

Research brief

Reflections on the ascendancy of technology in the media and its implications for organisations and their leaders

Lucy Küng

Reuters Institute, Oxford University

lucy.kueng@lucykueng.com

ABSTRACT

Technology is placing new demands on the media industry. Creative output is no longer simply the content itself, but the ‘containers’ in which it appears. Media industry leaders and practitioners must now understand the strategic importance of technology in all its dimensions. Yet more than this, they must be able to make the necessary – and often difficult – adjustments inside organisations. This essay draws on two exploratory research projects into technology transitions in the media industry. The findings suggest the ascendancy of technology does not necessitate a diminution in the

importance of creative content. However, it does raise two key challenges: first, a need for new ‘editorial-technological’ competencies, and second, a shift in media workplace culture to recognise the equivalency in importance between classic media creative skills and the newer but equally intellectually demanding tech-media skills.

Keywords

media studies, innovation studies, journalism

The Journal of Media Innovations 4.1 (2017), 77-81.

DOI: <http://dx.doi.org/10.5617/jmi.v4i1.3171>

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‘I am genuinely astounded by how the DNA of these businesses doesn’t get the technology.’

– CEO of U.K. publishing group

Over the past five years I have been engaged in two big research projects. Unintentionally, they proved to be highly complementary. The first, earlier project explores leadership in legacy media during a period of extreme change. In essence, it involved asking over 32 CEOs, board chairs and senior leaders about their experiences of leading media organisations, and probing them on the major challenges posed by significant evolution that has

taken place in the technical and technological foundations of the industry. The second project involved in-depth investigations of five digital news organisations, two legacy and three digital only (or ‘pure plays’), in an attempt to identify if there were common organisational elements underlying their success¹.

¹ The first research project explored the leadership implications of technology transitions in the media industry. This involved exploratory in-depth conversations with serving and past leaders of media firms. These interviews were difficult to control and discussions did tend to veer off subject frequently. Balancing the sample was also a challenge (there is, for example, essentially just one CEO of a major music label left in Europe). In total, 32 interviews were conducted with serving and past leaders of media organisations. In addition, a handful of sector analysts and observers were also interviewed to provide background insights.

A common set of interview questions was employed that explored the facets and boundaries of the subject’s role, the essential elements and biggest difficulties, the leadership lessons that had been learned, and critical insights for the future.

The second research project, also exploratory, sought to understand the function of organisations in the digital news field, specifically to understand why some digital news organisations are more successful than others and whether there are commonalities in how these successful organisations approach their

Both projects were exploratory and applied rather than theoretical. Intriguingly, both shared a key finding – evidence of a massive increase in the significance of technology for media leaders and for media organisations.

The ascendancy of technology in the media industry has given rise to a new, very core, competence for leaders: understanding the strategic importance of technology in all its dimensions and being able to make the necessary (and difficult) shifts and adjustments this necessitates inside the organisation.

When this finding has been presented, either to practitioners or to academics, it has often provoked a strong reaction on the part of a few attendees. This takes two forms. Some endorse it strongly (and often follow up with an observation about the shortage of good journalists who also understand the potential of digital technology – job-hunting journalists take note). The opposing view is to object not to the finding itself, but a perceived implication that it means a weakening of traditional journalistic values inside media organisations. Here is a

task. The case subjects were The New York Times, The Guardian, Quartz, BuzzFeed and Vice, and both primary and secondary sources of data were used.

typical example from a feedback meeting with senior journalists: ‘content creators are the heart and soul of a media organisation and technology people their support. Forgetting this ... will make content companies lose their identities.’

This essay explores the ascension of technology in the media industry and reflects on its implications for media leadership and media organisations.

TECHNOLOGY AND THE MEDIA FROM AN HISTORICAL PERSPECTIVE

‘To me the big shift ... is there was a duopoly [business and creative], and it’s now a trio [business, content and technology].’

At the outset, we need to observe that although the media industry’s self-identity is defined and shaped by the act of content creation, this sector has always been dependent on technology. Historically viewed, each of the sector’s constituent elements – content, distribution systems and the devices to display content – came into existence because of technological advances, a process that began with Gutenberg’s printing press and is still

ongoing. From that perspective, the internet, social media and mobile devices are simply the next stage in an inexorable technological progression.

Technology has jumped to the fore now, firstly because that evolution in technology has accelerated, disrupting established structures, products and processes and demanding strategic attention as a result, and secondly because the contribution of technology has expanded. Technology is no longer just the ‘plumbing’, the enabling factor that allows creative content to be produced and distributed, but intrinsic to the content and creative processes. The technology can even be the most novel element.

WHY IS TECHNOLOGY ‘EATING THE WORLD’?

Software now underpins nearly every function in the organisation and its value chain. This applies to the media, and to virtually all business sectors. Marc Andreessen, founder of Netscape and now influential Silicon Valley venture capitalist, remarked that ‘software is eating the world’ to underline how more and more businesses and industries are being run on software and delivered as online services. This finding was echoed by CEOs I spoke to. In the

(translated) words of a CEO ‘the media house is now a software house’.

This shift is the root from which all other strategic changes stem, and the reason why technology is leapfrogging up the strategic agenda.

The centrality of software coupled with the internet and widescale broadband means industry boundaries are now porous. New entrepreneurial tech companies can enter legacy sectors. We can see this meta-trend playing out everywhere: in taxi services (Uber), hospitality (Airbnb), telephony (Skype), and in the media itself – books (Amazon), filmed entertainment (Amazon again and Netflix), and music (Spotify). Tech-driven content creators like BuzzFeed and YouTube are new variants of mass media organisations. Google and Facebook are global distributors of media content.

“Technology is enabling us to create all sorts of tools and platforms and services, and you’ve got to think about, “What is my brand going to do in this environment? What can it be?”

Established media firms need to adjust to these new competitors and hold on to market share in the teeth of their aggressive growth ambitions. This in-

volves understanding disruptive products and their appeal for consumers, especially young consumers, as well as understanding, and to some extent aping, the organisations that create the products.

Software-based firms think and work differently from established organisations that have roots in the industrial era. If we take the strategy of software companies, having been forged in fast-moving digital markets, their prime goal is scale. Scale depends on speed, responsiveness and prioritising user experience. If we turn to product development, such processes in new players’ businesses reflect the fact that technology is constantly evolving. Products are outdated more or less on launch. Best practice therefore is not to seek perfection but to put what the industry terms the ‘minimum viable product’ on the market, and build in expectations that customers will upgrade it over the life of that product (Apple’s new product launch strategy builds on this philosophy). This in itself is a profound change in approach for an industry that grew up with an understandable drive to perfect analogue products before they were irrevocably put into production.

MEDIA LEADERS AS GEEKS?

‘Legacy media organisations need to recognize that they are no longer just creative companies, they are creative plus technology companies, and you can’t really separate the two. And therefore a strategic imperative is to change the nature of the expertise they have, both at senior executive and at board level.’

Technology is leapfrogging up strategic agendas in the media to the extent that leadership now incorporates a ‘geek’ dimension, and geek is not something that many media leaders naturally are nor aspire to be. Of my interviewees, only one had a technology background, and another had a degree in engineering – but these were two of the most successful leaders in my sample.

What does the geek component of media leadership entail? At its broadest, this combines an ability to ‘get’ the basic trajectory of technology developments and how it may impact the media industry, to decode the new industry dynamics, to ‘migrate’ products online, and to make necessary associated changes to the organisation (including the thorny issue of culture change).

Yet this new geek dimension to leadership is proving problematic. Media leaders are used to

working in the realm of words, images and sounds. Technology is about science – numbers not words:

‘Today, media is a bridge of creative, business and technology spheres. ... What has happened is [that] most business leaders, and some creatives, have said, “Technology is the black heart [of our businesses, and] I don’t understand [it].”’

There is a skill dimension, too. Leaders need not only to infuse technological thinking lower down in the organisation, but around the boardroom table as well. At a strategic level, media organisations now need to continually re-evaluate and adjust their tech portfolio; the pace of innovation means that technological advantages evaporate fast. The life expectancy of digital technology investments is far shorter than was the case for analogue ones, and is contracting all the time:

‘The pace of technology is such that anything you build turns out to have been the wrong approach five years later. The longer you’ve been around, the longer you’ve had technology systems, the more legacy crap you will have to deal with. ... It’s always legacy and it’s always changing dramatically fast. ... It becomes “legacy” in three years. So who has the advantage

when technology is so critical to everything? It’s the companies who can afford to be continually ripping out and changing the infrastructure.’

There is a personal challenge in this area, too. Comfort with new technology tends to be negatively correlated with age: increasingly, the strategy-critical, future-critical skills connected with understanding and working with technology are located lower down and at the periphery of media organisations. The once valuable expertise of those at the top is losing value:

‘It takes a lot to recognize and really understand that we as CEOs are in a position that is somewhat uncomfortable and unique. ... CEOs ... have to accept that the skills and experience ... they have are of absolutely zero value to their teams and managers and employees, and it’s a very uncomfortable position.’

WHEN MEDIA AND TECHNOLOGY MERGE, WHAT HAPPENS TO JOURNALISM?

‘The best digital [news] products are not made out of things that look like a newspaper.’

Technology used to be ‘the plumbing’, the engineering, the systems and machines that allowed creatives to do interesting stuff. Now the technology is part of the interesting stuff. Good technology is intrinsic to good content – consider Pixar’s *Inside Out*, Slate’s award-winning article and interactive graphic ‘2014: The Year of Outrage’, or the news and opinion website *Independent Journal Review*.

Inevitably, journalism is changing as a result. In the digital news organisations that I studied I began to track, first informally and then as accurately as I could, the ratio of journalists to digital tech staff working with journalists. This functioned as a crude proxy for how deep digital awareness had penetrated into an organisation, and by extension, for how far a legacy news organisation had travelled in its digital journey – and how serious it was about the digital future. The rough ratios that emerged were 8:1 at The Guardian, 2:1 at The New York Times and 3:1 at Quartz. (BuzzFeed’s reply to how many technologists worked in the content area was simply ‘a lot’. At that point they had around 250 news journalists).

Blending digital technology into editorial processes alters the shape of journalism. New formats are taking hold as stories start to exploit digital

tools for storytelling. Social media is also altering the shape of journalism. As Facebook, LinkedIn and Snapchat feeds become a gateway to news, the purveyors of news need to ensure that their content is not only present on those platforms, but presented in a way to maximise consumption and sharing. Headlines become shorter, graphics more common.

‘This whole issue of the traditional silos is inevitably going to break down. ... It’s got to be a more collaborative approach. ... It can’t be that the commercial or business person sets the agenda and technology or finance ... [are] the service or support parts that deliver it. It’s got to be about the fusion of those areas.’

Thus, the structure of journalism organisations is evolving. Ten years ago the trend was focused on converging in newsrooms. At that point, convergence meant blending print with online, or radio with television and online. Now, convergence concerns content and technology. These elements are integrated from the start in digital natives such as Quartz or Vox, meaning that the content management system, workflow, mobile, video, social and design are designed to work together. Staff working in these areas also sit together. Many legacy or-

ganisations share this goal, but progress towards it is slowed by legacy phenomena ranging from the physical (office layouts, tech systems) to the virtual (reporting relationships and cultural values).

Accommodating the evolution in platforms, products and format means that flexible teams are becoming more common. These are multi-disciplinary, interconnected units that work on a project basis, for example the development of a new app. Equally, roving experts in the field of say, data journalism, are being recruited. These experts attach themselves to specific desks or beats as stories dictate. The net result is flatter hierarchies. Such semi-autonomous units that can experiment and innovate move new projects ahead faster and make the company as a whole more agile.

THE RISE OF THE DIGITAL EDITORIAL THINKER

Research subjects reported that digital editorial thinkers – individuals who combine a mastery of journalism with an understanding of tech – are rare and in demand, especially if their organisation is succeeding:

‘If you get this right you become a talent magnet. If you don’t, polarity reverses and you can lose important people – Ezra Klein is a case in point. Human resource management, never a very high priority concern, is now becoming strategically very important.’

These individuals will usually be able to earn far more from new players than from legacy ones. They will probably be given more autonomy and can implement their ideas faster because they will not have to contend with the burden of the legacy ‘apparatus’ – editorial systems, processes and culture – and will have access to large digital audiences. Because of this, legacy media are no longer automatically the employer of choice for talented staff.

TURNING THE ASCENDANCY OF TECHNOLOGY INTO AN OPPORTUNITY

This central, common finding from both research projects represents a shift and a challenge. The ability to remain viable, in terms of ensuring appeal to audiences, and of finding new revenue streams to compensate for the decline in the old ones, depends on being able to accommodate and exploit

the new centrality of technology. Further, it depends on broadening the scope of creativity, from the content itself to the ‘containers’ for that content, from working within long-standing standard formats for story-telling to developing new native formats for the digital environment.

But, as with all such shifts, there is opportunity, too. Organisations that integrate digital tools and technologies into the pedigreed specialisms of the established media industry, and individuals who synthesise mastery of content with an understanding of technology, will thrive. This applies in the boardroom as much as in the newsroom.

So, the ascendancy of technology within the media does not mean a diminution in the importance of creative content. The need for creativity remains, but its scope has expanded. This merging brings two challenges. First, there is a skill shortage. This is not something that the media industry alone can solve, it requires new priorities in national educational systems. In the words of Marc Andreessen:

‘Many people in the U.S. and around the world lack the education and skills required to participate in the great new companies coming out of the software revolution. This is a tragedy since every company I work with is absolutely starved for talent ... This problem

is even worse than it looks because many workers in existing industries will be stranded on the wrong side of software-based disruption and may never be able to work in their fields again. There’s no way through this problem other than education, and we have a long way to go.’²

The second challenge concerns the implications this has for organisation culture. Acknowledging and accommodating the importance of technology is discomfiting for many, who feel that their expertise is undermined and that vulnerable cultural and public service values are at risk. Understanding this cultural reaction and exploring how it may be overcome is a priority for organisational researchers who want to ensure that the creative voices and cultural priorities of legacy media continue to be heard in the software-based media industry of the future, whatever it may look like.

² Andreessen, M. (2011, Aug. 20). Why Software is Eating the World. *The Wall Street Journal*. Retrieved Sept. 9, 2015 from <http://www.wsj.com/articles/SB10001424053111903480904576512250915629460>.