

DOES MEDIA MANAGEMENT EXIST?

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Columbia University, 2014

1. IS THERE MEDIA MANAGEMENT?

This may be the time to ask an impertinent but crucial question. What exactly is media management? Does it really exist?

After all, is managing a media company different from managing a beer brewery? An airline? A bank? Every business is run on similar functions – strategic planning, financing, HR, production, marketing, distribution, accounting, government relations, etc. So the question we need to address is whether media management is different from management in general.

What might be different? Managing media, is it said, is based on creativity, “feel,” and intuition. It may also be driven by a motivation of public service. Media are thus not quite driven by profit numbers and analytical models in the same way that other industries are.

Economists and business researchers are used to almost every industry considering itself “different”. Agriculture, energy, health care, law firms, biotech, aviation, banking, etc. – they all believe themselves to be governed by different principles. In the process, economists have become cynical about businesses cloaking themselves in a mantle of public-spirited service. In response, the argument is that all businesses have major commonalities: they all must raise funds, select projects, hire employees, arrange for inputs,

control costs, create outputs, price them, market them, account for the results, etc. "Technology changes. Economic laws do not"¹.

It is easy to jump to the other extreme – that there is no difference at all. Yes, basic management principles apply to all industries, but media industries also have unique characteristics that make media management different. There are several fundamental factors at work in the media field, which, while individually not necessarily unique to media industries, are unique in their combination. We must understand what they are.

The differences are on two levels. There are 'big picture' differences, and narrower characteristics. The setting of media production and distribution in society and the post-industrial information economy is the "macro environment". The fundamental business characteristics of media and information as goods and services constitute the "micro environment." In this article, I will focus on the latter.

2. THE NEED FOR MEDIA MANAGEMENT

Media management has traditionally been based on experience and 'gut' feeling. Decisions are often formed with educated guess work. For example, book publishers use their experience to make hypotheses about the number of copies to print, the price to set for consumers, and the advance that should be paid to authors. Film distributors must make educated guesses about the marketing budget of films and the numbers of DVDs to produce.

But lifelong experience in one segment of this increasingly overlapping environment will not suffice for media managers of the future. Media companies will require managers have experience in a combination of segments, and in a combination of functions. This is more easily said than done because the environment keeps changing – technologically,

¹ Shapiro, Carl, & Varian, Hal R. *Information Rules*. Boston: A Strategic Guide to the Network Economy. Boston, Harvard Business Review Press, 1998.

entrepreneurially, financially, and globally. How then can a media manager be effectively trained in a constantly upgrading field?

Other industries, like banks, automobile makers, or airlines, use a more scientific approach to management. In contrast, media management is often unpopular within media companies themselves. The managers are overshadowed by the "creatives," who have prestige and public visibility. Managers are seen as "bean-counters," "suits," narrow-minded clerks, and philistines who have but one interest, the bottom line. In this dichotomy, both sides are disdainful of each other when in fact they are symbiotic. In show business there is no show if there is no business, and there is no business if there is no show.

Yet, in no other industry does management have to continuously apologize for doing what managers do: raise funds, select projects, set budgets, control costs, and market products. Even the media themselves generally show negative stereotypes of media managers. When was the last time you saw a film or TV show in which a media manager is portrayed as a creative, interesting, and educated person who is a pioneer and contributor to the new ways of delighting and informing the public?

But it is easy to talk about media management and much harder to provide its elements. At universities, a typical "media business" course, if it exists at all, is usually a survey of the various media industries – film, print, music, radio, TV, and now the Internet. A second type of course might be one of political economy, reviewing the role of media, with an element of media policy. A third type of course is to use existing generic courses, such as marketing or strategy, and apply them to the media sector through media-specific cases and examples. A fourth approach is to cycle established media managers through a course. This can be interesting and informative, but is typically stronger on experiences and insights than on analytical principles.

One reason for the absence of more advanced approaches is the lack of analytical tools. For two centuries, the classic factors of production have been held to be capital, labor, and land. In the information economy, information has become the fourth factor. The first three factors are associated with three social classes – capitalists, workers, and land owners. The fourth factor is associated with what has been vaguely called the "new" or the "creative class".

The first three factors of production have an underlying analytical apparatus – finance theory, labor economics, real estate, and regional studies. But the

fourth factor, the information, has no underlying economic or political analytical tools that are equivalent. Information – as an input and output – has no real body of theory that could be used for management analysis and decision making.

There are, of course, several kinds of “information theory” and they are useful for media managers, but in a tangential way. One information theory is that of technologists: how to squeeze more bits into a pipe. Another kind of information theory is that of economists, dealing with risk and uncertainty of investments, and with asymmetric knowledge. But these theories do not relate directly to media where information is the output, not the input.

To deal with this, media and management economics, a new sub-discipline, is emerging to provide analytical tools and insight into activities in the media and communications environment². It combines several analytical management disciplines such as micro-economics, financial economics, statistics and operation research, the behavioral sciences of sociology and psychology, managerial accounting, marketing, etc. It deals with an industry sector – media; with a product – media content; with an input – information; with a creative process – content production; with complex distribution systems; with dynamic technology; and with wide-ranging legal and regulatory challenges.

3. THE TWELVE ECONOMIC PROPERTIES OF MEDIA

3.1 SUPPLY SIDE CHARACTERISTICS

3.1.1 Characteristic #1 of Media and Information: Extremes of high fixed costs, low marginal costs

Media production usually involves extremely high “fixed costs,” costs that remain constant independent of the number of units produced.

² Picard, Robert G. “Historical Trends and Patterns in Media Economics,” in Albarran, Alan B., Chan-Olmstead, Sylvia M., & Wirth, Michael O, eds. *Handbook of Media Management and Economics Handbook of Media Management & Economics*. Mahwah, NJ: Lawrence Erlbaum Associates, 2006, pp. 23-36.

“Marginal costs,” or the additional costs required to produce the next unit, are relatively low for media. Media content is typically expensive to produce but cheap to reproduce. Media distribution networks are expensive to create but cheap to extend to additional users. We can observe these characteristics for films, TV programs, computer software, electronic networks, newspapers, and semiconductors.

Media products that exhibit this property are said to have high economies of scale. Marginal costs often decline over a range of production, resulting in still higher economies of scale.

There are several business implications of the economic property of high fixed costs and low marginal costs. They include the following:

- large average size of media, telecom and internet firms, due to the economies of scale;
- incentives to acquire large size by M&A, and to be first-mover, in order to gain scale;
- incentives for competitors to engage in copycat behavior because they then save the fixed cost;
- very low prices in competition due to low marginal costs;
- large consumer surplus because of low marginal costs and low prices;
- incentives to price discriminate among customers in order to reduce consumer surplus.

3.1.2 Characteristic #2 of Media and Information: The Convergence of Production Technologies and of Products

The second economic property on the production side is the increasing convergence among media. The “economies of scope” of operating across multiple markets and products are rising.

In the 1970s, integration between sectors in the technology industry began to occur with increasing technical overlap of telecom and computer devices and components. In the 1980s, increased integration of technology extended the overlap also to consumer electronics and office equipment. In the 1990s, integration affected nearly every sector of the technology

industry. A smartphone combines the technologies of telecom, computers, information vendors, consumer electronics, TV, video games, calculators, cameras, music players and recorders, navigation devices, and many more.

The implications are that industries and firms that used to comfortably fill their separate niches are increasingly facing competition from each other. It also means that companies expand more easily to adjoining markets.

3.1.3 Characteristic #3 of Media and Information: Radically Divergent Cost Trends in the Value Chain

Media distribution and devices are subject to rapidly increasing economies of scale. This leads to large firms and market concentration. The actual production of content, however, has a different trend. It is subject to decreasing economies of scale. Due to the advancements in digital technology and its declining prices, a given (*ceteris paribus*) item of music, or of video, or of text, becomes cheaper to produce. This tends to enable the entry of many small producers.

Chris Anderson, editor in chief of *Wired* magazine, termed this the “long tail” phenomenon, when content can be profitably produced and distributed to millions of niche markets and products, as opposed to a few blockbuster products.

The long tail phenomenon is in stark contrast to the economies of scale in the distribution segment of media and communications. These opposing trends create new pressures and alignments in the enlarged media sector.

3.1.4 Characteristic #4 of Media and Information: Accelerating Returns

The fourth economic property of media is “accelerating returns to scale.” Accelerating returns result from information being both cumulative and exponential. Information is cumulative because a media product, once created, becomes a permanent part of the human stock of information, knowledge, and culture. Information has the ability to grow exponentially because it is based upon information previously held. Once the sea-route

from Europe to India was found, once Penicillin was discovered and understood, it did not have to be re-discovered. With few exceptions, new knowledge, once created, becomes the new base.

The Law of Accelerating Returns states that evolutionary progress accelerates because methods from previous evolution are used in the next stage. The “returns”, or speed and power of the process accelerate over time³. And the acceleration itself is accelerating. The managerial implications are requirements to structure an organization in a way that it can accelerate its creativity and its adjustment mechanism. In an increasingly Darwinian media environment, the most successful organizations are the ones most capable of adaptation.

3.1.5 Characteristic #5 of Media and Information: Excess Supply

The fifth economic property of media is excess supply. Media production increases exponentially. Media consumption, however, increases linearly and slowly. Given the gap, excess supply is inevitable. The compounded annual growth rate (“CAGR”) of media production is about 12.0%, whereas the CAGR of media time consumption is only 1.2%. Even this rate will decline. 2,100 hours of media are consumed by an average person in America per year. That’s 5.75 hours per day. Given time for sleep, eating, and work, this number will increase only slowly. Thus, the gap of demand is growing at over 10% each year.

New media consumption must be mostly supported by substitution from existing media in terms of time or full attention. Inevitably, this leads to competition for “mindshare” and “attention.” This has consequences for both content style and marketing⁴. Attention is the scarce resource. As Nobelist Herbert Simon observed, “a wealth of information creates

³ Kurzweil, Ray. “The Law of Accelerating Returns.” KurzweilAI.net. 7 March 2001. Last accessed on 13 July 2010 at <http://www.kurzweilai.net/the-law-of-accelerating-returns>.

⁴ “How Much Information.” School of Information Management & Systems, University of California, Berkeley. 2000. Last accessed on 14 May 2008 at <http://www2.sims.berkeley.edu/research/projects/how-much-info/summary.html#consumption>.

a poverty of attention”⁵. Compared to 1998, fewer than half as many of the new products make it to the bestsellers lists, reach the top of audience rankings, or win a platinum disc.

In consequence, there has been an increase in specialization and customization of media content. In addition, there has been an increase in production and marketing efforts. Together, costs rise per use, and marketing, production, and product design have to change.

3.2 DEMAND-SIDE CHARACTERISTICS

3.2.1 Characteristic #6 of Media and Information: Network Effects

The sixth of the economic properties of media are network effects. Network effects arise on the demand side when users benefit each other by sharing the network, or from sharing the experience. Individual benefits from media are often interdependent with that of other users. Networks have a fundamental economic characteristic: the value of connecting to a network depends on the number of other people already connected to that network. The larger the network, the more value it provides to its users and the more valuable it becomes itself.

For internet and telecom companies, the benefits to users rise with the number of other users on the network. With the increase in users of fax, email, and websites, users benefit from increased network usage and content. For film, TV, music, popular magazines and books, a major benefit of media consumption is to share experiences with one's peers.

This changes the economics of demand. Demand increases with the size of a network. The more people are on the network or share an experience, the more people are willing to pay for the product. This holds true because economic theory implies that increased demand acts to shift the demand curve outward and upward, creating a higher willingness to pay and increasing the price.

⁵ Simon, Herbert. “Designing Organizations for an Information-Rich World.” in Martin Greenberger. *Computers, Communication, and the Public Interest*. Baltimore: The Johns Hopkins Press, 1971, pp. 37-72.

Network effects have several business implications. Firm size is important. The larger the firm's user base, the more value is provided to users. Social networking increases the inequality of attention. A song that is gaining attention on a large social network eventually gains an overwhelming cumulative advantage⁶.

Market share is also important. A firm that captures a relatively large share of the market will experience increased exponential growth. First-movers have an advantage; it is usually easier for a firm to capture market share if it is the first to launch a particular product or service. Finally, interconnectivity is important, because it enables the users of a small network to link into a larger network and benefit from its network size.

3.2.2 Characteristic #7 of Media and Information: Non-Normal Distribution of Demand

The seventh characteristic of media is the non-normal distribution of demand. A normally distributed set of data will form a bell curve. Demand for technology is "normally" distributed and preferences are distributed evenly around a center point (mean). Demand that deviates from this standard is not normally distributed around the mean. (One cause of non-normal distribution of demand is cumulative advantage. Cumulative advantage occurs when preferences are determined by the amplified choices of the first few consumers.) This means that no matter how good our statistical tools are, it is almost impossible to create a predictor for the future⁷.

Risk is especially inherent in "discrete" products, i.e., where the transaction is for a single item (e.g., choosing a movie). In contrast are "continuous flow" media, where there is a steady flow of products. Examples

⁶ Michael J. Salganik, Peter Sheridan Dodds, Duncan J. Watts. "Experimental Study of Inequality and Unpredictability in an Artificial Cultural Market." Washington: Science, 2006. "The gazillion-dollar question." *Economist*. 20 April 2006. Last accessed on 2 August 2012 at <http://www.economist.com/node/6794282>.

⁷ Michael J. Salganik, Peter Sheridan Dodds, Duncan J. Watts. "Experimental Study of Inequality and Unpredictability in an Artificial Cultural Market." Washington: Science, 2006.

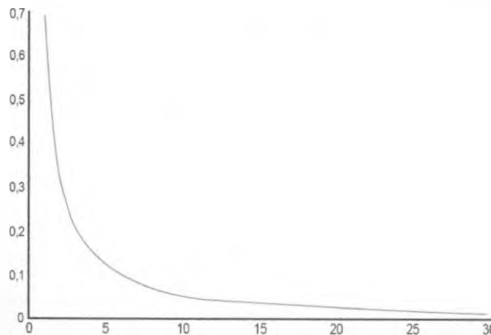
are newspapers, pay-TV com channels, ISP subscriptions, and phone service. These are also risky, but they offer portfolios of content and services and do not go on a limb like the producer of a single book or film.

The 80-20 rule states that 80% of all media do not become profitable. Profits are subject to the 90-10 rule. 90% of all profits are generated by 10% of the products. And, 50% of profits are generated by 1-2% of products.

It is not simply the small odds that are the problem, however, but the statistical distribution of media performance, which is not normally ("Gaussian") distributed. Instead, the best statistical representation of media content revenue success is the exponential distribution.

One exponential statistical representation of an exponential distribution that is useful is the Zipf's distribution. Zipf's distribution (shown in the following graph) illustrates a success that is extremely high for a few products, but low for the long tail of products on the right (left side of the graph).

ECONOMIC SUCCESS



For many media products, the average (of revenues or of profits) is *not* the most probable outcome. As seen in the graph above, the most notable outcome of the distribution at the 50th percentile is statistically zero, illustrating that there are very few successful products. However, because

the *average* is significantly skewed by the few and extreme outcomes, it is actually far *above* the most probable outcome⁸.

3.2.3 Market Characteristic #8 of Media and Information: Price Deflation

The eighth economic property of media is that of price deflation. When price competition occurs, the price drops towards marginal cost. Marginal cost is near-zero, and does not cover total cost, which also includes fixed cost. Price deflation makes it difficult to cover costs and achieve profitability.

And that is indeed what has been happening. Information has become cheaper for many a decade. And it is becoming increasingly difficult to charge *anything* for it. Music and online content is increasingly free. Newspaper prices barely cover the cost of paper and delivery; the content is thrown in for free.

The result of price competition with low marginal cost has been price deflation in information products and services. This is a good deal for the consumer but a difficult problem for the supplier. Price deflation to marginal cost poses a threat to long-term viability since low prices make it difficult to cover costs and achieve profitability. Prices have been dropping for a long time for phone calls, bandwidth, software, even hardware such as semiconductors and IT devices.

Price deflation is one of the fundamental economic trends of our time. The entire competitive part of the information sector – from music to newspapers to telecoms to internet to semiconductors and anything in-between – has become subject to a gigantic price deflation in slow motion.

This price deflation leads to economic pressure, to price wars which squeeze out weaker companies, followed by the locking up of prices, volatility of prices, and to instability in the entire information sector. Therefore, one main strategy for media managers is to avoid such price competition, and

⁸ De Vany and Walls, "Does Hollywood Make Too Many R-Rated Movies? Risk, Stochastic Dominance, and the Illusion of Expectation" *Journal of Business* 73, no. 3 (July 2002)

to focus on product differentiation, price discrimination (differentiation), consumer lock-in strategies, and industry consolidation.

3.2.4 Characteristic #9 of Media and Information: The Prevalence of Intangibles

A major characteristic of media activities is that they create and use assets that are not physical in nature. Intangible assets include, copyrights, patents, licenses, and more. Intellectual capital, a type of intangible asset, has several important characteristics. First, it is not inherently a scarce resource. Second, it proliferates, rather than depletes, with use (non-rival consumption). Management strategies then revolve around the protection and pricing of these products.

3.2.5 Characteristic #10 of Media and Information: The Presence of Non-Maximizers of Profit

The tenth fundamental characteristic of media is the presence of non-maximizers of profit. Many individuals in media field derive utility from the process of creating a product, not from profiting from its sale. When this occurs it is hard to distinguish production from consumption. Traditionally, utility is discussed only on the demand-side, but here utility is also created on the supply-side. In standard theory, producers follow the incentives of profits and maximize the latter. In media production, however, creatives are often incentivized to maximize recognition, not profit. Media managers need to reconcile these two conflicting goals of their employees, competitors, and often customers⁹.

⁹ Noam, Eli M. "Winners and losers: Industry Structure In "The Converging World of Telecommunications, Computing and Entertainment", *Mobility*. 2006.

3.2.6 Characteristic #11 of Media and Information: Information is Often a Public Good

The two classic economic characteristics of a "public good" are: (1) it is difficult to control the access to information because it is non-physical (non-excludability) and (2) it is easy to share the product (joint consumption). And, it is difficult to exclude someone from information, and also difficult to control access and sharing.¹⁰

The implications of information being a public good are: difficulty in charging for information, difficulty in protecting property rights, and frequent indirect transactions to create an ability to charge wrongly for the information. Media products often given away rather than sold to frequent users (e.g., in broadcasting, web portals, email services, search engines).

Also, because of the public good aspects, information is often generated publicly, such as through universities, and distributed widely in a subsidized way etc.

3.2.7 Characteristic #12 of Media and Information: High Government Involvement

Governments are involved in most aspects of the media and communications sector. Information distribution is considered essential, and hence the government protects it against dominance by any private company. Antitrust and anti-monopoly rules have been established to limit distributor power and curtail vertical integration. Policy also seeks to reduce distributor power over content providers. Oftentimes, the government subsidizes information distribution.

The high impact of media companies on politics and culture is such that they are always controversial, highly visible, regulated, or fought over. Indeed, media is a very 'public' private industry. There exists strong participation and regulation of government in broadcasting, cable, satellite,

¹⁰ Eli M. Noam, *Media Environment*.

telecom, mobile, film (subsidies), IT development, and many more. Considering the government's strong regulatory position there is a strong need to manage government relations.

4. CONSEQUENCES FOR ACADEMIA

We have identified 12 economic factors of the media industry. These characteristics impact just about every media industry, every media company, every media activity, and every media manager. Many of them exist, of course, in other industries. But not in the strong combination of structural instability, technological dynamism, risk, and public interest. In combination, they make its management different from management more generally in that they create unique incentives, demands, and constraints as compared to those of industrial productions or other services.

This creates a need for media specific management approaches and analytical tools. In that sense, media management is different. To provide such management skills effectively requires a convergence of expertise from several disciplines: technology, finance, economics, law, psychology, marketing, international relations, sociology, and politics.

What does this mean for the analyses of media management? It means that we need to develop a body of analysis that fits these fundamental characteristics. Economists have long talked about the 3 factors of production – capital, labor, and land. And over time a theoretical analysis has been developed for each of them. Finance theory has done it for capital assets; labor economics has provided a body of analyses for the people aspects of organizations; and regional and urban economics have investigated land use. And now, this must also be done for the emerging factor of production, information, and its consumer manifestation “media”. The list of 12 factors that was provided above is one way to organize such an analysis.

This is a major task. But it is also good news. It will bring field – the management of information resources and products – to a central role in economics and business analysis more generally, just as finance theory has today.

It is an unconventional field for traditional departments, schools, and disciplines, whether in schools of management or communications. Those working in this field today are the forerunners. The relevance of their work goes far beyond media, narrowly defined.

This is not new. Innovation and upheaval is what the subject of our analysis, media have done historically. Gutenberg's movable print was the first machinery of mass production. The industrial revolution eventually followed. The production and distribution system for film has been the forerunner for an emerging production system of virtual companies. And now the internet is changing everything again. There is an urgent need for management tools and for management research and principles. As is its subject area of media, this field is wide open for fast-paced creativity in research.