

**16<sup>th</sup> Bled Electronic Commerce Conference**  
**eTransformation**  
Bled, Slovenia, June 9 - 11, 2003

---

**Business Model Formation within the Online News Market:  
The Core + Complement Business Model Framework**

**Cornelia C. Krüger**

Faculty of Informatics, University of Koblenz-Landau, Germany, Universitätsstraße 1  
phone +49-261-2872850 fax +49-261-2872851  
ckrueger@uni-koblenz.de

**Paula M.C. Swatman**

Faculty of Informatics, University of Koblenz-Landau, Germany, Universitätsstraße 1  
phone +49-261-2872850 fax +49-261-2872851  
swatmanp@uni-koblenz.de

**Kornelia van der Beek**

Faculty of Informatics, University of Koblenz-Landau, Germany, Universitätsstraße 1  
phone +49-261-2872850 fax +49-261-2872851  
beek@uni-koblenz.de

**Cornelia C. Krüger, Paula M.C. Swatman, Kornelia van der Beek**

**Abstract**

*The business model literature is both rich and rapidly-growing. Authors identify special-purpose business and eBusiness models – and, increasingly, develop taxonomies of business models types. But, in searching for a comparatively simple way to understand the components of a “typical” internet business model, as part of our work for the EC research project SimWeb, we found that these taxonomies had little overlap and offered only a modest assistance to smaller companies trying to identify their own business identity. In this paper, therefore, we present the preliminary results of a three-year research project into appropriate business models for the online news and music industries. Having identified the problems, we describe the general taxonomies and components of Internet business models found in the literature, and explain our own core + component framework for developing an internet business model – using the online news industry as our example. We show how a combination of core and complementary components can be combined by any news-providing organisation for its Internet business model on the basis to its specific needs, resources and changing circumstances – and illustrate the usefulness of our this framework by means of “mini-case” examples of regional online newspapers in Germany.*

## **1. Introduction**

The online news market is going through a turbulent period at present, with little certainty about what will and will not be successful in terms of electronic presentation of news. Publishing houses are putting pressure on their online newspaper editions in the hope of forcing them to earn money – but so far, very few newspapers are successfully charging for online news delivery. Those newspapers which are currently making money in cyber-space are finding that it is often their value-added products (such as real estate or employment) which have the greatest potential for revenue-raising. The results of a survey of 429 online newspapers worldwide, undertaken in 2002 by the Innovation International Media Consulting Group for the World Association of Newspapers indicate that, although 39% of North American sites reported a profit against the 35% reporting a loss, only 17 % of news sites world-wide reported making a profit, with 59% reporting losses (OJR, 2003).

As newspapers strive to find an effective Internet business model, they are faced with fluctuating demand and an increasingly hostile news making and selling environment. The majority of newspapers initially went online with a business model very similar to the one they were using in the real-world. Over time, however, they have to adjust this initial model to keep up with the changing state of both the physical and cyber worlds. Online Publishing News reports that one major outcome of the “Making Profits from Digital Publishing” conference, held in the UK in 2001, was the suggestion that: “for some publishers advertising revenue will not be enough, neither will subscriptions, nor sponsorship. But one secret to short-term profitability is to be open to all potential revenue opportunities” (OPN, 2001).

To many newspapers, struggling to survive in the face of declining subscriber numbers, falling advertising revenue and a fickle and highly-critical public, the need to constantly modify their Internet business model to reflect the latest change in demand or in their competitors’ activities places a significant burden on their limited resources. But do they have to change their business model every time there is a change in the environment, or is there a better solution?

In this paper, we suggest an alternative approach to the creation of Internet business models for the online news market, based on the concept of “building blocks” – basic elements the newspaper can use as the foundation of its own business model. In response to changing circumstances, the newspaper can simply choose to utilise or eliminate certain components, offering a more flexible, and considerably cheaper, approach to the creation of an agile Internet presence. Initially, we describe the general taxonomies and components of Internet business models found in the literature, and then develop our own combination of Internet business model taxonomies and components for online news companies. We suggest a combination of basic or core components and complementary components which can be combined by any news-providing organisation for its Internet business model according to its needs, resources and changing circumstances. Finally, we underline the usefulness of our own model on the basis of “mini-case” examples from the online news industry.

## **2. Internet Business Models in Literature**

There has been an overabundance of literature concerning business models produced in recent years, with the emphasis very strongly on the concept of eBusiness, or Internet business, models in the majority of papers published (although Hedman and Kalling (2002a, 2002b) take a more restrictive view of the concept of the eBusiness model, distinguishing it from the broader group of non-Internet business models).

The literature is broad enough that a variety of definitions exist concerning what constitutes a business model in the most general sense. Indeed, there are almost as many taxonomies of business models and eBusiness models as there are authors writing about the subject (see, for example, Applegate (2001), Amit and Zott (2000, 2001), Afuah and Tucci (2001), Timmers (1998), Weill and Vitale (2001) and Rappa (2002) for examples of the most widely-cited taxonomies in this area). In this paper we make use of the definition provided by Rappa (2002), which succinctly identifies a business model as follows: “In the most basic sense, a business model is the method of doing business by which a company can sustain itself – that is, generate revenue”. This definition is generally held to be typical of both business models generally and of eBusiness models more specifically.

Research into business models is of two types:

- the description of specific business models; and
- the defining and analysing of the special components of a business model.

Authors taking the first of these approaches tend to enumerate a number of business models actually in use in industry. But there is still no comprehensive and generally accepted taxonomy of business models. The same gap exists when it comes to defining the components of business models – each author defines components on the basis of his/her own understanding of how a company works.

In the following sections we present, firstly, three different taxonomies of Internet business models and, secondly, three different ways of identifying the components of internet business models. In determining which authors’ taxonomies and selection of components to include in this paper, we based our choices on the work of those researchers who were focusing on business models for the content market, since this reflects the perspective of our own research most closely.

### **2.1 Taxonomies of Internet Business Models**

In Appendix 1 we provide a table which highlights the overabundance of Internet business models (but which is too long to include within the paper itself).

We selected the following three models on which to base our research, both because they appeared over a period of years and therefore reflect the ongoing development of research into business models; and also because they are particularly well suited to the online news sector. Bambury (1998), Rayport (1999) and Farhoomand and Lovelock (2001) have all produced taxonomies of eBusiness models related to the production of eContent. The taxonomy of a business model presents a finite number of models, which the author(s) have

observed and identified. The entire taxonomy should – in the best case – cover all the existing companies within the online news sector.

Table 1: Business Models relevant to Online News

<b>Bambury</b>	<b>Rayport</b>	<b>Farhoomand and Lovelock</b>
Transplanted real-world business models: -Advertising-based model -Subscription model -Free-trial model	-Content Business -Advertiser-driven business model -Electronic Commerce	B2B -Collaboration platforms -Virtual communities
Native Internet business models: -Information barter model -Digital delivery model		B2C -Virtual communities -Search engines/portals -Content Providers

### **Bambury (1998)**

Bambury’s taxonomy divides eBusiness models into two categories: those which pre-date the Internet and which have since been modified or merely transplanted to suit the World Wide Web (WWW); and those which have only come into existence (indeed, which are only possible) as a result of the creation of the WWW.

Many of the transplanted real-world business models Bambury describes can also be used in the online news sector. The advertising model, for example, can support a free offer through advertising income, or the subscription model where the user subscribes to database access for a specified period of time. The free trial model invites potential customers to sample what they have downloaded for a certain period of time, providing the opportunity to test the usability of the product.

Bambury’s native Internet business models can also be integrated in the business model of an online news provider. The Information barter model involves the exchange of information over the Net between individuals and organisations or companies. The digital products and the digital delivery models, which include the delivery of digital products such as images, movies or audio files over the Net, can also be implemented by online news providers.

### **Rayport (1999)**

Rayport presented another approach to business model taxonomies for the new economy, dividing online businesses into: those who concentrate on content; those who concentrate on advertising; and those who focus on e-commerce.

Rayport stresses that the user must pay for the time s/he is online, with revenue being shared between the content provider and the online service provider. Rayport notes that, until now, such offers were unsuccessful because they were

competing against too many free offers. But companies are now starting to ask consumers to pay for the content offered online, many of them using third-party providers (see, for example, The New York Times (NewsStand), RZ-Online (self-published), El Pais (Innovacion) – to name but a few, typical examples). Only a very few companies have been successful with the advertiser-driven Internet business model. The visitors to Web sites are valuable and it is therefore possible to sell information about them. This model emphasises high rates of traffic to Web sites which will lead to revenue. Problems involved finding the right CPM<sup>1</sup> rates, defining correct traffic rates, and identifying appropriate metrics (Rayport, 1999, p.2). Within the E-Commerce model real products are sold for real money using the Internet as a sales channel. Because of disintermediation this channel is cheaper than others – and the aim is to build up a loyal, and therefore profitable, customer base.

### **Farhoomand and Lovelock (2001)**

Farhoomed and Lovelock segmented Internet business models in a rather different way, defining them as business models for B2B or B2C markets.

In the B2B business model, category collaboration platforms and virtual communities are interesting for the online news sector. Collaboration platforms provide tools and an information environment to facilitate collaboration between enterprises and may focus on specific function(s). Revenue comes from membership fees, usage charges, and the sale of specialist software tools. In virtual communities members add their own information into a virtual environment provided by a coordinator. This business model enhances the attractiveness of other business models, such as collaboration platforms, because it builds up customer loyalty and leads to customer feedback.

The importance of a virtual community is the same in the B2C online market. The members add value to the Web site which is provided by an organiser and pay membership fees at the same time. Search engines group information into useful categories and help Internet users to find the online information they need. Main source of income is advertising. In addition to being search or navigation devices, they also incorporate informational content, communication, personalisation tools, homepage building devices, virtual communities and so find new resources of income, i.e. e-commerce transactions.

The content provider business model relates to Web-based data hosts and electronic publishers of newspapers and magazines, which gather a variety of information and organise this into electronic databases. Revenue comes from subscription fees. Online newspapers and magazines have, until recently, seldom charged for general content, tending to focus on charging small fees for archived

---

<sup>1</sup> CPM stands for “cost per mill” and, somewhat confusingly, refers to cost per thousand impressions. Marketingterms.com defines CPM as follows: “*the CPM model refers to advertising bought on the basis of impression. This is in contrast to the various types of pay-for-performance advertising, whereby payment is only triggered by a mutually agreed upon activity (i.e. click-through, registration, sale).*”

news and special services (but see our description of NewsStand in section 5 of this paper).

## 2.2 Components of Internet Business Models

While this coverage of Internet business models per se provides a foundation for understanding the way in which organisations endeavour to make money from their Internet-based activities, it is not the only approach to studying business models. An alternative approach taken by a number of researchers is to identify components of business models. The diversity of the components of different authors shows that they are created and associated on the basis of a variety of basic frameworks and theories. In addition, the number of components needed to create a business model differs considerably. Table 2 highlights the component composition of three authors working in this area. We chose these three models from those available both because they are the most recent approach to the topic; and also because they illustrate the different approaches which can be taken to this issue.

Table 2: Components of Internet Business Models

<b>Stähler</b>	<b>Amit &amp; Zott</b>	<b>Bieger, Rüegg-Stürm &amp; von Rohr</b>
Value proposition	Novelty	Goods and services concept
Goods and services architecture	Lock-in	Communication concept
Revenue model	Complementaries	Revenue concept
	Efficiency	Growth concept
		Competence
		Organisation
		Cooperation concept
		Coordination concept

### **Stähler (2001)**

Stähler's paper suggested dividing Internet business models into a number of different elements: the value proposition is that part of the business model which concentrates on the customer needs on the one hand, but also on the needs of the other partners in the value chain. The architecture of goods and services are the elements which build the basis for a promising product-market combination in relation to the internal and external necessities. And the revenue model defines the ways the company plans to make money.

### **Amit and Zott (2001)**

Amit and Zott identify four major value drivers for Internet business models: novelty, lock-in, complementaries and efficiency. For these authors, innovative business models create value through capturing latent consumer needs and the business model becomes the locus of innovation. The value-creating potential of a business model also depends on the extent to which it can motivate customers to engage in repeat transactions. Complementaries are present whenever a bundle of goods provides more value than the total value of each of the goods separately (i.e. when the value of the whole is greater than that of the sum of its parts).

Efficiency refers to a particular transaction enabled by a business model and transaction efficiency increases when the costs per transaction decrease. Novelty and lock-in are linked: business model innovators have an advantage in attracting and retaining customers, especially when working in conjunction with a strong brand. And being first to market is an essential prerequisite to being successful in markets that are characterized by increasing returns. Novelty and complementaries are also linked, because the major innovation of some e-commerce business models relates to the complementary components of transactions. Novelty and efficiency are once again linked, because certain efficiency features of a business model may be due to novel transaction components.

### **Bieger, Rüegg-Stürm and von Rohr (2002)**

Bieger, Rüegg-Stürm and von Rohr identified a further categorisation of Internet business models, taking all the important components of traditional business models and combining them into different concepts which, together, build an online business model.

The authors have developed a business model with eight important elements:

- The goods and services concept concentrates on the question of which value is relevant for which customer.
- The communication concept focuses on the goods or services which are communicated to the market.
- The revenue concept is responsible for the sources of income in the Internet company.
- The growth concept defines which growth concept will be pursued.
- The competence configuration which describes the core competencies of the business model.
- The form of organisation implies the company's coverage.
- The cooperation concept lays down which partner or partners are needed.
- The coordination concept defines the coordination model to use.

### **3. Linking Taxonomies and Components of Internet Business Models**

The wide variety of both business models and model components identified in section 2 shows how difficult it would be for a company to decide how to structure its own business model on the basis of existing theory (and it should be noted that the examples cited here are merely a subset of those available – even in the area of content-related business models alone, we make no claim to have cited all those extant). The real question which any company endeavouring to identify an appropriate business model for its own use must answer, therefore, is how to link the various models with the relevant components to suit their own needs. Additionally, a company in this position might ask whether every Internet business model should include the same components, or whether a model's components should vary according to context.

This suggests that a structure which provided guidelines for linking models and components has much to offer small businesses – particularly those in fast-moving market sectors such as online news. Despite the formidable number of business model taxonomies in existence, and the almost equally impressive number of sets of model components available in the literature, however, it is interesting to note how few authors have thus far tried to combine taxonomies with appropriate components. Even where this has occurred, the combinations have tended to be somewhat limited. Weill and Vitale (2001), for example, combine each of their taxonomies with the same set of components (infrastructure, strategic objectives & value propositions, sources of revenue, critical success factors, and core competencies). The “direct to customer” taxonomy thus includes the same components as the “content provider” taxonomy or the “intermediary” taxonomy, as Table 3 shows.

Table 3: Weill and Vitale’s combination of taxonomies and components

Taxonomy	Components
Direct-to-Customer	<ul style="list-style-type: none"> <li>• Infrastructure</li> <li>• Strategic objectives and value propositions</li> <li>• Sources of revenue</li> <li>• Critical success factors</li> <li>• Core competencies</li> </ul>
Full-Service Provider	
Whole-of-Enterprise	
Intermediaries (portals, agents, auctions, aggregators)	
Shared Infrastructure	
Virtual Community	
Value Net Integrator	
Content Provider	

Figure 1 illustrates this concept in a more abstract way – showing that no matter how different the taxonomy may be from the one above or below it, the components from which it is built are exactly the same:

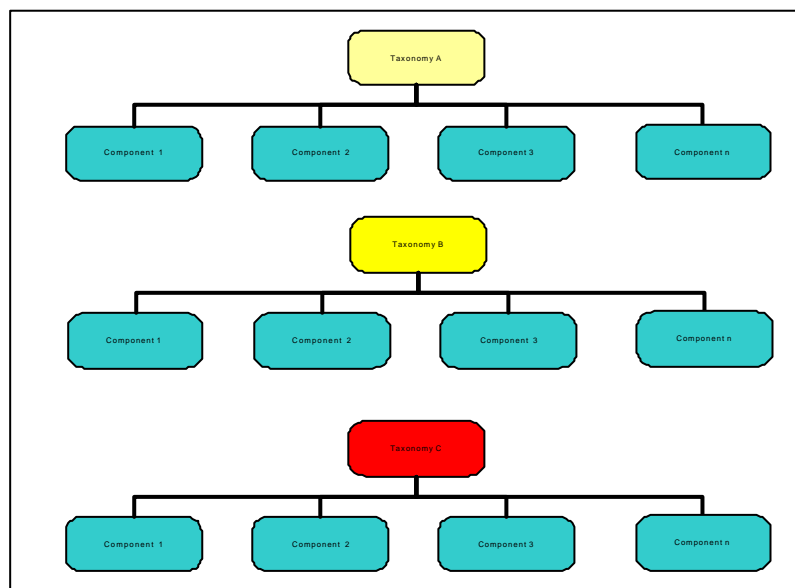


Figure 1: Weill/Vitale’s approach to combining taxonomies and components (Weill/Vitale 2001)



Such an approach has real benefits in situations where the contexts in which the various business models are applied are similar (e.g. sales of goods online, in a B2C environment). But where business environment or context vary significantly, such as in the online news environment, it may well be necessary to take a rather more generic approach to selecting the right components for a business model, as we suggest in Figure 2, below. This figure illustrates the way in which different taxonomies could be created from a variety of combinations of components.

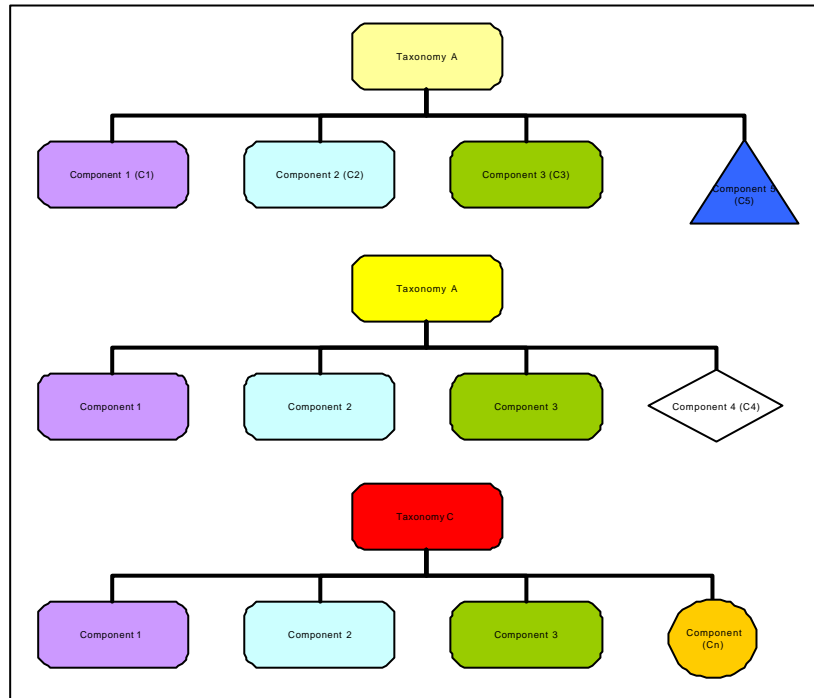


Figure 2: A generic approach to combining taxonomies and components

In the following paragraphs, we identify some of the crucial issues in terms of internet business model components for the online news market:

Revenue generation: online news is a sector where many companies create a web presence rather as an investment in the future, than because of current opportunities for profit – and yet profitability is crucial to survival in this sector. For every company working in the online news sector, therefore, it is very important to find out *ab initio* where the opportunities for gain can be found.

While this dichotomy could be said to be true for almost all internet start-ups, the online news sector has the added complication that there is not merely one way of generating revenue but, rather, a wide variety of potential revenue streams – many of them quite separate from the actual preparation and/or publication of news itself. For example, possible revenue streams can include: advertising (either in the print version of the newspaper, or banner advertising in the online version), direct consumer payment (in terms of online subscriptions, or “pay per article” charges), and/or additional services (such as the provision of ISP or ASP services to potential advertising clients).

Identification of appropriate content: while identifying what belongs on the web site of a transaction-based B2C web site is comparatively simple, this is actually a complex decision for an online newspaper. This decision is complicated by the fact that there are so many different types of content available to newspaper owners. Possible content, for example, could include: placing the “real-world” print version online, placing only parts of the print version online, having a major focus on important up-to-date issues, taking a niche focus such as the analysis of finance news, or making available only specific content such as business news or archived news. In the majority of cases, newspapers will choose a “bundle” of content – and this bundle can (and often does) change over time, or as the company acquires new skills or new alliance partners.

Infrastructure: this is the *sine qua non* of fulfilling customer needs and, while it could be said that all internet-based businesses require IT infrastructure, the news sector also depends upon: human resource capital and management, access to relevant news sources (breaking, political, sports, IT, etc.), ability to analyse that news in a manner appropriate for the newspapers’ readers (this is one of the reasons newspapers such as The Wall Street Journal or The Financial Times can charge successfully for their provision of sophisticated analysis of financial news), and the more “traditional” online factors such as an appropriate IT platform and distribution method.

All taxonomies designed for the online news market – digital products and the digital delivery model, Content Business, Content Provider – require these three core components. Beyond these central decisions, however, online newspapers must make decisions relevant to that particular company and its strategic objectives. For example, does the company plan to sell customer information, or use it for personalised advertising? Is it in the market for business partners with whom to create a network? Does it have a focus on particular value-added areas of concentration (perhaps the classified sections such as Positions Vacant or Real Estate)? Does it aim to increase its market share? These questions do not constitute a special classification in terms of identifying appropriate taxonomies of business models, but they are both important and relevant to a specific business model, once it has been identified – and therefore must be considered complementary components by the company.

Table 4: Combining taxonomies with components of Internet Business Models for Online News

<b>Taxonomies for Internet Business Models in Online News (Examples)</b>	<b>Components for Internet Business Models in Online News (Examples)</b>
Digital products and the digital delivery model Content Business Content Provider	Core Components <ul style="list-style-type: none"> <li>• C 1 = Revenue</li> <li>• C 2 = Content</li> <li>• C 3 = Infrastructure</li> </ul> Complementary Components <ul style="list-style-type: none"> <li>• C 4 = Cooperation</li> <li>• C 5 = Growth</li> <li>• C n</li> </ul>

In table 4 we illustrate the concept of a pool of optional components which are useful for a variety of Internet business models, but which are not necessarily found or used in all taxonomies. Such an approach makes the creation of Internet business models more flexible – and leads us to the recommendation of a two-stage process of Internet business model creation:

- In the first stage the company creates an Internet business model using both the core and additional components relevant to its initial entry into the market-place
- then, over time, the firm can look for complementary components to enable it to keep up with its changing environment.

Figure 3 illustrates this concept graphically. The three business models identified (Content Business, Content Provider and Digital Products/Delivery) each make use of a different combination of core and additional components to suit their own specific needs within the common online news market-place.

In section 4 of the paper, we illustrate this concept further by means of three “micro cases” from the German online news market.

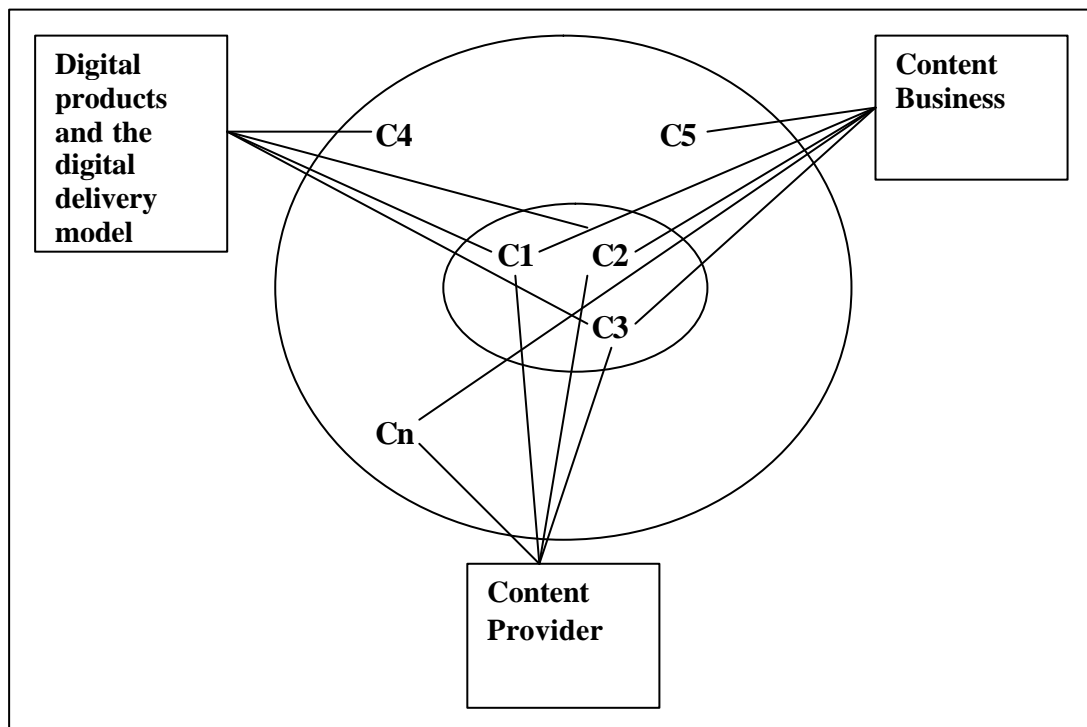


Figure 3: Individual components for Internet business models

#### **4. Structuring Internet Business Models in the European Online News Market**

The supply of news and information over the Internet is already overwhelming. Almost all newspapers in industrialised countries now have an Internet version; radio and TV broadcasters also offer news via the Internet in addition to their normal delivery channels; and there are a growing number of pure-play Internet

newspapers available. Information and news can also be found on the web sites of associations, government bodies, companies, and individuals. But although the competition for the consumer's "share of mind" may seem very similar, the business models and success factors of these different news providers differ significantly.

Weill and Vitale's (2001) taxonomy offers three possible business models for an online news provider: the company could be an "intermediary" because it creates a market by concentrating information; it could be a "virtual community" because it brings together members having a common interest; or it could be a content provider. Such a variety of possible business models for one company is a complicated way to analyse a business and generate the right business model.

The use of core + complementary components, however, offers an easier and more intuitive approach to the creation of business models in this sector. As a test of our suggested approach, we apply the concept to three regional online news providers in Germany<sup>2</sup>, all of which have developed an Internet version of their normal print-version: RZ-Online (Rheinzeitung), SWOL.de (Schwarzwälder Bote) and RON Online (Die Rheinpfalz).

At first glance, the web sites of these online providers are quite similar, as is their product – in other words, their initial presentation is very alike. They all offer content, they all have a revenue model, and they all have infrastructure. These three components are crucial for any content-providing business on the Internet. But these components, while necessary, are not sufficient to create a new taxonomy of accurate business models. We also need to introduce additional components to these core components and identify the various business models relevant to the online news sector.

RZ-Online ([www.rz-online.de](http://www.rz-online.de)) is the online company of the regional German newspaper Rheinzeitung and was one of the first online newspapers to make use of a "facsimile" version of the physical paper (that is, an online version which looks identical to the print edition of the paper). While there are now a number of other newspapers available in some form of facsimile online version (particularly those papers provided via the "NewsStand"<sup>3</sup> front-end) RZ-Online remains unique in providing access through any computer anywhere in the world – and in allowing users access to the paper itself with no restrictions as to number of copies or the length of time for which a particular issue of the paper may be accessed.

Although the e-paper is the heart of the company's Internet business model, and its core competency is definitely local / regional news, the online print-version also offers a "bundle" of additional services. This "content" core component is

---

<sup>2</sup> A more detailed description of the business models of these three regional newspapers can be found in Krüger and Swatman (2002).

<sup>3</sup> NewsStand ([www.newsstand.com](http://www.newsstand.com)) uses a proprietary, Acrobat-based reader to present the Quark Express print-ready output of 34 (as at the date of writing) newspapers and magazines. The large files produced by this conversion are downloaded to subscribers' PCs, where they are available to read for three months. Readers can only access the newspaper to which they subscribe through 1 computer and may have only 1 copy of the file.

thus supplemented by a “revenue generation” core component. RZ-Online uses a variety of revenue generation sources: subscription, pay per article, pay for advertising, etc. The “infrastructure” core component is a corporate entity in its own right with a staff of eight and appropriate IT and management facilities and skills.

It is, of course, obvious that the core components of RZ-Online are virtually identical to those of every other newspaper. But, in addition, the company’s business model depends on a complementary component – “cooperation”: RZ-Online is associated with the leading telecommunication company in the region (KEVAG Telekom) and one of the biggest energy suppliers (KEVAG). Without going into the details of this cooperation (which space does not allow), RZ-Online’s business model is far more than a simple “e-paper” model. A variety of offers to advertisers and clients (web page creation among them) make up the complementary components of RZ-Online’s very complex business model – many of which are still quite unique in the online news industry.

SWOL, like RZ-Online, has a core competence which also relates to local and regional news – but SWOL provides only a standard online presentation of their news content for free. Revenues are gained from a variety of sources, but primarily from advertising. We can identify the usual three core components – content, revenue and infrastructure – but SWOL also acts as a “controlled virtual community”. The company wants to be “the” online portal for their region and thus attract local and regional companies to put their online advertising on the Web sites related to SWOL.

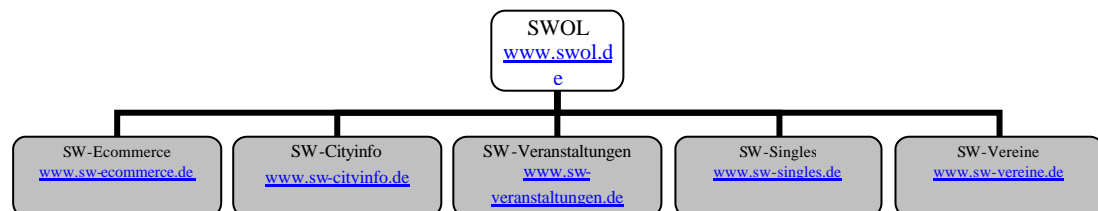


Figure 4: The SW-Network (in: Krüger/Swatman, 2002)

Local and regional news appear to be merely a way in which SWOL can lead the online reader to its local and regional information. As Figure 4 shows, the information itself is delivered through five channels: companies (sw-ecommerce), cities (sw-cityinfo), organisations (sw-veranstaltungen), individuals (sw-singles) and clubs (sw-vereine). But SWOL is the initiator and the main author, and links these different communities together. SWOL thus uses a very different set of complementary components in its business model from those of RZ-Online.

RON Online focuses on edited local news with hyperlinks to nearly every city in the Palatine region. The company has established its own network “RON Net” where it gathers and offers information about a variety of topics, from real estate to events.

RON Online, like SWOL, wants to convince regional companies to spend their online advertising budget on [www.ron.de](http://www.ron.de). In addition to their core components RON Online is, in a customer-focused variation of RZ-Online’s approach,

offering homepages and Internet access for subscribers to the print version. RON online thus has an interesting combination of the complementary components used by both RZ-Online and SWOL. All three regional online news providers thus need varying business models – and the use of core + complementary components makes it comparatively simple to create an appropriate model for each of them.

If we now reconsider figure 2, it is clear that the “generic” approach to combining core + complementary components can be synthesised with the three mini-cases above to generate a taxonomy of business models for the online news sector. In this case, we have three identical core components + a variety of complementary components (in figure 5 simplified into one complementary component for each online news company, for ease of comprehension).

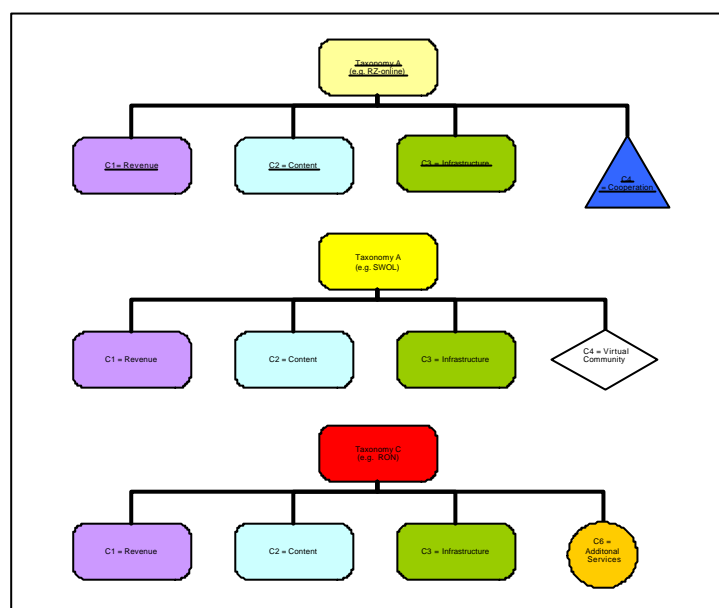


Figure 5: Combining taxonomies and components for the online news industry

This approach offers us the opportunity to develop an business models which can be generically created, while being simultaneously unique to each adopting organisation. Given the unavoidable core issues which all news organisations must deal with, such an approach offers real benefits to both practitioners and researchers.

## 5. Conclusions

Our efforts to understand business models suitable for the online news market over the past year led us to investigate the wide variety of business model taxonomies currently available; and suggested that breaking business models into core + complementary components might make this process considerably easier – particular for smaller companies struggling to find an appropriate model for their own use. In this paper, we have concentrated on the online news industry, but it is clear that our approach could, equally easily, be applied to almost any industry and demonstrate the same benefits it does in our example industry.

We summarise the benefits of our approach as follows:

- A simple identification of core components (what do I need to run a business?) as a first step is possible for most sectors and businesses – every supplier of news can be classified on the basis of the core components. The same procedure could be developed for other sectors: one sector or branch could be described by a finite number of core components;
- After structuring the core components according to the industry or sector in which a company is based, an identification of additional or complementary components could follow. There is clearly a finite number of complementary components for each industry and company, but their exact number for an individual business model can vary; e.g. industry A has X core components and company A1 has Y complementary components, in contrast to company A2, which has the same core components, but Z complementary components;
- It is also possible to imagine more complex industries; in which companies might not all have the same number of core components – making the process of identifying an appropriate business model slightly lengthier. Nonetheless, the concept is clear and the process of identifying and associating core and complementary components is relatively straightforward even under these circumstances;
- As a company evolves, it may find itself offering more (or fewer) complementary components – and these can be amended on an on-going basis. It is even possible that companies may change the core components of their business models as they evolve – but, once again, the changes to the model itself are comparatively minor and require only a little thought and analysis.

We evolved this approach as a part of an on-going European Commission-funded research project, SimWeb<sup>4</sup>, which seeks to identify the components of all business models within the online news and online music sectors. While the overall goal of the project is to develop agent-based simulations of these sectors, the process of understanding and analysing these two sectors led to our creation of the present core + complement framework for Internet business model creation.

The present paper has illustrated the “pilot” application of this framework to a very small selection of regional online news providers in one country. In future work we plan to test this framework against a wider variety of companies, in both our industry sectors, across 10 European countries. We are interested in establishing the efficacy of the framework across both industry and national borders – and we are using a mixture of survey and case study evaluation techniques to achieve this goal. For the present, however, we believe that we have shown the possibilities which this deceptively simple approach has to offer to smaller companies endeavouring to understand their market-place and their own special skills.

---

<sup>4</sup> A more detailed description of this project can be found at <http://www.simdigital.com>

## References

- Allan Afuah, Christopher L. Tucci, *Internet Business Models and Strategies*, McGraw-Hill, Boston, 2001
- Raphael Amit, Christoph Zott, *Value Drivers of e-Commerce Business Models*, 2000
- Amit R. and Zott C. (2001) "Value creation in e-business", *Strategic Management Journal*, Vol. 22, pp. 493-520
- Applegate L.M. (2001) *Emerging e-business models: lessons from the field*. HBS No. 9-801-172. Harvard Business School, Boston
- Paul Bambury, *A Taxonomy of Internet Commerce*, in:  
[http://johnmolson.concordia.ca/gkersten/ec\\_papers/models/98Bambury\\_taxonomy.pdf](http://johnmolson.concordia.ca/gkersten/ec_papers/models/98Bambury_taxonomy.pdf)
- Andreas Bartelt, Winfried Lamersdorf, *A Multi-Criteria Taxonomy of Business Models in Electronic Commerce*, in: *Proceedings of the IFIP/ACM International Conference on Distributed Systems Platform (Middleware 2001)*, WS on Electronic Commerce
- Jörg Bartussek, *Vom Newspaper zum Newsfilter*, in: Andrej Vizjak, Max Ringlstetter, *Medienmanagement: Content gewinnbringend nutzen*, Trends, Business-Modelle, Erfolgsfaktoren, Wiesbaden, 2001, pp. 63-73
- Thomas Bieger, Johannes Rüegg-Stürm, Thomas von Rohr, *Strukturen und Ansätze einer Gestaltung von Beziehungskonfigurationen – Das Konzept Geschäftsmodell*, in: Thomas Bieger, Nils Bickhoff, Rolf Caspers, Dodo zu Knyphausen-Aufseß, Kurt Reding (Hrsg.), *Zukünftige Geschäftsmodelle, Konzept und Anwendung in der Netzökonomie*, Berlin, Heidelberg, New York, 2002, pp. 35 – 61
- Ciaran Byrne, *FT.com says 17.000 are now paying*,  
in:<http://media.guardian.co.uk/newmedia/story/0,7496,765179,00.html> , 2002
- Ali Farhoomand with Peter Lovelock, *Global e-Commerce, TEXT and CASES*, Singapore, 2001
- Hedman J. and Kalling T. (2002a) *The business model: a means to understand the business context of information and communication technology*, Proc Conf 'ECIS'2002' – Tenth European Conference on Information Systems, Gdansk, Poland, June 6-8.
- Hedman J. and Kalling T. (2002b) *Analysing e-business models*, pp. 259-270. In Monteiro J.L., Swatman P.M.C. and Tavares L.V. (2002) Eds. "Towards the Knowledge Society: eCommerce, eBusiness and eGovernment", Kluwer Academic Publishers, Mass.



- Cornelia Krüger, Paula M.C. Swatman, Regional Online Newspapers: paths to glory, or the road to ruin? , in: The Proceedings of the 12th Annual BIT Conference in Manchester, 2002
- Manfred Niewiarra, Der Rahmen: Content Management in der dritten Generation der Telekommunikation, in: Andrej Vizjak, Max Ringlstetter, Medienmanagement: Content gewinnbringend nutzen, Trends, Business-Modelle, Erfolgsfaktoren, Wiesbaden, 2001, pp. 45-59
- OJR, The Future of News: How's Business?, Online Journalism Review, <http://www.ojr.org/ojr/future/1026348700.php> , 2003.
- OPN, Publishers discuss the key to online profitability, Online Publishing News, <http://www.onlinepublishingnews.com/htm/n20011126.065060.htm>, 2001.
- Robert G. Picard, Changing Business Models of Online Content Services, Their Implications for Multimedia and Other Content Producers, in: JMM – The International Journal on Media Management, Vol.2, No.II, 2000, pp. 60-68
- Bharat Rao, Emerging Business Models in Online Commerce, in: <http://www.ite.poly.edu/people/brao/RT99.pdf> , 1999
- Michael Rappa, Business models on the Web, <http://digitalenterprise.org/models/models.html> , 2002
- Jeffrey F. Rayport, The Truth about Internet Business Models, 1999
- Patrick Stähler, Geschäftsmodelle in der digitalen Ökonomie, Lohmar, Köln, 2001
- Judy Strauss, Raymond Frost, E-Marketing, 2001
- Paul Timmers, Business Models for Electronic Markets, in: [http://www.commerce.net/research/reports/1998/98\\_21\\_n.html](http://www.commerce.net/research/reports/1998/98_21_n.html) , 1998
- Peter Weill, Michael R.Vitale, Place to Space, Migrating to eBusiness Models, 2001
- Bernd W. Wirtz, Medien- und Internetmanagement, Wiesbaden, 2001

## Appendix 1: The Internet Business Model Literature

Author	Internet business models
Afuah and Tucci, 2001	Brokerage Advertising Infomediary Model Merchant Manufacturer Affiliate Community Subscription Utility
Bambury, 1998	Transplanted Real-World Business Models: <ul style="list-style-type: none"> <li>• The mail-order model</li> <li>• The advertising based model</li> <li>• The subscription model</li> <li>• The free trial model</li> <li>• The direct marketing model</li> <li>• The real estate model</li> <li>• Incentive scheme models</li> <li>• Business to Business</li> <li>• Combination of above models</li> </ul> Native Internet Business Models: <ul style="list-style-type: none"> <li>• The library model</li> <li>• The freeware model</li> <li>• The Information barter model</li> <li>• Digital products and the digital delivery model</li> <li>• The access provision model</li> <li>• Web site hosting and other Internet services</li> </ul>
Bartelt and Lamersdorf, 2001	e-shop e-tendering e-newsletter e-procurement e-mail
Bartussek, 2001	Newsfilter
Farhoomand and Lovelock, 2001	Emerging business Models for B2B <ul style="list-style-type: none"> <li>➤ e-Procurement</li> <li>➤ Collaboration Platforms</li> <li>➤ Virtual Communities</li> </ul> Emerging infomediaries in B2B e-commerce <ul style="list-style-type: none"> <li>➤ Vertical Hubs</li> <li>➤ Functional Hubs</li> </ul> B2B intermediary models <ul style="list-style-type: none"> <li>➤ Aggregators or catalogue model</li> </ul>

Author	Internet business models
	<ul style="list-style-type: none"> <li>➤ e-Auctions</li> <li>➤ Exchange</li> </ul> Business-to-consumer e-commerce business models <ul style="list-style-type: none"> <li>➤ e-Shops</li> <li>➤ e-Malls</li> <li>➤ e-Auctions</li> <li>➤ Search Engines/Portals</li> <li>➤ Content Providers</li> </ul>
Niewiarra, 2001	Content Network (cooperation between content and network provider with and without intermediary)
Picard, 2000	Videotext Paid Internet Free Web Internet/Web Ad Push Portals and Personal Portals Digital Portals
Rao, 1999	Business-to-consumer commerce (physical and online retailing, information-based marketing and other hybrid forms) Business-to-business commerce (inter-company trading, supplier network, vertical industry exchanges, horizontal linkages between firms, digital business-market mechanisms like auctions) Consumer-to-consumer commerce (auctions, custom services, inter-consumer exchange like online communities, chat forums)
Rappa, 2002	Brokerage Model Advertising Model Infomediary Model Manufacturer Model Merchant Model Affiliate Model Community Model Subscription Model Utility Model
Rayport, 1999	Content Business Advertiser-driven Business Model E-Commerce
Strauss and Frost, 2001	Content Sponsorship Direct selling Infomediary Intermediary models Brokerage models (Online Exchange and Online Auction) Agent models representing the sellers (Selling Agent, Manufacturer's Agent, Metamediary, Virtual mall) Agent models representing the buyers (Shopping

<b>Author</b>	<b>Internet business models</b>
	Agent, Reverse auction, Buyer cooperative) E-Tailing (Bit vendors, Tangible Products)
Timmers, 1998	E-shop E-procurement E-auction E-mall Third-party-marketplace Virtual communities Value-chain service provider Value-chain integrators Collaboration platforms Information brokerage, trust and other services
Weill and Vitale, 2001	Direct-to-customer Full-service provider Whole-of-Enterprise Intermediaries (portals, agents, auctions, aggregators) Shared Infrastructure Virtual community Value Net Integrator Content Provider
Wirtz, 2001	E-Information