XML Technologies, Value-based Marketing, Franchising and the New Paradigm in Business

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Abstract—A simple, holistic view of each of the four large trends listed in the title is given with focus on their competitive advantages. By combining those trends we arrive at a new E-business model which is a value-based franchise. The so-called methodological approach to information gives the new E-business model competitive advantage. The key characteristic of a value-based franchise is that it is a synergistic business (has favorable influence on culture). The goal of “Authentic Norway” inter-university project is to create a practical instance of the new E-business model.

Index Terms—Decision making, E-business, information design, value-based marketing.

I. INTRODUCTION

The starting position of this article is best expressed by the title of Shapiro and Varian’s book: “Information Rules” [1]. Indeed, in the Information Age it is information that decides the preferences for goods and services, makes the difference between success and failure in businesses, directs the development and use of technology and ultimately determines the outlook of our culture.

The observation that motivates this work is that the current spontaneous evolution of our culture seems to lead to a condition where the technology is a threat to the environment and our lifestyle is a hazard to our physical and mental well-being. Repeatedly we are urged to take conscious control over our cultural evolution [2], [3]. An obvious challenge is, however, to find a feasible way of doing that.

In this article a general strategy for dealing with this issue is proposed, where the key idea is to create information about information. If information rules, then the information about information is exactly what we need in order to rule over information, and in that way also over our cultural reality. By following this approach for about a decade I have developed “Polyscopic Modeling”, a general-purpose information design methodology, which provides guidelines for an informed informing and initiates the methodological approach to information [4], [5]. In this article I show how the methodological approach to information can be combined with the business orientations and Internet technologies that are mentioned in the title to create a synergistic E-business model. A synergistic business is characterized by the synergism between its economic and cultural effects. In a synergistic business ‘doing the right thing’ is not a sacrificial-ethical act of the management and the employees of the organization but the company’s vital interest, because its competitive advantage depends on it. It is not difficult to see how such business orientation can contribute to the solution of the general cultural issue that has been mentioned as the motivation for this article.

The rest of the article is organized as follows: In Section II, the basic elements of the Polyscopic Modeling methodology are outlined. In Sections III to VI, the four approaches to business and Internet mentioned in the title are discussed. It is shown that their combination leads to a synergistic E-business model, and that the methodological approach to information gives the new business model the competitive advantage. In Section VII, an inter-university research project called Authentic Norway is described whose goal is to create a practical instance of the new business model.

II. METHOD

A. Polyscopic Modeling Methodology

“Polyscopic Modeling” is a general-purpose information design methodology. This methodology includes a terminology, an information model, a definition of principles and criteria, a collection of techniques and sample results [4], [5]. The methodology can serve our strategy in two ways:

- As guidelines for designing information. By using those guidelines we can create information that has more power than the common kinds of information.
- As guidelines for choosing information. By making the effects of information clear, those guidelines can help us choose the information whose effects are favorable.

B. Scope Design

In the Polyscopic Modeling definition the polyscopic modeling approach is defined as ‘information design by scope design’. The scope is the way of looking, or ‘what is being looked at and how’. The scope may be determined by the terms of the language used, the subject, the method and the presentation techniques. Scope design distinguishes the polyscopic modeling approach from the common traditional approaches where the scopes are chosen according to the
hereditary customs of a traditional profession. In practice, scope design means prioritizing the most relevant themes, and finding new ways of looking at issues and phenomena. Scope design is practiced by following the criteria that are stated in the methodology definition.

C. Perspective

The perspective is one of the four criteria in the Polyscopic Modeling definition. This criterion extends and replaces the factual truth, which is the common criterion in informing. The perspective literally means ‘seeing through’ something. Applied to information, it means using information to see something as a whole, with nothing obscure or hidden, and in correct proportions. This criterion distinguishes polyscopic modeling from the traditional informing, where traditional themes are pursued by traditional techniques in order to create factual information with relative or assumed certainty. The main goal of polyscopic modeling is to create the information that is necessary but lacking as reliably as possible.

D. High-level Information

The distinction between the high-level information and the low-level information is another essential characteristic of polyscopic modeling. The high-level information, like the view from the top of the mountain, shows clearly what is large and essential and hides the details. Although the high-level information, like the view from the top of a mountain or a large-scale map, is obviously what is needed for choosing the direction in both management and daily life, it has been unduly neglected in the search for factual truth, which is believed to be technical and detailed or low-level. The high-level information has therefore been a focus of attention in polyscopic modeling. Specific techniques such as patterns and ideograms have been provided for stating and justifying high-level results. By using those techniques, high-level information can be created that has similar reliability and power as scientific information [5], [6]. The high-level information is usually created by combining the available lower-level pieces of information.

With the help of the methodology, our mental picture of information can change from a flat plateau filled with facts to a three-dimensional structure, where certain basic high-level insights stick out as very high peaks. The practice of using those peak insights as ‘view points’ for directing our daily life actions and choices may have a profound cultural impact.

E. Example Results

Two basic high-level insights are of special interest for our discussion of the use of the methodological approach to information as the source of competitive advantage for the new business model.

The first insight is a perspective of well-being (a clear picture of the nature of human well-being including the most relevant factors their relative importance). This insight is a result of polyscopic modeling of addiction [6] and convenience [7], [8]. It is shown that convenience (preferring what seems pleasant) is a dysfunctional and deceptive value, since it surprisingly often leads to a less pleasant condition. It follows that we cannot pursue well-being based on our sensory perception alone. A suitable ‘map’ (information) is required for finding the way.

The second insight is a gestalt of modern culture (a way of grasping the culture as a whole and interpreting its nature and condition). In [9] it is shown that our cultural condition is as if we were living in a house with failing foundations. Our culture is undergoing a foundations change (‘cultural paradigm change’). Building further on the present foundation is dangerous in the long run. Even living as usual is incongruous with the situation. Trying to solve any of our worsening problems (environment, health and others) on the present foundation is no better than patching the cracks in the walls of a house with failing foundations. This cultural gestalt has surprisingly bright and optimistic consequences: By changing our cultural foundations and reconstructing our culture on that basis we can not only begin to solve our notoriously intractable problems, but also live a lot better than we do now.

By definition, the foundations of culture are the values that are used for making basic choices. The cultural paradigm change requires that we consciously choose the values upon which our beliefs, designs, daily routines, relationships and other elements of culture are founded. The cultural paradigm change can have as profound impact on the modern culture as architecture had on high-rise building.

By using the polyscopic modeling techniques, the mentioned insights are turned into hard facts, similar to scientific results and at the same time made transparent. Established and communicated in that way, those facts can be used to support other elements of culture. In particular, as explained below, they support the synergistic business orientation.

III. FRANCHISING

Franchising [10] makes the business efficient by centralizing the production and use of information in two ways:

- **Common design.** Everything in a franchise unit, from the stationary and the logo to the business processes and the product, is designed only once for all units and then reproduced in as many instances as desired.
- **Common advertising.** By advertising together, the units of a franchise can become highly visible in the information jungle at an affordable cost.

The franchise business model also has disadvantages, similar to the ones that are associated with the conveyor belt: Uncreative, repetitive work on the production side, and a correspondingly uninspiring product. Those disadvantages become clearly visible when the cultural effects of the organization are considered together with its economic effects.
IV. NEW PARADIGM IN BUSINESS

The new paradigm in business [11] is a growing trend in management theory and practice whose main characteristic is that ‘money’ as the goal of the organization’s activity is replaced by ‘company values’. Of course, the revenue is still considered as a vitally important value, but no longer as the only one.

The cause for this trend may easily be found in the fact that, as information is increasingly becoming the key factor of an organization, the values such as creativity and loyalty are becoming key company assets. Furthermore, it is becoming widely recognized that the company culture may be as important for an employee’s well-being as the income level.

Finally, it has become clear that the global cultural and environmental condition will not improve unless the power of the business is used to move forward the vehicle of change.

The new paradigm in business can naturally be combined with franchising. The result of such combination is a value-based franchise where the values determine the company identity that is identified with the brand and protected by the franchise agreement. The development of this identity is a slow and sensitive process. The reinforcement of the company values among the franchisees and the communication of those values to business partners and clients requires special mechanisms and presents a key challenge to this form of organization.

V. VALUE-BASED MARKETING

While common marketing works with implied values such as low cost and convenience, in value-based marketing the values are consciously chosen, explicitly communicated and considered as the main focus and tool. It is clear that the value-based marketing is the natural marketing approach for the new-paradigm business. In particular, value-based marketing is the natural way in which a value-based franchise can create and maintain its distinct identity.

In [12] it is argued that the methodological approach to information that was described in Section 2 has the potential to give the value-based marketing a competitive advantage over the common marketing. Here I highlight the main points in this argument:

• The methodological approach to information allows us to create information about the true value of goods and services that combines the power of science with the expressiveness of art. Such information can easily be more convincing than common advertising.
• The methodological approach, especially when used in education, allows us expose the ways in which common advertising can be deceptive and show how it can reinforce dysfunctional values [13].
• The insights that are created by the new approach to information can make the values that are supported by common advertising less appealing.

I anticipate that it will not take long before the marketing as we now know it will be considered as a rather crude and often harmful first attempt, which has fortunately given rise to more advanced forms with superior economic and cultural effects. Its current persistence may be attributed on the one side to the lack of real information that can help us make meaningful choices, and on the other side to the lack of information about information which could help us understand the effects of advertising.

VI. XML TECHNOLOGIES

The XML technologies\(^1\) [14] are transforming the World Wide Web into a world-wide distributed computer. This computer can implement the business, informing and education processes and connect them together. It is expected that the XML technologies will bring a sweeping wave of change to business, informing and education.

The XML technologies can bring the following advantages to a value-based franchise:

• They can automate much of the routine information work of a unit and in that way make the operation cost-effective.
• They can bind the distributed units together into flexible value chains as the need arises.
• They can allow for creating customizable templates for displaying and handling the unit-specific information.
• They can create far more complex interactions within and without the franchise than what is currently possible.

The XML-enabled Internet is exactly what is needed for providing a common infrastructure that links the units of a value-based franchise together into an efficient organization. This infrastructure is also the required medium through which the value-based marketing information, which necessarily includes both general and unit-specific components, can be disseminated.

VII. AUTHENTIC NORWAY PROJECT

Authentic Norway is an inter-university research project whose goal is to create a practical instance of the above-described business model. The units of Authentic Norway will be Norwegian businesses, typically small and family owned, which work in authentic tourism (tourism that has authenticity

\(^1\) While the older and still dominant HTML markup language specifies how the information is to be displayed on the computer screen, the newer XML or semantic markup specifies what a piece of information is. The only thing that a browser can do when it receives the HTML-marked piece of information \(<b>29.95</b>\) is to display it on the screen in bold face. But when the same piece of information is marked in XML as \(<price\text{ currency}=USD>29.95</price>\), it can also be identified by both humans and machines as a price and used as a part of a larger transaction, such as the computation of the best or the over-all price. By allowing for the semantically marked data to be exchanged over the Web, the XML approach turns the World Wide Web into a world wide distributed computer. Hundreds of standards, languages, programming tools and on-line services (in a word, ‘technologies’) are being developed for programming and using that computer. It is expected that the XML technologies will bring revolutionary changes to business, informing, education and other areas where information plays a major role.
as main value). On the applied side, Authentic Norway will give competitive advantage to those businesses, similar to the advantages that chain enterprises enjoy now, while supporting their intrinsic values. As a research project, it will serve as 'modeling clay' for the researchers to develop the solutions, combine them together and test them in practice.

Authentic tourism is a natural and almost ideal application arena for the business model introduced in this article:

- Since authenticity is most easily developed and most intimately experienced in smaller units, it is most naturally supported in an organization that is a flexible structure of such units.
- Since authenticity (expressed as creativity, strong cultural identity, depth of shared experience etc.) is inspiring, it will not be difficult to use it as a source of motivation for both the authentic tourism workers and researchers.
- Since authenticity is the natural and obvious value in tourism (or in any case it should be that), it will not be difficult to develop the value-based marketing that is based upon this value. The value-based marketing here will have the effect of elevating the status of authentic tourism to the fine art of tourism, which is indeed natural and well deserved.
- Since the automation of information processes, flexibility (easy customization) and interconnectivity are the main values brought by the XML technologies, they will naturally provide exactly the technological support that this business needs in order to be cost-effective. In a later phase, the project will create an online authentic tourism registry and extend its operation worldwide.

The Authentic Norway value-based franchise can have several desirable cultural effects. In Norway there are many rural areas with extraordinary natural beauty and cultural heritage, that are being abandoned by young people who cannot find any meaningful work there. The Authentic Norway project can reverse this trend. By bringing genuinely interested visitors into those areas, it can inspire the local people to become proud of their heritage and give their best. This can stimulate cultural emancipation and exchange, help elevate the status of authentic tourism and generate higher income. In that way the culture-economy positive feedback loop which characterizes a synergistic business can be closed.

VIII. CONCLUSION

By combining the franchising with the new paradigm in business we arrive at a new business model, the value-based franchise. The value-based marketing approach that uses methodological information design can give this new business model competitive advantage. E-business implementation that uses the XML technologies can make it cost-effective and profitable. The task of the Authentic Norway project is to develop a real-life instance of this business model and to test these theoretical possibilities in practice.

Our main challenge is to secure that the new business model is synergistic, i.e. that its economy is directly co-dependent with its inner and outer cultural effects. As we have seen, the authentic tourism, which is the activity of the Authentic Norway project, is so natural application of these ideas that, provided that the communication channels work, the co-dependence between highly developed authenticity and good revenue should be almost automatic.

It remains to explain how the creation of the new business model in theory and in practice may help the solution of the general cultural issue that was mentioned as the motivation for this research. Here, as in [3], it is useful to take the point of view of memetics and consider the new business model as a new cultural gene or meme. If this meme proves to be successful and competitively superior, it may easily be reproduced in many instances and in all corners of the economy and culture. The act of producing such meme may be understood as a case of 'cultural genetic engineering' which avoids the disadvantages of the two extremes – anarchic evolution and dictatorship – and provides an acceptable and in our situation necessary form of intervention into business and culture.

REFERENCES

Dino Karabeg has a doctorate in theoretical computer science from the University of California at San Diego. Since 1992 he is an Associate Professor at the Department of Informatics, University of Oslo, where he is developing a system of results and ideas about information and culture under the common name ‘information design by polyscopic modeling.’