The U.S. Cable Television Industry: The Multi-Service Operator Organizational Structure as a Bundle of Competencies

By

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Submitted to the MIT Sloan School of Management in Partial Fulfillment of the Requirements for the Degree of

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Abstract

The United States cable television industry is experiencing fierce competition from telephone companies and content providers, as well as new and possibly unknown entrants. As organizations in the industry are currently dealing with competitor firms' ability to enter the domains of media, entertainment, and communications bundled services, areas that were traditionally controlled by the cable companies. The commoditization of voice, video, and data networks has led cable companies to rethink how they are going organize to be able to compete, service customer needs, and keep competitors from entering their domains, while maintaining best-in-breed product differentiation. In order for the cable companies to maintain their dominant position, I argue in this thesis that the firms must change from being a single service cable company, to being multi-service operators (MSO). This change in operations requires a new organization structure.

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Chapter 1 Introduction

1.1 Industry Evolution of Cable Television in the United States

Cable television has grown consistently in the United States over the last twenty or so years. The first television set was introduced in the middle of the 1940s. Cable television originated in the United States in 1948 to enhance poor reception of over-the-air television signals in mountainous or geographically remote areas. Signaling antennas were constructed on mountain tops or other high points and homes were connected to the antenna towers to receive the broadcast signals. By the early 1950s, around 70 cable systems served 14,000 subscribers nationwide (Parsons, 2008, pp 7-11).

In the late 1950s, cable operators began to take advantage of their ability to pick up broadcast signals from hundreds of miles away. Access to these "distant signals" began to change the focus of cable's role from one of transmitting local broadcast signals to one of providing customers with new programming choices.

By 1962, almost 800 cable systems serving 850,000 subscribers were in business. Well-known corporate names like Westinghouse and TelePrompTer began investing in the business (Parsons, 2008, pp 25-29). The growth of cable through the importation of distant signals was viewed as competition by local television stations. Responding to broadcast industry concerns, the Federal Communications Commission (FCC) expanded its jurisdiction and placed restrictions on the ability of cable systems to import distant television signals.

As a result of these restrictions, there was a slowing effect on the development of cable systems in major markets lasting into the early 1970s. In the early 1970s, the FCC continued its

restrictive policies by enacting regulations that limited the ability of cable operators to offer movies, sporting events, and syndicated programming. The freeze on cable's development lasted until 1982 when a new policy of gradual cable deregulation led to, among other things, modified restrictions on the importation of distant signals. The clamp on growth had adverse financial effects on cable companies, especially on access to capital. Money for cable growth and expansion all but dried up for several years.

Concerted industry lobbying efforts at the federal, state, and local levels resulted in the lessening of restrictions on cable in the early to mid 1980s. These changes, coupled with cable's pioneering of satellite communications technology, led to a pronounced growth of services to consumers and a substantial increase in cable subscribers. Satellites changed the business dramatically. They paved the way for the explosive growth of program networks and cable companies. As a result, nearly 16 million households were cable subscribers by the mid 1980s.

The 1984 Cable Act established a more favorable regulatory framework for the industry, stimulating investment in cable plant and programming on an unprecedented level. Deregulation provided by the 1984 Act had a strong positive effect and led to the rapid growth of cable services. From 1984 through 1992, the industry spent more than \$15 billion on the wiring of America and billions more on program development. This was the largest private construction project since World War II (NCTA¹ Archive, 2004).

Satellite delivery, combined with the federal government's relaxation of cable's restrictive regulatory structure, allowed the industry to become a major force in providing video entertainment and information to consumers. By the early 1990s, nearly 53 million households

¹ NCTA stands for National Cable Television Association

subscribed to cable and cable program networks had increased from 28 in 1980 to 79 by 1992 (Lindsay, 1998, pp 38-39). Some of this growth, however, was accompanied by rising prices for consumers, incurring concern among policy makers.

By the 1990s, congress responded to cable price increases and other market factors with legislation that once again hampered cable growth and opened heretofore "exclusive" cable programming to other competitive distribution technologies such as "wireless cable" and the emerging direct satellite broadcast (DBS) business.

In spite of this act, the number of satellite cable networks continued growing rapidly, based largely on the strategy of targeting programming to a specific "niche" audience. By the end of 1995, there were 139 cable programming services available nationwide, in addition to many regional programming networks. By the spring of 1998, the number of national cable video networks had grown to 171 (Lindsay, 1998, pp 46-48).

By that time, the average subscriber could choose from a wide selection of quality programming, with more than 57 percent of all subscribers receiving at least 54 channels, up from 47 in 1996. And at the end of the decade, approximately 7 in 10 television households, more than 65 million, had opted to subscribe to cable (Lindsay, 1998, pp 49).

Also, during the latter half of the 1990s, cable operating companies commenced a major upgrade of their distribution networks, investing \$65 billion between 1996 and 2002 to build higher capacity hybrid networks of fiber optic and coaxial cable. These high speed networks reception provide multichannel video, two-way voice, high-speed Internet access, and high definition and advanced digital video services all on a single wire into the home. The upgrade to broadband networks enabled cable companies to introduce high-speed Internet access to customers in the mid-90s and competitive local telephone and digital cable services later in the decade.

Enactment of the Telecommunications Act of 1996 dramatically altered the regulatory and public policy landscape for telecommunications services, spurring new competition and greater choice for consumers. As noted, it also spurred major new investment. A deregulated environment for cable operating and programming companies enabled the cable industry to accelerate deployment of broadband services, allowing consumers in urban, suburban, and rural areas to have more choices in information, communications, and entertainment services.

1.2 Current Environment

The new millennium brought with it hopes and plans in the industry for acceleration of advanced services over cable's broadband networks. Cable companies began pilot testing video services that could change the way people watch television. Among these: video on demand, subscription video on demand, and interactive TV. The industry was proceeding cautiously in these arenas, however, because the cost of upgrading customer premise equipment² for compatibility with these services was substantial and required new business models that were both expansive and expensive. Some consolidation in the industry resulted. For example, in 2001, partly in response to consumer demands, AT&T agreed to fold its cable systems into those of Comcast Corporation creating the largest ever cable operator, reaching than 22 million customers (Comcast Annual Report, 2002, pp 57).

² Customer Premise Equipment refers to devices in the home such as set top box, and cable modem needed for services offered by cable companies.

Lower cost digital set top boxes that started to become the norm in customer homes in the mid 1990s. This led to the launch of many of the new video services. In general, however, more expensive technology would still be required for cable to begin delivery of advances such as high definition television services. Such services began to be introduced by off-air broadcast stations as well as by cable networks such as HBO, Showtime, Discovery, and ESPN. This was a coordinated effort on the part of companies to ensure a consistent customer experience across the industry.

In 2002, a study sponsored by the Cable & Telecommunications Association for Marketing (CTAM) reported that roughly two of every three U.S. households had access to cable television, cellular phones and personal computers. Digital cable could be found in 18 percent of U.S. television equipped homes, suggesting an overall digital cable penetration among cable customers in the range of 27 percent (CTAM Market Size Report, 2002, pp 21-30). As for data services, the research revealed that 20 percent of cable customers with PCs were then using high-speed modems.

Cable operators with upgraded two way operations plants have been witnessing dramatic growth in broadband data businesses. Cable has quickly become the technology of choice for such services, outpacing rival technologies, such as digital subscriber line (DSL) services, offered by phone companies, by a margin of 2 to 1. Subscribers to high-speed Internet access service via cable modems had grown to more than 10 million by the end of the third quarter of 2002. As for telephone service using the cable conduit, growth was evident in all the limited market areas where such service was offered. More than 2 million customers were using cable for their phone connections by mid-2007 (CTAM Market Size Report, 2002, pp 49-58).

To accommodate accelerating demand, cable programmers rapidly expanded their menu of digital cable offerings. By 2002, about 280 nationally-delivered cable networks were available, with that number growing steadily.

Digital TV transition leapt forward in 2003 as substantial gains were made in the deployment of High-Definition Television (HDTV), Video-on-Demand (VOD), digital cable, and other advanced services. Competitive digital phone service gained momentum as cable introduced Voice over Internet Protocol (VoIP) telephone services. At the start of 2006, cable companies counted a total of about 5 million telephone customers, representing VoIP customers and customers for traditional circuit switched telephone service.

Cable's high-speed Internet service took up 24.3 million subscribers, and the number of digital cable customers had grown to 27.6 million by 2007, representing, roughly, a 60% penetration of all potential households in the United States (NCTA Broadband Churn Report, 2007, pp 5-18). The pace of growth is shown in Figure 1 below.







1.3 Key Issues

As noted, cable has grown rapidly but the growth has leveled off in recent times. Convergence of media platforms, such as voice, video, and data has led to the emergence of services that cross cable division boundaries. Changes in these industries have left cable organizations unable to meet consumer demands and fend off competition. Rather than organizing into traditional product silos such as video, voice, and data divisions, cable companies could be re-organized into cross-product groups such as content delivery, network convergence, and cross platform products.

Many services produced by cable industry are operated independently of each other. For example, television operates independent of broadband Internet service. There are many legitimate reasons why these services should be independent. Most segments of the media industry, such as telephone carriers, cable operators, broadcast licensees, and wireless communication providers continue to believe that the focus on a single product or service is critical to maintain growth.

Traditionally, firms in the cable industry created organization units on the basis of the service provided to customers. Yet similar functions across groups are required to provide for these services. For example, cable television divisions generally do not interact with the telephone divisions but both must go to customer homes, process orders, bill for services, and so forth. The traditional structure used to work well because there was little overlap among services. Technology infrastructures had limitations and were used only for a single application. For example, the physical cable connection into the home was used only to deliver television service. However, digitalization is expanding the functionality of certain technologies allowing cable companies (and others) to offer multiple services. Common carriers now offer more than just telephone services and cable companies can offer more than just cable programming. Organizational silos make convergence difficult and are increasingly creating problems.

This thesis will examine each of the service segments in the cable industry. The segments are of course components of larger corporate entities, but they often act autonomously and impose an unnecessary burden the overall cable company. In this thesis, I offer an explanation for the difficulties that the cable industry has had in integrating various services platforms. I also offer an organizational design to cable companies that cross connect boundaries between silos to ensure that a common set of goals and business objectives can achieved. I will argue that slow technological development and leadership failures have led to a decline in the cable industry and this decline cannot be arrested and turned around without structural changes to the cable organization.

Chapter 2 Organization Structure

2.1 Introduction

This chapter provides an overview of three different types of organization designs. Each serves somewhat different business objectives. I understand this presents an idealistic view of organization design in this chapter and that, in reality, firms often mix the three in a variety of complicated ways. But, for the purposes of this thesis, I describe organization forms at a general level of analysis. In the subsequent chapters, I tie these designs to the organizational challenges faced by cable companies.

2.2 Definition

An organization is a pattern of relationships. Specifically, an organization represents many interwoven, simultaneous relationships through which people, under the direction of managers, (presumably) pursue common goals. Goals are the products of decision making processes. The goals managers develop through planning are typically ambitious and generally, open ended. Managers want to ensure that their organizations last for a long time. Members of an organization need a stable, understandable framework that directs their work toward organizational goals. Managers must take into account two factors when they organize:

- They must outline the goals of the organization, their strategic plans for pursuing those goals, and know the capabilities of their organization for carrying out in strategic plans.
- Managers must consider both the present and future state of the competitive environment in which their organization exists.

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The specific pattern of relationships that managers create is organizational structure. It is a framework managers devise for dividing and coordinating the activities of members of their organization. Because strategies and environmental circumstances differ from one organization to the next, there are a variety of possible organizational structures.

2.3 Organization Design Types

Organization design refers to the way in which an organization's activities are grouped and coordinated. An organization can be formally structured in three major ways:

- Function
- Product/Market
- Matrix Form

2.3.1 Functional Organization Structures

Organization by function brings together in one department everyone engaged in one activity or several tightly related activities called functions. For example, an organization shaped by function would have separate departments for operations, marketing, and finance. The top marketing manager in such an organization would be responsible for the marketing of all products produced by the firm.

Advantages of the Functional Structure

A functional organization is perhaps the most logical and basic organization design. It is used mainly by smaller firms that offer a limited line of products because it makes efficient use of specialized resources. A major advantage of a functional structure is that it makes management easier. Each manager must be expert in only a narrow range of skills. In addition, a functional structure makes it easier to mobilize specialized skills and bring them to bear when and where they are most needed.

In the early days of cable television, for example, the functional design made sense because the product line was limited. This specialization made management (and the assessment of people) easier due to the single focus of the organization.

Disadvantages of the Functional Structure

As an organization grows, either by expanding geographically or by broadening its product line, some of the disadvantages of the functional structure begin to surface. Because functional managers have to report to central headquarters, it can be difficult to get quick decisions. It is sometimes hard to determine accountability and judge performance in a functional structure. If a new product fails, who is to blame: Research and development? Operations? Marketing?

Coordinating the functions of members of the entire organization also becomes a problem for top managers when functional organizations grow. Because members of each department may feel isolated from (or perhaps superior) to those in other departments, they may have difficulty working with others in a unified way to achieve the organization's goals (Adler and Baer, 1988, pp 40). For example, in cable television, the operations department may concentrate on addressing operational issues and be unaware and unconcerned with what marketing or the product groups do. As a result, the operations department may be flooded with complaints. In short, a functional structure typically produces linking problems across departments.

2.3.2 Market Based Organization Structure

A product or market organization, often referred to as 'organization by division', brings together in one work unit all those involved in the development/production and marketing of a given product or a related group ("family) of products. It may be segmented by geographic area or by customer types. Most large, multiproduct companies have a market organization structure (Laffer, 1990, pp 21). As organizations grow, sheer size and diversity of products make functional departments too unwieldy. When a company's departmentalization becomes too complex for coordinating the functional structure, top management generally creates semiautonomous divisions. In each division, management and employees design, produce, and market their own products.

Unlike a functional department, a division resembles a separate business. The division head focuses primarily on the operations of his or her division and is accountable for profit or loss in that division. A problem arises since the divisions may become competitive with one another. But a division is unlike a separate business in one crucial aspect: the division manager must still report to central headquarters. For example, Comcast, when it expanded into content based media, created a new division solely to manage online and interactive content. While this division operates as its own entity, the head of this division still reports to "headquarters"; the corporate parent.

A product/market organization can follow one or more of several patterns (Laffer, 1990, pp 30):

- Division by product.
- Division by geography
- Division by arket segment

Advantages of the Market Structure

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Organization by market has several advantages. Because all the activities, skills, and expertise needed to produce and market particular products are grouped in one place under a single head, the whole job can more easily be coordinated and work performance measured and maintained. Both the quality and the speed of decision making are enhanced because decisions made at the divisional level are closer to the market or customer. At the same time, the burden on central management is eased because divisional managers have greater latitude to act. Perhaps most important, accountability is clear. The performance of a division can be measured in terms of the division's profit or loss. This is one of the major problems in the cable industry, because decision making resides primarily at the corporate level.

Disadvantages of the Market Structure

The divisional structure does have some disadvantages, however. The interests of the division may be placed ahead of the goals for the total organization. For example, because they are vulnerable to profit and loss performance reviews, division heads within the cable industry firms often look for short term gains at the expense of long range profitability. In addition, expenses increase because each division has its own staff members, specialists, administrator staff and so forth. Costly duplication of skills results.

2.3.3 Matrix Organization Structures

The matrix structure, sometime referred to as a "multiple command system" is a hybrid that attempts to combine the benefits of both functional and market designs while avoiding their drawbacks (Pilnick, 1980, pp 16). An organization with a matrix structure has two types of structure existing simultaneously. Employees have in effect two bosses and they work in two chains of command. One chain of command is functional. The second is divisional or business

specified. The matrix form combines people from various divisions and function into a project or business unit led by a manager.

Advantages of the Matrix Structure

The matrix structure has proven to be flexible. Teams can be created, changed, and dissolved without major problems. Communication and coordination are usually increased. The matrix structure may increase the motivation of individual employees because employees are part of an environment where the exchange of ideas and greater opportunities to lead exist. In well run matrix organizations, people in business units receive technical training, and people in technical units learn business practices for employees develop. The aim is for all to have perspective on the organization as a whole.

Disadvantages of the Matrix Structure

The main disadvantage of the matrix structure is the potential conflict, confusion, and frustration created by the dual chain of command. Employees have two bosses; the functional manager and the project (or business) manager. Also, the matrix often pits divisional objectives against functional objectives, creating conflicts (Pennings, 2005, pp 3).

Another disadvantage is often the time lost to meetings and discussions needed to resolve conflict. The structure places a premium on interpersonal skills, open communications and conflict resolution techniques. In summary, the balance of power in the matrix organization is always troublesome. If one side (function or division) has more power, the advantages of the matrix (coordination and cooperation across the organization) are lost.

* * * *

In the chapters to follow, I evaluate the adequacy of the current cable industry division based structure for handling current problems faced in the industry. I argue that technological development and lack of leadership have led to the loss of cable dominance. This cannot be easily addressed unless the organizational structure and firm culture changes. But first, I look at the current organizational design of cable companies.

Chapter 3 Cable Industry's Current Organization Structure and Culture

3.1 Background

As pointed out by Lehr and Kiessling (1999, pp 39) "a strong centralized authority is needed to facilitate cross knit cooperation. The process of alignment is likely to proceed more rapidly and be easier to manage and coordinate if authority is centralized. Lehr and Kiessling focus primarily on regulatory convergence within an industry rather than the division of power between local and corporate segments. But their argument applies to the organizational problems in the cable industry. As shown in Chapter 1, organizational evolution within the cable has a long and complex history. Traditionally, there has been a division of jurisdiction between the local market and corporate management. The preemptive power of the local cable market has been granted many times while also being questioned. Centralization of services within the cable industry has been almost impossible to achieve.

The dispersion of power across multiple divisions adds to the difficulty of organizational alignment. Lately, the dispersion of power has even increased as a result of numerous mergers in the industry. The Comcast and AT&T Broadband merger being a case in point as reviewed above.

Reorganization of the cable companies based on functional units has, therefore, been next to impossible. A divisional organization refers to a set of divisions, each operating separate business and each performing the same functions within the division. The objective of the reorganizational purpose is to centralize most functions in a single department instead of being separated across different divisions. Examples of functions that are currently separated are network management, operations, and marketing, even at the corporate level.

3.2 Evolution of Disorder

The organizational structure of firms in the cable industry on a divisional basis was not the result of careful design. The main function of this disparity was to allocate singular focus by means of pooling single minded focuses. As the demand for cable services increased, companies were forced to develop competitive strategies on the basis of content. And so began silos within the firms. For example, silos developed because managers in the industry felt that content flowing across cables did not need to be integrated. The early structure of the cable firms included only engineering, marketing, finance, and vendor relations functions. This made sense at the time because television was the only platform provided cable organizations.

There have been relatively few changes in the organizational structure of cable companies. New offices services have been added while maintaining old ones. The structure of the firms has remained in place since the first cable organizations formed. The Telecommunications Act of 1996 maintained this structure.

3.3 Comcast's Acquisition of AT&T Broadband

In 2002, Comcast offered to buy AT&T's cable television operations, AT&T Broadband. If Comcast, the largest cable company in the U.S., with 23 million television subscribers, took over AT&T Broadband, with 16 million subscribers, the result would produce the largest cable company in history, serving almost 40 million customers³.

AT&T, at the time, had lost its dominant position in the phone service market. It had four major businesses: wireless service, consumer phone service, business telecommunications service, and

³ Source: Comcast company records

high speed Internet service or broadband. These are business domains that Comcast (and other cable firms) did not understand. They lacked expertise in these areas. Hence, if they were to enter these new domains, the merger served as an opportunity to grow the bundle of competencies held by Comcast.

Further motivation existed as well. Cable television revenues had been shrinking at Comcast in the face of tough competition. AT&T Broadband represented an opportunity for Comcast to build a converged network capable of handling not only television but also able to capitalize on the growing demand for Internet and digital phone service. The acquisition of AT&T Broadband made Comcast a major player in offering services beyond television. The merger did not come without organizational challenges.

The acquisition of AT&T Broadband by Comcast led to a difficult integration process. AT&T's employees did not understand the television expertise of Comcast nor did Comcast employees look beyond what they knew. More to the point of this thesis, the organizational design of cable companies made it even more difficult to integrate the two firms. As was true before, fiefdoms ruled the day but now there were more of them. Looking at this through the design lens, the problems were a result of issues in grouping, linking, and aligning (Ancona et. al, 2005, pp. 4-18).

3.3.1 Grouping

One of the problems that Comcast experiences today—and magnified when AT&T was brought into the company—is that the company does not organize by customer. Organization by customer means, for example, that the various activities and tasks performed by both the television and Internet sides of Comcast are done in the, and service the same customer. But, because of the divisional boundaries that exist in the firm, many activities such as operations, marketing, and product development, are duplicated for each serviced provided to customers. This only confuses both customers and employees. This structural grouping makes new product innovation and convergence of services very difficult. This leaves Comcast (and other cable companies) highly fragmented and internal competition between divisions for resources is rampant.

3.3.2 Linking

As the name implies, strategic linking is the way groups and individuals in an organization coordinate their activities within the organization. Comcast has been unable to manage coordination well because the divisions do not coordinate; indeed they fight one another for resources. Everyone is pulling for the same resources in order to achieve specific division objectives. Companywide objectives are secondary. At present, this myopic focus makes linking across divisions almost unattainable. A simple example illustrates the problem. AT&T Broadband acquired and the firm moved to develop a residential broadband Internet business, AT&T Broadband was rebranded as Comcast Online and set up as a business unit. But at no point were firm wide resources, aside from corporate capital used to buy AT&T, allocated to this new division to integrate with the rest of the firm.

3.3.3 Alignment

Alignment is defined as aligning the system to fit the existing system and processes. The problems with alignment (and for that matter, linking too) at Comcast are due to Comcast's lack of central support systems and process. Such systems and processes should be part of the

overarching strategic agenda of the company as a whole. Comcast is not alone with these problems in the cable industry. Support systems and processes are located within each division. And, to add to the redundancy, Comcast corporate have their own support systems and processes. Each of these is different. The lack of organizational congruence starts at the top and permeates throughout all parts of the firm. The newly formed Comcast Online, as noted above, still does not operate as an integrated part of the entire firm.

Market shifts now occurring in the media sector are going to make things difficult for cable companies to compete in a business as fashion. Cable's dominance may not last much longer if the firms that comprise the industry do not adjust their organization structures to deal with these market shifts.

* * * *

Convergence refers to the increasing cross-functional centralization of services. Convergence is based on functional units organized under a single head instead of being replicated in separate divisions. The objective is to have similar functions grouped under one organization instead of being divided across divisions. Greater integration of functions would enable more flexibility to each geographical operating unit. Such an organizational design could reduce unnecessary redundancies, save company resources, and possibly lead to faster product delivery as a result of a more simplified reporting structure.

Chapter 4 Market Shifts in the Media Sector

4.1 Changes in Business Model

Traditional media companies, cable firms included are changing their businesses in dramatic ways. Each company now provides voice and data transmission via traditional infrastructure. There have nonetheless been considerable developments in the way the infrastructure is used. With relatively simple technical upgrades, media companies are now able to offer services other than television. Internet and telephone services can bundled together now with content delivered over and across various platforms.

This expands business opportunities by adding programming choices for customers. For cable companies, there is a new market. In the near future, media companies will also be able to offer interactive television. Recently, successful attempts have been made to provide telephone services over cable infrastructure. A cable infrastructure is also able to provide interactive services which, when added to ground wireless transmission, completes the range of services that cable companies can offer. With few exceptions, cable companies (and their competitors such as telephone and content companies) are upgrading their physical networks and adding services to their traditional businesses. They are also forming multiple alliances and acquiring other companies. Companies that offer a substantial number of these services are able to charge comparatively lower fees compared to companies that specialize in a given service. More costs less. The multiservice shift is shown in Table 1 below.

	Telephone	Wireless	Cable TV	Internet Access	Interactive TV	Satellite TV	Content Production	Speed Tiers
AT&T	x	x	x	x	х			
Verizon	x	x		x				
SBC	x	x		x		x		
Qwest	x	x		x	x	x		
Nextel	x	x		x				
Time Warner	x		x	x	x			x
Comcast	x	x	x	x	x		x	x
ABC			x				x	
NBC	R R		x				x	
CBS			x				x	
Fox			x				x	

Table 1: Service Convergence Across Competitors

Source: FCC Service Convergence Report, 2005

The implementation of new services by cable creates significant competitive challenges for the firms in the cable industry. First, there are problems that cannot be easily solved using the traditional structure of the organization, such as those related to the development of converged technologies. For example, there is a major trend in the media industry to offer television shows streamed over the Internet. This makes sense as more and more consumers demand the same content on their mobile devices or on their PC as they get on a their television set at home. In the case of cable companies, the divisional structure has not allowed television and Internet technologies to converge as rapidly as the media industry is demanding because there is a lack of coordination and control between divisions the television and Internet divisions. This is the true at Comcast where a lack of understanding across technology platforms has delayed and even stopped product launches.

Second, management of services offered by the company poses a problem because it requires personnel with a broad knowledge of the information industry instead of knowledge of the individual segments. Such general knowledge is not widespread in the cable industry, or Comcast specifically. Third, firms in the industry have to manage a trade-off between convenience and savings to users as opposed to market domination from the use of a single carrier. While it is easier for the consumer to deal with a single provider for many services, it also creates a dependency that may be difficult for competitors to break. Successful companies that have market offer bundled arrangements now and can move to dominate markets. The cable firms have not evaluated the potential market power of companies that provide services across all products.

4.2 Realities of Convergence

Integration with other companies from other industries is occurring in the cable companies. This leads to external organizational management problems. The largest cable companies, Time Warner, TCI, Media One, and Comcast have all made arrangements of various kinds with companies in other communications industries. Perhaps most significant is the purchase of TCI and Media One by AT&T. Time Warner and Comcast have entered into agreements with common carriers to expand services beyond their traditional programming. Time Warner, for example, has an agreement with AT&T to provide cable telephony. Arrangements with other information related companies such as Microsoft and Compaq are helping Time Warner to provide customers with fast access to the Internet. Five years ago cable companies considered the upgrade of their infrastructure an expensive option. Now they are investing not only in

infrastructure to allow two-way transmission over their coaxial but also investing in content to deliver on upgraded platforms.

The need for fast, reliable, and integrated services has motivated cable companies to make investments that were once considered too expensive. Before convergence opportunities became apparent, cable companies, unlike common carriers, faced large operational expenditures. The addition of new services over their updated infrastructures has made them more attractive companies. Now cable carriers have the infrastructure—and the best infrastructure—to handle bundled communication services.

Cable companies have the bandwidth necessary to provide telephony, Internet access, and interactive programming services. A weakness of cable is that it is a shared medium. The more people that access bandwidth, the lower the transmission speed provided to all customers. In contrast, common carriers have been able to provide these services over DSL lines but are unable to offer them to all of their subscribers because the technology has a limit of 18,000 feet from a central office. Given technological limitations, there has been a need for interconnection to take advantage of each technology's strengths. For example, one recent development in this industry is to make it possible for people to click on an icon to obtain price and relevant information of things shown on the program they are watching, such as clothing, furniture, and music. To make this reality there must be a connection to the Internet that would allow a viewer to access the site of the product or service. This is possible only if there is a close integration of networks. Cable is best placed to do this. Additionally many cable providers are interested in other information

related industries such as publishing and programming. Linkage here has been problematic and the organizational structure needs to be in place to allow this to happen has not yet emerged.

Finally, cable companies realize that the FCC^4 may allow open access to the cable infrastructure. Regulatory challenges in this area are likely of course. But legal challenges may arise as merger activities increase. Interconnection agreements are another potential issue of contention. The extension of regulation to content of programs and web sites may also reemerge since cable owners are now also program developers.

4.3 What is Needed

Change for cable companies has come slightly slower than that for others in the media space. In spite of the efforts cable companies have made to expand the scope of their businesses, only until recently have improvements in technology allowed them to offer broader services such as Internet access. Historically, the industry has been primarily concerned with industry specific issues. Technological improvements and deregulation have, nonetheless, come to pass and are forcing cable companies to re-examine their operations and strategy. To take advantage of the new competitive landscape, integration with other companies beyond the industry will be required. If integration is to succeed, an overhaul of the structure of cable firms in necessary.

Most cable companies operate today as independent monopolies. For this reason, a large portion of a firm's activities concentrate on organic growth activities and as the certification of new franchises. Cable companies grew in an area where technology was relatively stable and

⁴ FCC=Federal Communications Commission

earnings were more or less guaranteed. Few efficiency gains could be claimed by any cable company.

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Technology stability may be helpful to understand why reorganization efforts have increased the number of groups performing similar functions, yet not increase the interaction among them. This theory is based on the assumption that cable company employees are self-interested individuals and, given the incentives they have within the firm, tendency is to continue expanding. This is consistent with many organizational theories. A classic book by Cyert and March (1965) recognizes, for example, that organizations change slowly. Objectives and goals and even the determination of new objectives are constrained by the existing structure of the organization. Employees take the structure as given and are rarely enthusiastic about changing the structure. Individuals making decisions often do not even think about other possibilities and consider precedents binding.

This could be attributed to "path dependency" (David 1995). Although originally presented as a way to understand the evolution of technical standards, the idea has been applied elsewhere. The basic premise is that once individuals (or organizations) learn a particular way of doing things, they do not deviate from it because the cost of changing the way they do things is too high. Path dependency is a construct that helps explain the cable company's inability to move away from its original structure. The cable companies organized its functions along service divisions. In spite of the fact that functions overlap, the cable firms have not been able to change. In sum, they appear stuck with trying to do new things in old ways.

Chapter 5 Proposed Organization Design in Cable Industry

To establish a customer and employee first philosophy as well as a unified culture calls for exemplary leadership abilities. Cable companies must find a way to engage employees and align them to a common strategy designed to strengthen the customer experience, build customer and employee satisfaction, and drive business results. In this regard, the strategic design of the cable organization is critical.

5.1 A Culture Shift

Building an innovative and entrepreneurial group of employees who can create new products and learn new technologies in the multiservice operator model is a difficult task given culture norms that have existed for so long in the cable industry. Aligning human resources to a unified set of objectives across the cable company requires an iterative and ongoing process. In the cable industry, HR functions have been seen as routine administrative matters rather than functions that can contribute to the strategic agenda of the firm.

As a number of new competitors appear in the marketplace, cable has lost a significant number of video customers to satellite companies and an array of content providers across non-traditional platforms such as the Internet and mobile devices. On the high-speed Internet side of the business, cable companies are losing market share to phone companies such as Verizon and SBC Communications. The focus of the firms in the cable industry has remained on cable television clientele and less on the newer lines of business such as broadband Internet and digital telephone. The task of reinvigorating the culture in a multiproduct firm is a key problem to be solved. A number of challenges face cable leadership.

5.1.1 Structural Issues

Cable leadership must recognize that their companies are losing customers because of the divisionally aligned structure. The need to restructure by moving leadership and operations closer to the customer is a way to address this problem. This strategic aligning combined with grouping and linking is critical. Local management must "own" their customers. The cable business is run by the heads each of each function: Marketing, customer service, field operations, technical operations, and so on. This segregation of functions has not allowed a cross-functional communication or innovative product development. Moreover, management has lost touch with customers and is unable to act locally or understand the customer experience from beginning to end across all service offerings.

5.1.2 Customer Service

The customer service strategy across cable organizations is to outsource a large portion of customer service calls to geographically distant places. These service calls are taken by agents far removed from the customer. It is clear that contracted service providers are not providing quality service. This has fueled the industry's declining reputation in the market (Broadband Reports⁵, 2008).

Delivery of a poor customer service and lack of local empowerment and product knowledge of customer service employees to is equally problematic. Employees at Comcast have hesitated to wear their logoed jackets in public places. They were worried that they would be accosted by irate customers. A personal example is worth mentioning in this regard. I was asked to attend a recruiting fair on behalf of Comcast. I was on a train wearing a Comcast polo shirt, and at one of

⁵ Broadband Reports is the central customer sounding board for customer service problems in the cable industry

the stops a nice elderly woman sat down next to me. She asked if I worked for Comcast. When I told her yes, she immediately said "I hate your company, your service and attention to customer details is terrible!"

Customer service representatives are required to follow "business rules" that were written to reduce costs on all transactions with customers. For example, CSRs⁶ are measured on the length of the call with a customer rather than the quality of service provided and the manner in which the problem is resolved. Business rules are written to make it easier for the business rather than what is helping or convenient for the customer. Such rules and processes lead to increasingly negative customer experiences and perceptions.

For example, in most cable markets, when a customer calls to activate cable service, it is the cable company that dictates the times when a technician will come out to a customer's home to install service. What is convenient for the customer is often ignored. Consider what happens when a customer calls customer service to report a problem. Most of the time, a customer is put on hold. Problems are dealt with in the order that calls come in. They are not dealt with based on the severity of the customer's problem. Thus, a person needing a new television channel may get higher priority than a person whose service is completely disrupted.

5.2 Reinventing the Organization

Employee morale is clearly a challenge in cable companies today. Employee attrition has increased and this leads to and apprehension among employees. For example, unions are attempting to capitalize on the low employee morale of cable employees. A recent reported 32

⁶ CSR=Customer Service Representative

union campaigns among technicians and call-center employees in cable companies (NCTA Service Delivery Survey, 2007, pp 78).

Reinventing the organization is I think the key. The cable companies are losing market share, employees in the firms are unhappy and constrained in the jobs, and systems the systems in use are not conducive to supporting the business. The organizational model under which cable companies operate does not support the outcomes called for by current business plans. Cable companies need to focus on three key areas: customer satisfaction, employee satisfaction, and business results. It is time to "rewire" the business. Cable companies need senior leadership teams that recognize they must allow more power and control to flow to those who know and operate in local markets. Recruitment must be locally sourced. Leadership is a principal void. There is too much reliance on technical engineering skills rather than market knowledge and general management. Turnover at the top is a problem as well. As of 2007, seventy five percent of the senior leaders in cable are either brand new employees or recently moved into their positions (CTAM Report, 2007, pp 20).

5.3 A New Organization Design

Any new organization design must pay attention to grouping principle, linking mechanisms, and aligning devices. These must match market challenges. My proposed design for the cable company of the future follows.

5.3.1 Grouping

First and foremost, cable companies need to design the organization based on expertise and function within the company. Because the divisional approach has led to redundancies across

the organization, such as in operations and marketing for example, functions must be grouped by shared disciplines, skills, and work processes.

This would allow several synergies to surface. First, cross-functional training and knowledge sharing across multiple service platforms could occur. Each function would have a shared pool of resources across departments thus helping to connect the silos that are today isolated. One example is operations. Currently, the three major divisions in cable, television, Internet, and telephone handle their own operations independently of each other. But the platforms are converging. To group employees by function would allow operations to operate as a single entity. New products might also be more forthcoming than is currently the case.

5.3.2 Linking

Coordination between divisions has always been a problem in cable firms because the mechanisms and processes to link functions have not existed. Market shifts indicate that service delivery is critical and platform convergence is occurring. Specifically, a new group should be created that performs two linking functions. First, a liaison is needed across product groups and projects. Second, integration is needed for cross functional programs. For example, Comcast has a project in its project portfolio to launch a television service on mobile devices. But there is no group within the company that has knowledge of both platforms and understands the interdependencies needed to launch such a service.

5.3.3 Alignment

Resource management has been a chronic problem in cable. This was true even when television was the only service offered. At Comcast for example, resource allocation has always been done on an ad hoc basis. No formal process or procedures are in place to a corporate benchmarks such

as return on investment or market penetration. Often, aligning mechanisms are needed as well. This includes an inventory management system or a standard for how many projects a given person can be assigned at any one time. Cable companies must make sure that resources are available to insure that people have what they need to perform their job.

* * * *

While the above proposals may sound straightforward, change is a slow and iterative process. The next chapter describes how this new organizational structure could be deliberately built.

Chapter 6 Bringing About Organizational Change

6.1 Taking a Risk

The risks of implementing new organization model are high. The rules for how to organize are not entirely clear and may need to be changed again as experience accumulates. Putting general managers in charge of a particular market and telling them that they now own their own end-toend operations, product development, and marketing units, may mean they become separated corporate parent. While a regional, market based approach to cable's organizational challenges will alleviate the reliance of market units on the central entity, the need for a unified vision is also clear if the local leadership teams at the market level are to be aligned with the corporate goals. These corporate goals must be made clear.

6.2 Strategic Fitness Process

A "strategic fitness process" (SFP) is one way to engage cable employees in the change to a market based, multi-service organization (TruePoint, 2005). The SFP is guided governance and learning process that enables the market teams, through a series of structured meetings, to improve organizational performance. The idea is to align the local cable units to the corporate cable company's overall strategic intent. The SFP is not a push strategy from the top, but a participating process that begins at the local market levels.

The SFP requires the local market team to clearly articulate a vision in a cohesive document. This is a statement of strategic intent at the local level. The process then incorporates a series of disciplined conversations among and about the cable company's goals, strategy, and leadership. The following sections detail the components of the strategic fitness process.

6.3 The Statement of Intent

The statement of intent focuses on three primary goals:

- Improve customer satisfaction
- Improve employee satisfaction
- Improve business results

The statement of intent needs to be carefully drafted. It must elaborate on each of the three goals and how they are to be achieved. This exercise can be a powerful beginning to defining the strategic agenda for the cable company itself. This process is the first of several steps to create a cable company that allows everyone to participate in deciding how the organization should to address the challenges it faces. Everyone in the organization needs to participate in order for a clear statement of intent to be drafted; from CSRs to product managers, from field technicians to the accountants, from HR to operations supervisors.

6.4 Action Planning

After having defined the strategic intent at all levels, action plans and timelines must be developed. Each action plan has to be assigned an owner among the local senior team members. A few action items must identified that can be implemented almost immediately. The action plans need to focus on simplifying the customer experience. Some of the most critical action items include:

• Capture customer feedback and incorporate the "customer's voice" through a variety of feedback mechanisms such as customer surveys and customer focus groups. This must occur at the market level.

- On the employee side, redesign the performance management processes and launch a quarterly employee satisfaction survey.
- Develop a leadership training program to help generate managers who can lead effectively in the changed organization.
- Develop a new set of organizational performance metrics and create broad awareness of the current financial performance in local market area and targets for the future.
- Form "operations councils" in an effort to create cross-functional groups and coordinate the implementation of key initiatives.

6.5 Implementing Changes

As a result of the SFP and the action plans that emerge, significant changes in how the cable business is now managed can be expected. A critical task from operations council is to review areas that are identified in the strategic fitness work. Redesigning business processes to remove these obstacles can be the biggest gain. For example, in the case of Comcast, when product teams conceive of a new product, they must now contact several engineering groups to get an assessment of the technical feasibility for this new product. Instead, the formation of a technology steering council that comprises of all of Comcast's engineering groups could look at the technological feasibility at the same time, and avoid confusion as to what the product launch. This will be useful as various services lines converge as new voice, video, and data products emerge.

Increasing customer satisfaction by engaging a team chartered to examine the "business rules" governing employee interactions with customers is a major area that must be investigated. This

is particularly important given that the cable industry's customer focus at the corporate level has not yet been felt at the market level. In order to put the customer first, a change to the local business rules is necessary.

A significant shift from earlier corporate practices must also occur. Specifically:

- More frontline employees must be hired and trained to provide better quality of service. Outsourcing must be curtailed.
- Operations support centers need to be moved from a centralized "virtual" model to a geographically specific unit to support local, not national operations. In today's cable customer support model, a central call center manages all markets.

From an action plan perspective, the following can be implemented almost immediately:

- 1) Training frontline employees on the basics of business and finance
- 2) Developing a new set of performance metrics that track customer satisfaction.
- Designing a new bonus plan for all employees based appropriate performance metrics.
- 4) Determining a set of customer satisfaction metrics based on the quality of the interaction employees of the company have the customers.

6.6 Employee Communication

An employee communications process needs to be created to effectively operate cross-function teams within the local market. This is a dramatic cultural shift. The communication plan needs to center on engaging employees in the transformation process by heightening their awareness as

to what is happening in the organization (and industry) and why. Employees need to be part of the change and need to feel empowered. This can only happen if the leadership in the company is listening and acting based on direct employee feedback.

Any employment communications strategy needs to center on

- Thinking of the customer first.
- Making the cable industry a "great place to work".
- Achieving sound financial performance.
- Reminding employees of the company vision.
- Creating a powerful brand with which employees are proud to be associated.

6.7 Developing Innovative Products and Services.

The introduction of innovative products and services is at the heart of what cable companies should do. The SFP process helps to ensure a smooth and timely delivery of products by:

- Improving processes for new product introduction. CRM tools may help this.
- Creating greater employee and customer knowledge, training, and understanding of new products.
- Providing information sharing tools for technical and frontline employees.
- Strengthening contractor and vendor partnerships and training. Including vendors and contractors in a product and technology strategy council may help to alleviate the challenges faced downstream during product delivery.

Training is probably one of the most important needs that cable companies must meet.. Employees I speak with constantly express a desire for additional training. Cable companies are rolling out new products and services such as mobile television and visual voicemail. The technical complexity associated with these products is such that employees are having difficulties keeping up. Technicians, customer care employees, and service center representatives need more training to do their jobs in order to best represent the new products to cable customers. Some of the ways to mitigate the knowledge gap in addition to training include:

- The formation of an advanced services team whose charter is to cross-functionally project manage each product launch. Functions that need to be crossed include operations, problem escalation, project budgeting, and project and program management functions. An ERP⁷ system could help manage this process.
- 2) Acknowledge that leadership development, communication, and training remain problems and thus require attention and action at all levels of the organization.
- 3) Establish a product bundle that combines high speed Internet, cable television, and telephone service for a low price.
- 4) Simplify product pricing and packaging to reduce confusion.
- 5) Invest in frontline information tools for employees such as access to the problem management tools that the CSRs and field technician use so that employees can better understand the product deliver problems from the customer perspective. A CRM⁸ system could help manage this process.

⁷ ERP=Enterprise Resource Planning

⁸ CRM=Customer Relationship Management

6) Inform customers at the market level as to the products and services available to them through the cable company. Marketing team "webinars", door-to-door demonstrations, and face-to-face meetings with customers and employee groups will all help in this regard.

6.8 Timeframe

A change process that truly engages the hearts and the minds of the cable company workforce is required. The Strategic Fitness Process is based on the assertion that cable organizations already have the answers to the organizational challenges they face but the problem lies in bringing these answers to the fore and then putting them into action plans that can be implemented.

By clearly identifying high impacts areas to focus on first, appropriate resources can be allocated, team leaders can be assigned, and establishment of a flexible and nimble process can be enacted to ensure that each organizational unit involved stay focused and on track. However, the improvement process is a never ending story.

6.9 Impact on Organizational Culture

If the SFP process is followed, a collaborative environment can begin to emerge and perhaps the stovepipe form of cable companies will be reduced. Employees need a voice and want to be heard by senior leaders. They have much to say. Interaction from the front line can help senior teams develop a connection with what employees and customers experienced every day. Performance improvements follow timely actions in response to the problems surfaced byt employees will demonstrate to senior leaders the importance of employee feedback and its impact on business results. Top leaders' commitment to continuous improvement must be

demonstrated. The culture of the cable company is currently not that of constant improvement. There needs to be among senior leaders a focus on pushing for progress as well as tolerance for imperfection.

The SFP should impact the awareness of companywide problems among the most senior team in cable companies. Senior leaders today are mostly aware of challenges faced in their particular function. Conversations resulting from the SFP will facilitate an understanding of challenges and problems in other functions. The whole system of organization and management must come into view. Increased dialogue will also lead to an understanding of the impact of decisions "downstream" (middle management and line level) and across functions. The SFP process allows members of the organization to hear of matters well beyond what they hearing going about their everyday duties. This is especially important at the market level where the closeness to the customer exists but little communication across services and functions takes place. The cable company must learn what the cable company knows.

6.10 The Road Ahead

An organizational learning process such as the SFP is something that needs to be repeated across all markets in a cable company. This will not be an easy process to administer. It will take the full commitment of senior leaders and will require significant funding, and of course, it must be done well.

I am convinced that the cable industry would benefit by adopting a market based organizational form. An organizational change process like the SFP could help establish such structure and

help manage and guide the change needed to make the new organizational structure work. The process I have laid out for cable organizations perhaps works best at "inflection points", when technology shifts, markets change, new product lines develop or regulatory environments alter. All of these are occur in the cable industry today. It is time for cable organizations to reinvent themselves or vanish from the scene.

Bibliography

- Parsons, P.P., <u>Blue Skies: A History of Cable Television</u>, Temple University Press; 2008. pp. 7-11
- 2. National Cable Television Association Archive, <u>2004: Evolution of Cable Television to</u> <u>Today</u>. NCTA; pp. 12
- 3. Lindsay, J.V., "Pay Television at the Crossroads" in <u>The Electronic Box Office: The</u> <u>Growth of Cable Television</u>, Praeger, New York; 1998, pp. 46-48
- 4. Lindsay, J.V., "Pay Television at the Crossroads" in <u>The Electronic Box Office: The</u> <u>Growth of Cable Television</u>, Praeger, New York; 1998, pp. 46-49
- 5. Comcast Corporation: 2002 Annual Report
- 6. Cable & Television Marketing Association, <u>Annual Cable Market Size Report</u>, CTAM 2002; pp. 21-30
- 7. Cable & Television Marketing Association, <u>Annual Cable Market Size Report</u>, CTAM 2002; pp. 49-58
- 8. National Cable Television Association Archive, <u>2007 Broadband Churn Report</u>. NCTA; pp. 5-18
- 9. Adler, J., Baer, W.S., <u>The Wired Island</u>; The Rand Corporation; 1988. pp. 40
- 10. Laffer, C.R., <u>Convergence Between Telecommunications and Other Media: How to</u> <u>Adapt</u>, Telecommunications Policy, 1990; pp. 21
- 11. Pilnick, W.G., <u>The Information Society</u>, Center for Philosophy of Organization, University of Louvain, Belgium, 1980; pp. 16
- 12. Pennings, J., <u>This Organization is Disorganization</u>, The Wharton School, University of Pennsylvania, 2005, pp. 3
- 13. Lehr, W. & Kiessling, T., <u>Telecommunications Authority: The Case for Centralized</u> <u>Authority</u>, Lawrence Erlbaum Associates, 1999; pp. 39
- Ancona, D., Kochan, T., Van Maanen, J, & Westney, E., <u>Managing for the Future:</u> <u>Organizational Behavior and Process</u>, South-Western College Publishing, 3rd Edition, 2005; pp. 4-18
- 15. Federal Communications Commission, <u>2004: Evolution of Cable Television to Today</u>. FCC; pp. 12

- 16. Cyert, R.M., March, J.G., <u>A Behavioral Theory of the Firm</u>, Prentice-Hall, 1965; pp. 33-34
- 17. David, P.A., <u>Clio and the Economics of QWERTY</u>, American Economics Review, 1995; pp. 332-337
- National Cable Television Association Archive, <u>NCTA Service Delivery Survey</u>. NCTA, 2007; pp. 78
- 19. Cable & Television Marketing Association, <u>CTAM Cable Management Survey</u>, CTAM 2007; pp. 20
- 20. Beer, M., Leading, Learning and Learning to Lead: An Action Approach To Developing Organizational Fitness, TruePoint, 1998