expression coined by Jeff Jarvis which became shorthand for the customer service issues he experienced. The second was "customer service" in the context of Dell. We did this second analysis to examine to what extent Dell's reputation for high quality customer service had been affected by the controversy, and establish whether critics like Jeff Jarvis had influence over perceptions of Dell's customer service.

Appendices A and B explain in detail how our analysis worked. In a nutshell: we crawled the internet and built a list of all the sites mentioned in the context of the expression "Dell Hell". We call these sites "stakeholders"

We then rank them by three measures:

1. Number of citations by other stakeholders
2. How often the stakeholder is the source of relevant information for another stakeholder
3. How much influence is given to a stakeholder by other important stakeholders on this topic

In the first analysis we look at the phrase "Dell Hell". First we count the number of mentions of a stakeholder in the context by other relevant stakeholders and make a league table of our sites.

Dell hell - Citations

Organisation	Citations
Buzzmachine	68
NY Times	40
Slate	39
Yahoo	36
Businessweek	33
Micropersuasion	26
BBC News	25
CNN	25
www.bloglines.com	24
Dell	24
Guardian Unlimited	23
Washington Post	22
sethgodin.typepad.com	21
www.mediapost.com	21
Wired News	20
customerevangelists.typepad.com	18
Wall Street Journal	18
www.livejournal.com	18
Engadget	18
Fortune	17
BoingBoing	16
Forbes	16
news.google.com	16
Calacanis Blog of CEO of the blogging network Weblogs Inc	15
www.whatsnextblog.com	15

68 stakeholders cite Jeff Jarvis's blog Buzz Machine, many repeatedly. The rest of the top ten is made up of other mainstream media outlets which featured the story, as well as two key blogging influences – Steve Rubel's online PR-focussed "Micropersuasion" blog and the blogging aggregation site "Bloglines". Note that the lower portion of the top twenty-five is dominated by bloggers: Seth Godin (a marketing guru), customerevangelists.typepad.com (Ben McConnell and Jackie Huba), Live Journal (an aggregation site), Engadget (a technology magazine), BoingBoing (a general news blog), Jason Calacanis (CEO of a blogging company), www.whatsnextblog.com (BL Ochman).

The volume of citations doesn't reveal much on its own.

The next index, Information Influence shows the proportion of times a crucial piece of information passes via a stakeholder. By analogy: suppose you are a sports fan and the newspapers, websites, TV and radio are reporting on your team. They in turn get their news from players' agents, the team press office, the manager and players. Information influence gives you an indication of how often news about your team passes via, for example, the team press office.

Here is a table showing how often the Information passed via the stakeholders of "Dell Hell"

Dell Hell - Information Influence

Organisation	Information influence
Buzzmachine	37%
Micropersuasion	21%
Edbott	5%
blogs.chron.com	5%
Slate	4%
Gaping Void	3%
Guardian Unlimited	2%
customerevangelists.typepad.com	2%
chris.pirillo.com	2%
blog.hiwired.com	1%
Corante	1%
www.wintellect.com	1%
www.webwereld.nl	1%
www.truthlaidbear.com	1%
www.estatelegacyvaults.com	1%
redcouch.typepad.com	1%
www.loiclemeur.com	1%
blog.holtz.com	1%
blogs.salon.com	1%
davenetics.com	1%
www.mediafact.nl	1%
TechRepublic	1%
beta.news.com.com	1%
www.rosenblog.com	1%
www.basicthinking.de	0%

Jeff Jarvis has huge predominance. 37% of all information is to be found via his website. Even more startling is the extent to which he is joined by fellow bloggers Steve Rubel of Micropersuasion, tech journalist Ed Bott, Dwight Silverman of the Houston Chronicle at blogs.chron.com and blogging pioneer Hugh MacLeod of Gaping Void. Between them these five bloggers influence 71% of coverage on this issue.

To look at how this works in detail, turn to Appendix C.

When stakeholders in the topic "Dell Hell" write about it, they rely very heavily on Jeff Jarvis himself and his blog site Buzz Machine, or on commentary on his case from four bloggers who are closely associated with him.

These bloggers cover this issue in a way that differs in many respects from conventional journalism. They are not reporting that Dell faces challenges in its customer services, quoting Jeff Jarvis and then quoting a Dell spokesman. No. They are reporting on Jeff Jarvis's problems, often in the context of a further example of Dell's troubles or of a further comment from Jeff Jarvis, referring to Dell's response (often in a link not to Dell, but to another blogger's report of what Dell have done or said) and adding some spin of their own.

For example on 30th August 2005, Dwight Silverman blogging on the Houston Chronicle website reported that Jeff Jarvis had heard from Dell spokeswoman Jennifer Davis.

The article is worth quoting in full, see overleaf.

Figure G, Post by Dwight Silvermann, 30 August 2005
*See **Table 1** for a list of sites linked by Dwight Silvermann's from this post.*

Dwight Silverman has broadened the discussion about Dell's customer service to include the context of "companies not getting the blogosphere". In this respect Microsoft and Hewlett Packard are positively referenced. It is noteworthy that all his references to Dell are indirect. He cites the following web addresses:

What is remarkable in this list is the

Table 1, List of sites linked by Dwight Silvermann for post in Figure G

1	http://blogs.chron.com/MT/mt-search.cgi?IncludeBlogs=2&search=dell+blogs
2	http://www.buzzmachine.com/index.php/2005/08/26/dell-sell/
3	http://www.buzzmachine.com/index.php/2005/08/29/dell-calling/
4	http://blogs.chron.com/techblog/archives/2005/07/follow-up_dell.html
5	http://publications.mediapost.com/index.cfm?fuseaction=Articles.showArticleHomePage&art_aid=33396
6	http://www.micropersuasion.com/2005/08/free_pr_advice_.html
7	http://www.technorati.com/
8	http://www.technorati.com/search/katrina
9	http://www.technorati.com/tags/katrina
10	http://channel9.msdn.com/
11	http://h20276.www2.hp.com/blogs/index.jsp
12	http://en.wikipedia.org/wiki/Astroturfing

predominance of references to other blogs. 11 of the 12 references are either to Silverman's own archive, or Jeff Jarvis's blog Buzzmachine, Steve Rubel's Micropersuasion, the blog search engine Technorati and to Microsoft's and Hewlett Packard's blogging efforts.

A measure of Information Influence in respect of "Dell Hell" shows that bloggers are relying on other bloggers for their news.

Information influence shows how the news flows and therefore how it is controlled.

To measure the authority of different sources, one has to calculate the "Issue Influence Index" for Dell Hell. This gives each blogger and news source a rating derived from the volume of links he or she receives from bloggers or news sources which are themselves authoritative on the issue. This authority is derived from being cited in turn by other authorities. In this scale someone with an index of 4 is twice as authoritative as another person with an index of 2.

Dell Hell - Issue Influence Index

Organisation	Issue Influence Index ™*
Buzzmachine	**11.71**
Dell	**4.83**
Slate	**4.45**
Yahoo	**4.30**
NY Times	**3.94**
www.mediapost.com	**3.42**
www.bloglines.com	**3.20**
Businessweek	**3.08**
Edbott	**2.75**
www.mediafact.nl	**2.69**
BBC News	**2.68**
Forbes	**2.38**
www.livejournal.com	**2.34**
www.snopes.com	**2.32**
www.ps260.com	**2.23**
www.tomshardware.com	**2.20**
www.blogshares.com	**2.20**
www.computergripes.com	**2.20**
Micropersuasion	**2.13**
Slashdot	**2.12**
Washington Post	**2.11**
www.townhall.com	**2.10**
mediachannel.org	**2.06**
Wired News	**2.06**
www.forimmediaterelease.biz	**2.03**

Jeff Jarvis's Buzzmachine blog is the most influential voice here. Jarvis is more than twice as authoritative as Dell on the issue of Dell's poor customer service ("Dell Hell"). Then come some online media sources like Slate and Yahoo. Note that the venerable old New York Times has only a little more influence then the niche online media news purveyor mediapost.com, that Business Week is outpointed by the bloggers of Bloglines, that Ed Bott is more influential than BBC News. Never heard of urban legends message board www.snopes.com? Or www.ps260.com?[5] Or tech review site www.tomshardware.com? Well they all have a high in this context ("Dell Hell") than the Washington Post. This suggests that in the context of this story the Washington Post has less authority for other stakeholders. Tom knows a lot about hardware and customer services issues.

Why is this so? Well, part of the impact of blogs is to do with something which one might call: the "my story" phenomenon. If I am reporting on something that has happened to me I am the most authoritative source. Anyone writing about this story links primarily to me, because I am the authority. It is my story after all. Bloggers, and even conventional journalists give a great deal of authority to bloggers in this way. They quote the blogger, and link to him or her, often using a direct quote. They rarely, if at all, look for the

[5] ps260 has direct links from blog.lightfrog.com, blog.hiwired.com, batesline.com; Snopes mainly gets their influence from blogs.chron.com

* Issue Influence Index is a trademark of Onalytica Ltd.

other side of the story. This is exacerbated in Dell's case by the company's failure to engage with the bloggers who were writing about them, by commenting on their blogs for example, or setting up their own blog site to put their side of the story. As we have seen, bloggers like Dwight Silverman who wrote about Jeff Jarvis and had even talked to Dell, would nevertheless rely on Jeff Jarvis's own account of his conversations with Dell. This meant that Dell's "defence" was mediated via a highly sceptical group of writers.

There are two very strong effects wrapped up in this. One is: if Jeff Jarvis has a certain authority on a topic and another authority (Authority A) links only to him, Authority A gives Jeff **all his** authority. This gives Jeff additional Google ranking. The other effect is that if a number of different people link to a particular source, all using a particular phrase, this gives that source enormous prominence in relation to that phrase.

What this can mean to a corporation is that if their own brand name (Dell) and a keyword (Hell, in this case) are the subject of commentary by an influential blogger, they may end up in a situation where they have less authority than their most violent critics.

We will deal with the power of the single issue blogger further in our next white paper, looking at how corporations should respond to the blogging phenomenon and examining ways in which corporations can seek to balance this prominence.

You might object to our approach here. "Dell Hell" is a silly tag, you might argue. Only a blogger would use it. Conventional media coverage would be more measured, and less likely to take a single source at his own estimation and by so doing give disproportionate coverage to a maverick writer and his one-off negative experience.

Because of this we looked for a control topic: Dell's customer services.

Topic Two: Dell + Customer service

We wished to establish to what extent the Jeff Jarvis-inspired "Dell Hell" theme had affected the overall discussion about Dell computers in this area – i.e. their customer service. So we ran another analysis, this time looking at how the entirety of Dell's customer relations was viewed. The keywords on this occasion were Dell and "customer service" or "customer support".

So first of all: who cites who on this topic?

Dell is – unsurprising – the stakeholder most often cited in the context of its own customer relations. Close behind come Yahoo, MSN and the online mainstream media – New York Times, CNN, The Register, BBC News and the Guardian Unlimited. Buzzmachine itself is still reasonably prominent, at number 14.

Dell Customer service - Citations

Organisation	Citations
Dell	**59**
Yahoo!	**47**
MSN	**43**
NY Times	**34**
CNN	**31**
The Register	**29**
BBC News	**28**
Slashdot	**28**
Wired News	**28**
Businessweek	**27**
Forbes	**26**
eWeek	**25**
ZDnet	**25**
Buzzmachine	**24**
Reuters	**24**
USA Today	**24**
Wall Street Journal	**24**
Washington Post	**23**
HP	**22**
Google	**21**
Guardian Unlimited	**20**
IBM	**20**
SeattlePI	**20**
Computerworld	**19**
PC World	**19**

The Information Influence table is a shock for Dell. The stakeholder who is most often cited by other stakeholders on Dell's customer services is Jeff Jarvis's blog Buzzmachine.

Buzzmachine beats Dell itself as a source of information on Dell's customer services. Almost as bad, the tech PR blogs Micropersuasion and Corante come close behind. To put it another way, the stakeholders who are most inclined to single source their news about Dell's customer services are predominantly using Buzzmachine. This means that they are disproportionately likely to take their information on the topic of Dell's customer services from someone who is telling a story about a highly negative experience.

Dell customer service - Information Influence

Organisation	Information Influence
Buzzmachine	**18%**
MSN	**10%**
Dell	**9%**
Corante	**7%**
Infoworld	**7%**
Micropersuasion	**6%**
Novell	**4%**
TechRepublic	**3%**
Fast Company	**3%**
CNN	**2%**
Engadget	**2%**
NY Times	**2%**
Doc Searls	**2%**
SiliconValley.com	**2%**
Edbott	**2%**
Information Week	**2%**
PC Magazine	**1%**
Calacanis Blog of CEO of the blogging network Weblogs Inc	**1%**
ExtremeTech	**1%**
PC World	**1%**
Computerworld	**1%**
MacWorld	**1%**
Salon	**1%**
ZDnet	**1%**
The Register	**1%**

But who is the most influential stakeholder on the topic of Dell's customer service?

There is some good news for Dell here. On the issue of its own customer service it is still by far the most authoritative voice - that is it is given the most authority by other authoritative stakeholders. But there is also bad. If we tally up the sum of the issue influences of bloggers (not all of whom are listed here) it is 11.12. This gives bloggers as a whole almost as much influence on Dell's customer services as Dell itself.

Jeff Jarvis's blog Buzzmachine is at number 11 on table 6 compared to number one on table 5. Our observation is that those stakeholders (mostly bloggers) who take their news from Buzzmachine tend themselves to rely on fewer sources for their information, and are themselves viewed as somewhat less influential by relevant authorities. However, Jeff Jarvis has more influence than Reuters, PC World, Fortune and Forbes magazine. It is noteworthy that Microsoft's influence on this issue is mainly derived from their own blogs, and in particular Robert Scoble's blog. Hewlett Packard's influence is because of frequent comparison of their own customer support (delivered by a peer-based network of fellow HP-owners) with Dell's.

Dell Customer service - Issue Influence Index

Organisation	Information Influence Index ™
Dell	12.33
all bloggers	*11.12*
Yahoo!	4.32
NY Times	3.88
MSN	3.71
USA Today	3.57
PC Magazine	3.56
Microsoft	3.42
HP	3.16
Cnn	3.07
CNET	2.95
Buzzmachine	2.81
Austin360	2.76
PC World	2.55
AOL	2.50
AlienWare	2.49
Comstock Interactive Data	2.38
Reuters	2.38
Extreme Tech	2.37
Information Week	2.16
Fortune	2.15
Forbes	2.14
Linux Insider	2.10
Mac News World	2.09
Intel	2.09
Jive Software	2.06

Conclusions

What conclusions can one draw from this study?

a)   Jeff Jarvis's Buzzmachine is the key online source for those who have a negative perception of Dell's customer service;

b)   Its influence is enhanced by support from a closely-allied group of bloggers

c)   Dell's own influence on the topic of its poor customer service is weak

d)   Jeff Jarvis's Buzzmachine is the key source for low-influence stakeholders (normally bloggers) writing about Dell customer services in general;

e)   Taken all in all Jeff Jarvis's Buzzmachine is the eleventh most influential voice on Dell's customer services in general

f)   If the bloggers were aggregated they would be the second most powerful influence on perceptions of Dell's customer services after Dell itself.

In their cover story Forbes depicted bloggers as a lynch mob, hungry for a corporate scalp. They characterised bloggers as being high-handed, irresponsible, and cavalier about the facts. The Forbes story was roundly criticised in the blogosphere for being sensationalist.

Richard Edelman of Edelman PR observed:

[*The article is*] *a stunning attempt to create a parallel reality. In a style reminiscent of former President Richard Nixon* [*it*] *skewers the blogosphere as "the ultimate vehicle for brand-bashing, personal attacks, political extremism and smear campaigns."*

Another blogger characterised the article as a "blogosmear".

As we have shown in this white paper the article contains more than a grain of truth. Blogs are influential and they can be highly negative in their impact. Bloggers do operate in packs which predominantly reference one another (see Appendix D). However, by conventional journalistic standards bloggers have characteristics that weaken their individual influence: they single source stories and are themselves referenced by stakeholders who single source stories. Bloggers gain prominence and link volume by being outspoken and partisan, but this prominence comes at a price. As they lose balance, they weaken their credibility with key authorities (ie do not cite more than one source).

It is clear that one person's perception of a brand, if it chimes with that of others, can materially damage that brand. Dell's customer services now have a somewhat negative perception. This may not be the result of Jeff Jarvis's blogging, but he is viewed as an authoritative source on it. Any attempt to redress the public perception of their customer services by Dell will have to pass via Jeff Jarvis's influence.

The limitation of bloggers – their lack of journalistic "balance" – is the key to the way corporations should respond to blogging attacks. This is a subject we will deal with at greater length in our next white paper, where we will look at what companies like Dell should do, faced with similar threats to their reputation.

Appendix A: Methodology

The way our study works is that we look at links, or common phrases between different websites, which show one website referring to another in a particular context. We call this a "citation"[6].

Here is a example from the context of Dell

Jeff Jarvis (JJ): "My laptop is awful"

Two bloggers read it

Blogger one (B1): "I read that Jeff Jarvis's laptop sucks … you shouldn't buy Dell."

Blogger two (B2): "In reference to the issues Jeff Jarvis is experiencing, I have checked with Hardware insider, who have a piece about this, and to the New York times, who have linked the complaint with Dell's outsourcing their customer service to India"

The first blogger is influenced only by Jeff Jarvis, the second blogger is influenced by three entities, Jeff Jarvis, Hardware insider and New York Times.

A possible objection to this methodology is that it discounts possible offline influence on the first blogger. He may have discussed the matter with his friend, for example and not cited this conversation. This effect doesn't matter, because what we are comparing is the relative influence of the key entities. The first blogger's friend is not generally, or systematically cited.

Blogger three (B3): "I see Blogger one is reporting on the Jeff Jarvis laptop story."

Blogger four (B4): "Blogger four has mentioned the issues Jeff Jarvis is having with his laptop and Dell's customer service. There are worthwhile background pieces about this on CNN and ABC news".
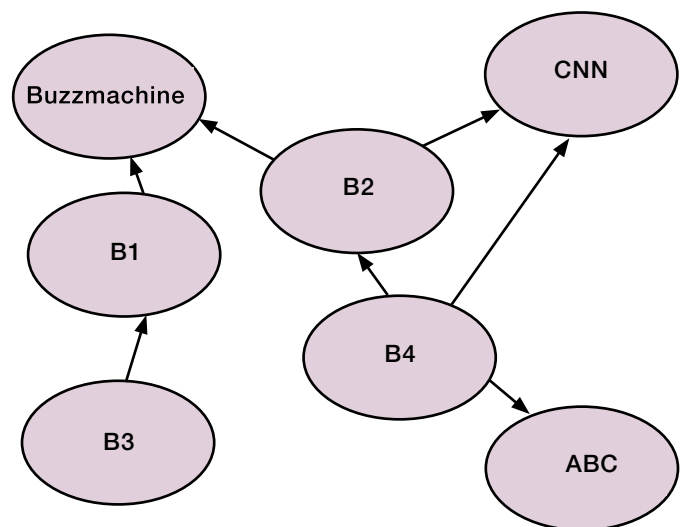
The diagram above lays this information out graphically. The arrows show the direction of the mention (citation). The stakeholders who have arrows pointing at them are exerting influence.

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6 At the heart of influence measurement is a simple, but central conjecture:

Person X has influence on Person Y if Person Y is dependent on Person X.

When measuring "issue influence" we rephrase that conjecture to say, if Person Y refers to Person X in the context of the issue of focus, it is because Person Y regards Person X as relevant to the context. It also means that Person X, to some extent, influence Person Y on this issue.

Based on the above systems of equations can be formed and influence calculated.

("Person" can mean organisation, website, person, etc, according to the context.)

Using this method we first find everyone who talks about the issue. (or a relatively representative proportion). We eliminate anyone who only talks about it once. What remains are players who are cited by multiple sources. We refer to these people as stakeholders. They can be people who are writing about the issue, publishing commentary on the issue or who are referred to by other commentators.

We then do some mathematical noise filtering. We end up with a list of stakeholders who are referred to from the context of the subject, that is to say, they discuss "Dell Hell" and they reference the other stakeholders.

We then use three metrics to assess this group:

1.Citations

First we count mentions of a stakeholder by a fellow stakeholder. We only count a person who cites a stakeholder at least once. We do not count self-mentions. This gives us a crude indication of how influential a person is. This is the measure that Technorati calls "authority". This measure is only relevant in the context of the other metrics.

2. Information Influence

The next step is to assess "Information influence". This measure indicates how often information passes between one stakeholder and another via a particular party. Information Influence indicates what proportion of the overall information an stakeholder could exert influence over.

Coming back to our diagram above, Bloggers 1 and Blogger 2 are in the middle of the information chain and therefore have information influence over the message.

This measure is one in which traditional media have always been strong since they gather information from lots of sources, aggregate and transmit it.

3. Issue Influence Index™

The third measure is the "issue influence index". This measure uses a method familiar to the academic world, where the influence of an author can be worked out by the influence of those who mention (cite) him or her. The influence of the people who mention (cite) the first author comes in turn from the influence of their own citers.

If Blogger 3 mentions Blogger 1 (the direction of the arrow shows that mention), one has very strong influence over three. The index is a scale, from 1 (a stakeholder with no influence) to 4 (which is the number of stakeholders being analysed). A player who has an influence of 4, has twice the structural influence of someone who has an influence of 2.

IMPORTANT NOTE: To be influential you don't have yourself to cite a topic. You can be cited in the context of a topic by someone who is themselves influential. If they deem you to be relevant, you are.

Apendix B: The process used by this study:

1. We crawled the Internet and identified 2790 distinct documents[7] referring to the topic (e.g.) "Dell Hell".

2. We identified the relevant stakeholders. Stakeholders can be:

- People who are writing about the issue;
- People who are publishing articles about the issue;
- People who are referred to by commentators writing on the issue (such as Hardwareanalysis.com);

We then analyse the stakeholders using collaborative filtering.

If nobody or very few people refer to a potential stakeholder and the potential stakeholder does not refer to anybody they are thrown out;

3. We perform a manual inspection to eliminate false positives – in other words, mentions which don't relate to the context.

4. When we completed this process we had identified 888 relevant stakeholders. Of the 888 stakeholders 250 were identified because they use the expression "Dell Hell". The rest were identified, because they were cited (in a "Dell Hell" context) by several of the 250 stakeholders.

5. We found 38080 citations between the stakeholders. This allows us to calculate citation density. (That, the average number of mentions per stakeholders). In this it is c. 40 which is typical.

This is a moderately high density of citations, showing there is a general conversation going on, which is not dominated by one particular source.

The data was collected 6-8 October 2005. There was no geo-filtering, this was a global analysis.

[7] A document can be a freely-available non-subscription webpage, a PDF, a Word document, a Powerpoint presentation.

Appendix C

Inter-citing of blogging:

This section shows how bloggers like Ed Bott and Dwight Silverman of the Houston Chronicle supported Jeff Jarvis's "Dell Hell" campaign.

The following stakeholders cite blogger Ed Bott in the context of Dell Hell (the number is how many times):

url of site	citation
blogs.chron.com	29
dev.upian.com	12
Buzzmachine	8
www.netrn.net	8
Micropersuasion	7
www.wintellect.com	4
www.desparoz.com	3
office.weblogsinc.com	2
www.truthlaidbear.com	2
www.thisistrue.com	1
chris.pirillo.com	1

Sites citing www.edbott.com in the context of "Dell Hell"

About Market Sentinel

Market Sentinel was founded in September 2004.

Market Sentinel's unique algorithm offers live 24/7 online monitoring on any topic in any language, selecting the sources most relevant to your brand.

The company:

• benchmarks corporate reputations,
• measures the "audibility" of corporate messages
• provides online publishing services, including blog creation and linking strategy.

In 2005 it was nominated for "Hottest Start Up" in the Net Imperative Awards.

Our customers include a number of large UK, US and International companies and major PR agencies.

CEO Mark Rogers, was previously co-founding commissioning editor of BBC Online, and co-founder Amazon.com Anywhere.

Online publishing director Sheila Sang was previously editorial director at AOL UK, BBC Online, Handbag.com and Barclays Bank

CTO Ian Davis, was co-founder Calaba (now Surf Kitchen), architected Sky Interactive's recently-launched TV e-commerce service. Pioneered and co-wrote RSS 1.0 XML news syndication standards.

Simon Rogers, Director of Sales and Marketing is a chartered accountant whose background includes senior positions at Hoskyns, Cap Gemini, Burberrys, Corning, and Norcross.

How can we help you?

For an online brand audit showing how your message works online contact: simon.rogers[AT]marketsentinel.com

**or phone +44 (0)20 7793 1575
or +44 (0)79 7700 1372**

About Onalytica and how we can help

Onalytica can help you improve your understanding of who influence issues and brands.

Armed with the intelligence we can provide, we can help you get your message across more precisely and more cost-effectively.

Onalytica was founded in 2003 and we are based in London, United Kingdom.

We have done work for private and public organisations in United Kingdom, Ireland, Scandinavia, Japan and the USA.

Our main services consist of Stakeholder Analysis and Social Network Analysis.

Our services in Stakeholder Analysis provide our clients with a clear picture of how stakeholders of a particular issue, organisation or brand influence each other.

This knowledge help our clients communicate their messages more cost-effectively, improve their brand positioning and manage influencers.

We conduct stakeholder analysis on topics of interest to individual clients. We also publish regular reports on industry specific issues and issues of general interest.

Contact Flemming Madsen on

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email at flemming.madsen[AT]onalytica.com

for a discussion of your requirements.

www.onalytica.com

About Immediate Future

immediate future Ltd is an independent public relations agency, specialising in online PR for organisations wanting to maximise their exposure on the web.

From corporate blogging to blog relations and search optimised releases to podcasting, immediate future has expertise across the spectrum of online PR tactics.

Great online PR is understanding how to manage client-customer conversations; planning for the longevity and searchability of online content; and developing a sixth sense for the nuances and personalities of communities, bloggers and influencers. With careful strategic planning, guidance and proven tactics for implementation, immediate future assists clients in reaching its audiences on the web.

immediate future builds and manages the reputations of progressive brands such as EMI, Virgin Records, The Association of Online Publishers (AOP) and Pigsback, by keeping one step ahead of audience influencers.

Our online PR expertise has proven to drive traffic to websites, develop stronger relationships with journalists and create a positive reputation by tapping into the buzz of blogs and citizen sites. Clients benefit from widespread, positive, measurable coverage and develop relationships with key online influencers. Our monitoring services and influencer profiles ensure difficult issues can be addressed quickly and a crisis plan activated.

How we can help you

Want to discover more about online PR and how to manage your online reputation?
Call Katy on 0845 408 2031 or email Katy.howell [AT] immediatefuture.co.uk to discuss your requirements.

www.immediatefuture.co.uk