

THE DIGITAL REVOLUTION IS OVER. LONG LIVE THE DIGITAL REVOLUTION!

Many businesses are now involved in the digital marketplace. Yet **Gianvito Lanzolla** and **Jamie Anderson** argue that the new reality of numerous companies offering overlapping digital products means that it is critical for managers to understand digital convergence and to observe the imperatives for remaining competitive.



There was a time when the industry your company was part of clearly defined the technologies at the core of your business.

Publishers were associated with paper and printing technologies, music companies with vinyl disc or magnetic tape technologies, camera producers with chemistry and physics. In the past, telephones were used to make telephone calls, portable stereos were used to play cassettes and one could not use a radio to show pictures or make a telephone call. That time is gone.

The pervasive diffusion of digital technologies has made it possible to break the symbiotic relationships between technologies and industries. For instance, it is now commonplace to convert different kinds of content – a radio programme, a book, a magazine, a song, a phone call – into digital data. What has emerged, in digital terms, is a transfusion of technologies among industries that were once disparate. There is now no difference between the product provided by a telecom company (for example, a voice call) and the product of a music company (for example, a song or a symphony). The products generated by both industries are, in essence, a series of transmitted digital 0s and 1s.

Moreover, as a result of this, several digital “products” can now be bundled, or converged (hence, the term “digital convergence”); that is, some products are, in reality, the convergence of hardware, software, audio, video and data into a single interface or device. And the era of digital convergence is just starting.

Four lessons

The success of companies that have intermixed products that used to be the exclusive domain of enterprises in other industries (think of the phone companies that now pride themselves as purveyors of music) has been decidedly mixed. What can be learned from successful inter-industry convergence? From our studies, we offer four important lessons.

Forget end-to-end, inter-industry convergence; it's not likely to be successful. Our research shows that the required capabilities for *content production* (including artist management, creativity, idea scouting and content marketing), for *telecommunication network management* (including coverage, quality, network reliability and customer service) or for *information technology and consumer electronics development* (including R&D, technology testing, manufacturing and industrial design) are inherently different and “divergent”. Despite the increasingly common underlying digital technological structure, there's no example of any one company excelling at all three facets of the digital product world.

In the media industry, for instance, digital technologies affect the content's technological structure and the modalities through which it can be produced, distributed and enjoyed – but not the raw content itself. Thus, it has been difficult, for instance, for a software engineering company to produce raw content, such as a news programme or televised entertainment. As one studies the attempts to become a one-source-for-all digital enterprise, it becomes obvious that there are required capabilities across legacy industries that are so hard to equal that de facto barriers exist to block sustainable, end-to-end, inter-industry convergence. The recent disposal of Endemol (a content production company) by Telefónica (a telecommunication company) or the announced divestitures of AOL (Internet services) by the Time Warner Group (media) provide anecdotal evidence to support this conclusion.

Build strategic predominance in your capability space by focusing on your core strengths and by building trust. Analysing the commercial digital world, we identify two basic capabilities spaces, one tied to content, the other one tied to technology. The *content capability space* is filled with companies such as Disney, EMI and Fox; these are the originators of music, television shows, movies, sports programmes, video games, maps or “Web 2.0” content (ad hoc online communities, wikis, blogs and so on). The *technology capability space* is comprised of six kinds of companies, all of whom either distribute, transport or otherwise provide access to content:

- Traditional content distributors include video stores such as Blockbuster or bookstores such as Borders
- Analogue device manufacturers include companies such as Sony
- Providers of access to content include companies such as Google or YouTube
- Digital device manufacturers include companies such as Apple or Nokia
- Telecom network operators include companies such as Vodafone or Sky
- Digital technology developers include companies such as Ericsson, Microsoft, Siemens and IBM

As you are probably now thinking, there can be overlap in the above five categories; Sony, for example, manufactures both analogue and digital devices. The most significant implication of viewing these two spaces in this way is that it emphasizes the critical importance of building predominance within a capability space if a company wants to profit the most from the opportunities related to digital convergence. Our research shows that two strategic avenues are available to build predominance: focusing on core strengths and building trust. →

→ *Focusing on core strengths is integral to building a barrier to competitors.* For example, within the technology space, companies are trying to take control of the distribution channels by becoming *the* digital interaction gateway. Digital interaction gateways can take various forms, such as a communication network, a digital device or an Internet portal. Different players, coming from consumer electronics, information technology and telecommunication services can all compete to achieve this goal. Internet companies, for instance, are trying to establish their portals as the trustworthy gateway to content (and services). Google, building on its expertise to combine and organize third-party information, is paying increasing attention to providing more services (maps, emails, videos). The objective for these companies is to create “stickiness” in a world where it is otherwise very easy to switch. In contrast, telecommunications network operators have tried in the past to position their mobile device as an essential lifestyle tool and to participate fully in all aspects of the value chain – from developing content to consumer marketing. Yet, results have been very disappointing: review, for instance, the slow-to-grow “success” of Vodafone Live, which has been trying to establish a marketplace stronghold since 2003.

Building trust is the essence of a strong brand. Whether fiction or nonfiction, news or music, sports or movies, digital data can be easily copied and re-transmitted. Consider, for instance, how easy it is to immediately distribute news from a bona fide source via Twitter or Facebook. While the growth of user-generated content is important, trustworthy services that require content accuracy and timeliness are the linchpins to winning and keeping consumers’ trust – and, thus, such services can continue to sell their digital product at a premium. However, our research shows that in the digital world, consumers’ trust will be more difficult to gain than in the traditional analogue world. Once won, however, it will be far more rewarding in terms of value- and revenue-creating opportunities. For instance, as trusted financial news providers, *The Wall Street Journal* and *Financial Times* run successful online subscription services despite the abundant supply of free financial news.

The key for companies in the content space is to reflect on their core business and refocus on what they are best at (be it good journalism, good talent scouting or good scripts) while constantly strengthening the value of their brand. It is not surprising that Rupert Murdoch has set brand management as the next key strategic objective for the *Wall Street Journal*, which he recently acquired. Given their strong legacy capabilities, media companies have limited room to expand outside the content capability space into the technology capability space. Among these limited options, media

companies may become the providers of access to their own content as the BBC has done with its iPlayer as well as its dedicated websites for different entertainment and current affairs programmes.

Break into new digital value chains. While full convergence between content and technology spaces is not a feasible output, our research shows that there are areas in which the diffusion of digital technologies opens up significant new opportunities in the creation of new value chains to provide the backbone “services” for the digital world. Traditional “analogue” services are bound to become digital, and the business opportunities for developing new value chains here are virtually endless. Among these opportunities, three are pre-eminent: (1) providing digital services to enable online advertising, (2) providing digital services for rights management and (3) providing digital services for financial transactions.

The amount of advertising on digital channels is projected to increase dramatically. The *Financial Times* estimates that the global online advertising market will reach \$64 billion in 2010.

The digitization of content has made it more difficult to protect intellectual property, and new digital rights management (DRM) systems are required to support firms in this key value-appropriation activity. DRM systems will strongly influence the future business model of content producers.

Booming digital markets are triggering the need to have an infrastructure for online payments, and the spread of digital communication networks are enabling firms from outside the banking sector to offer financial services. Online transaction systems such as PayPal are now well established and compete with previously dominant payment systems such as those offered by Visa and MasterCard. Perhaps the most dramatic implications of digital convergence for financial services can be witnessed in developing markets. Smart Communication’s 2003 launch of Smart Money, the Philippines’ first consumer-oriented mobile banking and commerce service, heralded a new era for electronic banking in emerging markets. Today, Smart Money provides basic current account facilities and the ability to make micro-payments in conjunction with Banco de Oro (BDO), one of the Philippines’ largest banks. At the end of 2008, more than 7.5 million subscribers were in the Smart Money system; and similar systems had been launched by telecommunications companies to serve previously unbanked consumers in markets such as South Africa, Kenya and India.

Deliver the hardware, software and services underpinning the digital revolution. For a far-sighted information technology company, there is also the opportunity to provide the digital world with the tools to build it. With its Android project, for example,

Google is aiming to supply a complete development environment to give software developers the tools to create new Internet applications. Digital technology developers such as Cisco, Motorola and Microsoft (in league with Yahoo!) are also trying to establish popular applications and systems and thereby take control of the market for such development tools. Other companies, such as IBM, HP and Ericsson, are similarly developing sophisticated system-integration capabilities.

Expanding on this thought, look at the telecommunications field today. Telecommunication companies ultimately sit on a single commodity (for example, data transfer services) that is hard to distinguish as a marketplace differentiator. In the quest for profitability and to increase their bargaining power, telecommunication network operators in developed markets are now following three main strategies that often blend hardware, software and other services:

- *Create a converged technology play.* They have converged previously separate networks in order to offer integrated triple-play (mobile telephony, fixed telephony, Internet) or quad-play (mobile telephony, fixed telephony, Internet, television) services. This strategy aims to cut costs through scale economies, increase customer loyalty and drive growth through the cross-selling and up-selling of multiple services – for example, the change in Vodafone's strategy from mobile-only operator to a multi-network company.
- *Become the platform partner of choice.* By leveraging the existing customer base and strong consumer branding to resell others' services as well as their own, a telecommunications platform partner links its scale and customer base with attractive third-party content and applications providers in an effort to stimulate demand – for example, Deutsche Telekom's partnership with Yahoo! to boost mobile telephone-based Internet search.
- *Join strategies as a communications backbone partner.* This happens when a telecommunications company focuses on wholesale provision of data

carriage – attempting to position itself as *the best* means of adding mobility or ubiquitous availability for other industries' services. The backbone partner thus invests in multiple network capabilities, just as British Telecom's international enterprise services business has done.

The digital revolution?

As of the end of 2008, there were already more music-enabled Nokia and Sony-Ericsson phones than iPods, and more Nokia camera-phones than digital cameras from any other manufacturer. Yet, a review of the 2009 stock price appreciation of Apple, Nokia and Sony will quickly reveal that only one of these companies, Apple, managed digital convergence to a supreme competitive advantage. The bottom-line lesson to be learned is that the digital world provides a different context to the old battle between companies that create content and companies that provide distribution. But the fundamental logic for superior profitability remains unchanged: content producers must try to produce appealing content that people want while distributors must try to attract people towards their distribution channels.

The past five years have witnessed a period in which the diffusion of digital technologies created significant uncertainty about the pervasiveness of the digital revolution. But that stage is over, and the strategic options available to established firms and new entrants are now much clearer. The digital revolution is, and will remain, pervasive; it is now time to focus less on future scenarios and turn to the exploitation of the myriad business possibilities already emerging from it. The ability to implement and achieve change will become increasingly important, and it will be those firms that can reach the future first that will be the most successful. The digital revolution is over. Long live the digital revolution! ■

Resources

Gianvito Lanzolla and Jamie Anderson, "Digital transformation", *Business Strategy Review* 19, no. 2, 2008.

Jamie Anderson (janderson@london.edu) is Adjunct Professor at TiasNimbas Business School, Fellow of the Centre for Management Development at London Business School and Associate Partner with the Globalpraxis consultancy. **Gianvito Lanzolla** (g.lanzolla@city.ac.uk) is an Associate Professor in Strategy at Cass Business School.



London Business School
Regent's Park
London NW1 4SA
United Kingdom
Tel +44 (0)20 7000 7000
Fax +44 (0)20 7000 7001
www.london.edu
A Graduate School of the University of London