Digital Platforms: 
Definition and Strategic Value

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Introduction

Digitization of information transport networks, technical solutions geared to significantly increasing their capacity, progress made in the field of interactivity mobility and compression, the phenomenal deployment of Internet and the launch of digital TV and mobile telephony have all contributed to enabling projects for development of new remote, on-line or broadcast services, sometimes termed multimedia.

It goes without saying that the scope of services being offered in the fields of Internet and TV has been broadening consistently over the last five years. Every year since the launch of digital TV in continental Europe in 1996 has seen the creation of 100 digital television channels, bringing the total number of services to 650 in 1999. Commercial sites on the Web are multiplying exponentially. In France, for example, the amount of Internet sites and services has veritably exploded over the past three years, going from approximately 10,000 to over 50,000 at the end of 1998.

Furthermore, TV and Web terminal access services are compounding and becoming increasingly multi-functional; Web services are exploiting the same broadcast networks as TV (and vice-versa), and the content being transmitted by the two media is becoming progressively similar in nature.
In both these markets, where technological evolution is at once rapid and diverse, the potential for development is to be found there where the television and Internet universes meet.

Under the influence of technological innovation, the Web and TV converge: not only in terms of content, the type of services being offered and network technologies, but also, fatally, in terms of the economic and financial logic that governs the whole of both media's activities.

In particular, a rather prominent common development is the advent of a new intermediation activity linked with the "assembly"\(^{(1)}\) of content and services onto a coherent technical and commercial access platform. The notion of a digital platform hence becomes common to both the Internet and TV markets facing multiplication of services. This activity appears fundamental to the progressive structuring of the multimedia chain\(^{(2)}\).

At a time when strategic alliances (AOL-Time Warner, Vivendi-Vodafone, Lagardère-Deutsche Telekom) are consecrating the merger of multimedia's core industries (Internet, TV, telephone) and related competitive interests:
- not only for mastering supply of high value added content,
- but also mastery of the technical side of consumer final access via control of the network,
the issue of the pertinence of a player's market position with respect to assembly comes to the fore.

The goal of this article, then, is to address the issue of the strategic value of this "new" activity, or entity, which is at the heart of the Web and TV operations chains.

In order to aptly trace the contours and competitive advantages that it contains, a definition drawn from recent market trends will be proposed.

This article also aims to illustrate the fact that, in this world of convergence, the structures\(^{(3)}\) of Web and TV operations chains' are converging toward a similar model, i.e. toward an ultimate multimedia

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\(^{(1)}\) Intermediation also targets commercial distribution as well as certain of its technical services.

\(^{(2)}\) Notably an evolution made possible by the increasing deployment of two way broadband networks, or at least enabling implementation of a certain level of interactivity.

\(^{(3)}\) To a certain extent, the mobile telephony network is also converging toward the same model. For reasons of simplicity and brevity, however, this aspect of the convergence issue will not be addressed here.
chain. This model will constitute the basis for a conceptual analysis of the value added chain of supply of convergent multimedia services.

The primary goal here, however, is to demonstrate that the value of digital platforms does not reside so much in the content that they broadcast or in the distribution networks or technologies which they exploit, and the resulting competitive advantages, but rather, and above all, in their capacity to implement the principles of the One to One marketing theory.

### The Advent of an Additional Intermediary Function

**TV: evolution toward a “TV of services”**

Development of digital and compression technologies in the field of television, which began in the mid-90s (4), offered broadcasters new growth opportunities based on:

- expansion of the networks' broadcasting capacities, and a resulting decrease in broadcast costs,
- the possibility of developing new television services, principally thematic, and/or especially interactive,
- establishment of subscriber payment as television's prime source of revenue,
- designation of bouquet operators as the television industry's central players.

In this respect, the television offer has been considerably enhanced. In 1999, in France, for example, thematic French language channels, managed primarily by French companies, numbered close to 70 - representing approximately 50 new channels since 1996.

This evolution has had a dual effect on the economic and financial logic which governs the television market players' strategies.

- First, fragmentation of the television offer into more targeted programming schedules translated itself logically into heightened competition in that market segment which is specific to TV services editing.

(4) Digital technology in the field of television has been applied to broadcasting standards, but also to conditional access systems and, more recently, to APIs (Application Program Interfaces).
Consequently, mastery of programme supply has become a crucial factor for TV channel editors, for three main reasons:

- In an increasingly competitive environment, it is vital that all channels, be they in the free-to-air or pay-TV, must offer quality programming that will attract demand or, at the very least, allow them to distinguish themselves among the existing offers - enabling them to maintain their audience base and, hence, to secure revenues. A channel's editor must therefore be able to: offer innovative programmes, enabling the channel to renew its offer, or to broadcast programmes with high expected viewer ratings, notably TV dramas, feature films or sports;

- The multiplication in the number of existing TV channels generates a significant increase in the need for programmes and, consequently, large inflationist tensions on the world programme market. This evolution tends to limit a channel's room to manoeuvre with respect to programming, especially given the fact that demand tends to concentrate on a limited number of guaranteed appeal programmes (sports, feature films, TV dramas). A channel's editor must therefore find a means of filling his programming schedule for the lowest possible price in order to remain profitable;

- Finally, in light of the advent of digital technology coupled with the contingency of advertising revenues, distribution of thematic channels via a platform (or bouquet) of digital pay-TV services has become indispensable. The quality of the programmes that a channel offers, in addition to the size and profile of its expected audience, directly influence the position that it can obtain in the operator's service line-up, and on the level of remuneration that the operator will allocate to it. A channel's editor must therefore offer programming which is at once complementary and sufficiently original in value in order to optimize the channel's position in the bouquet.

In the field of digital, then, the competitive edge for a channel's editor will be built around his mastery of programme supply and of his channel's brand image.

- Secondly, the size of the investment required to exploit a digital television platform has led operators, in light of increased convergence and competition, to consider a new business model which will enable return on investment through taking advantage of this convergence and of interactivity, in particular.
The French example, and notably those strategies developed by Canalsatellite and TPS, serve well to illustrate this evolution.

The strategy of these two companies first centered around the goal of rapid development of their subscriber base through a promotional battle and deployment of their points of sale networks. After this initial phase, competition between TPS and Canalsatellite is now focusing on strategies for creating differentiation between their services (via interactivity) combined with a supply of high value added content (competition on the rights to sporting events and feature films).

The more or less admitted objective of TPS and Canalsatellite's platforms is to continue to sell even "more services" in order to take advantage of economies of scale in terms of the cost of recruiting subscribers, but also in terms of the cost required to manage subscribers and their fleet of set-top boxes.

Continued development of the bouquets will no longer come from an increase in the number of traditional "re-broadcast" channels but rather, and this in the short term, from:
- multiplication of interactive TV services according to the "walled garden" model, whether these services are associated with the channel's programmes or not,
- and, very probably, on high speed Internet access via the television set or PC.

In this approach, the economic logic is concentrated on ensuring customer loyalty and qualification \(^{(5)}\) as well as on controlling a clearly identified \(^{(6)}\) subscriber base which is likely to attract advertisers.

Internet: "Content and profiling are now the key issues"

In Europe, the Internet consumer access sector's entry into a highly competitive price war, although this market is still, all in all, relatively limited, has led to an intense concentration phenomenon over the last two years. Despite current threats come from free Internet access offers, large telecoms operators generally dominate, at least in Europe, the consumer segment of the Web market.

\(^{(5)}\) I.e. identification of the various profiles which constitute this subscriber base.
\(^{(6)}\) The digital pay-TV platform operator indeed knows the first and last name, address and credit card number of the head of the family for each household subscribing to his offer.
Moreover, thanks to deregulation of the telecoms sector, transport capacities have been increasing consistently. Hence, in France, France Telecom has invested heavily in its transport infrastructure (Transpac ATM network), whereas ISPs (7) have rapidly deployed their access infrastructures in order to improve the quality of access services (access time and accessibility). Since 1997, high speed access via cable has been emerging progressively, while ADSL pilot projects have also been implemented.

Up until recently, players in the field of Internet access have concentrated on their market position strategy via deployment of their access infrastructure and by actively battling it out in the price wars.

Now, in a more concentrated market, where networks are deployed and high speed solutions are compounding, the stakes have evolved:

• The principles governing ISPs’ competitive involvement tend to reflect a striving to reach the break even point as quickly as possible, thus moving the battle to a realm beyond prices.

In light of this, then, the content of services displayed on their home page and the appeal of its presentation now constitute major criteria. These criteria linked to the development or supply of attractive content is even more crucial in the field of free Internet given the fact that advertising constitutes its principal source of revenue, rendering audience maximization and/or qualification indispensable.

• Furthermore, the need to simplify access, to organize and structure the Web’s offer comes increasingly to the fore given the overwhelming proliferation of "com sites".

The prime concern for a commercial site’s editor is now that of making his services visible to potential users by multiplying his links and points of reference in order to maximize the visitor rate and, consequently, his revenues.

Here, portal sites, or points of entry onto the Web, whose goal is to simplify access to the world of available services, have continued to multiply, often upon the initiative of the ISPs themselves. Their essential role consists not only of structuring the offer but also of managing the profitability conditions of both the ISP's and e-commerce sites' activities.

(7) Internet Service Provider.
A portal site which is updated regularly takes on the role of theme bearer as it offers quality Web sites and integrates a number of functions (e-mail, chat room, boards, search engines, directory, ...) and/or various animations, e.g. video, hence enabling it to generate audience, to better qualify the users and to gain their loyalty.

The ever burgeoning role of portals, and notably community sites, has enabled generalization of profiling techniques and implementation of an economic logic that relies, above all, on the "customer asset" that these portals represent for advertisers.

A similar organization for the TV and Internet chains

As illustrated by the market tendencies observed in the fields of both consumer Internet and TV, as well as those come from more detailed analysis of commercial relations between the various players on the digital satellite pay-TV, consumer "paid" Internet or cable distribution (see Annex) markets, the players present at each stage in the TV and Internet chains often have a main role and function throughout the value added chain which is generally very similar in nature.

Although corresponding to specific services and to contrasted market configurations, it is possible to consider that both these chains, which constitute in part the multimedia chain, are structured around five basic activities:
- production of content,
- creation of so-called value added services based on this content,
- assembly of these services into a "one stop shopping" offer, which is both varied and attractive,
- transport or routing of the offer's data to end subscribers,
- local distribution of the offer via a telecommunications and/or points of sale network.
Here, the "multimedia" chain (8) is structured around those same five functions to which each of the industries that constitute the chain contributes in accordance with their know how, their specific fields of specialization or technological capacities, hence exploiting a number of industrial links and technological interdependencies as sources of added value.

At the heart of this structure we find the function of assembly of convergent multimedia services, or the digital multiservice platform operator's activity.

Before pursuing our analysis of the strategic nature of this activity, it seems appropriate to first offer up a definition.

(8) The activity contributing to supply of convergent services.
Digital Platform: Objectives, Definition and Related Activities

Structure, facilitate, generate loyalty

The activity which consists of assembling distant digital content and services, whether television or Internet, into a coherent technical and commercial access platform is born of a need to federate, structure and offer an ever growing body of services. In an overall fashion, this activity then aims to play host to a broad variety of services at a single point, and to simplify users' access to content which responds to their expectations.

The economic logic which underlies this activity is thus the creation of a community of users, or a base of subscribers, for the services being offered (whether paid or free) and with whom a direct link (formal or, more precisely, contractual) is established:
- with the initial goal of optimizing the platform's revenues (subscription, advertising, commissions on traffic or sales, revenues coming from exploitation of customer data base),
- with the ultimate goal of making a profit on the production of content and exploitation of the various services it contains (advertising, sales, goods, etc).

Definition

Taking into account what has been said up to this point in our attempt to discern the exact nature of a digital platform, we offer up the following definition:

A digital platform consists of a coherent technical and commercial offer for access to a universe of distant, interactive or non-interactive services:
- which can be broadcast or supplied on-line,
- and which can either be subject to payment or to which access is either limited or entirely free.

This offer relies on the development of a community of users with each of whom the platform operator establishes a formal direct link (contract with the individual). The offer therefore groups together a body of Web or TV, or even telephony, services.
In a more concrete fashion, this definition thus encompasses:
- digital pay-TV platforms via cable, satellite or terrestrial network, or all other type broadband network,
- offers of digital free-to-air TV services bouquets federated by an Electronic Programme Guide broadcast via cable, satellite or terrestrial network, or by all other type of broadband network,
- digital interactive free-to-air or pay TV bouquet offers accessible via the TV set and based on the walled garden model, broadcast via cable, satellite or terrestrial network, or by all other type of broadband network (Digital TV datacasting),
- the content and services offered by ISP home pages, whether the offer is free or by subscription, via dial-up access or a broadband network,
- content and services offered by independent portals, browsers or community sites to which access is conditional, entirely or in part, on the user's completion of a personal data form.

**Distribution at the heart of the industry**

In the competitive world of services, a digital platform operator's primary activity consists of creating a "one-stop shopping" offer which is as diverse, modulable and complete as possible, comprised of a selection of currently available distant, broadcast or on-line services. This function at the heart of the value added chain is thus structured around two primary forms of activity.

**Activities linked to management and technical distribution of the offer**

In the field of pay-TV via satellite, the assembler generally ensures multiplexing, coding, scrambling and, when applicable, encrypting of the TV programmes that he incorporates into his offer, even if the tasks may be in part undertaken by a third party or performed by the TV stations themselves. The operator also ensures the management and maintenance of his national broadcasting centre.

Similarly, in the field of Internet, it is generally the ISP who ensures the management and maintenance of his network of modems and DNSs.

Hence, management of the data flow associated with the services, as well as maintenance of the access infrastructures (PoP network, cable headend, national broadcast centre,…), are contained in the assembly function, even if these types of activities may be all or in part farmed out to third parties.
Activities linked to marketing and distributing the offer

For the assembler, his main tasks at this level consist of:

- "selecting" the services and/or types of content which will be included in his offer, and which will enable him to make it distinguishable from those of his competitors in terms of both content and price. Here, the assembler may exercise the option of signing exclusivity agreements with certain value added service providers;

- to organize service line-up, in accordance with the choice of services and editorial policy, in order to maximize both the number of subscribers or visitors and revenues (the offer's level of modularity, the scope of the "basic" offer, the number of options, ...);

- to activate subscriber or community member access rights according to their choice of formula, to record them in the customer data base and then to manage their access rights;

- to manage customer relations (information, after sales service, installation of access equipment, ...) and, particularly, to supply subscribers with navigation or selection tools to help them to make optimum use of the services contained in the offer;

- when the service is subject to subscription, to invoice - generally on a monthly basis - each subscriber according to the formula they have chosen;

- to coordinate and manage consumer relations with the distribution and marketing channels (percentage of commission, network extension, ...) and, when necessary, to ensure proper distribution of the equipment required to gain access to the offer;

- in certain cases, to remunerate value added service editors, generally in accordance with their service's performance.

Whether in the field of Internet or TV, the viability of this activity therefore depends on the achievement of the two following goals:

1. Mastering the development of a subscriber base through a policy aimed at making the customer base "captive":

- for TV, captivating subscribers may, for example, take the form of offering a proprietary set-top box which, for the given assembler, avoids any attempts on the part of his competitors to by-pass, in other words to exploit his installed base of set-top boxes without having to invest in
them. Mastering the development of a subscriber base, which is always partial as it depends initially on consumer choices, also relies generally on control of the distribution channels and the development of a sustained promotional policy;

- in the field of consumer Internet, control of the development of a subscriber base first takes the form of deployment of the access and transport infrastructure (PoP, purchase of dedicated lines,...) thus guaranteeing better service than that being offered by the competition. Since "technologically" speaking the access system is entirely open, control also relies on an active policy aimed at gaining customer loyalty.

Captivating subscribers may focus, for example, on the concept of a cyber community. In France, for instance, Wanadoo and its "Wanadian tribe" illustrates this principle well: by structuring its offer around a certain number of centres of interest and by offering related services which are accessible only to the initiated and which cannot be found elsewhere, Wanadoo has captivated its customer base to a certain extent.

2. Mastering the supply of programmes:

- Be it on TV or on the Web, assemblers seek above all to structure their offer around themes which attract subscribers or which maximize audience or visitor ratings, i.e. in the present conjuncture:
  - on TV, essentially sports or films,
  - on the Web: information services, sports and games and, to a lesser degree, cyber boutiques or e-commerce sites.

- For TV, reinforcement of control of the supply of programmes takes the form of:
  - acquiring, even for top price, products with guaranteed appeal (e.g. the recent bidding war between TPS and Canalsatellite for acquiring the rights to re-broadcast First Division football),
  - acquisition of exclusive rights in order to minimize the negative effects of offer fragmentation and to distinguish its bouquet from all others (e.g.: exclusivity of the Disney Channel, Canal Jimmy and Planète on Canalsatellite in addition to exclusive rights to the six major North American feature film catalogues),
  - an active investment in production policy via, for example, acquisition of production units with the goal of quick renewal of programme offers.
• On the Web, control is more difficult to obtain given the plethora of accessible sites. There is a noticeable attempt on the part of top ISPs, however, to channel the creation of content.

In France, for example, Cegetel has recently purchased the world’s leading developer of CD-ROM and game software. For the production of those services which it offers exclusively, AOL works in close collaboration with the two subsidiaries of the Vivendi group specialized in content, Canal Plus and Havas. For Wanadoo, France Telecom Interactive created a subsidiary IP studio whose activities focus on the production and aggregation of content.

Close to eighty partnerships have been formed with content editors, among which the “After School” (fun learning) service which relies on alliances with TLC-Edusoft (9), Bayard and Albin Michel Jeunesse.

However, the most telling illustration of this level is without a doubt the mega-merger between Time-Warner and AOL which took place in early 2000, and which clearly underlines the determination to master both content and broadband networks, but also represents the desire for reinforcement in terms of creation of multimedia content, AOL and Time-Warner having each been already highly involved in the field of content.

What Makes up the Assembly Activity’s Strategy?

Analysis of the economic and technological context of the consumer Internet and TV markets, presented here above, serves to illustrate a shift in the stakes toward the head of the chain, in other words toward the production and mastery of content. On the other hand, recent debates over Open access with respect to the case which saw AT&T-@Home sparring off with narrow band ISPs illustrate to what extent the stakes linked with mastery of the local loop or direct technical access to the end user remain a hot issue.

This double deal which places assembly at the heart of the value chain, at the same time bestows a certain value on the link itself.

(9) Subsidiary of The Learning Company, world leader in recreational CD-Roms.
Although availability of content and infrastructures conditions both the existence and the value of digital platforms, control of this link in the value added chain is at least as strategically important as content and network control, for two primary reasons:

- It is clearly a source of competitive advantages, given its role of "gatekeeper" as it constitutes the link between content and the network.
- Its mid-long term profitability derives from an economic model which appears more solid than that of advertising or paid subscription: "the demand generation model" whose basic principles have been described by GENSOLLEN (1998). Hence, since digital platforms develop a formal direct link with the services' users, they become unavoidable intermediaries in the definition and marketing of the majority of products and services which may exist on any given market.

A clear source of competitive edge

The value of digital platforms resides first, most probably, in the competitive advantages that they are likely to confer on the player who implements them.

For the company managing this activity, it endows them with:

1. Control of a direct link with the subscriber (10) which, thanks to autonomous management of its subscriber base, guarantees direct control of its revenues and of the commercial information regarding its clients.

2. Total freedom in the choice of editorial policy, in other words in the choice of services which will comprise its offer (11).

The assembler may exert two forms of control over content:
- direct control over content services which may correspond to three types of gradation in terms of vertical integration: exclusivity agreements for certain types of services or content, acquisition of shares in those services deemed as being essential to his offer; takeover or creation of all elements of certain services which are deemed strategic;

(10) To paid or free services.
(11) In the field of TV, this activity generates further advantages in that it is positioned at the broadcast via satellite level: thanks to the position that satellite occupies in the digital TV broadcast structure, commercial satellite bouquet operators are endowed with a degree of freedom, when establishing their service plan, which is greater than that of cable or over the air network operators.
indirect control of content services, via development of its services line-up, and the position it confers on each type of service (basic or optional, exclusivity or unconditional return, for example). Even if it may be supposed that a service which is optional in an assembler's offer is paid for by means of a higher rate than that of the basic service, it is probable that its turnover will increase more slowly since the subscriber base is likely to remain smaller.

Exercising indirect control carries the implicit supposition that the assembler has a favourable power of negotiation over the service editor. It is indeed difficult to imagine that a well-known brand would have its behaviour dictated by an assembler since the brand is clearly in a position to impose its marketing conditions.

Direct control can, however, always be exercised. For the assembler it could represent a means of mastering the creation of content in a situation where the content editors enjoy market clout. The assembler is also likely to exercise direct control in a market situation where the power struggle favours the assemblers, and a certain competitiveness does exist at the assembly function level; here it consists of gaining a competitive edge by "appropriating" the content which bears the greatest added value.

3. The mid-long term perspective for an attractive level of profitability. In spite of considerable initial investments, once the break even point is reached, this activity generates an attractive level of profitability given the relative low rate of variable costs (12).

4. Control of the chain's remuneration channels, thanks to the direct link with the subscriber and, hence, the possibility of indirectly "steering" the activities of the other players along the chain.

Several comments must however be made with respect to this level:

- In the field of TV, the level of control exercised by the assembler along the entire value chain is much higher than in the field of Internet where an ISP's customer is not truly "captive" from a technological point of view;
- A service editor's market clout, notably in the case of surplus transport capacities with respect to the service offer, may limit the assembler's control over the chain. The strength of the brand associated with the service editor may also generate a certain shift in the nature of his relations

(12) In the digital pay-TV field, particularly, this signifies that the operator is progressively distanced from the management of his fleet of set-top boxes.
with the assembler: in this case it is easy to imagine that the assembler will be willing to pay the service editor to be part of his bouquet of services;
- In the field of Internet, it is interesting to note that while they are at the bottom of the chain, navigator editors are in a position to control content through implementation of a system of push chains;
- Still in the field of Internet, the existence of a sole and unique intermediary at the local loop level prevents the ISP from developing flat rate offers which blend access to the Web with use of a telephone line, since the local network operator maintains control of billing local telephone communications. Hence the local loop operator limits an ISP's control over the chain.

Furthermore, a number of papers (CAVE, 1998; NOLAN, 1997; MAXWELL & VERNET, 1999) and debates have underlined the perils of distorted competition linked to the services and content assembly activity.

This brings to the fore the degree of freedom possessed by those who control digital platforms and their potential ability to influence the market's structure as well as competition. Here, we can cite three examples given by M. Cave and D. Nolan with respect to digital TV, but which may also be applied to the world of Internet:

- By exploiting a proprietary conditional access technology (13), the platform operator is in a position to mount unscalable entry barriers from the moment that his subscriber base has attained a critical mass since he controls the access to this customer base via the equipment used to receive his service (i.e. proprietary set-top boxes), but also because of the inconvenience that an accumulation of set-top boxes presents to the consumer (consumers’ resistance to "box-towers"). As soon as this situation transpires, the perils of abuse of dominant position become numerous (refusal to distribute certain services, encouraging new potential entrants to link up to the existing offer, monopolistic rates, abusive contractual clauses with respect to certain services).

- In his position of gate-keeper, the platform operator may very well implement an anti-competitive billing policy or exclude certain services from his offer.

142 COMMUNICATIONS & STRATEGIES

(13) In essence a conditional access system is a means of implementing by means of hardware and software contracts between content rights owners, platform operators, service providers and consumers.
a compulsory retail bundle can be constructed by a dominant broadcaster (14) in a way likely to impede entry."

- With the development of digital TV, its increasing interactivity and convergence with Internet, set-top boxes become an essential facility for supplying new interactive services via the TV set (services developed specifically for TV or Web access via the TV).

"If there is one method of delivery with a sufficient consumer base then obviously content providers will seek to make use of that platform, reinforcing a potentially dominant position."

Thus, by positioning himself in this activity, a market player can gain true market clout and eventually enjoy a dominant position.

**A value founded above all on "creation of demand"

**Current stakes on TV and the Net**

The various activities along the Internet and digital TV chains can be generally characterized by colossal investments. Although these markets are in a strong growth period, the perspectives for profit remain distant, given the size of initial fixed costs, notably for platform operator activities.

The issues at stake in convergence therefore rely on finding the path to profitability and, thus, on defining a viable economic model.

In light of the multiplication in the number of audiovisual or Web services, the model of financing via advertising which has heretofore sustained mass media seems to have reached its limits. The advertising financing model supposes a far too long return on investment time.

Although the model of paid subscription or flat rates offers more attractive financing perspectives for the chain, it does not carry a sufficient guarantee for the long term (15) and is not necessarily adapted to all types of services.

The e-commerce model offers promising, albeit clearly imbalanced, financing perspectives throughout the chain. With the development of

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(14) i.e. platform operator  
(15) Users' propensity to pay is difficult to discern. A flat rate eliminates de facto a significant portion of potential users: those who do not wish to or cannot pay.
e-commerce, however, the economic logic which underlies communication and One to One marketing, and which is beginning to be prevalent across the Web and on TV with the advent of interactivity, should allow a more balanced distribution of revenues among the various players along the chain.

**A new marketing approach**

In a great number of industries and trades now witnessing a proliferation of brands, companies are increasingly confronted with growing customer disloyalty and, consequently, erosion of their profitability.

In this context, it appears that a company's competitive edge will depend largely on the manner in which it exploits the information it detains on its clientele and in which it maintains a dialogue with them in order to create durable customer relations.

A majority of successful companies are in fact those which have adopted the principle of One to One marketing. Generally, they have also taken proper advantage of available information technologies for implementing this new approach.

Hence, networking of the economy and especially the development of distant, multimedia and interactive services, enable transformation of the company's marketing functions and, among other things, facilitate an evolution of direct/relational marketing towards an more intensive use of information technologies.

This evolution offers real advantages.

First, Web and TV both allow an association of advertising, promotion and sales on the same medium which, for advertisers, constitutes a clear advantage. Moreover, by making use of non-material media for their direct and/or One to One marketing campaign, companies can enjoy substantial savings in terms of mailings, printed advertisements, flyer distribution and telemarketing - hence enabling a transfer of a portion of the budget to One to One communication campaigns on TV or the Web.

Thanks to interactivity, then, and to the possibility of efficiently exploiting client data base of digital access platform operators, the Net and TV can be now considered as direct marketing media capable of:

- promoting brand image or a particular product,
- delivering personalized communications to their consumer-subscribers,
- helping advertisers better satisfy their customers and/or define an offer which better tailored to their needs,
- generating lasting customer loyalty to a brand,
- helping identify and privilege the most profitable customers,
- having, in certain cases, a direct effect on sales, thanks to the possibility of buying on-line or via a remote control device.

The One-to-One marketing model of financing

The economic viability of a digital platform now lies, above all, in the fact that it offers advertisers the possibility of implementing extremely efficient personalized and One-to-One marketing campaigns.

Since these platforms constitute an unavoidable point of entry to a host of services for a certain base of clearly identified consumers, they naturally become intermediaries for companies when defining and marketing the majority of their products and services.

In fact, given the position they occupy at the heart of the chain, digital Web or TV platforms enable companies to achieve their communication and marketing objectives. These intermediation structures appear to be particularly well adapted to achieving the goals of:

- information/communication on a given product,
- dialogue and generating customer loyalty (support service, contests, couponing, ...),
- brand recognition and/or enhancement thanks to the possibility of multiple referencing and advertising,
- direct sale of products. On interactive TV, for example, there is no break between product demonstration and search for complementary information, hence stimulating impulse buying,
- gathering of information on customers and prospects and identifying those prospects which represent the greatest asset for a company;

On Internet, tools used for measuring and qualifying audience are increasingly numerous (tracking tools, target optimization tools, ...) and are being used by more and more players, notably ISPs. The Web makes it possible to observe Internauts' navigational patterns in real time. This behavioural data may be in part stored in the ISP's client data base.
In interactive TV, targeting possibilities are controlled by the access platform operator as the platform operator directly controls his client database which is constantly enhanced with time. He is indeed able to regularly, and in an entirely transparent fashion, download complementary data onto each subscriber's set-top box; data can be information which is related to their behaviour or centres of interest as stated in a customer satisfaction survey, for example. Hence by conditioning execution of an advertiser's interactive application according to certain criteria, it is possible to target a segment of the population whose set-top box's memory contains corresponding criteria. This can be done without the subscriber having to define any parameters whatsoever;

- personalization of a service or message thanks to the addressing capabilities of the technologies implemented by the digital platform operators.

In this respect, the platform's value does not really reside in the quality and/or type of content to which it give access but rather in its capacity to "generate demand" for a growing number of companies.

This capacity should ensure substantial revenues in the long term.

## Conclusion

To conclude, it appears useful to recall that the goal of this article was not to study all of the facets of digital platforms' value. Furthermore it presents a rather commercial definition of these economic entity.

- In particular, examination of the macro-economic value of digital platforms was not addressed.

- By illustrating the sources of competitive advantages related to exercising the function of digital platform operator, this article has underlined the possibility of abuse of dominant position which may ensue. It is nevertheless possible to conceive of the impact of digital platforms on the market structure in a more positive way: the activities of a digital platform operator may also drive and structure a fledgling industry, as demonstrated by the case of Canalsatellite and TPS in France in the field of interactive TV.
Two other issues relative to analysis of the activity of digital platform operator would also have warranted examination:

• The issue of the viability and pertinence of the financing model of the multimedia chain via One-to-One marketing campaign budgets. The current hypothesis is that financing digital platforms would be in part ensured by a transfer of Direct Marketing expenditures toward the Interactive Mass Media. But would this financial manna suffice to finance all of the sector’s developments?

• The issue of the conditions for success linked to this activity and identification of the players who are currently in the best position to face the mid-long term stakes. Many players are now in a position to take advantage of the widespread use of personalized marketing practices, but which of them have the greatest chances of developing a winning strategy in the multimedia industry?
Bibliography


The MEYER Paper finds a zone of commercial opportunity in the overlaps between broadcasting and the Internet due to convergence of these digital, interactive media. Of the two themes of this session, Meyer places greater emphasis on convergence.

These overlapping spaces or roles increase the importance of the assembler of “content and services into a coherent technical and commercial access platform” in what the author calls a “digital platform”.

While MEYER asserts the assembler will add value to content and distribution, those contributions are secondary to the potential and the opportunities for assemblers in cultivating a walled garden for one-to-one marketing.

The author builds on Gensollen’s scholarship, seeing that digital platforms become “unavoidable intermediaries in the definition and marketing of the majority of products and services which may exist in any given market”. Other scholarship on virtual communities could as easily be cited with little change to Meyer’s findings.

MEYER’s argument strikes me as thoughtfully composed, a well structured argument following Descartes, typified in the spirit of encyclopedias; a thorough strategy plan for a profitable enterprise.

MEYER observes that abundance need not dilute culture. The author notes the emergence of 50 new thematic French language channels, managed primarily by French companies in the past three years.
MEYER queries where the money will come from to pay for digital platforms. In all probability, direct marketing budgets will not be enough to finance full sector developments. But, the right mixes of programming and products will sustain successful, individual efforts.

MEYER asks which players will emerge dominant in capitalizing upon digital platforms. Those with programming, ties to fulfillment houses, and successful marketing will be the likely winners, I would forecast.

The assembler's strength is in its potential to control of content and of user interface.

My view is that those strengths are the assembler's principal weaknesses. Content producers will continue to extract maximum fees for programming which will attract audiences. Conduit owners may strive for vertical integration or to develop relationship with preferred assemblers making it difficult for assemblers to capture user interfaces.

Wireless could emerge as a new conduit, providing the largest opportunity for assemblers. AT&T has announced that it will welcome all ISPs in its global wireless services.

In addition to incumbent interests, theft and piracy will pose a fresh challenge to assemblers.

In the US, a college student has developed a program and search engine he calls Napster that retrieves music files from computers hosting Napster. In this way, music can and is copied across the Internet from computer to computer with little or no loss in quality due to digital technologies then transferred to compact discs. The music industry receives revenues from initial sale only.

At the University of Pennsylvania, Napster accounts for 70% of the traffic despite University efforts to shut it down.

The music industry has been unable to agree on a standard for encryption. Each company wants its proprietary standard to dominate to garner licensing fees.

Once the music industry establishes industry peace with a common standard, piracy and theft may be controlled and stopped for a period of time until a new Napster emerges.
Three areas of further research therefore emerge in addition to Meyer’s precise specifications about financing digital platforms and successfully operating them: 1) the inertial strength of content producers and of conduit owners for control of “the last mile”, 2) an assessment of the likelihood of digital piracy and theft, and 3) the opportunity for strategic collaboration with wireless.

Code and commerce must commingle, as Professor Lawrence LESSIG has shown, for electronic commerce to flourish in his thoughtful book Code. He raises important questions about liberty and freedom when code and commerce are conjoined.

The Walled Garden

The conceit of the walled garden is to create the illusion that the user controls choices in a predetermined environment. It adopts and transforms the festival.

In this way, the walled garden of programming and consumption is in part the electronic equivalent for consumers in the present age of being a guest for Louis XIV’s festival Plaisirs de L’île Enchantée in the gardens at Versailles in 1664.

Jean JACQUOT observes:

“The trick consists of leading the guests, as if by chance on a walk, with surprise after surprise, letting rise here a salon made of greenery, there a pavilion from whose interior fountains gush, there again a theater improvised by art work. And in the decor of the comedy with interludes, the tragedy or opera, to use sometimes painted black cloth, sometimes the facade of a court of honor with its columns, its statues and its orange trees, sometimes to extend the feigned perspective by a real perspective of paths and canals. And as if the sense of otherworldliness still was not enough, or if the majesty of the places was too great, the festival got out of it by going toward some Trianon made or porcelain, or it glided along some Grand Canal on boats laden with musicians.”

Today, this conceit cannot be sustained because the consumer is not simply a guest expected to behave in a proper manner for his host but a person with liberty to make consumption choices.

In this sense, the experience of the walled garden is more akin to Jacques Louis DAVID’s Festival of the Federation on July 14, 1790.
That "walled garden" took place in the city. At the central arena, the king and the president of the National Assembly sat on a stage at the same level. "A horizontal, fraternal concept superseded the vertical, theistic element" a scholar notes.

For the electronic commerce consumer, the "walled garden" presents this illusion of equality – a horizontal relationship – through extensive choice to entice the user to purchase goods and services thinking the selection is a free, individual choice when he is, in fact, shepherded through pre-selected choices. In such an environment, one-to-one marketing could readily flourish.

It would be a misnomer to equate the "walled garden" with DAVID’s festival masterpiece, the Festival of Reunion in 1793, for that festival had an expressed ideological message celebrating Republic and Revolution while the ideology of the "walled garden" is that of consumption.

Annenberg Public Policy Center

I would like to close by mentioning research on access and convergence we are doing at the Annenberg Public Policy Center at the University of Pennsylvania under the direction of W. Russell NEUMAN.

In this data rich communications world, policy should be based on technological convergence.

A first step is to dispense with unenforceable distinctions between voice and data across communications networks which will increasingly deploy packet switching. It no longer makes any sense to distinguish between 0's and 1's.

A second step is a recognition of multiple media pipes and platforms to office and home.

Third, policy should impel transparency in the provisioning of broadband services so consumers can understand what they are and are not purchasing when cable or ILEC or ISP vendors approach them with various service platforms.

Fourth, service level agreements could well emerge as policy vehicles at defined points in the broadband information chain (ISP/consumer),
A service level agreement is an user's tool to negotiate quality of service with a provider.

A rudimentary service level agreement of network availability looks like:

\[
\frac{(24 \text{ hours} \times \text{days in month} \times \text{number of sites}) - \text{network outage time}}{(24 \text{ hours} \times \text{days in month} \times \text{number of sites})}
\]

We are exploring broader generality and increased specificity for such issues as speed, privacy, restitution for downtime to provide for transparency and to address issues of artificial bottlenecks in broadband communications.

We anticipate that the cable industry will likely employ will be routing and switching policies guaranteeing high speed and security over virtual private networks for subscribers of a preferred and other cable industry affiliated ISPs while also enabling consumer choice for independent ISPs.

Some of these independent ISPs will likely operate on public networks with less security at slower speeds.

Price tiering through a panoply of characteristics ranging across speed, security, privacy invasion, exposure to unsolicited advertisements, and volume of electronic shopping will likely emerge as bottlenecks.

Transparency of service level agreements could well address these practices.

**Closing Comments**

In closing, I would like to say that it seems totally fitting that we engage these issues of electronic commerce in Venice, a city that flourished as a maritime empire.

Venice secured the dominance of its commercial economy not simply through diplomacy and military power.

Regulation played a crucial role. Throughout the thirteenth century, historian Frederic Lane notes:
“there were thirteen control points around the lagoons. At each, a half dozen men with two or three vessels inspected all passers to make sure that their cargoes were covered with permits to go where they were headed. The coast between Grado and Istria was patrolled by a galley armed at Capodistria, which in 1180 was the main Venetian stronghold in Istria.”

We now face the opportunity of information abundance. While some may admire comparable wealth, or seek comparable power in the optical electronic age, I would doubt that any of us would willingly chose to be patrol man or submit to serve as a galley slave of an optical/electronic Doge. This discussion of access and convergence provides a timely clarification of the importance of these issues.