Customer Segmentation Projects at Skandia – the Third Phase

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Judge by much of the discussion inside the assurance industry, one could get the impression that the primarily tool to get success is distribution power and not good products or service. The reality is of course a mix of different factors, however distribution is a very important factor because assurance products have a tendency to be sold and not bought. Even though this picture might change as the border between assurance products and investment products



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become more and more blurred and the need for supplementary income to the state pension becomes more and more obvious, distribution power will still be a very important competition tool.

In a recent study done by LIMRA 48% of the respondent from 76 European Life assurance companies identified distribution issues as their top challenge. Furthermore 49% identified distribution as a key factor for success in the next five years. Customer focus was identified as the second most important key factor for success, scoring 30%.

Seen in that perspective it seems reasonable to conclude that the current public discussion in the assurance industry is heavily focused on 'distribution power' as the best tool leading to market share. This discussion might be at the expense of addressing good products and service. Reality of course is that a mix of factors secures market share. Tradition has it

that assurance products are sold and not bought. This picture is changing. Assurance products are converging with investment products. The boundaries between them are blurring as customer sophistication increases. In practice a savvy customer will compare term life assurance against returns from an index fund, for example. Part of this arises out of the need for supplementing state pension. Distribution is critical, but increasingly assurance products 'are bought' rather than 'sold.' Distribution will remain critical, but it must be complemented with 'customer driven strategies.'

Distribution models of assurance products have changed in the past decades resulting in new demands on assurance companies. One example is the need for more sophisticated customer segmentation to fully exploit emerging distribution channels. A promising distribution channel for financial services is the web/internet. The financial industry, of all industries, is most immediate affected by this emerging channel. This article addresses a case example of how Skandia works with customer segmentation on the web. Our description is based on project undertaken as part of the MTC (Stockholm) Service Innovation Multiclient Programme in which Skandia participated in, along with several universities and NUTEK, a Swedish government agency dedicated to accelerating innovation in IT and economic development. A more comprehensive description of the Skandia case can be read in Bo Edvardsson's book "New Service Development and Innovation in the New Economy"

The Co-evolution of Customers and Distribution Channels at Skandia

The character of insurance markets and Skandia's approach to serving them has evolved during the past four decades much in parallel with the societal evolution in industrialised countries. In the mid-sixties markets were characterised by co-operation between the largest insurance providers and sellers.

Insurance products were considered 'low interest products.' Such products were "sold" to more or less passive customers (as opposed to an active buyer of a product). There was one primary distribution channel – the insurance provider's own sales forces – considered to be superior to all other channels. Sales representative knew customers personally and understood their needs. Service was largely a matter of personal chemistry between representative and customer. The responsibility of the sales agent was not a part of an integrated holistic company strategy.

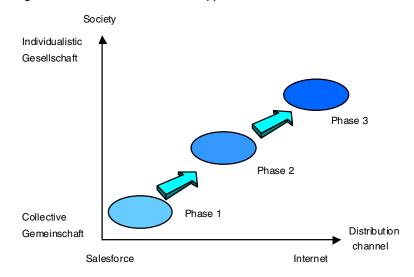
Swedish society of the 70s was widely acknowledged as leaning toward a collectivist model. The "Folkhem" lay its foundation. Since the 70s Swedish society has migrated, like other northern and western European cultures, to a more individualistic culture. A culture that today could be described as building upon an emerging "Internet-hem" at it's foundation. This migration is well characterised and described as evolving from what Max Weber termed "Gemeinschaft" to "Gesellschaft", (Asplund). Prahalad & Ramaswamy (2000) characterise this shift in customer role as moving from passive to active. Management orientation toward customers in most services has changed too, from persuading a passive customer to meeting and coopting the competence of an active and interested buyer.

In Diagram 1 we place this general description of the migrating from Gemeinschaft to Gasellschaft on one a vertical axis, and distribution channels that emerge to fulfil distribution requirements on a horizontal axis. This figure serves well to characterise different phases in Skandia's marketing approach as distribution channels keep pace with social/cultural change.

The number of alternative distribution channels has increased in line with technical developments to support them. Today growing insurance companies complement their personal and local sales force channel with brokers/IFAs, telemarketing and the internet largely because of two reasons: 1) alternative channels can be more cost effective, and 2) some customers prefer them.

Distribution channels evolve in phases, and different channels require different informational input. Requirements for storing and using information about customers has changed at Skandia in line with distribution channel needs in different phases of development. For example, more or less homogeneous markets of more or less passive cus-

Diagram 1. The Skandia distribution approach.



tomers served by local sales forces who rely on personal relations, are met with minimal information (e.g., income as an indication of a desired customer target group). In a society where personal relations form the social fabric, the Assurance Company basically needs to know whom can afford their products, and inform the sales force of this. In other words; customer segmentation is done on the basis of spending power. This situation is represented as Phase 1 in Diagram 1. In phase 2 where distribution is complemented with direct mail and telemarketing capability, relations with customers are mediated and less personal. The company must understand more about the customer as the personal sales forces are replaced or mediated. This is important because customers tend to evaluate products more on the merits of the product alone, and less so based upon the relation ship with the sales agent. To address this need for more information, segmentation schemes evolve to include variables like age, sex, education, place of living and other social demographic indicators in addition to income. These variables represent segmentation techniques in

what we describe as Phase 2 in Diagram 1. Their analysis has become increasingly sophisticated by advanced data-mining programs where 'twins' are found in customer databases and marketing messages are sent to noncustomers based on information about existing customers who match the social demographic profile of his/her virtual twin as identified in the customer database. However, in Phase 2, the approach and assumptions about the customer (passive, less interested) are similar to Phase 1. That is, the customer is someone to be identified and marketed to. Distribution channels like Internet changes this picture. They increase the need to complement social demographic segmentation variables. Part of the assurance industry has realised this and is in a transition from phase two to phase three, where the assumptions and approach to market segmenting is changing radically. Outbound marketing strategies are being rapidly complemented with inbound strategies where efforts are made to actively encourage customers to contact the company via channels of their own choice like the internet, WAP technology, etc. In phase three

everything is turned upside down. The customer segments assurance companies according to values and personal preferences rather than the assurance company segmenting customers. The importance of the brand as a communication tool is increased. Assurance companies (like Skandia) must attract and hold the attention of customers interactively. This increases demands upon distributors to understand signals and communications that originate from the customer. The importance of knowing and listening to the customer can not be underestimated. But acknowledging and accomplishing this also requires an organisation that actually enacts a customer centric approach in practice.

Implementation of an inbound Phase 3 strategy on the web

In essence, inbound means that the customer contacts the product provider. Apparently, assurance companies are assuming that competition on the assurance market is efficient and that the monetary cost of a product will be perceived as equal to the quality of the product. If this is the case the authors expect that the industry will have a tendency to focus on cost reduction and a strategy of mergers and acquisitions to win economy of scale benefits. However, the monetary cost of a product does not reflect the total cost a customer pays and the definition of utility/quality is not limited to revenues/gains and death benefits. Customers incur transaction costs. This puts a 'friction' on efficient markets. Customers' information collection and processing 'costs' is not reflected in the monetary cost. Customer 'attention' is difficult to attain and hold in information rich environments like the Internet. For the customer to 'pay attention' to an offer, these costs must be recognised by the offering company. These costs represent a boundary that has been ignored by many assurance product suppliers.

Having the right product and information is not enough; to win the struggle for attention it is necessary to present the products in such a way that the customer can easily understand the product to decrease the cost of acquisition. Hence, understanding theory and research regarding how people process information that is, gather, evaluate, and choose among actions to take, etc. is essential for a webpage/communications campaign designer.

To attract and hold attention, services must be designed and marketed interactively. Grönroos (1982) characterised the management of this process as interactive marketing, and their execution to be customer centric (or customer oriented). Also, Prahalad & Ramswamy (2000) emphasise that customer-centric value creation revolves around the coopting of customer competence into the value creation experience, and such co-optation is a critical factor for emerging business models which they suggest are replacing older models. However, complete customer-centralism must also allow for individual customer preferences for low participation in service production (i.e., a full service business model), as there are individuals who seek less rather than more involvement in some service processes (Sweet 2000).

One of Skandias approach towards achieving interactive, individual-centred co-operation in information-heavy situations is guided by a cognitive theory and model of human information processing and decision making. Inspired by Nobel laureate Herbert Simon's research on human decision making (Simon, 1956 & 1959) it was later developed and applied by Driver et al, (1993). The model was introduced to be especially appropriate for information-heavy services and products because the basis of the model is human information processing in action, which is a functional description of decision making. Understanding individual information processing habits offers useful guidance in initiating and sustaining customer dialogue via any communication channel, including the internet, and via any communication form, from advertising to invoices, and from the first service encounter to post-service reward programs. Such an understanding is especially informative for information-heavy services.

A Cognitive Perspective on Human Information Processing & Decision Making

Literature and Skandia's own perspective of customer interaction supports that service dialogue requires achieving co-ordination in decisions and actions between service provider and customer. Relationships between provider and users of services extend over time. Decisions about which supplier to use, and under what terms, are increasingly open to re-evaluation under hyper-informative and hyper-competitive contexts. Thus, a dynamic model of decision making is appropriate in the design of interactive service processes requiring co-ordination over time.

The cognitive decision-making approach which Skandia use in this segmentation project is guided by a Dynamic Decision Style model developed by Dr. Michael Driver and his colleagues over the past 20 years. The Driver Decision Style model is based on Noble Laureate Herbert Simon's work on information use and bounded rationality, coupled with research on evaluative and ideological dimensions of "open and closed mindedness" tendencies of people (Driver et al 1993).

The Driver Decision Style model is particularly suitable for sensing and accommodating differences in communication/interaction habits and preferences. It is useful in achieving precision in co-ordination decisions, in designing information systems, and in marketing communication efforts. It has been applied to service management (Larsson, Syensson & Ulvenblad, 1993) as well as in

personal sales (Perrault & Brousseau, 1989) where it has been found to explain upwards of 70 percent of the variance in sales performance among 26 high-tech sales representatives (Brousseau, 1987). In the power industry, the model has been used to assess differences in buyer/seller relationships among industrial customers (Baderschneider, 1996), and to evaluate new service offered (Sweet 1997). In the financial services sector the model has been applied to better the precision and understanding of credit intelligence efforts (Kling 1999). We present the model as follows.

Decision Style Model in Brief

The essential dimensions of the Driver decision style model are distinctly useful and easily understood. Decision styles patterns are A) gathering, and B) processing/using information. People differ in how much information they seek, and the number of solutions preferred when making decisions.

- When gathering/seeking information to make a decision we tend to either satisfice or maximize. Satisfaction occurs if one stops information search/use once a sufficient solution or set of solutions is identified. Maximizing occurs when one continues to collect information until no additional value is obtained from new information.
- When making a decision, people differ in their tendency to develop either a single solution or a set of possible solutions. People tend either to push to find one solution or multiple solutions. Single solution tendencies are considered Unifocus and multiple solution tendencies are considered Multifocused.

Combining these two dimensions (information use and "solution" focus) creates four basic decision styles: Decisive, Flexible, Hierarchic and Integrative. The four basic styles are displayed below in Table 1. You

Table 1: Decision Style Matrix (from Driver, et al, 1993)

Information use			
	Satisficer	Maximizer	
Unifocus Solution focus Multifocus	Decisive fast action-oriented efficient	Hierarchic analytic logical quality	Systemic analytic compre- hensive prioritizing
	Flexible fast action-oriented adaptable	Integrative analytic exploratory creative	

will notice a fifth decision style in table 1 – the Systemic Style. Systemic style has emerged as a unique decision-making style combining aspects of the Integrative and Hierarchic styles. The systemic style has materialized empirically in research over the past 20 years.

This theoretic framework was applied to two primary projects based on efforts that stemmed from internal workshops at Skandia. These efforts were proposed to re-design the Skandia web platform, and the analysis of a database of 80 000 individuals to determine whether there is any correlation between values, personal preferences and decision styles on the one hand and education, occupation, and job position and other social demographic variables on the other hand. The purpose of the later was to arrive at complementary segmentation variables that could guide market communication and service design efforts.

Project part 1: Decision Stylebased Customer Segmentation

Present market communication or products and services offered by Skandia are not individualised. Product and organisational constraints often dominate communication and service delivery. However, in this project an attempt was made to develop a platform for individualisation, according to the phase 3 strategy where customer's education, job position or habits of decision-making, presenting a valuable method to apply the cognitive approach described above. The segmentation effort attempted to use social-demographic information knowledge about customers, and analyse them from the perspective of the Driver Decision Style framework.

The project had access to a database of 80 000 individuals who had completed the Driver Decision Style questionnaire as well as questions regarding age, education, job responsibility, etc. These variables chosen were variables often found in typical customer databases, which provided the opportunity to generalise beyond what the database analysed.

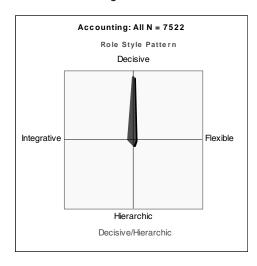
Diagram 2 shows the general relationships (correlation) between more standard social-demographic variables and the cognitive decision style dimensions of the amount of information use and solution focus that comprises the dimensions of the Driver model. The team learned that there are significant and strong correlation between education and information processing. The higher the education of an individual, the greater they tend to score on amount of information used as

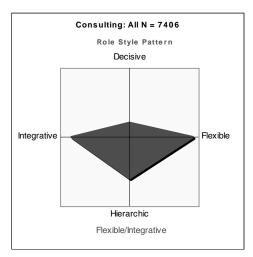
measured by the Driver style assessment. This corresponded very well with the expectations of Skandia and theoretical expectations of the model. But not only the amount of information sought varied with education, but the type and processing habits also varied with the type of education one has. Individuals with a more technical education had a tendency to be more uni-focused in the types of solutions preferred to problems presented in the Driver assessment. For example, higher-educated people with a more humanistic or social science oriented education had a tendency to seek information of a more holistic multi-focused character compared to individuals with more technical education. Further, the type of job one has (presumably related to the type of education one has) was also found to correlate significantly with solution focus habits or style. Individuals with more technical and 'focused' job positions, tended significantly toward uni-focused solution seeking (as opposed to multi-focused solution seeking). Other variables like branch and job position also had a tendency to add additional influence on decision-making habits.

In Diagram 2 we present a graphical perspective of how individuals in accounting jobs differ from individuals working as consultants. We do not offer descriptions of measurement technique nor statistical indices in this article, as these are overly detailed for the present purpose. However, we can report that numerous and significant correlation's (p<.05) consistent with theoretical expectations were found among education, occupation, branch of industry, and information use and solution focus dimensions. Finding significance is not surprising given the samples size. Finding significant differences between individuals related to differences in occupation could be considered surprising if the question is not approached from a cognitive psychological framework.

In Diagram 2 we can see decision style aggregates of accountants and consultants. People working in these two occupations demonstrate quite different information processing styles. Interpreting the graphs above is intuitively simple. The wider the profile on the horizontal axis, the greater the multifocus tendency of the individual. Clearly,

Diagram 2. Decision style differences between individuals working in accounting and individuals working as consultants.



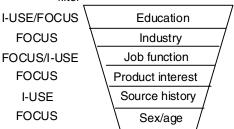


'people working in accounting' demonstrate a much narrower focus tendency than those working as consultants. The implication here is clear. Information presented to accountants ought to be more focused where as consultants will likely prefer a more holistic presentation.

Integrating the knowledge gained from the database analysis with other findings from other segmentation tools, Skandia gets a possibility to increase the precision in customer segmentation, beyond today's datamining search for twins. By integrating the different databases and using a behaviour theory like the Driver decision style model Skandia can individualise services and products to the desired customer segment. Diagram 3 presents the start of a segmentation filter to be further developed using the Decision style framework.

To increase the precision in customer segmentation Skandia worked with a customer-filter with different layers of variables analysed in the database. The segmentation filter offers Skandia a tool to segment its entire customer database as well as potential customers according to their way of processing information, thus guiding service design and communication along personal preferences, which should increase Skandia's ability to attract and hold customer attention.

Diagram 3. Decision styles segmentation filter



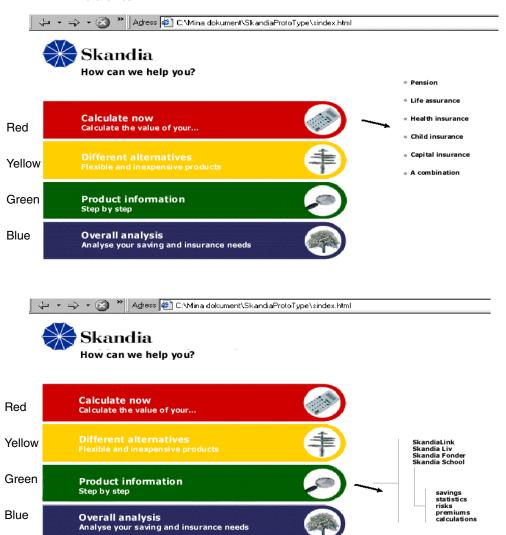
Project part 2: Decision Style-based Web Design

The Driver decision-style model offers detailed guidance regarding the types of information different styles seeks, stylistic preferences in information format (e.g., short bullet statements vs. lengthy and structured details), and even suggestions as to shapes and colors preferred by different styles. Skandia used this information to organize interactive webdesign principles. These principles articulate which styles are likely to prefer 'problem solving and action sequences or paths' on a website e.g., versus styles that would prefer detailed and structured product information, quality reporting, comparisons, etc. The principles were then lifted into 'an architectural' guideline where a critical decision was faced and made. A fundamental design choice to be faced by anyone considering interactive design is to either

- a) design the front end so that early preferences can be sensed (via questions and other queries) leading to a style specific presentation of materials based on the early preference assessment, or
- b) design the front end to accommodate the preferences of the four primary styles (Decisive, Flexible, Hierarchic, Integrative) and creating paths (navigational experiences) open to all, but more or less 'self-selected' by the customer/visitor on the cues provided. In this project Skandia opted for the later approach. In essence individuals would 'self-select' their navigational paths in the prototype.

Figure 1 presents two views of a prototype front end. The top view shows 4 'paths.' Notice the bullet point options to the right of the arrow in the top view, which emerge when a cursor is passed over the 'red colored option' in that view. In Swedish, the red option is offering the visitor to 'Calculate now!' That is, the visitor is offered an action sequence (as opposed to an informational sequence). In the

Figure 1&2: Two views of the proto-type frontend. View 1 (top) is Decisive. View 2 is Hierarchical.



bottom view, the text presentation (to the right of the arrow) is a more hierarchical structure, which emerges when you pass the cursor over the 'green color' option (intended to accommodate more hierarchical styles). This option offers details about products, information, etc. which is a less active, more analytical sequence.

In Figures 3 & 4 we present the prototype navigational path for a decisive (action oriented style) who 'clicked-on' the red option (Calculate Now!) in the prototype presented above. Note that the information presented and requested of the visitor (assumed to be decisive-action oriented) is short and less detailed. Also notice that the 'end result' (fig-

Figure 3: Decisive (Calculate Now!) navigational path screen 1, simple questionnaire.

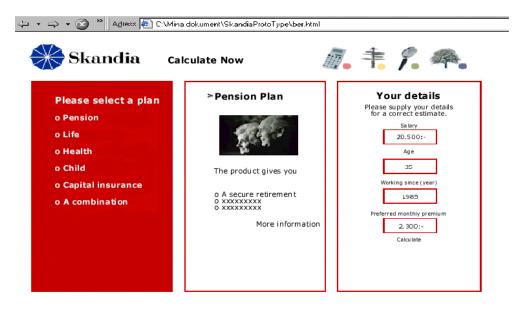


Figure 4: Decisive navigational path screen 2, single option and simple presentation of the result of the calculation.

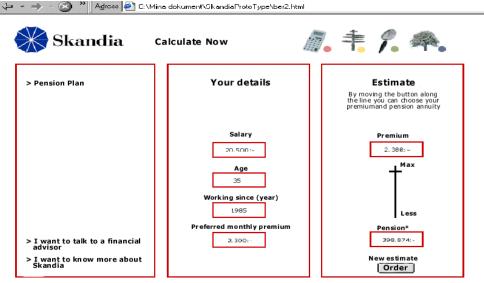


Figure 5: Integratigive (totalanalys) navigational path screen 1 offers a comprehensive analysis of insurance needs.

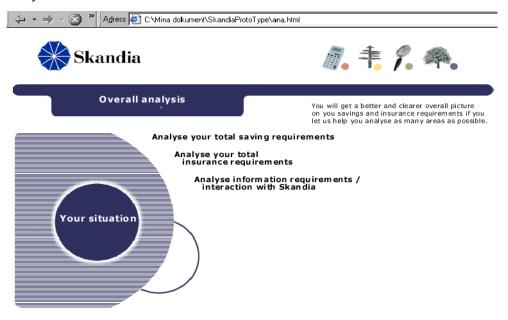


Figure 6: Integrative navigational path screen 2, provides a comprehensive questionnaire.

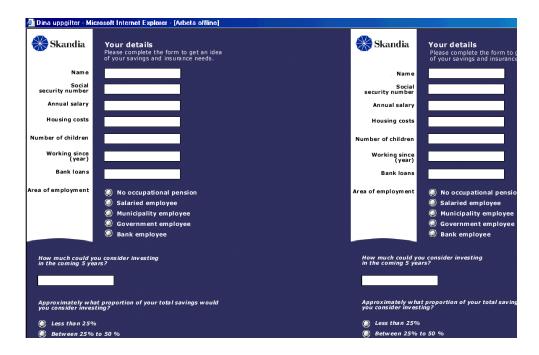
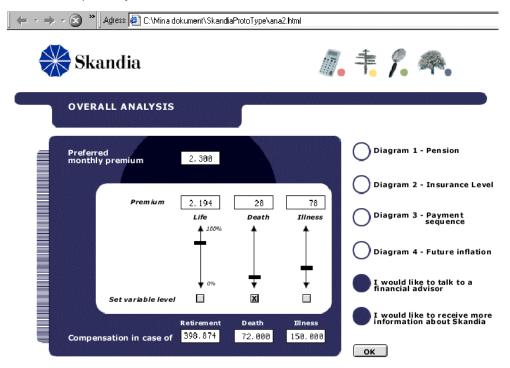


Figure 7: Integrative navigational path screen 3 provides multi-option, integrated presentation of a comprehensive analysis based on a long questionnaire completed by the customer.



ure 4) is a 'uni-focused' presentation of one insurance product option.

In the integrative (maximizing, multi-focused) path, the information provided to the visitor and requested from the visitor is much greater in quantity and detail. And the 'end result' of the calculation for the integrative path consists of a 'multi-focus' integration of three insurance products (health, life, and pension insurance) that can be interactively adjusted in relation to each other.

In Figures 5–7 we present the prototype navigational path for an integrative style (comprehensive, big-picture maximizing style) who 'clicked on' the blue option (Comprehensive Analysis of Needs) on the home page (Figure 1 above) of the prototype.

The next screen of the integrative path

requests detailed information from the visitor in order to conduct the comprehensive analysis offered above.

The screen in the integrative navigational path of the prototype shows the results of the comprehensive analysis based on the large amount of information given by the visitor.

The prototype illustrates in a good way how a cognitive theory can and was applied to interactive web design in service of the customer. By varying the amount of information provided and sought, the options offered and presentational form, style variations can be accommodated and unobtrusively assessed by online behavior if desired, offering further opportunity to customize interactive experiences to the requirement of the individual visitor.

References

- Limra (2001), A view from the top, Limra International.
- Edvardsson (2000), Bo and others, New Service Development and Innovation in the New Economy, Studentlitteratur.
- Asplund, J. (1991), Essä om Gemeinschaft och Gesellschaft, Bokförlaget Korpen.
- Baderschneider, C. (1996) The Human Side of Marketing in a Deregulating Industry: The Impact of Decision Styles on the Quality of Customer Relationships. Masters Thesis. Lund University, Department of Business Administration.
- Brousseau, K. R. (1983) Toward a Dynamic Model of Job-Person Relationships: Findings, Research Questions and Implications for Work System Design. *Academy of Management Review*, 8, 33-45.
- Brousseau, K. R. (1987) Profiling Sales Success. Decision Dynamics Corporation.
- Cespedes, F. (1995) *Concurrent Marketing*. Cambridge, Mass: Harvard University Press.
- Driver, M.J., Brousseau, K.R. & Hunsaker, P.L. (1993) *The Dynamic Decision Maker*. San Francisco, CA: Jossey-Bass.
- D'Aveni, R. A.. (1994). *Hypercompetition: Managing the Dynamics of Strategic Maneuvering*. New York: The Free Press.
- Davidow, W. & Malone, M. (1992). *The Virtual Corporation*. New York: Edward Burlingame Books/HarperColliins.
- Edvardsson, B. (Ed.). (1996). *Quality in New Service Development: Key Concepts and a Frame of Reference*. Stockholm: Nerenius & Santerus Förlag.
- Edvardsson, B. & Gustafsson, A. (1999). 'Quality in the Development of New Products and Services.' *In The Nordic School of Quality Management*. Bo Edvardsson & Anders Gustafsson, Eds. Lund, Studentlitteratur.

- Grönroos, C. (1983). Strategic Management and Marketing in the Service Sector. Boston: Marketing Sciences Institute.
- Grönroos, C. (1999). 'Marketing Services: the Case of a Missing Product.' In *The Nordic* School of Quality Management. Bo Edvardsson & Anders Gustafsson, Eds. Lund, Studentlitteratur.
- Larsson, R., Svensson, K. & Ulvenblad, P.O. (1993) Strategic Human Resource Management of Services: Matching Customers, Employees, and Job Design in Banks. Presented at Strategic Management Society 13th Annual International Conference, Chicago.
- Simon, H. (1956) "Rational Choice and the Structure of the Environment" *Psychological Review*, (Volume 63, 1956 pages 129-138).
- Simon, H. (1959) "Theories of Decision Making in Economics and Behavioral Science", *The American Economic Review* (1959, pages 253-283);
- Perrault, M., and Brousseau, K. R. (1989) Selling to Different Styles. Decision Dynamics Corporation.
- Prahalad, C.K., and Ramaswamy, V., (2000). Co-opting Customer Competence. *Harvard Business Review*, (January-February), 79-87.
- Sweet, P. (1997). Interactive Services Marketing and Customer Decision Styles: A Dynamic Model with some Empirical Evidence. *Proceedings of the International Conference on Telecommunications and Information Markets*. November, 1997, Brussels.
- Sweet, P., (2000). Is Full-Service Dead? A Critique of Prahalad & Ramaswamy's Co-opting Customer Competence. *Letters to the Editor, Harvard Business Review*, (March-April). See also HBR Forum, www.hbr.org/forum.