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# Connecting Future Scenarios to Business Models of Insurance Intermediaries

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## **Connecting Future Scenarios to Business Models of Insurance Intermediaries<sup>1</sup>**

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### **Abstract**

*In this paper we explore how intermediaries can redesign their front and back offices by connecting future scenarios to business models and we provide researchers with an approach to connect scenarios to business models. By outlining various alternatives and calculating the consequences of strategic choices, intermediaries become more aware of their strategic opportunities. The practical purpose of this research project is to stimulate the sector's innovative capability and the translation of that capability into viable and feasible business models. In scientific terms this paper combines futures research using scenarios, strategic thinking and business models. The paper shows that combining both approaches not only makes them more valuable, it also make clear the critical interdependencies between strategy, business models and innovation. Furthermore, we feel the usability of our conceptualisation as presented in the STOF-model and the translation into a method of design are important elements.*

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<sup>1</sup> This article is based on the work of a large number of researchers from the Telematica Instituut and Delft University of Technology: Patrick van der Duin, Piet Boekhoudt, Edward Faber, Erwin Fiel, Wil Jansen, Ingrid Mulder and Jaap van der Spek. The three authors were involved as project managers representing their respective institutes. The research was made possible by contributions from the following organizations: ABZ, Avero/Achmea, ARAG, Generali groep, Microsoft, Nationale Nederlanden, NVBA, NVA, NVGA, Reaal Verzekeringen, Telematica Instituut and Delft University of Technology

**Keywords:** *Business models, innovation, insurance services, futures studies*

## 1. Introduction

Thus far, descriptive business models have often been used to analyse or design existing business cases. In this paper we go one step further by developing business models that match a future scenario. We combine knowledge from futures studies and the experience that we have in analysing existing business models, with the development of business models in the insurance sector. We have chosen the insurance sector because it is a sector where innovation is a cumbersome affair. Intermediaries play an especially important role in the insurance sector value chain, but, as with most SME's (small and medium-sized enterprises); they are incapable of developing, adopting and implementing innovations independently.

Although in the past it has often been said in a broader context that, because of Internet-technology, there would be a trend towards disintermediation (Benjamin & Wigand, 1995), reintermediation is also taking place (Sarkar, Butler & Steinfeld, 1998). On the one hand intermediaries offer information with regards to the demand for and supply of insurance products, price and service demands, and on the other hand they offer added value in terms of advice and the ability to realize economies of scale, combine services and prevent opportunistic behaviour (Spulber, 1999). Transaction cost analyses indicate that the position of intermediaries in the value chain is a legitimate one. In insurance value chains, intermediaries represent the point where back office and front office insurance processes come together. There are numerous reasons to assume that insurance agents will continue to play an important role in the insurance sector. Garven (2002) even states that the disintermediation hypothesis has proved to be completely wrong. Dumm & Hoyt (2003) argue that the Internet is primarily used for sales support and servicing. This is especially true with regard to simple, low-advice and often object-oriented insurance products like car and travel insurances. In this segment intermediaries have a considerable market share and are competing especially with direct writers (Van der Spek & Fiel, 2004). As far as the more complex financial products and services, like life insurance, pensions, healthcare and disability insurance, are concerned, intermediaries play an important advisory role. In these areas they compete with banks and employers. The intermediaries' market share is relatively large. Complex regulation in the area of social security, fiscal implications and a lack of transparency in the insurance market, combined with service bundling and an unclear pricing system, reinforce the intermediaries' position. With regard to healthcare costs, disability and pensions, new opportunities continue to develop as more and more employers decide to outsource these activities. The position can be reinforced if intermediaries, competing, for example, with banks, manage to modify their front office processes with the customer in mind, opting in favour of a multi-channel approach, tailor-made products and services, personalization and customer intimacy.

In view of the relative importance of the intermediary, the inability to innovate presents a problem to other parties in the insurance value chain, such as insurers, but also to the increasingly knowledgeable and emancipated customers. Customers expect customer-friendly processes supported by IT at the front office end, and a flexible management of the insurance process at the back office end. It is important, then, for intermediaries to be able to meet the requirements from their environment.

This paper provides intermediaries with ideas on how they can design their services and researchers with an approach to connect scenarios to business models.

## 2. Innovation, Scenarios and Business Models

Innovations in the financial intermediary domain are a cumbersome affair (Vermeulen, 2003) not only in the Netherlands but also in other western countries. This can largely be explained by looking at the intermediaries' basic characteristics. They are usually small-scale companies: less than one percent of them employ more than 100 people. In a small company it is usually hard to dedicate staff to start and develop innovation projects. More often than not innovation is the result of pressure from suppliers and customers, in this case insurers and clients. Sector organizations also play a stimulating role. Chesbrough (2003) points out that an open approach to innovation is important. He argues that it is important to cooperate with smart people within and outside of the organization, to incorporate innovative concepts in combination with one's own innovations and to work out adequate business models rather than focus on time to market (p. xxvi). In this paper we address the way innovation scenarios can be developed. In line with Chesbrough (2003), our focus is on the business models that can play a role in these scenarios. Viable and feasible business models are more important than aiming for a limited time to market. After briefly discussing innovations in the financial services sector, we focus on futures research and a scenario-based approach, and finish with a brief look at our business model approach.

Tidd et al. (1997) point out that innovations in the financial domain usually have a short-term focus, are product and service-oriented, as well as cost-oriented, focus on a short time to market, and are usually brought about by information and communication technology. Until recently, information was exchanged on the basis of EDI and batch processes. There is an increasing trend towards synchronous/semi-real-time data-processing between intermediaries and insurers. Possible options for chain integration are extranet solutions, ASP's or portals. Chain integration refers both to vertical integration – matching hardware and software between insurers and intermediaries – and to horizontal integration – linking the intermediaries' or insurers' applications. Thus far, chain integration is experimental in nature, aiming at an optimal use of new technologies such as the Internet, component-based solutions and XML. How we should assess developments in the area of ICT is the subject of futures studies.

Futures research explores, captures and describes possible alternative futures (Miles, Keenan & Kaivo-Oja, 2002). It has yielded various approaches to the investigation of future developments, examples of which are scenario analysis, back casting, road-mapping, normative forecasting and foresight. Increasingly, different methods are being combined (Bouwman & Van der Duin, 2003). Scenarios provide insight into the way the future may develop, based on clearly defined assumptions concerning the relationship between relevant developments. Usually, these developments are based on input from other methods of futures research, such as, for instance, trend analysis. Relevant trends serve as the primary axes along which the alternative scenarios are constructed. A well carried out scenario study addresses criteria such as *plausibility* (scenarios are not science fiction), *consistency* (preventing combinations of mutually incompatible trends), *completeness* (scenarios are more than a variation on a single theme) and the validity of the underlying assumptions (Van der Heijden, 1996). Scenarios can best be used in situations where there is a high level of uncertainty and managers or decision-makers feel the world is changing but they are not sure in which direction, as is the case in the insurance industry. Scenarios enhance their ability to anticipate future developments that may affect their business strategy and models.

Strategies are increasingly being translated into business models. Nowadays, many business ventures have a limited interest in formulating strategies; instead they formulate business models (Hedman & Kalling, 2003). There is an extensive body of literature on business models (see Bouwman & Van Ham, 2003a), which we will, however, not

discuss but instead we make it clear what our position is. We see a business model as a blueprint of how a network of organizations cooperates in creating and capturing value from technological innovation (Chesbrough & Rosenbloom, 2002; Faber et al., 2003).

When comparing the various definitions of business models, we distinguish four common components:

- Service domain: a description of the value proposition (added value of a service) and the market segment at which the service is targeted;
- Technological domain: a description of the technical functionality required to realize the service;
- Organizational domain: a description of the structure of the multi-actor value network required to create and distribute the service, and to describe the focal firm's position within this value network;
- Financial domain: a description of the way a value network intends to generate revenues from a particular service and of the way risks, investments and revenues are distributed among the various actors within the network (see figure 1)

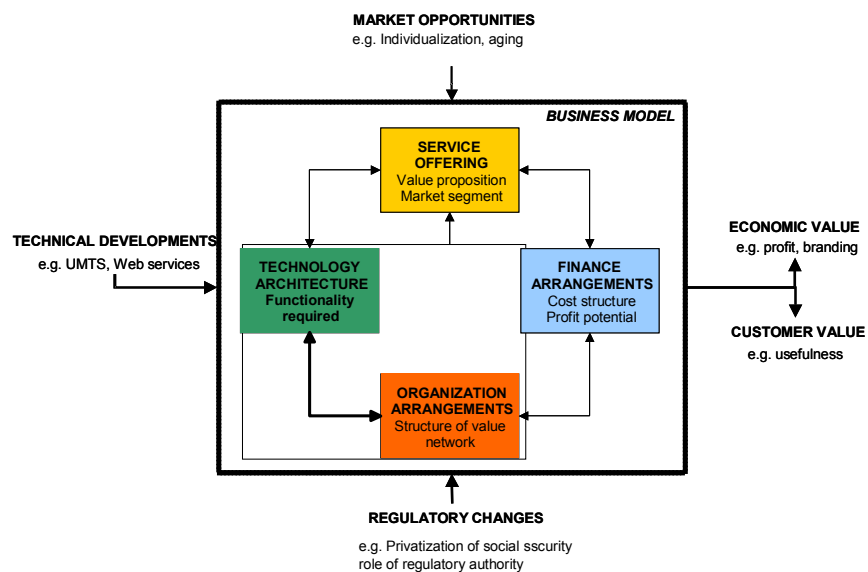


Figure 1: STOF Business model framework

In developing business models that fit within given scenario's we will deal with these four domains, as well as related critical success factors and design issues on basis of the Freeband Business Blueprint Method Haaker et al (2004). We have discussed this method at earlier Bled Conferences (see Faber et al, 2004).

### 3. Research Approach

We started the research project by mapping market-related and technological developments, and regulatory changes in the Netherlands (Van der Spek & Fielt, 2004), as well as looking at similar developments in various Western industrialized countries (Bouwman, Boekhoudt & Ter Doest, 2004). These explorations were used as input for workshops in which intermediaries from the insurance sector played an important role. In these workshops we developed four scenarios, which we labelled **Working Hard**, **Controlled Growth**, **Collective** and **Action!**, based on two scenario-axes – the level of regulation and the level of acceptance of new information and communication technologies (for a detailed description, see Bouwman et al., forthcoming). The intermediaries were then asked to reflect on how they can anticipate the future developments described in the scenarios, and what strategic decisions they expected having to make. To add depth, in the final two workshops we let the participants take on specific roles related to the four domains in the STOF model: head of marketing and sales, head of HRM, head of ICT and head of the financial department. Twelve people took part in both workshops, in preparation of which four case studies were conducted on four innovative intermediaries in the insurance sector. The cases were selected in such a way as to include a captive as well as an independent intermediary, as well as front office and back office cases. We used a case study protocol describing what data we collected and in what way, and how we then stored and subsequently analysed it (Faber et al., 2004). We obtained data through document analysis, participating observation and interviews with relevant key people. We analysed the data on the basis of the case study protocol. The protocol further indicates what information is gathered and on the basis of which source, as well as how the information is stored. The STOF model and a detailed elaboration served as an analysis framework. The case descriptions were validated by the organizations, and the case results served as input for the scenario workshops.

### 4. Results

First of all, we provide an overview of developments that are relevant to the intermediary channel in each of the scenarios, focusing on the role of government and that of information and communication technology. We focus on these two developments because they have a profound impact on the services of intermediaries, according to experts in the fields. The regulatory role of the government is heavily debated in practise, and the experience for instance in the UK serve as an example for many countries (Nurullah & Dinenis, 2000). Tidd et al (1997) and Vermeulen (2003) have made it clear that innovation in the financial service industry is mainly driven by innovation in the Information technology domain. There are similar overviews with regard to competition from other channels and the Dutch Financial Services Act, a piece of legislation that imposes strict rules on intermediaries with regard to management-related issues. These developments serve as a starting point for the development of business models.

As a first step, the developments have been translated into possible demands on the intermediary's management, such as:

- *In the service domain*: a clear positioning of, and more professional services, as well as a broadening of the available service, increased margins;
- *In the technological domain*: using the Internet in a multi-channel approach and standardization with regard to chain integration;
- *In the organizational domain*: increased efficiency and a broadening of the available, more professional services;

- *In the financial domain:* increased efficiency.

Table 1: The impact on intermediaries of developments in regulation and ICT for each scenario

Development	Working hard	Controlled growth	Collective	Action!
Leaner government	Insufficient advantage is taken of new opportunities surrounding social security Simple products in the areas of pensions, disability and healthcare Consumers need more advice	Intermediaries take advantage of opportunities surrounding social security New products in the areas of pensions, disability and healthcare, partly through employers High demand for financial planning	Intermediaries take advantage of opportunities surrounding social security Poor ICT stands in the way of optimal use Simple products in the areas of pensions, disability and healthcare Consumers need more advice	Insurance chain takes advantage of changes in social security Ample supply of complex products in the areas of pensions, disability and healthcare High demand for advice
Information and Communication technology (ICT)	Back office innovations initiated by insurers Hard to meet the insurers' efficiency demands Intermediaries compete on infrastructure Local and poorly integrated solutions (for instance CRM) Direct writers have an advantage Few front office innovations	Entire process digitised Efficiency chain focused on one-time data entry Intermediaries compete of service level ICT is outsourced to specialized service providers (ASP's, Shared Service Centres) Standards to data-related and technological connections Good relations management (CRM) Customer has an overview of his insurance portfolio Customer carries out (small) transactions Intermediary uses mobile ICT Online possibilities for certification and benchmarking of intermediaries	Back office innovations initiated by insurers Hard to meet the insurers' efficiency demands Intermediaries compete on the basis of infrastructure Local and poorly integrated solutions (for instance CRM) Direct writers have an advantage Few front office innovations	Chain integration limited to a small number of chains, orchestrated by large insurers Insurer provides necessary technology ICT- support not interchangeable Experimental new services, such as real-time insurances Efficiency chain focuses on one-time data entry Emancipated customer: chain reversal Good relations management (CRM) Customer carries out (small) transactions Intermediary uses mobile ICT and advanced tools to communicate with customers

There are various ways intermediaries can respond to these demands. Their actual response is largely determined by their business strategy. To arrange possible strategies we have used the model presented by Treacy & Wiersma (1993). In their view, all strategies are based on any of the following three fundamental strategies:

- Operational excellence: distinguishing oneself from one's competitors by emphasizing price, which requires an efficient product organization.
- Product leadership: distinguishing oneself by regularly marketing new products and services, the emphasis being on the organization's ability to innovate.
- Customer intimacy: finding as perfect a match as possible between one's products and customer demand.

The choice of strategy affects a company's business model: the strategy has to be supported in all components. Table 2 presents the strategic options that are available. Based on these options it is possible to construct numerous alternative business models, taking into account the various product/market combinations. Our model for developing business models, i.e. the Freeband Blueprint Method (Haaker et al., 2004), starts with clearly defining the intended service and customers. Based on this, the various business model domains – Service, Technology, Organization and Finances – are worked out in greater detail. Because it is not useful and feasible to work out all the business models, we opted in favour of working out four illustrative business models, and to present one of them in this paper, to wit the '**Modular Tailoring**' model, a model that is based on scenario B – Controlled Growth (regulation and level of acceptance of technology are high). In this scenario the insurance sector has been highly professionalized as a result of the rules imposed by the Financial Services Act. The traceability demanded by this piece of legislation has an impact on the way insurers and intermediaries handle their customers' files. They use a set of standards that is generally accepted by insurers, ICT and other parties in the sector. This means that chain integration has become a fact of life. To allow for chain integration, the insurers' back office has opened up, allowing for a real-time processing of transactions and claims.

In this scenario the intermediary is a generalist. He or she offers a wide range of financial services and as far as consumers are concerned serves as a central contact with regard to complex and advice-intensive insurances and other financial products. In addition to insurances, intermediaries also handle tax-related matters and student grant applications. The intermediary is a financial advisor/partner to private citizens and companies looking for convenience and who are reluctant or unable to spend much of their time on complicated financial matters. Rather than pushing products, intermediaries focus on the customer. They put themselves in their customers' shoes, know the situation and handle complex financial matters with the utmost confidence. The intermediary does business with several insurers. Insurance products are modular in nature, which makes it easy to put together insurance packages based on customers' specific requirements and needs. These packages are also offered via employers. The intermediary has the necessary digital tools, with regard to both the internal organization and the insurance companies and customers with whom he does business. Using a portal, customers have access to their contract data and the status of quotations. The intermediary offers them an overview, which means there is no need for them to look in various different places. In addition, consumers can alter their personal data and hand in a claim electronically.

## **5. Service Domain**

This approach focuses on the wishes and needs of the customer. The primary target groups are consumers with twice the average income or more, and SME's. The intermediary serves as the central contact with regard to complex and advice-intensive products. Competition with direct writers with regard to simple risk products is considered non-feasible. The social consequence of this is that the broad base of society can no longer count on receiving advice and instead has to rely on direct writers. As far as



risks for which insurance is not mandatory (legal aid, life insurance, etc.) are concerned, the large number of people without insurance starts to pose a social problem. Although the modular approach increases the transparency of insurance products, for many customers (private persons as well as businesses) finding the right insurance continues to be a complex affair. Customers want above all tailor-made and user-friendly solutions. Intermediaries distinguish themselves from new entrants like banks and retailers by taking a personal and entrepreneurial approach. Customers are treated with respect and can choose how they wish to approach the intermediary (telephone, appointment, e-mail, video conferencing, etc.). Intermediaries can be contacted at every hour of the day. Customers are informed regularly with regard to changes in insurance products and - due to the annual contract period used in most cases - can change their insurance package once a year.

Table 2: Strategic options available to Intermediaries

Management demands	Business strategy	Strategic options
Clear positioning of services	Customer intimacy	Focus on advice-intensive products vs. simple risk products
	Product leadership	Focus on higher customer segment (e.g. SME, consumers, twice the average income, etc.)
More professional services	Customer intimacy	Introduction of new innovative products and services (for instance real-time insurance)
	Customer intimacy	Personal approach to customers vs. more distant approach to customers
Broadening of services	Customer intimacy	Use of CRM packages or not
	Product leadership	Broad vs. focused services
Increase margins	Customer intimacy	Working together with employers and government Agencies
	Operational excellence	Focus on higher customer segment (SME, consumers, twice the average income, etc.)
Using the Internet in providing services	Operational excellence	Increasing efficiency of business processes
	Customer intimacy	Chain integration
Standardization	Operational excellence	Electronic access to policy data, claims processing, information
Increasing efficiency	Operational excellence	Full or partial chain integration
		Creating increase of scale in management
		Outsourcing non-core activities (for instance ICT)
		Working together in business networks
		Work in mandate of insurance companies (mandate organization)
		Chain integration

Intermediaries try to keep track of the developments in customers' lives. They regularly send newsletters containing information tailored to each customer. .

## 6. Technological Domain

The advisor still visits people at home, supported by mobile and wireless ICT, which allows him to access all the information he needs and request a quotation on the spot. Claims can be handled on location as well. Data have to be entered only once. Customers that wish to do so can contact their advisor by means of video-conferencing. The intermediary has all the necessary digital tools, with regard to both his internal organization and insurers and customers. However, intermediaries and insurers are still not using a single infrastructure.

The IT-landscape is characterized by “islands” of chain integration between insurers and intermediaries, which is why competition on infrastructure persists. Insurance applications are not operated locally but hosted by Application Service Providers. Customers can use the intermediary’s portal to access their contract information and view the status of a quotation. The intermediary offers an overview, which means that customers do not have to log on at various insurers. In addition, customers can make simple changes in their insurance policy data and process simple claims. The intermediary checks the information for errors. The insurer is the owner of the insurance data, while the intermediary owns the customer data.

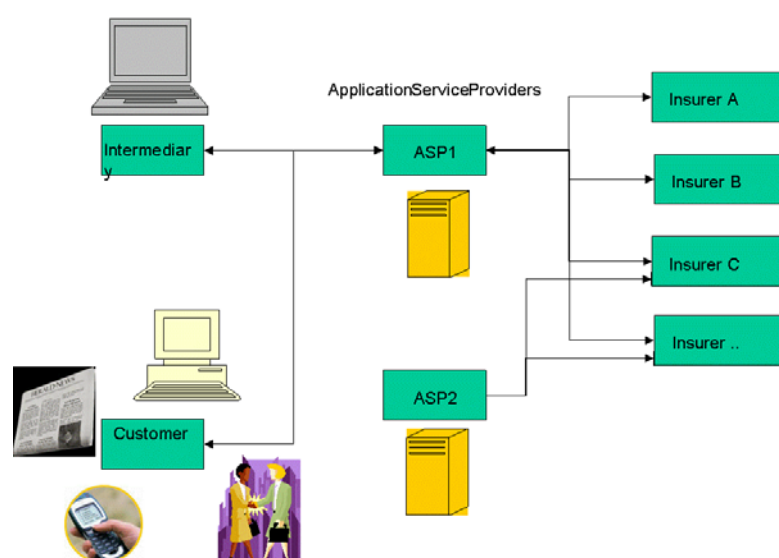


Figure 2: Architecture modular network

## 7. Organizational Domain

Because intermediaries increasingly become generalists, it is especially important for small intermediaries to work together with others. Another reason to work together is that it allows the intermediaries to negotiate more favourable rates. The result of this cooperation is a network organization of intermediaries working together. The intermediary’s core competences are knowledge and customer contact. Insurers cover the risks, and develop and market new insurance products. Sector and consumer organizations increasingly replace government as supervisors of the insurance sector. In addition, the sector organization plays a role as matchmaker, bringing together intermediaries wanting to benefit from each others’ expertise. IT is outsourced to

specialists as much as possible. Insurance applications are not operated locally but hosted by Application Service Providers (ASP's). Because sector-wide chain integration has not yet emerged, there is continued competition with regard to infrastructure.

## 8. Financial Domain

From the point of view of the intermediary the costs involved in giving advice and outsourcing IT are important factors. Intermediaries are no longer paid on the basis of the number insurances that they sell. Depending on the customers' preferences, there is a fixed fee, subscription or hourly rate.

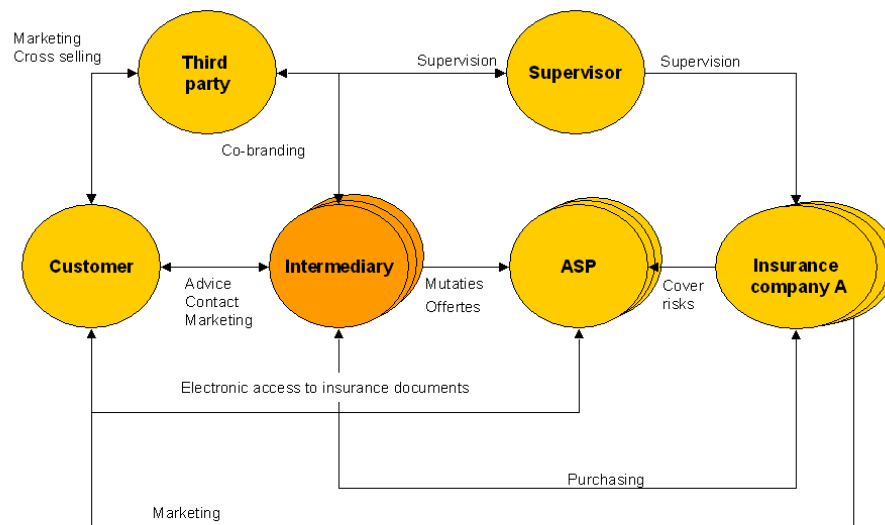


Figure 3: Value web and interdependencies between actors

The costs involved in advice, administration and purchase are included in the intermediary's hourly rate. Because it is difficult to include representation costs in a subscription, all insurances include coverage for such events. Intermediaries are able to economize considerably due to chain integration and IT outsourcing.

**Table 3: Overview of the main elements of the business model**

Service	Technology	Organization	Finances
<b>Service elements:</b> Modular insurance package, advice-intensive products <b>Target group:</b> Consumers and SME's <b>Slogan:</b> No time, but profit <b>Added value intermediary:</b> Following life cycle, entrepreneurship and personal approach <b>Customer approach:</b> Affinity marketing, access portfolio via Portal, personal contact, branding by intermediary	<b>Technology support:</b> Enabler, via portal to intermediary: access contract data, status quotation; processing electronic claims, intermediary works with laptop to access customer data online <b>Chain integration:</b> Partial integration, competition in products and infrastructure, all insurance applications and databases hosted by ASP <b>Multi-channel:</b> Customer can choose how to approach intermediary <b>Security:</b> Via digital passport	<b>Advice and maintenance customer relationship:</b> Intermediary <b>Risk:</b> Insurers, third parties <b>Marketing:</b> Insurers, large intermediaries, sector organizations, cross branding, affinity <b>Product development:</b> Insurers, large intermediaries <b>IT-infrastructure:</b> Competing infrastructures of insurers, application hosting by ASP's <b>Customer:</b> Consumers, affinity groups, network organizations <b>Supervision</b> Sector organizations (self-regulation), government and consumer organizations <b>Purchase:</b> Intermediaries	<b>Revenues</b> Subscription insurance package Hourly rate for advice, administration and purchase, revenues from cross-selling, cutting costs on advice (reduction administrative activities) Cutting costs infrastructure (chain integration) Rate for representing customer interest <b>Expenditures:</b> Advice-related costs, hiring fellow intermediaries to deal with specialist issues, Marketing and product development costs Costs involved in outsourcing IT (hosting of applications by ASP's) Costs related to stricter regulation (training, administrative consequences)

However, the rules imposed by the Dutch Financial Services Act prove to be quite costly. Intermediaries have a subscription at an ASP for the various insurance applications. The costs involved in realizing chain integration are largely borne by the large insurers. Although usually no money changes hands when an intermediary requires specialized assistance, sometimes the services are provided at a fixed rate. Intermediaries also try to sell insurance products via affinity groups and cross selling with strong brands.

## 9. Discussion and Conclusions

Although the position of the intermediary is under pressure, insurers realize that they largely depend on intermediaries if they are to market their services. To reinforce the intermediaries' innovative capability and stimulate their strategic choices and the implementation of those choices in new business models, a sector-wide study was set up in which various parties played a role. Based on the scenarios that were developed in this research project and relevant effects of developments in the areas of regulation and technology, we discussed the strategic choices intermediaries have at their disposal. We then translated these strategic choices into a business model on the basis of the Freeband Business Blueprint Model (Haaker et al., 2004). This business model is but one of many possible alternatives. On the basis of the description of the business model we have looked at the impact on the services offered by intermediaries as well as on the technology that is required, we have described the organizational arrangements and established the revenues, potential economies and costs. With regard to the insurance sector these business models, like the scenarios, primarily serve as examples.

By outlining various alternatives and calculating the consequences of strategic choices, intermediaries become more aware of their possibilities. The practical purpose of this research project is to stimulate the sector's innovative capability and the translation of

that capability into viable and feasible business models. In scientific terms this paper combines futures research using scenarios, strategic thinking and business models. The paper shows that combining both approaches not only makes them more valuable, it also identifies the interdependencies between strategy, business models and innovation. Furthermore, we feel the usability of our conceptualisation as presented in the STOF-mode and the translation into a design method, are both important elements. Taking part in these types of projects and getting feedback from professionals allows us to determine what the relevant concepts are and how they are interrelated, and how these can be used in everyday practice, which in turn helps us to improve our method of design. This is one of the many ways we test the usability of the method and the relevance of our conceptualisation.

At a large number of stages of this study we made various analyses and interpretations, and used them as input for the steps ahead. Because we are dealing with futures research here, it is possible to come up with alternative analyses and interpretations that must eventually lead to other perspectives and strategic decisions, as well as to a different implementation of the business models. Although we are aware that our research contains these restrictions, we do believe that we achieved a considerable level of verisimilitude, thanks to the broad involvement of the sector in our research, their participation in our workshops, which played an important part in the description of scenarios and business models. Furthermore, we have at all times checked for coherence and logical consistency in the scenarios and business models. Finally, at every stage the results have been submitted to the critical eyes of a panel from the sector. Their feedback and evaluations have been constantly included.

In addition to the internal validity of the study, there is also the question as to its external validity. When we began, we conducted an intensive investigation into the innovations surrounding intermediaries in the insurance domain in other countries, in particular England, the United States and Canada. Also, we contacted various organizations representing intermediaries in these countries. Despite the fact that there will obviously be differences between these countries with regard to the insurance sector and the position of intermediaries, the overall picture that emerged was that the problems facing intermediaries in these countries are similar to what we found in the Netherlands, that the intermediaries' room for manoeuvre is also determined by market developments, information and communication technology (CRM and chain integration) and the regulatory role of governments, and that the innovative capability of intermediaries is limited. In that sense we feel that general conclusions can be drawn from this research as far as other countries are concerned. We failed to find any other innovation-oriented projects comparable to the one described in this paper, which makes the results presented here unique and valuable to other countries.

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