Shaping the Future:

Seven Enduring Principles for Fast-changing Industries*

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Abstract

The dizzying pace of innovation presents great challenges to executives in the communications, information, media, and entertainment (CIME) industries. To help these executives make sense of the complexity they face, we conducted a throughout review of research in numerous fields and interviewed industry experts and senior executives. This paper provides seven principles for creating viable and sustainable strategies in the CIME space. The seven principles synthesize lessons from the past, identify the key roles in CIME value chains, and provide strategic guidelines for developing digital platform strategy. While the nature of CIME businesses will continually change, these seven principles provide a useful guide for strategic decision-making.

* This working paper is based on the monograph of the same name and authors, published February 29 2012.

Introduction

The communications, information, media and entertainment (CIME) industries face dramatic changes in revenue streams and shifts in industry dynamics.

- New players such as Amazon rise to prominence while power players accustomed to monopoly profits face unprecedented competition.
- Traditional business models face threats such as free content and services, piracy, and substitution.
- After spending billions in infrastructure, communications firms like cable companies and telcos face substitution from over-the-top services like Netflix and Skype.
- Technological innovations create indirect substitutes for consumer time, attention, and money, such as the way the rise in spending on video games corresponds, mirror-like, with decreases in music spending.

The dizzying pace of innovation –from well-funded firms as well as dorm rooms and garages – presents great challenges to CIME executives charged with leading their firms through the sea of digital change. All industry incumbents feel a threat, but some are taking advantage of transformative digital technologies to reduce costs, create new products and services, and expand into non-traditional markets.

We set out to develop tools that executives in the CIME industries can use to make sense of the complexity facing them, now and in the future. We combined lessons from historical and present-day business transformation with time-tested strategic management models (see About the Research). We identify the five digital forces transforming the CIME industries and introduce seven enduring principles to guide decision-makers as they formulate their digital-age strategies.

The Five Digital Forces

The past provides valuable insights about how to adapt to the present wave of disruptive technologies and inventive business models. Despite recent news coverage, many of the high-profile issues facing the CIME industries are not new.

- Record labels and Hollywood studios faced competition from *free* when confronted with radio and television. They responded by leveraging the new technologies to their advantage.
- These same industries faced salient piracy issues with cassette tape and VCR, but both turned those pirate-prone media into record sources of profits.
- Newspapers faced direct substitution risk from news radio and CNN, but adapted in order to co-exist profitably with the broadcast news media.
- Movie studios faced indirect substation from radio since it provided an alternate source of entertainment, but filmmakers increased the competitiveness of their offering to usher in cinema's Golden Age.

While history can be a valuable guide, digital forces are at work reshaping the industry in new ways. The convergence of information goods, powerful computing devices, and inexpensive digital communication is changing business and society through five digital forces: globalization, Millenialization, prosumerization, business virtualization, and platformization

Globalization reshapes the nature of supply and demand. As artificial barriers disappear, consumers enjoy a new world of choice no longer limited by geographic borders. Companies benefit from larger markets and global sourcing, while concurrently needing to fend off challenges from foreign competitors.

Millennialization of consumers, and the resulting digitally-centric lifestyle, has turned consumers into producers, empowered individuals to share their voices and influence others, and transformed the way people evaluate and consume products and services – whether digital or physical.

Prosumerization, brought about by shrinking costs and the increasing quality of the tools needed to create saleable information products, has lowered the break-even point for producers and given birth to low-overhead startups that can compete directly with capital-intensive (and sometimes debt-burdened) incumbents.

Business virtualization empowers firms to focus on their core strengths by partnering with outside firms that can better execute other business processes. When pursued mindfully, virtualization can reduce costs, increase agility, and boost quality by moving some process steps to companies that excel in those specific functions.

Digital platforms are increasingly becoming the systems of engagement through which critical pieces of the value chain are delivered. These technology-mediated networks provide the interface that brings together suppliers, customers, and third parties into a mutually-reinforcing synergy. These platforms are replacing traditional middlemen and can often serve to level the playing field by granting small players and new entrants access to formerly closed markets.

Nowhere are the effects of these forces more pronounced than in the CIME industries. (See Appendix A for an example of the five forces' impact on the newspaper industry.) As they reshape industry structures and redefine what it means to be successful, firms in these sectors both face difficult competitive challenges and seize new revenue opportunities. Executives need a set of stable strategic tools for navigating through the tempestuous changes caused by the confluence of globalization, Millennialization, prosumerization, virtualization, and the rise of digital platforms.

The Seven Principles

The future is far from certain, and the source of future competitive advantage is likely to be different for every firm. We set out to provide a set of tools that manager can use to make sense of the complexity, to identify what parts of their businesses will remain valuable, and to identify potentially valuable new business opportunities. Drawing upon interviews with CIME experts and executives as well as time-tested research in the fields of corporate strategy, information economics, and information technology management, we identified seven principles that can provide stability and consistency as executives confront the dynamic changes within the CIME sectors.

1.) Stop staring in the mirror

The critical success factors that make a firm excel in one era may not contribute to success in another. When confronted with dramatic changes in the marketplace, a natural response is to focus on traditional areas of strength and improve the performance of current operations. While incremental improvements can help an enterprise buy some time to adapt, a key to adapting to dramatically-shifting marketplaces is to reevaluate what makes you successful and how you measure success. The metrics used to measure performance in the prior era may no longer be relevant.

Pay careful attention to the dynamics of the industry, and to adjacent industries. Changes in the way firms manage transaction costs, as well as in the way consumers behave, will drastically redefine threats and opportunities for your firm.

Take a macro view of the industry: How is the value chain changing? What is happening upstream and downstream, and how does it affect the supply of your inputs and the demand for your outputs? Are your key customers or key suppliers in strong positions, or are they being challenged by the changes to the industry? Then look to other industries: How are other companies managing information goods that have similarities to yours? What synergies can you build to jump into new businesses or prevent attack from outside?

Looking beyond the mirror can identify systemic changes in supply and demand. If the upstream value chain is changing, such as the book publishing industry's supply side shift to e-books, it will impact the role of downstream players, such as the bookstores that sell paper books. Similarly, if the demand side of the industry changes, it will necessitate changes from supply-side firms. For example, leading educational publishers such as Wiley and Pearson are adapting to the changing demands of customers, who want results rather than tools. While improving traditional efficiencies is a vital part of their business, they are shifting from a focus on selling books to delivering outcomes by designing systems that measure the performance of each student and custom deliver the content each pupil needs to master the subject.

2.) Disrupt yourself

Today, game changing innovation can appear from nowhere to redefine entire industries. With enterprising entrepreneurs and enthusiastic hackers determined to change the status quo, disruption is now a constant state of business.

While reactive innovation can still be effective way to keep pace with the markets, proactive innovation also can increase competitiveness and prevent disruption. A commitment to constantly increasing customer value – not just profits – can help preempt disruption from external sources. By always seeking innovative ways to increase the value afforded to existing *and emerging* customers – even at the expense of current revenue streams – firms can remain at the top of their game.

A willingness to engage in creative destruction of the current business model will prevent enterprises from suffering the innovator's dilemma that allows others to sneak up and disrupt their business. For instance, book publishers are leveraging the rise of eBooks to test new business models that leverage free content. Divisions of HarperCollins, Harlequin, and Random House are releasing titles of some authors at no cost as a way to promote the authors, with the hope that readers will pay for other titles by the writers.[1] In the film business, Mark Cuban's triad of Magnolia Pictures, Landmark Theatres, and HDNet cable network is responding to unofficial distribution channels that release bootleg film copies via the internet as soon as (and often before) a film hits theatres. Cuban's companies are foregoing the established window model and releasing movies by Oscar-winning filmmakers with a scheme that releases the films in theatres, on DVD, and on television at the same time.[2, 3]

Companies must constantly innovate their products and business models so they can drive changes that might otherwise sneak up and disrupt their business.

While the strategies applied in these examples of innovative self-disruption may not apply to all firms or all instances, they illustrate that industry incumbents are not all standing on the sidelines watching newcomers define the future of their industries. The key takeaway: firms that deliberately strive to bring greater efficiency to their industries and greater value to customers – even if it means adopting discontinuous business models – will be more competitive against new entrants bent on radically changing their industries.

3.) Join them to beat them

History shows that trying to regulate away disruption is often ineffective. It didn't stop radio, the audio cassette or the videotape. And it isn't working now either, as evinced by the failure of SOPA and PIPA, and the proliferation of P2P sites despite the court-ordered closure of Napster, Kazaa, Mega Upload, and other file finding services. What the past does teach, however, is that embracing a disruption can create new opportunities for the firms that initially seem most threatened by it.

You can't regulate away disruption, so embrace it and leverage it in your favor – or else cede the future to someone else.

For example, broadcasters face challenges from commercial-skipping digital video recorders and illegal peer-to-peer downloads. In response, networks are embracing the strategy of offering free online content. By setting the rules for the video streams, such as how soon and for how long the video will be available, the broadcasters are able to maintain some control over distribution and ability to capture ad revenue, both of which would be completely lost if the viewer downloaded the program from a pirate site. Making content more widely available, often with fewer commercials, might cannibalize some traditional TV revenue, but it allows broadcasters to retain the Millennial generation, who are as comfortable watching video on their laptops and tablets as on a television set.

In a similar fashion, many news organizations are recognizing that important breaking news coverage and expert content can originate outside of their journalism staff. News outlets such as National Public Radio acknowledge the growing importance of citizen journalists in reporting.[4] Other news media provide institutionalized forums for regular citizens to contribute news content, such as CNN's iReport[5] and MSNBC's FirstPerson.[6]

We live in a digital world powered by the internet, where incumbents have as many opportunities as startups to redefine the competitive landscape. The future is here. You cannot fight it, so it is time to devise a strategy that embraces it and leverages it in your favor, rather than ceding it to someone else.

4.) If it's not VRIN, it's out

Organizations can be viewed as a collection of resources that are mobilized to generate profit.[7] But not all resources translate into a sustainable competitive advantage.[8, 9] Technological innovations can reshape value chains, causing once-strategic resources to lose their value,[10] initiating a process of creative destruction that can cause industry leaders to stumble or fall.[11, 12] In the face of radical technological change, incumbents will prosper if they can identify and build upon strategic resources that will remain valuable after the transition.[13]

In order for a resource to provide a sustainable competitive advantage it must be VRIN: valuable, rare, inimitable, and non-substitutable.[12]

- *Valuable* resources enable a firm to conceive or implement strategies that produce profit. Think of *valuable* as a synonym for *strategically relevant*.
- Resources drive competitive advantage only when relatively *rare*.
- To provide competitive advantage, a resource must be *inimitable* (or only imperfectly imitable). Advantage comes only if the companies that lack them cannot obtain them.
- *Non-substitutable* means that there cannot be different but strategically-comparable resources that other firms can use to implement the same strategy. Executives must consider whether seemingly unrelated or different resources can be used as a strategic substitute.

The VRIN framework helps executives to evaluate their competitive position. Build strategy around the VRIN core and consider shedding other functions to create a leaner operation or outsourcing them to a strategic partner who can perform them better. Executives also should chart a course to reduce their dependence on, and potentially eliminate, resources that are currently VRIN but declining in value.

What enabled you to generate riches a few years ago may provide little or no strategic value in the future.

French yellow pages company Pages Jaunes Groupe provides a great example of leveraging VRIN resources to thrive in the face of digital disruption. Faced with the impending death of paper-based directories, executives needed to find a way to survive. They decided to leverage a resource that remained VRIN in the digital age – its sales staff's intimate relationships with local business owners – to provide internet and mobile-based solutions linking small and medium-sized advertisers with local customers.[14] This strategy has made it the third biggest online presence in France, trailing only Google and Facebook. It earns 46% of its revenue from digital ventures,[15] remarkable for a century-old company in a declining, paper-based industry.

5.) Produce, search, and/or deliver

A firm's business model often evolves over time as it adjusts to confront specific transaction costs. As such, businesses and industry structures built to manage yesterday's transactions may not be suitable for reducing friction when faced with new ways to produce goods and services or coordinate work.

After searching for the fundamental transaction costs that are common throughout CIME sectors, we found that CIME firms create value by managing only three types of transactions: production, search, and delivery.

- *Production* is "making goods available for use."[16]
- *Search* is matching different parties together so they can trade.[17-20]
- *Delivery* is transmitting or communicating information and information goods as part of the trading process.

This straightforward Production – Search – Delivery (PSD) framework cuts to the most essential level of how CIME firms create value. Companies are subject to attack in a PSD role when new companies find better ways to manage transaction costs. This provides an opportunity for you to disrupt others by performing a role better in the new world.

The PSD framework helps to identify and separate core revenue-generating transactions from supporting, non-core activities – distinctions that often become blurred after long periods of stability. For example, after two centuries, the newspaper business lost the focus on its core moneymaking search role: matching advertisers with consumers. News production is a way of attracting readers to the ads and printing is a necessary but only supportive production function. Over time, the functions were viewed together, rather than as separate core and support activities. This allowed new internet-based firms unrelated to news, but who offer more efficient ways of matching advertisers to customers, to take advertising dollars away from the newspapers.

CIME firms profit by reducing inefficiencies in production, search, and/or delivery. Disruptive innovations offer greater efficiency in these roles.

The PSD framework enables you to take a step back and rethink your businesses in the light of today's digital realities. To which function do you add value? How is that function changing? Are there competitors from outside the traditional industry boundaries that reduce frictions better or create more value for consumers that you do? How can you continue to reduce friction in a world where transaction costs are constantly diminishing due to globalization and technological advances? (See Appendix B for an example of the value chain dynamics of the book publishing sector.)

6.) Value creation is the new structure

Traditionally, companies have been defined by their place within the value chain or the type of product or service they provide. Over time, businesses and industries have structured themselves around their processes. After proving successful, these structures often become rigid, causing firms to define themselves by what they do, not how they add value. The structures imprudently shift the focus to creating profits for the firm instead of creating value for customers, priming them for disruption by firms offering a greater value proposition to the end consumer.

> *A focus on value opens organizations to new possibilities. It frees them to pursue new alliances that will maximize value create that cannot be achieved within the confines of their existing structures*

In the modern CIME landscape, structures are constantly redefined and value creation can quickly shift. For example, firms in the telecommunications sector spent billions creating a wireless infrastructure in anticipation of revenue not just from traffic, but also from value-added services such as mobile banking, music downloads, and information services. However, other firms, led by Apple and Google, created value that was independent of telecommunications company structure. They, not the telcos, captured huge revenues by adding value to the user experience. Similarly, educational publishers Pearson and Wiley are redefining their businesses by shifting the focus from producing learning materials to generating results. Their adoption of an outcome-based learning strategies focuses on creating value for universities and students rather than on the structure of the publishing industry. They are building new services to enhance the value of existing content in the form of radically new offerings, rather than just finding better ways to produce or print its traditional content within the long-established publishing industry structure.

A focus on value rather than structure frees enterprises to shake off the mentality of “that’s not how we do business.” It opens organizations to new possibilities. By restructuring around core functions, firms can concentrate resources and attention on powerful value creators. Companies can build a strong competitive offering around core and essential core support functions, while virtualizing other part of the business through outsourcing, partnerships, and strategic alliances.

7.) Platforms are the future systems of engagement

Platforms are the gateways through which CIME firms will engage with their customers to transact business. This trend has already begun, and it will continue to grow in the future. A platform is a foundational technology or service that is used beyond a single firm and is subject to network effects,[21, 22] which means that its value is based on the number of users.[23-28] Platforms provide connectivity, expand variety, match different users with each other (i.e., suppliers and consumers), and set prices within the market.[29] The platform provides rules that mediate the transactions among users.[30, 31]

> *Digital platforms will become the gateways – and bottlenecks – to the market.*

Platforms change the shape of CIME value creation, which is why executives must shift from thinking about value chains to value networks. Unlike the linear structure of traditional value chains, platform users transact with each other at the same time that they transact across the platform.[22] For example, the Xbox platform enables gamers and developers to transact business with one another. Microsoft provides the software developer kit (SDK) to developers while providing the Xbox console to gamers, enabling gamers to use the products sold by the developers. [22, 32]

Key to a successful strategy will be a firm's production, search, and delivery functions within the platform-mediated market. Subject to network effects, size is important.[27] But scale is not the only deciding factor that determines whether a platform will remain strong. VRIN resources will still determine competitive advantage and will drive users toward one network rather than another. If a firm does not have a VRIN role for production, search, or delivery within the platform ecosystem, it will not have a sustainable competitive advantage. And if the platform ecosystem itself is not VRIN, then another platform will dominate.

The CIME landscape of the future is already taking shape with notable platform leaders. Today, the video game market is dominated by three platforms: Wii, Xbox, and PlayStation. Amazon is emerging as a powerhouse in the publishing industry. iTunes dominates digital music and video download sales. The future shape of the CIME sectors will be defined by how incumbent firms and new entrants offer value to different types of consumers in the market.

One thing is certain: future strategy will involve platform strategy. A carefully crafted platform strategy can increase the profits of incumbents or help new entrants rise to powerful gate keeping positions within CIME industry segments.

Charting Your Future Course

When commencing our research, we set out to develop tools that CIME executives can use to make sense of the complexity facing them, now and in the future. Stable strategic tools do exist to navigate through the tempestuous changes caused by the current confluence of globalization, Millennialization, prosumerization, virtualization, and platformization. While the nature of CIME businesses will change over the coming months and years, the Seven Principles will not be upended in the short or medium term. As such, the Principles provide a vital guide to evaluate your own position, assess the competition, plot your future course, and then revisit your progress over time. So the critical question is: what course will you chart to your future?

About the Research

This work synthesizes years of research by scholars in numerous fields of study, builds new concepts, and then applies them to the challenges facing CIME leaders. We sought to understand changes in the past and future of CIME by compiling industry histories and by examining recent market data. We interviewed CIME experts and executives to ascertain how they perceive and address the challenges and opportunities facing them today. We then drew on decades of research in the fields of corporate strategy, information economics, and information technology management to make sense of the challenges facing CIME business leaders. We provide practical, theoretically-informed methods to dissect the problems within CIME enterprises and to create viable, profitable, and sustainable strategies.

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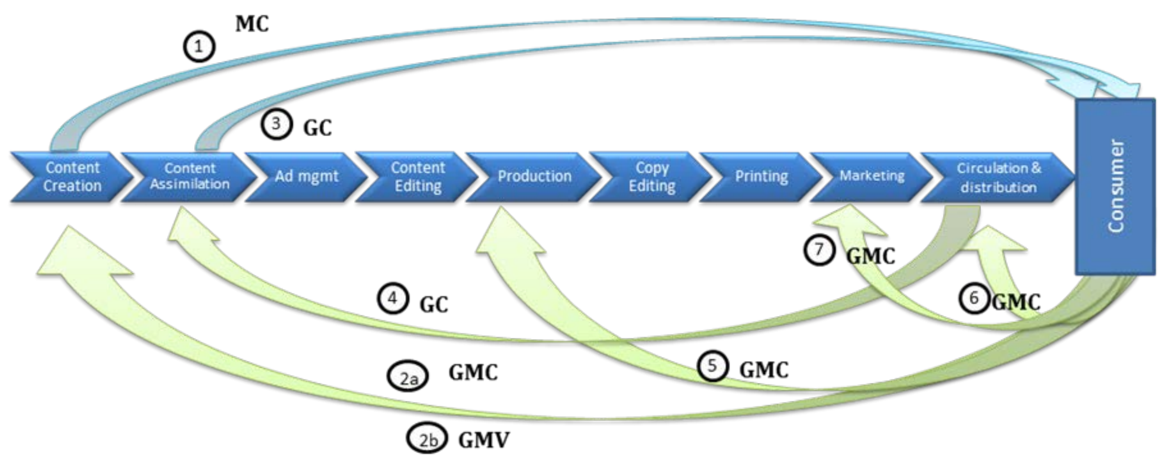
APPENDIX A

The Five Digital Forces and the Newspaper Business

The five digital forces of change are radically reshaping the newspaper value chain. Historically, newspapers competed in markets delimited by location. The most prominent changes to the newspaper value chain are detailed below. Each change is labeled according to the force(s) driving the transformation (G=globalization, M=Millennialization, P=prosumerization, V=business virtualization, C=cloud platformization).



Value chain adapted from “The Evolution of News and the Internet,” Organisation for Economic Co-operation and Development, 2010.

1) The traditional newspaper value chain followed a very linear process in which journalists created content that then went through the editorial process and technical and logistic processes necessary for delivering the article to a newsstand or subscriber’s home. Since the advent of the internet, however, the speed at which newspaper journalists must break news has increased.

As a result, journalists have begun to "publish" news for consumers to read that bypass the conventional editorial and production process.

2a) Web 2.0 platforms give the Millennialized newspapers readers more input into the content creation process than ever before. Non-journalist readers now play a part in creating newspaper content when reporters reach out to the community for help researching a story.

2b) Newspapers have also been virtualizing the news gathering process by reaching out to citizen journalists. Many local events are now covered by people without professional training.[23] While a substantial amount of this content appears in the online version, papers are including citizen journalist articles in the printed pages as well.

3) A key function of newspapers is to assimilate news stories so readers can get the information they need from a single source. As journalists blog and tweet the news as it happens, new services that assimilate the content of these blogs are appearing. So now, readers can visit these sites and get an assemblage of content from respected journalists, similar to the way they are accustomed to receiving a compendium of information from their newspapers.

4) As new types of services such as Muckrack begin to aggregate content from journalists, a larger disruption to the newspaper's business comes from sites that aggregate content from newspapers after it enters circulation. Internet news portals, such as Yahoo! News, organize content from major news sources into one convenient place. While a great time-saving tool for

the consumer, these new portals attract most of the web traffic, and therefore receive much of the advertising revenue that otherwise would go to the individual newspapers that created the content.

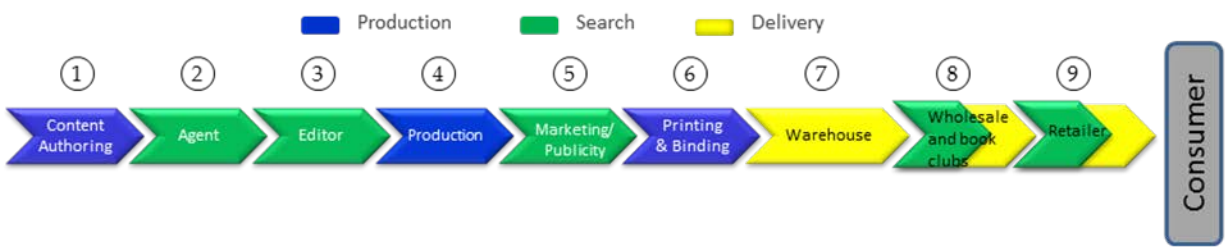
5) For decades, newspapers have provided a limited feedback loop for readers to help shape the editorial direction of the publication. As such, the newspaper information flow remained unidirectional. This changes, however, when newspapers include interactive web 2.0 technologies. It is easier than ever for readers to comment on articles and to make suggestions about both the print and online versions of the paper. At the same time, web analytics services such as Newsbeat provide real-time analytics about how long people spend reading online articles and about "clicks" that measure navigation patterns. Based on the real-time information, newspapers increasingly engage in in-situ, post-release editing.

6-7) As more content distribution moves to the web, the dynamics of newspaper circulation are changing. Readers increasingly move online to read their news. Aggregation services are becoming important intermediaries, playing a role similar to the role played by the newsstand in pre-digital days. At the same time, readers begin to play a very important role in the circulation and distribution process. When readers find articles they like, they can now share them with friends. What began as simply pasting a website link into an email is taking on a very big role through social media platforms. Now, users share interesting news articles with their social networks.

APPENDIX B

The PSD Value Chain Dynamics in Book Publishing

The book publishing industry provides an example of how the PSD model can be used to understand how long-established functions can be rationalized out of the value chain as technology and business model changes reduce the friction in an industry.



Value chain adapted from Fischer WA. "Stephen King and the Publishing Industry's Worst Nightmare," Business Strategy Review. Summer 2002 2002;13(2):1.

In the traditional book publishing value chain, 1) an author creates the content by writing a manuscript.

2) An agent plays a search role by matching an editor or publisher with suitable author-produced content.

3) Editors manage the search process by finding content that matches their readers' tastes.

4) During the production process, the print-ready master of the book is created.

5) The publishing house markets the book to wholesalers, book clubs, and retailers, generating awareness among B2B customers. The publisher also markets the book to consumers, making them aware that a book that potentially matches their interests will soon be released.

6) The physical printing and binding process is a production process that makes the content available in a form that can be used by consumers.

7) Printed books are warehoused and shipped as part of the delivery process that transports the books from printing press to store shelf.

8) Wholesalers are intermediaries that help retail stores find and order books that their shoppers want to read. Similarly, book clubs pick books that they think will match the interests of their members. Wholesalers and book clubs then use a shipping service to deliver the books to retailers and club members respectively.

9) Retailers serve a dual role. First, they provide a filtering service for their shoppers by searching for titles that will be of interest to their customers. Retailers historically have provided an important service by reducing consumers' search costs by pre-filtering the available selection, reducing the choices to a manageable number of titles. Customers take delivery at the book store, enabling the trade and ultimate source of value chain monetization.

The book industry is changing quickly. With the rise of digital publishing, longtime functions within the industry are disappearing, as evidenced by the eBook value chain.

With new formatting technology, the production process can now be performed by an editor as she finds content that matches her readers' tastes. The process of creating physical media is irrelevant to the eBook value chain, as is the need to warehouse pallets of physical inventory as it waits to be shipped to retailers. Wholesalers are no longer necessary as electronic booksellers can store all new titles on their servers and consumers can use the electronic retailers' search engines to find books that match their interests. And once the title is found, the e-tailer delivers it to the consumer via file download. The move to digital, therefore, is eliminating the traditional production, printing and binding, warehousing, and wholesaling links from the value chain. With unlimited virtual shelf space, old titles that are in demand but do not warrant printing and warehousing an entire lot of books can be made available to anyone who wants to buy them.

The ability to carry unlimited titles is also opening mainstream online retail venues to self-published authors, further changing the industry value chain. Professional writers and respected scholars increasingly take advantage of new self-publishing opportunities. At the same time, aspiring amateurs also can now write their masterpieces on their laptops and sell them through the world's largest bookstores.