

# What is the digital divide, and what implications for society and the individual are seen to arise from this?

## *What is it?*

The term 'digital divide' refers to the disparity in terms of access that has emerged following the advent of electronic information and communication mechanisms in the realm of consumer technology. Notably, this notion of 'access' applies to more than mere physical proximity and availability of resources – Mark Warschauer's text, *Technology and Social Inclusion*<sup>1</sup> argues that the primary barrier to be overcome in terms of equitable access is not simply implementing the technology in the first instance, but implementing it in a way which does not simply view infrastructure as the first and only barrier to be overcome, instead heeding the issue of training and skills development as an inextricably connected aspect of the same problem.

In light of this, the 'digital divide' is beyond resolution through simply attaining (or donating, with regard to aid efforts) appropriate resources – ongoing, consistent efforts are required, at least for a period sufficient to rectify the situation in the medium term. That is to say, until industry and, perhaps more importantly, education, exist and are well established in whatever demographic the disparity was evident in (be that geographic, racial, or otherwise), such that this industry and education may be self-sufficient, to sustain and promote the growth of Information and Communication Technology (ICT) literacy in that region.

Having identified that need (although perhaps not having justified it), what is required? Clearly, infrastructure is. In many places, however, this need has already been fulfilled through aid donations from 'corporate citizens', aid organisations, and governments – note this does not necessarily mean foreign governments – it is important not to view the digital divide purely geographically, and, even if it is, the geography of an individual state may create an inequitable climate in terms of access – Australian rural areas are an example of this, as recognised in the NET\*Working 2002 Vocational Education conference<sup>2</sup>.

It is now commonly understood in circles where the 'digital divide' is of holistic concern (that is, not as much the realm of electronic content creation – which may be *aware* of and actively working to rectify the divide, even though they are not aware of issues associated with it which do not directly impact their activities) that training and recognition of non-physical issues as necessarily a part of any approach to overcome said concern. Understanding this, then, provides necessary grounding for understanding what the 'digital divide' is.

## *Implications for society*

The digital divide, viewed at a societal level, is not without a degree of 'prior art' that may be applied in order for objective, contextual, examination to occur. In this instance, the 'prior art' is found in the Industrial Revolution which occurred globally from the eighteenth century onwards – this is still occurring in many contemporary states, such as (provinces of) China and other nations (primarily in Asia).

What, then, is the picture presented from this 'prior art'? Is the portrait painted one of bleak defeat and growing societal and economic disparity? Or, in this real-world scenario, is a resolution of this 'divide' something that is attainable, and, if it proceeds along the same lines as the Industrial Revolution, the natural outcome to which events shall point?

The Industrial Revolution first occurred in any real form in Britain and the United States, and then propagated to various European nations and, to a lesser extent, colonies, in the nineteenth century. Prior to this revolution, it has been noted that China and Japan were at a similar point in societal development to that of Western nations, however industrialisation did not occur there until much later. Reasons attributed to this have ranged from proximity and capacity for communication of ideas (as opposed to the *type* and *rate* of ideas and how rapidly these were being explored) to mere geography, however this is largely irrelevant to the present discussion. Of greater consequence is the Meiji Restoration in Japan in the late twentieth century, during which they achieved in less than 40 years an industrial capacity that had taken western nations two centuries to develop. If ever there were a success story with regard to rapid industrialisation, Meiji Japan was it.

Of course, industrialisation does not occur (and has not occurred) without significant societal strain. The Meiji Restoration in Japan resulted in significant social turmoil, especially in terms of their class-structured society, but also in the sudden concentration of population in urban areas. The time period in which this occurred, in contrast with that of Western nations prior to it, accentuated the effects of this change process – whilst industrialisation enabled international competitiveness (especially in terms of high-value silk exports) and economic benefits, the speed with which this was achieved lead to societal suffering greater than that experienced in Western nations, where urban facilities could be developed in step (or at least closer) with the influx of new population from rural areas.

Today, Japan is a globally recognised force economically and industrially, and a leading innovator in the fields of electronic and information technology device manufacture and adoption. It boasts one of the highest standards of living in the world, and one would be hard-pressed to find any remaining disadvantage with which Japan is burdened as a result of its (comparatively) late industrialisation.

Clearly, late adoption is not a barrier to subsequent achievement and even restoration of status. Rudyard Kipling's *Cities and Thrones and Powers* may also be cited, if

poetic rather than historical-political reference is desired – the point stands. Achievement at one point does not guarantee continued status, and late adoption does not require the continuation of any detriment that may be found in that, either.

A view of the Digital Divide should, perhaps, be akin to this – but possibly not. This ‘prior art’ has shaped the direction and nature of the world, as has the technological revolution which followed it – of which debate is now held. The world, though, has not yet fully industrialised. Nations may be developing, or simply not holding either the desire or the resources *to* develop – several small Pacific islands are an example of this. Ironically, some of these have achieved a status of technological advancement (albeit at a nation-state level, rather than for the general populace) without ever experiencing industrialisation, as a result of exploitation on an international level of their domestic legal systems – several such islands are now used for the purposes of money laundering, etc.

Inherently, this only serves to accentuate the point that ‘first achiever’ status is non-essential. Viewed holistically, however, this renders any such prior art inconsequential – nations did not achieve an industrialised state through foreign abuse of internal policy.

The digital divide, then, may be likened to past events and linked with past policies, yet these do not clearly encompass its scope or the manner in which the world must proceed in order to achieve resolution to the present situation – partially because there is no established path to trouble-free industrialisation, and as such it is impossible to ascertain such a path for progression in terms of ICT adoption and implementation. Clearly, nations that are generally considered ‘prosperous’ and ‘developed’ are more likely to fall on the ‘developed’ side of this digital divide, and, given wise internal policy, are likely to stay there through continuing change. Having said this, however, even within nations there are factors that may affect the access of specific groups to resources, such as geography (speaking of networks, for a moment, there is a clear limitation that arises in terms of the *quality* of resources, more than anything, as a result of physical distance) and regional demographics.

At a societal level, then, ICT adoption in terms of the emerging divide cannot simply be likened to a past revolution of technology, even in the manner discussed above. Viewed in greater detail, the potential parallel collapses even further, as the ICT “revolution” occurring at present is in terms of access to *information*, restructuring society and, ultimately, creating horizontal networks, which is perhaps the reverse of the outcome of the Industrial revolution (the creation of hierarchical networks) in its consequence, and entirely different in process – the Industrial revolution being about innovations in production and industry, resulting in the creation of a new class and a restructuring of society (evident in the social turmoil during the Meiji Restoration period in Japan)... through the process of ‘deskilling’ in which the capacity for independent thought is renounced, rather than actively promoted as with the freedom of expression inherently a part of this ICT revolution.

ICT can be seen to similarly result in the restructuring of society, however in doing

this, it damages or alters class structures, and create a new degree of equality in the potential it gives for use to achieve common communication. Conversely, limited adoption of ICT, as evident in the digital divide, could be seen to have another effect – the widening of divisions within society, not into class, but into a new class system of access.

A common misconception would have this new class system being labelled as binary in nature (pun unintentional, undesired, and unrelated) – that is, that it could simply be split into two categories of ‘have’ and ‘have not’. Whilst cursory examination of the matter may result in this understanding of the divide, any attempt to delve deeper will quickly result in an understanding that there are many levels within this seemingly binary divide.

Many factors combine to form this multi-faceted divide, the main aspects being:

- Physical access to technology
- Quality of technology
- Usability of technology
- Internationalisation/localisation of technology (specifically software platforms)
- Access to training
- Presence and impact of regional information technology sector facilitating further personal and professional development in terms of IT usage

Clearly, these factors cannot be condensed into simple categories of ‘have’ and ‘have not’ – representation of these in terms of the degree of access on a linear scale would likewise fail – a two-dimensional modelling of a six-dimensional issue (those six being the key factors outlined above) is overly simplistic and probably not advantageous in its modelling of the problem.

At a societal level, the problems that result from this divide are widespread and complex, and often beyond any attempts at visual representation in this regard, if not in scope alone. Analysis of the impact of the digital divide, and indeed the impact of ICT generally, at a societal level, is possible in a variety of forms focussing upon a variety of specific issues, however, for the purposes of the task to which this essay relates (namely a creative piece exploring the aforementioned issue), it appears more prudent to examine the role of ICT in relation to the *individual* within the construct of society, rather than the same in relation to society as a standalone issue; this lends itself to creating a deeper understanding of the requirements of characterisation within this text, rather than simply exploring environmental requirements, themselves shaped largely by the experience and interactions of the individuals which exist within them.

## *Implications for the Individual*

The individual within this new environment brought about by the (limited) proliferation of ICT resources is simultaneously burdened and empowered. In one sense, technology inherently comes with problems, as adoption of this becomes widespread; it is a collective action problem in which, for a time, the technology offers benefit to its users – but as adoption becomes widespread, the potential negative effects of this technology or action are realised. In an article entitled “Technology Bites Back”<sup>3</sup>, Dr Rob Sparrow from Monash University’s Centre for Human Bioethics cites the example of standing on seats at a rock concert to gain a better view: “The first person who does it gets a great view, but if everybody does it, no-body sees any better than before. They’re worse off, in fact, because they’re standing rather than sitting.”

The competitive advantage offered by mobile phones ten to fifteen years ago is now neutered by widespread adoption – and now an unprecedented expectation of constant connectivity and reaction/response exists, placing a burden upon, rather than granting an advantage to, many people. A similar situation is witnessed with more conventional electronic networks – the advent of email in the context of global commerce requires rapid responses to the point that consideration of the response does, in some circumstances, require notification that the message has been received and the responder is indeed considering the issues raised; customers have been heard to express dissatisfaction with email response times of greater than a day, compared to conventional (physical) mail, with which same-day responses are not the norm in a global context, and rare outside of a corporate environment in which physical proximity renders this realistic.

The individual on the ‘have side’ of the divide (protestations regarding categorisation stand, however, this terminology is retained with the traditional semantics attached to it held in mind, for the sake of brevity), then, is seen to be burdened with a need for immediacy in response to this change beyond that to which people of previous generations were subjected. This communication is, of course, at a peer-to-peer level, as opposed to any mass dissemination, although the same technologies could (can) be applied in this way (an example of this is evident in mass emailing, solicited or unsolicited), with varied effects.

It has been argued that, with the adoption of mass marketing techniques (not limited to those technologies relevant to the present discussion, although certainly including them), corporate and government entities have adopted a new form of language, which, though saying much, communicates very little and obfuscates what is communicated through the use of language “as contrived and artificial as the language of the 18<sup>th</sup> Century French court”<sup>4</sup>– in other words, to their audiences at least, companies sound “hollow, flat, literally inhuman.”<sup>5</sup>

*The Cluetrain Manifesto*<sup>6</sup> was a work published online in 1999 in the form of 95 Theses, and, in the foreword to the published text, *The Cluetrain Manifesto: The end of*

*business as usual*<sup>7</sup>, the writer of this foreword, Thomas Petzinger, Jr. of *The Wall Street Journal* claims that book is “one of the first books written as a sequel to a Web site”<sup>8</sup> – a claim probably not far from the truth. This wouldn’t be of significance, but for the *content* of what was written in both. Just as the author of this essay may chose to use an electronic form for the extension 2 task that he writes this for but does not, due to the inappropriateness of that form for the task at hand, *The Cluetrain Manifesto*’s message is one which *requires* an electronic form (in the first instance – the published book is an extension, not a basis) – for content, for distribution, for authenticity, and, ultimately, for the preservation of the ideals presented in the work itself.

What ideals, then, are presented? Authenticity is valued, certainly. Humanity is valued. The metaphysical construct of ‘the corporation’ is valued, but shunned in its present form – it is seen to have drifted away from its constituent’s nature, and into its own egocentric entity that fails to value the consumer. Open collaboration and discourse are valued. *Interesting* dialogue is valued, with authenticity, disclosure, directness, and a genuine voice.

*The Cluetrain Manifesto* challenges the corporate mindset regarding marketing in a post-industrial society, in which companies aim to ‘create relationships’. This is perhaps best addressed in point 25 of the manifesto, which reads “Companies need to come down from their Ivory Towers and talk to the people with whom they hope to create relationships.” The advent of global electronic networks has simultaneously been a blessing and a curse for the individuals connected to them. In one sense, it has allowed for the creation of smarter, networked markets – in the words of manifesto, “Hyperlinks subvert hierarchy” (point 7). In another, the misunderstanding of the nature of these global networks has resulted in a curse; the burden of the faceless entity upon this new ‘market’ – notably not this new ‘community’ or ‘connected people’.

This sentiment is echoed in Meikle’s book, *Future Active*<sup>9</sup>, which models the Internet around two basic concepts, known throughout the text as version 1.0 and 2.0. Somewhat ironically, the older version (version 1.0) is perceived to be the better model, with version 2.0 misunderstanding and corrupting the former. Examples are given throughout the work, which cites the success of Amazon.com as a byproduct of its version 1.0 nature, despite it being a commercial entity. Simply, version 1.0 refers to the pre-commercialisation Internet of open military-academic communication, extending forwards to the opening of the Internet to the public, but essentially prior to any overwhelming commercialisation of the Internet; version 1.0 is about open publishing and discourse.

Version 2.0, however, is closed publishing. It’s corporate websites, flashy reports, stuff-designed-for-print-but-stuck-online-anyway, and content and websites that generally fail to recognise the collaborative potential of the medium, instead viewing it as a network that is a *market*, rather than a network that is a *meeting place*. Amazon.com is about pre-developed content with commercial presentation, but is successful (according to Meikle’s text) due to its creation of a *community* around its products, in the form of allowing users

to comment on books/products and leave reviews – for free, in recognition of the pulling power of this open publishing that people flock to.

The Internet, for companies that don't understand the importance of this "version 1.0" model, is just an extension of another form of mass media – without recognising that, here at least, their 'target market' is free to switch to any 'channel' they wish – and the Internet is rich enough in content that this is of no substantial detriment to the targeted user, unlike its traditional broadcast counterparts.

The Internet, then, is another avenue for forced 'broadcast' (top down) communication, if this is how corporate entities perceive it. This communication is often very much in the same *style*, if in a different *form*, from more conventional broadcast communication – that is, still top down, still non-interactive, still "hollow, flat, literally inhuman" ... but the Internet is more than this, and "markets" (correctly people) understand that – "hyperlinks subvert hierarchy". With this in mind, use of the Internet as though it were simply another form of 'mass media' is, in most instances, misguided (exceptions being electronic presences of existing publications, specifically news sources – although these too would do well to permit a degree of interaction, a good example of this being the discussion features on CNet news.com and, to a lesser extent, some articles on the SMH.com.au website) and backwards-thinking. Meikle's *Future Active* proposes that activism is "backing into the future"<sup>10</sup>, applying old techniques and mechanisms to a new environment (the web) and *then* subsequently changing accordingly – not the other way around. This is equally true of the majority of electronic news outlets, and, as is beginning to be realised, with corporate websites such as englishcut.com<sup>11</sup> adopting a different mindset in the nature of their electronic presence, as the significance of open publishing and 'version 1.0' frameworks is realised.

With the recognition of the importance of this different mode of publishing, the present (overwhelming redundant) manner that many businesses currently utilise for all electronic communiqués will be seen to subside, to be replaced by more open, honest discourse between business, employee and customer, in a way that views "the Internet" as its own medium, not simply "TV with a buy button"<sup>12</sup>.

What does this mean in terms of the digital divide, then? Before the paradigm shift in the way corporations approached and thought about this new medium, in terms of business-to-consumer or business-to-employee communication, the "have not" group weren't, in terms of communication, missing out on anything significant. In fact, the communication was so facile, so trite, and so backwards looking that the "have not" group would find a better experience in television, print media, or simply *reality* itself. *The Cluetrain Manifesto* book carries throughout a "market" metaphor for the Internet – it brings people together, not as a *target* market, or any business-based understanding of the term, but rather as with markets in the most basic sense – a gathering of people to share, to converse, to exist in a common environment where not only goods are traded, but also *stories* and *experience*.

This, it is argued, is what an open Internet looks like.

Canadian comedy group *Three Dead Trolls*<sup>13</sup> have satirically described 'multimedia' as being "just like normal media, but not as good!"<sup>14</sup>. Multimedia is like "owning a TV that's three inches wide"<sup>15</sup>. In a way, that's how many aspects of the Internet are currently presented. Many content authors don't appreciate or understand how "multimedia" can be appropriately applied, and the overall effect is a far cry from cohesive, consistent, or usable. And yet people use it anyway, immerse themselves in it, despite its shortcomings.

What of this divide then? If, despite the imperfections of the medium and (more significantly) its applications, people who *can* access this resource by their volition *elect to* – then these imperfections are outweighed by the perceived advantages the medium offers. Apparently.

Is the value misplaced? Is the implementation of this seemingly empowering technology such that the 'empowering' is lost and the 'technology' is a ruling influence? The timeless question resounds – is technology serving us, or is the reverse true?

Given sufficient access to technology, the answers to all these questions is no. The Internet *can* be used for empowerment, for collaboration, as a global 'marketplace' (in both a commercial and a social sense) and to serve humanity *socially* – it is not purely a military tool, or a commercial tool, but a tool for communication in an altruistic sense sans any ulterior motive – simply, communication for the sake of discourse, existence in a social network, connectivity within this 'web'.

Having said that, however, the effects of the digital divide on the individual are wide-ranging, depending on the social context and the degree to which access exists. Mark Warschauer's book *Technology and Social Inclusion: Rethinking the Digital Divide*<sup>16</sup> identifies a scenario where partial 'access' to technology results in a worsened situation than that which existed prior to the provision of technology in the first instance. By 'access', it is important to remember that this term must not be solely applied to physical access to technology – training, knowledge, ability (especially motor skills and physical disabilities), usability and internationalisation all constitute 'access', in this context.

Warschauer presents the circumstance of a village in an Asian nation (probably India, this example is recalled from memory) where an Internet access point had been installed by some benefactor, who freely provided the necessary physical resources for this to occur. Ongoing access fees may or may not have been provided for, but that is not wholly relevant – the donation was futile because of the overwhelming technology illiteracy in the area, and the failure of this donation to encompass any degree of training. Once installed, the primary use of this newly installed technology was not communication and open discourse, but instead found local children using this resource for playing games online.

Similar situations exist closer to home – many local libraries in New South Wales now provide free Internet access to their members, often without formal training provided



as well. The author has witnessed e-learning initiatives in such environments fall to similar fates as the Indian scenario above, with children finding online games more engaging than often stale 'interactive learning material' – as a result of the presentation, not the content itself.

Neither of these scenarios results in the breaking down of boundaries, or the opening of new and exciting discourse – instead, the technology places a burden upon the community in terms of maintenance, ongoing costs, and initial investment for little or no tangible – or intangible! – return, and the slave/master relationship between humanity and its technology turns, in this case, against humanity.

### ***What ICT isn't***

ICT isn't a magic pill for the problems of industrialisation. Industrialisation *still has to occur*; because ICT is dependant upon the infrastructure that industrialisation develops to exist (not just the technology itself in a historical framework, but the electricity to operate the technology, and the physical networks used to connect it!), and cannot come before the other.

ICT isn't a magic pill for the problems of poverty. It creates industry, and arguably higher standards of living – but the real problems of population concentration versus arable land and other *physical* constraints will mean this emancipation from certain influences is not absolute in its unburdening... although, ICT in the *means* it provides the for expression of individual thought, feeling, and voice is such that poverty as a result of political situations may, potentially, be overcome or at least challenged in a way previously unprecedented – an example of this is the recent 2004 election in the United States, covered by 'blogs' (web logs, or personal journals) so extensively that, following the election, bills have been proposed<sup>17</sup> to amend laws concerning journalism and the press to include web logs, granting similar rights – and, more importantly, censorship – as that which conventional media is subject to.

ICT isn't a magic pill for the problems of distance. If anything, it is seen to exacerbate them, as physical locale directly influences availability and subsequent adoption of technology, ultimately resulting in inequality and the broadening of the *social* divide between people. ICT alters the form and style of communication used, and the early/late adoption rift results in the development of skills to manage this being fragmented between groups, influencing the way in which groups *can* relate to each other both in the medium used, and in the language used within the confines of that medium – that is to say, stylistically, the feel of communications and the way in which these are written, spoken or otherwise presented alter, based on the author's experience with different modes of communication. The writing conventions of personal e-mail, for example, are substantially different from those used in the writing of most letters, in its inherently conversational tone merged with the written word and, in some instances, the alteration of language itself in terms of spelling, use of jargon ('emoticons' are included in

this), and abbreviations not commonly used outside the context of this form of electronic communiqué – reflected, conversely, in other writing by users of said technology, in which adoption of the different language features common to electronic forms of communication are seen to transcend this, and permeate other writings – the use of emoticons and/or abbreviations such as ‘LOL’ (a commonly used abbreviation for ‘laugh out loud’, generally not used in a literal sense, but simply to denote some degree of humour) in letters, for example, or even in speech (albeit to a lesser extent, and only with some terms).

### ***What the divide means***

Such is this change in communication as a result of the common adoption of this new media form in groups of people on the ‘have’ side of the divide, that the way in which they communicate is substantially altered to the point of obfuscation of meaning and general incomprehensibility. As with generational differences in language, the digital divide has introduced (and continues to perpetrate) a further gap linguistically, as well as in terms of the mode and form of communication used, assuming resources even exist to receive information published electronically.

At an individual level, this prevents exposure to a diverse range of writing and content created and disseminated electronically – and, at the stage when this exposure and the ‘bridging of the divide’ becomes feasible at some (as yet undetermined) point in the future, there still remains a cultural and communicative gap – some would cite Alvin Toffler’s *Future Shock*<sup>18</sup> to highlight the possible effects of this gap, once ‘bridged’. Notably, this ‘bridging’ is an un-real concept – whilst the circumstances surrounding the divide may be mitigated, the *effects* of the divide are longer lasting, at least for a generation, and potentially longer; for example, unemployment propagates through generations in a cyclic manner, as sociologists have observed is the case in certain areas – a contemporary example being parts of Macquarie Fields. The digital divide is perhaps not necessarily as extreme in consequence as the cyclic unemployment in Macquarie Fields, although, arguably, the divide may lead to unemployment as a result of the new skills it requires (perhaps reversing the trend instigated by the Industrial Revolution towards ‘deskilling’), and this unemployment may continue across generations if appropriate training is not available and/or offered to those still lacking in skills.

Of course, communication and training barriers may not necessarily be an issue – the divide holds a lesser relevance to those employed in primary industries, for example. Having said this, changes in technology (not communications-related) have also resulted in changes in requisite skills for employment in primary industry areas – perhaps requiring an understanding of technology to function in a competitive environment, for example, the use of software to determine appropriate use of chemicals, etc.

Not only this, but ICT itself is relevant to these primary industries for the purposes of receiving communications of the requirements of customers, as well as communication of changes in technology for the basic means of production – simply, ‘keeping on top of’

the latest industry developments. This is particularly relevant to the agricultural aspect of primary industry, with mining and logging often already connected to a larger parent company that is likely to already have ICT systems in place for the purposes of such communications.

At an individual level, the divide has the potential to result in communication differences greater than the generational communication gap, as language and the application of language changes, and new forms and modes of expression are adopted on a large scale. The 'bridging' of the divide allows this nuance to be realised, as the individual struggles to comprehend and adapt to this different means of communication – Toffler's concept of "future shock"; an example of which has been observed at the University of Sydney's Facilities Management department<sup>19</sup>, which has, at some point in the last several years, seen the introduction of ICT in order to audit and manage activities internally. The primary users of this ICT infrastructure are tradespeople, many of who do not use computers at home, or had not previously used them in the workplace – the workplace training co-ordinator<sup>20</sup> at Facilities Management commented on the widespread frustration and difficult transition experienced; and this, in an environment in which appropriate training is provided. "Future shock" is a reality, which, especially in light of the ICT revolution, is increasingly relevant in today's society, both locally and on a global scale.

Entities and society as a whole faces this revolution as its constituents experience and capacity to deal with change mandates – that is to say, similar challenges are presented to society as with the individual, with cumulative effect playing a role in shaping the society into the future. Requirements for training, such that lasting change can occur, must be met for the divide to be bridged, and, to avoid the *linguistic* aspects of this gap broadening further, this should occur in a timely manner, before this secondary divide of consequence is permitted to take hold and instigate cyclic disadvantage. The digital divide is but a descriptor for the *first* effect of a circumstance with consequences far beyond this original manifestation.

## References

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  - <sup>3</sup> “Icon” technology section, *SMH*, April 9, 2005
  - <sup>4</sup> *The Cluetrain Manifesto*, <http://www.cluetrain.com/> point 15.
  - <sup>5</sup> *Ibid.* point 14.
  - <sup>6</sup> <http://www.cluetrain.com/>, see also ref. 7, p.xi
  - <sup>7</sup> Locke, C., Levine, R. et al. *The Cluetrain Manifesto: The end of business as usual*. Cambridge, Mass.: Perseus. 2000.
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  - <sup>9</sup> Meikle, G. (Edited by Wark, M.) *Future Active: Media Activism and the Internet*.
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  - <sup>11</sup> Macleod, H., Mahon, T. *English Cut: Bespoke Savile Row tailors*. 2005. <<http://www.englishcut.com/>>
  - <sup>12</sup> Locke, C., Levine, R. et al. *The Cluetrain Manifesto: The end of business as usual*. p.15
  - <sup>13</sup> <http://www.deadtroll.com/>
  - <sup>14</sup> *ibid.* “How to Buy a Computer” recording. Also <http://www.ampcast.com/music/22488/artist.php>
  - <sup>15</sup> *ibid.*
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  - <sup>18</sup> Toffler, A. *Future Shock: A study of mass bewilderment in the face of accelerating change*. London: The Bodley Head Ltd. 1970.
  - <sup>19</sup> The author of this essay worked at the Facilities Management Office at the University of Sydney in an IT capacity on a work placement, for a period of time in 2004, during which employees whose profession was in their trade, rather than in management or an ICT role, expressed frustration at the technology which they were required to use for the management aspects of their job.
  - <sup>20</sup> Barbara Achilles, also the work placement co-ordinator.