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December 2007

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# Branding 2.0 Designing an Information System to build a Brand based on User-generated Content

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#### **Abstract**

This work proposes a new branding process that is inspired by and builds on the fundamental ideas behind the term Web 2.0. The paper shows how information systems can be designed to create value throughout the branding process by collecting and distributing user-generated content that supports physical-virtual artifacts. The paper follows the design-science research guidelines provided by Hevner et al. (2004). It introduces the model of Branding 2.0 and a real-world instantiation. Related cases are analyzed and compared to the instantiation to refine the model and extract implications for designing future branding applications. Finally, a note on possible business models demonstrates options for an implementation scenario.

**Keywords:** Web 2.0, Branding, Branding 2.0, Marketing 2.0, Brand Community, Physical-Virtual Artifact, User-generated Content

#### 1. Introduction

In 2004, O'Reilly Media coined the term "Web 2.0" to describe the second generation of a variety of web-based services that seemed to change the way we use the World Wide Web as an information system (O'Reilly 2005). While some people (from both the academic and the business community) dismissed the term as a marketing "buzz word" (Best 2006), the change in the way we use the web described by O'Reilly must be recognized and is clearly evident as of 2007. O'Reilly initially addressed the term "Web 2.0" to a technical audience. Since 2004, remarkable services and business models built on available web technology have evolved. Currently the focus of interest is shifting from the web's applications to the new role of its users. It is now easier than ever before for users to participate in online communication and to create and publish their own content.

In a widely-recognized article published in Wired Magazine in 2005, Kevin Kelly reviews the first ten years of the World Wide Web and reflects on the current developments:

"What happens when everyone is uploading far more than they download? If everyone is busy making, altering, mixing, and mashing, who will have time to sit back and veg out? Who will be a consumer? No one. And that's just fine. A world where production outpaces consumption should not be sustainable; that's a lesson from Economics 101. But online, where many ideas that don't work in theory succeed in practice, the audience increasingly doesn't matter. What matters is the network of social creation, the community of collaborative interaction. ... The producers are the audience, the act of making is the act of watching, and every link is both a point of departure and a destination." (Kelly 2005)

In the 2006 edition of its annual "Person of the Year" special issue, Time Magazine declared simply "You" - representing each individual internet user - as the world's most notable person of the year 2006. It reflected on the huge recent success of user-generated content websites such as YouTube.com (which was sold for \$1.65 billion to Google.com in November of the same year) and other social community websites like MySpace.com, Facebook.com, etc.

#### Branding and Web 2.0

While Web 2.0 applications and organizations (O'Reilly 2005) have been used by companies to communicate their brands through these new marketing channels, modern information systems still play a rather passive role in serving the brand communication process. It seems that marketers still use the web in the same manner that they use traditional mail (e.g. spam), print media (e.g. banner ads, information websites) and television (e.g. placing spots on youtube.com, cnn.com, etc), with a small number of exceptions where "viral" marketing actions are performed through reaching opinion leaders that will create a buzz around a particular brand or product. Furthermore, product placement happens in online games and virtual social worlds (e.g. secondlife.com), like it used to happen with TV programs. As of 2007, marketing (and branding in particular) has not yet been updated to a "version 2.0", which would be expected to include campaign elements that are designed with the new challenges and opportunities of Web 2.0 in mind. This paper presents a model for Branding 2.0 that includes Web 2.0-typical design elements and ideas to create a brand image that is generated by its own consumers.

The term "Branding 2.0" has (probably) been around since 2005 but is not very well recognized in the media<sup>2</sup>. Martin Lindstrom, one of the recent "gurus" in the marketing scene, mentioned the term in a 2005 article, calling for marketers to occupy evolving broadcasting channels such as web logs (Lindstrom 2005). Since Lindstrom's article, Branding 2.0 has been discussed in a few niche web logs but has never been in the focus of academic publications. So the new possibilities of advanced (social) interaction, participation and user-created content (which are predominantly proposed by the idea of Web 2.0) seem not to be widely represented in branding process innovations, although these factors might be quite valuable when creating a powerful brand. A possible reason for this situation might be that marketers limit their actions to the capabilities of existing web applications (such as MySpace.com, YouTube.com, etc.) opposed to considering an innovative information system that is particularly designed to serve the branding process.

This work assigns a more active role to information systems in the brand creation process. Through user participation and user-generated content (with the idea of Web 2.0 in mind), the information system can create value through building the

<sup>&</sup>lt;sup>1</sup> In this paper, the term "Web 2.0" is used to emphasize current phenomena such as web-based communities, social networking sites, Wikis, etc.

<sup>&</sup>lt;sup>2</sup> As of 03/04/2007, Google.com returns only 11,300 result pages for "Branding 2.0", while "Branding" returns 64.3 million and "Web 2.0" 84.1 million pages. Respectively, "Marketing 2.0" returns 0.45 million result pages.

brand and transcending physical product boundaries. Applying social software and complementary, recently available technologies like RFID, product branding can be taken to another level, resulting in a closer relationship between the brand and the customer - a significant contribution to brand equity in general. Since Branding 2.0 represents an interdisciplinary approach that involves both information systems design and marketing principles, this paper is addressed to audiences from both disciplines<sup>3</sup>: the paper introduces a possible option for brand managers who seek differentiation from other brands through designing a more meaningful brand image, characterized by high customer involvement and Web 2.0-typical design elements. It is also addressed to IS professionals who design systems that manage user-generated content, in particular in a marketing-related context. In order to utilize Web 2.0 concepts for branding, a participative and collaborative structure should already be considered at the design stage. As Tim O'Reilly puts it:

"One of the key lessons of the Web 2.0 era is this: Users add value. But only a small percentage of users will go to the trouble of adding value to your application via explicit means. Therefore, Web 2.0 companies set inclusive defaults for aggregating user data and building value as a side-effect of ordinary use of the application." (O'Reilly 2005)

For the academic community in IS the paper provides a case on how information systems create value. For researchers in marketing, it introduces a new type of brand community that is different from other observed brand communities, as it applies two basic principles:

- The brand community is not just formed around a brand; it creates the brand.
- The brand community is not just formed around a product; it is part of the product.

The first principle is achieved by product-associated content that is created and published by the members of an online community. The resulting dynamic content and social interactions are also part of the actual product, applying the second principle. This is possible by designing a physical-virtual artifact that exists both as a regular product in the real world and as a bundle of dynamic online content in the virtual space (In the prototype, this is realized through implementing RFID transponders in the actual product for identification and further interaction). Both principles are realized using an accordingly designed information system that is the enabler and driver of this new type of branding model. By following a design science research approach (Hevner et al, 2004), a new branding model (and the design of the underlying information system) will be developed and realized through a real-world instantiation.

The remainder of this paper is organized as follows: Section 2 will introduce key benefits of Branding 2.0, derived from IS, sociology and marketing literature. Section 3 shows how this works applies to the design-science research guidelines as proposed by Hevner et al. Section 4 introduces the model and shows how value is created in the Branding 2.0 process. Section 5 describes a real-world instantiation of the model and looks and discusses possible evaluation methods. Section 6 focuses on other applications and on how they relate to the instantiation described in Section 5. Section 7 discusses possible business models. Implications for future research are discussed in Section 8. Section 9 provides a final conclusion.

#### 2. Background

Anticipated Key Benefits of Branding 2.0

#### Adding real experiences and emotion to the brand

Norton (2003) calls for 'brand truth' and 'meaningful brand experiences' to add value to brands and products. Giving the creation of the brand's meaning into the hands of the actual consumers should ensure a branding process where real memories and interesting experiences flow into the virtual product content, to be shared with fellow participants. With the help of the information system, this meaning transfer can create a more vivid and emotional brand that is beyond the capabilities of corporate branding. This would lead to a significant differentiation from competing brands.

<sup>&</sup>lt;sup>3</sup> The author strongly believes that in order to succeed with brands in the future, practitioners will need a fundamental expertise in both IS and marketing areas. The current lack of these interdisciplinary professionals is already recognized as a problem and in this industry, as addressed in a 2006 Financial Times article (Van Duyn, A. "Web ads sector lacks experienced staff," FT.com, 08/29/2006, URL: <a href="http://www.ft.com/cms/s/e2a439cc-378b">http://www.ft.com/cms/s/e2a439cc-378b</a> 11db bc01-0000779e2340.html)

#### Reaching the long tail

The fact that the brand's meaning is actually created by the consumers should effectively contribute to a closer consumer-brand relationship. Another positive effect of this collaborative, self-managed branding process is that it considers and leverages the effect of the "long tail" (see Brynjolffson et al. 2003) in addressing the consumer's personality and preferences<sup>4</sup>. While a fair amount of consumers might be addressed by most mainstream branding campaigns, a certain amount of independent-minded individuals remains unaffected by this type of campaign. Enabling those customers to participate in creating the brand's meaning while expressing their own individuality can lead to a broader - and simultaneously to a more focused - brand leverage. In traditional branding, this issue would be addressed by creating a new brand extension or a sub-brand that is aimed to leverage a different, smaller segment of customers. While this might be effective in order to capture a good portion of the "long tail", user-created brand meanings could be more efficient because covering the niches becomes an automatic and dynamic process.

#### Addressing both individualism and collectivism

While we can observe the ongoing evolution of self-expression through the web (web logs, MySpace.com, YouTube.com, etc.), Muñiz and O'Guinn (2001) refer to the work of Maffesoli (1996) to question the trend towards individualism. Maffesoli (1996) introduces a model called neo-tribalism: we are now experiencing the re-aggregation of hyper-individualistic society in the form of "heterogeneous fragments, the remainders of mass consumption society" (Shields 1996). Cova (1997) shows that members of these neo-tribes share a common identity through consumption, while unbound to physical co-presence. In conclusion, there seems to be a co-existence of individualistic and collective characteristics. Research in social psychology also shows that a person may possess both individualistic and collectivistic tendencies (Sinha and Tripathi 1994; Triandis 1989, 1994). The model of Branding 2.0 (user-generated content in a community setting) captures both individualism (self-expression) and collectivism (being part of a community) - it addresses both tendencies simultaneously.

#### Replacing the celebrity endorser

While celebrity endorsers are very successful in transferring meaning from their persona to the brand and the product (McCracken 1989), Turner (2006) observes a shift from 'elite' celebrities to 'ordinary' celebrities in media broadcasting, first initiated by "reality TV" and then expanded further through the internet. This "celebrification" process (Turner 2004) continues to create more and more 'celebrities' on the web and in particular inside online communities (Young 2004). Therefore an online brand community might produce its own 'celebrity endorser' that is far more reachable than the traditional celebrity and might provide higher value congruence with fellow participants, communicated through iterated social interaction.

#### 3. Methodology

The research paper follows the guidelines presented by Hevner, March, Park and Ram: "Design Science in Information Systems Research" (Hevner et al. 2004), although some limitations will be addressed later on. The authors show how IS research can succeed in domain areas where existing theory is often insufficient and point out the relevance of the design (and the creative design process) of information system artifacts. The following section will look at how the main points of Hevner et al. will be applied to this research approach and what the limitations are.

"As technical knowledge grows, IT is applied to new application areas that were not previously believed to be amenable to IT support" (Markus et al 2002, p.180). While we can observe different usage scenarios of information systems in branding processes, the approach presented in this work is not widely explored and not reflected by the literature.

<sup>&</sup>lt;sup>4</sup> Brynjolffson et al. use the metaphor of the long tail for the vast number of products that attract only a small amount of customers each. Addressing these customers becomes easier and profitable using online markets. In the context of Branding 2.0, the long tail refers to a number of individual customers with non-mainstream meaning preferences. While this customers are hard to target with traditional marketing tools, Branding 2.0 can target this group very efficient and at rather low costs.

The paper presents present two out of four IT artifacts identified by March and Smith (1995), the model and the instantiation. March and Smith argue that it is especially important for the research field of models such as architectures that they do not remain as theory but that they should be designed as real-world applications: "the concern of models is utility, not truth" (March and Smith 1995).

Following Hevner et al., this process of construction and exercising should help "enabling design-science researchers to understand the problem addressed by the artifact and the feasibility of the approach to its solution<sup>5</sup>". This work will "address the interplay among business strategy, IT strategy, organizational infrastructure, and IS infrastructure". Since the artifacts presented here are designed to become enablers of a business strategy, this interplay is crucial (see also Kalakota and Robinson 2001, Orlikowski and Barley 2001).

The design process must be seen as "a sequence of expert activities that produce an innovative product (i.e., the design artifact)". This work will present a model of the Branding 2.0 process and describe the resulting prototype application. "The evaluation of the artifact then provides feedback information and a better understanding of the problem in order to improve the quality of the product and the design process". A detailed evaluation of the prototype would be beyond the limitations of this paper, therefore the prototype is (rather briefly) compared with a selection of other cases that reflect different components of the Branding 2.0 model<sup>6</sup>. Neither does the paper length allow a description of the "built-and-evaluate loop" that is "typically iterated a number of times" (Markus et al. 2002). Instead, feedback in the sense of Hevner et al. is continuously implemented into the next prototyping stage (in fact, the presented model has already been influenced by results from multiple prototype installations). Therefore the model can be seen as the resulting design artifact – but since the design process is iterative, another version of the prototype will follow to further refine the model in the future.

#### 4. The Branding 2.0 model

The model is built from three components: brand community, the physical-virtual artifact and the underlying information system. In combination with the physical-virtual artifact, an online brand community can be designed to generate content that is much closer related to the actual product than the content we can observe in today's online brand communities. Finally, this process is handled by an information system which is specifically designed to contribute to brand value.

#### The Brand Community

A brand community is a specialized, non-geographically bound community, based on a structured set of social relations among admirers of a brand (Muñiz and O'Guinn 2001). The construct of brand community is used in this model because of its major effect on brand equity, as shown by Muñiz and O'Guinn (2001); it directly affects all four components of brand equity as conceptualized by Aaker (1991): perceived quality, brand loyalty, brand awareness, and brand associations. Some companies (see cases below) have already installed various virtual environments for participants of their brand communities. Past research (Cova and Pace 2006) shows that virtual brand communities of this kind are based on personal self-exhibition in front of other consumers, rather than on real interaction between consumers ("Para-social instead of social"). Cova and Pace note that this limitation is intentionally established through the design of the information system<sup>7</sup>, minimizing the risk of the brand community taking over too much control in designing the brand's meanings (as it happened to Harley-Davidson, shown by Schouten and McAlexander 1998). Nevertheless, Cova and Pace still recommend that a company should play the role of a non-intrusive enabler of personal expressions, while reducing its control over the brand's meanings. This already implies that the underlying information system must be designed in a way that enables the self-expression and interaction of its users.

<sup>&</sup>lt;sup>5</sup> All citations not explicitly marked in the methodology section are taken from Hevner et al. (2004)

<sup>&</sup>lt;sup>6</sup> The paper discusses an appropriate evaluation technique for the instantiation; the evaluation itself and its results are not part of this paper.

At the time Cova and Pace reviewed the MyNutella.com application, there was not much interaction between users, since there were no appropriate tools (e.g. Messaging services) available inside the application. Cova and Pace conclude that limited interaction between users leads to a smaller probability that consumers would take over in controlling the brand's meaning and that the company can control this process by allowing users only a predetermined level of interaction.

#### The physical-virtual Artifact

In order to establish a very close, personal and emotional relationship between the customer and the product – and the brand, respectively – the content created by the user must be closely connected to the product so that both the virtual content and the physical item are resembled by a single entity. This is realized by creating a physical-virtual artifact that is instantiated in both the physical and virtual environment. Pederson (1999) requires an instantiation of a physical-virtual artifact to be easily identified where an equivalent instantiation in the other environment is known. This particular branding process requires that each single item be electronically identifiable. Furthermore, the identification and the presentation of the corresponding virtual content should be executed automatically by the information system in order to establish a seamless user experience. Pederson (1999) recommends maintaining a tight coupling between the artifact's instantiations. For the prototype, RFID transponders have been used to identify the items and trigger the interaction with the virtual environment.

#### The underlying Information System

To serve the branding model, the information system must record, manage and present the user-generated content and provide an interface to the physical instantiation of the product. Design implications can be drawn from looking at the attributes of the virtual instantiation of the product, which can be conceptualized as a bundle of information: for each item, users can add, edit and view multimedia content. To manage this process, each user receives a designated slot in the product's content space that can be accessed for editing once the user has been granted write access to the item (by renting or buying it; write access could be also granted by other authorized users, but this is part of the actual application configuration). In this setting, participants can express themselves but not really interact with each other. However, ongoing social interaction is important for

- creating a more vivid contribution to the brand's meaning (Cova and Pace 2006)
- reciprocity and future existence of the community (Kollock 1999)
- establishing trust between the participants (Ceshire and Cook 2004)

Trust is a significant factor, since fake or inappropriate behavior would weaken the brand's image. Trust can be supported by the system design not only by enabling iterated interaction, but also byimplementing positive reputation systems (Yamagishi and Masuda 2003), a closed community setting (Cook and Hardin 2001) and access to user profiles (Ziegler and Lausen 2004), so that users can check for value congruence (Cazier et al 2006).

With multiple users and ongoing interaction, the information bundle tied to an artifact can become rather complex, and we can expect user preferences to be complex as well. This means that we face a complex product description and high asset specificity. According to Malone et al. (1987) this requires a hierarchical instead of a market type of exchange structure. Transferred to the information system this means that the user should not be forced to browse around for interesting artifacts (pull-mode), but that the system has to identify what may be interesting for the user (through matching profiles and other content or subscriptions to specific content categories, comparable to RSS-feeds) and pass this information on to that user (push-mode).

#### Value Contribution of the Information System

The ultimate goal of the information system is to add value to the brand by documenting and sharing user-generated content (meanings and associations) and supporting user interaction. The value created by the information system can be demonstrated by visualizing its contribution to brand value throughout and beyond the product lifecycle (resulting in BRAND VALUE 2) and comparing this process to a traditional branding process (resulting in BRAND VALUE 1) in Figure 1. Figure 1 illustrates the Branding 2.0 process, as used by the prototype "Used Clothing" that is described in the following sectionIn this partic ular example, clothes are enriched with virtual content while RFID hardware establishes the connection between the physical and the virtual artifact. Users can exchange clothes and add virtual content to them. Details of the prototype and other possible scenarios are discussed in the next section.

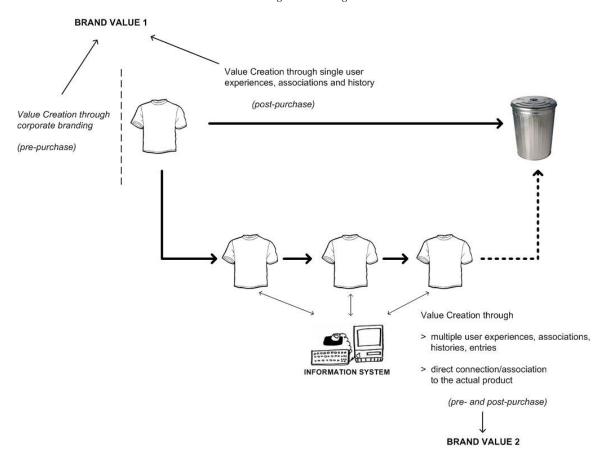


Figure 1. Contribution to brand value through traditional branding (resulting in BRAND VALUE 1) and Branding 2.0 (resulting in BRAND VALUE 2)

In traditional branding, initial brand value (through meanings and associations established by the company) is created before the product is purchased by the consumer (pre-purchase). After the purchase, the consumer adds personal value by collecting associated memories and connecting them to the product (post-purchase). This all adds up in contribution to BRAND VALUE 1; it must be noted that a significant part of BRAND VALUE 1 is limited to a single consumer, since personal memories and associations can not be accessed by other customers of the same brand.

Through the proposed Branding 2.0 process, multiple customers can record and share their memories and associations with others through the information system. This happens in both the pre- and post-purchase phase, since the content generated by past users can be accessed by current and future users. Therefore memories and associations add up over time and are always present throughout and even beyond the product's physical lifecycle, since they continue to exist in the product's virtual instantiation. Additionally, this information can also be accessed by other customers, and should therefore result in a higher contribution to BRAND VALUE 2. Note that while users add content to individual products, the value also adds to the brand<sup>8</sup>. This is because the brand itself will be associated not only with the individual content contributions but also with giving its consumers this possibility of self-expression. Because of this very unique feature, the awareness for this brand is likely to spread quickly through word-of-mouth, generated by active users. It also should be noted that companies cannot associate real experiences and personal memories with a single product, but customers can. A brand created this way can be much more vivid and emotional. This demonstrates how the design and the features of an information system can create additional value that would otherwise be lost and not utilized. In this particular case, the information system can be pictured as a central storage- and distribution center for memories, experiences and associations in the branding process that is constantly and automatically re-stocked by its own consumers.

#### 5. The Instantiation: USED Clothing

<sup>&</sup>lt;sup>8</sup> This can also be illustrated the other way round, e.g. a negative image connected to a product is very likely to influence the image of the brand as a whole.

#### Description of the prototype

USED Clothing<sup>9</sup> is an artificial fashion brand. Participants can bring their clothes, shoes, accessories, etc. to a central point of exchange (a sort of second-hand shop), where an RFID-transponder (carrying a unique ID) is attached to the item. The item information (name and picture) is stored in a central database which is accessible through an online catalogue. Furthermore, the original owner can add multimedia information (text, pictures, videos and other file types). Thereafter the item is displayed in the shop (and in the online catalogue) and is available for rent to other participants. Every single customer that has possessed the item can add another bundle of multimedia information, so the item's virtual content starts to evolve like a community web log and displays both its own history and content about its past possessors. In addition to the RFID interface installed in the shop, users can look up their artifact through the website by typing in the product's ID and a given password. USED Clothing has been installed temporarily on various international locations throughout 2005 and 2006 in order to build a global, interactive branding prototype.

While this particular prototype features a reusable and easily exchangeable product, it should be noted that the proposed branding model can be applied to other types of products as well<sup>10</sup>. Exchangeability and reusability may act as additional drivers but are not requirements for the model. Note that Nutella (see examples below) successfully created a virtual community around a hazelnut spread product (a non reusable and rarely exchanged type of product). The possibility of digitally identifying the product acts as a strong connector between the physical product and its virtual content and therefore enhances user experience. While this is an ideal example, there might be other possibilities to establish this strong connection, since in some scenarios it might not be possible or useful to identify each single physical product. In those cases, identification could be established on a product, product line, or on brand level, in contrast to a single physical product (Different users of a product or brand can add content). Vice versa, virtual content regarding single physical products can be aggregated on brand level, etc. This is a matter of the actual scenario and desired outcomes. While levels of identification may vary, identification itself remains a crucial part of the Branding 2.0 model because it distinguishes users from non-users and therefore handles the access to additional value (virtual content).

As long as there is a possibility and motivation to add virtual user-generated content to a particular product, applicability is only limited by creativity and has to be evaluated separately in each specific case. The development of evaluation criteria will be a part of future research.

#### How to evaluate the instantiation

Past research implies that online ethnography (or 'netnography') is an appropriate tool for studying marketing-related issues in online communities (Kozinets 1997, 1998, 2002; Sandlin 2006) and has also been used for studying distinctive online brand communities (Kozinets 2002, Maclaran and Catterall 2002, Cova and Pace 2006, Abrahmsen and Hartmann 2006). Netnography is an analysis resulting from fieldwork studying the cultures and communications that emerge from online communication. It unobtrusively collects data and analyzes the content, language, actors, symbolisms, cultural codes, consumption patterns, attitudes etc. Netnography follows the grounded theory approach (Glaser and Strauss 1967), where data collection continues as long as new insights on important topical areas are still being generated (Kozinets 2002). While the evaluation of the prototype is not part of this work (see limitations in the methodology section), other applications that reflect different parts of the Branding 2.0 model are compared against USED Clothing in the following section.

#### 6. Examples of similar applications

In order to get a better understanding of the prototype, its features and their benefits, projects similar to the Used Clothing prototype are discussed in this section. The following projects have been chosen because they feature at least three out of four

Sample user entries are attached in the appendix. For more information, visit http://www.used.co.at.

<sup>&</sup>lt;sup>10</sup> Clothes have been chosen because of symbolic reasons: Clothes already act as a social information medium that carries information about its user and allows for self-expression. The application exaggerates this effect to create more awareness regarding these particular capabilities of fashion.

criteria that are significant in the Branding 2.0 model (with the exception of Prada<sup>11</sup>): Each project is either related to a brand, maintains an online community, features a physical-virtual artifact or manages user-generated content (which is the main purpose of the underlying information system, as discussed in section 4). A feature overview is provided in Table 1:

	Brand- Related	Online Community	Physical- Virtual Artifact	User- generated content
United People	X	X		X
MyNutella.com	X	X		X
Prada	X		X	
WheresGeorge.com		X	X	X
YellowArrow.net		X	X	X
Semapedia.org		X	X	X
Used Clothing	X	X	X	X

Table 1. Compared projects and choice criteria

**United People** is an installation hosted by the Italian fashion brand Benetton in some of the company's worldwide flagship stores: customers can record video, add text and upload it to an online catalogue. Users can also interact with each other through sending personal messages. Benetton also uses United People for other local advertising campaigns to involve customers (Cameron 2004).

**MyNutella.com** is a website provided by the Italian hazelnut spread brand Nutella, that lets fans of the brand set up personal pages. People also list events like Nutella parties, etc. Like Benetton, the members of myNutella.com can interact with each other (the site also hosts its own instant messenger) but according to Cova and Pace (2006) the relationships between members are more para-social than social, because users care more about creating their personal pages than about directly interacting with each other 12.

The Italian fashion brand **Prada** uses RFID transponders in its flagship store in New York City to identify particular products and provide associated virtual content to the customer. The product is automatically identified in the changing room and the customer can see a video of a model wearing the actual garment and additional information (e.g. other available colors). The system also recommends other products that go together with the chosen product (shoes, bags and other accessories). However, McCormick and Gage (2002) identify some weaknesses and failures (confusion among customers and sales staff) throughout the implementation process.

At **WheresGeorge.com** users can record numbers of US dollar bills (Goodwin 2003, p.3). Users can buy a stamp for \$4.95 that says: "track this bill at wheresgeorge.com" through the website, record the bills serial number and add personal comments. A person receiving the bill is therefore invited to go online and continue documenting the bill's path, while adding a personal story (e.g. how he/she got the bill and what was bought with it). This concept has also been established in Canada (WheresWilly.com) and in Europe (EuroBillTracker.com) (Evans 2006).

**YellowArrow.net** sells small yellow stickers (10 for \$5) in the shape of an arrow with unique IDs printed on. For every ID the user can set up a page with self-created multimedia content in the catalogue. Furthermore, people who are passing by the sticker (that means the object where the sticker is attached to) can send a mobile phone text message with the reference ID to a 1-800 phone number and the content of the corresponding website is sent back to them. The individual participants can also be contacted through a message service on the website.

Semapedia.org offers a service that lets users print out 2D barcodes (called "SEMACODE", see Brause 1999) that encode a URL within the online encyclopedia Wikipedia.org. SEMACODE can be read by camera-enabled cell phones and the phone can then fetch the corresponding content from Wikipedia.org. A typical scenario might be a barcode tag attached to a point of interest (e.g. a building) that refers to an article about this building on Wikipedia.org. Additionally, Maps.Google.com (the online locating and map service) is used for visualizing the locations of tagged points of interest. The main interest of this project is to build a semantic search environment through user-generated tags and content (O'Murchu et al. 2006). Another similar, but commercial service is QR Code that is mainly used by public billboards in Japan and is readable by 30 million cell phones in Japan (as of 2005, see Fowler 2005).

12 At the time of Cova and Pace's observations (2006), tools for interaction were limited. As of 2007, MyNutella.com features various messaging services

<sup>&</sup>lt;sup>11</sup>The Prada project does not feature an online community nor user-generated content, but is closely (and exclusively) tied to a brand. Furthermore, it features a notable execution of a virtual-physical artifact and is therefore included in the selection.

#### Differences between example applications and components in the Branding 2.0 model

The cases of United People and MyNutella.com show how an online brand community is actively established by a company and that users are willing to generate content that is connected to the brand. However, neither installation establishes a connection between the user-generated content and a particular physical product. In the case of Nutella this may be very difficult since it is a food product, but for Benetton this could be an improvement worth considering. Another significant difference between United People and USED Clothing is that in the case of USED Clothing, people are encouraged to share their memories associated with a specific product, while Benetton collects random, user-generated content. This of course contributes very well to the idea of focusing on the people (hence the name United People), but it results in a rather weak connection to the product. The Prada case shows how virtual content can be attached to and displayed for a specific product (creating a physical-virtual artifact) but does not collect user-generated content. The cases of WheresGeorge.com, YellowArrow.net, and Semapedia.org show the possibilities of physical-virtual artifacts in connection with user-generated content. Interfaces range from very simple (typing in numbers) to rather sophisticated (scanning tags through cell phones). Exploring appropriate interfaces for branding processes can also be an interesting area of future research. Also, the examples of Semapedia and Yellow Arrow show that the physical-virtual artifact is not limited to mobile objects, but can be expanded to brand specific locations and points of interest. Deeper Analysis of the cases mentioned above is needed to identify best practices and recommend design guidelines.

Compared to the cases above, USED Clothing establishes a brand community similar to Benetton and Nutella, but with an important difference: The memories and associations are bound to a single item, which makes it easier for participants to add personal and meaningful content, instead of just random postings that can be observed on both United People and MyNutella.com. From the technical point of view, the interfaces used for establishing the physical-virtual artifact differ in the dimensions of 'seamless experience' and 'availability': while it is rather elegant to use RFID (Prada and USED Clothing) because it does not require an intentional interaction from the user (seamless experience), it limits this scenario to a steady location (wherever the installation provides an RFID-interface, mostly just in the store). Therefore USED Clothing was designed to be also fully functional through typing in the item's ID on the website, to make it easy for participants to look up their artifacts very quickly without the RFID interface. Hansen (2006) mentions that the typing of numbers (referring to YellowArrow.net) is not a seamless interface, but it certainly enables anytime, anywhere access. Using camera-enabled cell phones with special software (as in the case of Semapedia.org) may be a good compromise for overcoming this dilemma.

#### 7. Possible business models

The purpose of the proposed branding model is to contribute to higher brand equity. High brand equity can lead to a significant higher revenue and company value (Keller 1993), more attention from investors (Simon and Sullivan 1993), and results in higher shareholder value (Madden 2006). Therefore the branding process is not primarily required to be cost-effective. Of course a company could also charge participants premium prices for products or some other form of fee. Also, since a lot of personal information is collected by the system, this could be a very interesting platform for advertisers, dynamically displaying ads in the manner of Google's AdSense<sup>13</sup>. But all of this may weaken the impact of the branding process significantly, and we do not observe this in the described online brand communities (United People and MyNutella.com) The value contribution should not only be identified by the number of actually participating customers but also by the content that is created by these participants and viewed by others. The true value created by this process includes the user-generated content (that can be used for various forms of brand-related advertisements), the growing brand associations, and brand awareness.

#### 8. Future Research

This paper reflects a research in progress: Evaluation and further iterations of the instantiation (USED Clothing) – as suggested by the design-science guidelines – is yet to be completed. The search process for working models and applications includes exploring the role of direct user interaction in online brand communities and its influence on brand meaning. Real-world implementation scenarios and business models have to be considered: how to embed this branding process in established brand environments versus starting new brands from scratch. From a technical perspective, different interfaces for

http://www.google.com/adsense

establishing the physical-virtual artifact have to be evaluated in terms of seamless user experience and availability. Different methods of managing and presenting information have to be explored. While all these questions can be divided into marketing and IS areas of interest, the author believes that future branding models will heavily rely on information systems that create value throughout the branding process. Therefore an interdisciplinary approach should be considered by researchers and professionals in both marketing and IS areas.

#### 9. Conclusion

The author shows how the current developments of Web 2.0 can be used to involve users in the branding process. Designing a physical-virtual artifact that carries user-generated content expands the product's meaning and contributes to a very distinctive brand image. All this is realized by a Web 2.0 application, demonstrating how information systems can create value by actively involving customers, collecting unique content and enabling interactions that would otherwise be impossible and therefore not accessible in the branding process. The resulting brand is extraordinarily meaningful and characterized by a very close relationship to the customer. The paper shows branding professionals how Web 2.0 environments can be applied in creating a unique type of brand and shows IS professionals how information systems design can create value in a particular business process.

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#### **Appendix**

The following screenshots show samples of typical user entries from the prototype USED Clothing, 2005-2006. All user entries are available at http://usedclothing.aec.at/en/



INTERNATIONAL
JUMPER CONSPIRACY
this jumper was bought in
the Himalayan mountains, 2
hours outside Kathmandu in
a chilly night. The first
owner was a Swedish NGO
worker on a treck, he then
brought the pullover to Lund
(Sweden) from where it
sneaked into the
moving-truck to Vienna,
where he was given to
Melina from Linz who
passed it on after
possesing it for 3 hours...
warm and enriched, pass it



ASA STAHL
These pair of striped socks
(white and black) i found at
a market place in Tblisi,
Georgia in 2004. I sort of
collect cheap, funny socks
that I find during trips. (I
have found some really nice
once in Warsaw and Tokyo).
They are also good for
travelling with, since they
hardly weigh anything.



GREEN-BROWN TOP
bought this summer in the
sales in london - for just 3
pounds, took the top to
syria for a month, it was
worn when travelling along
the euphrates, to the old
city of palmyra in the
desert, in damascus and
now, during the ars
electronica festival in linz, i
am 50, was born in linz, live
in london, work as a painter
and designer, the top is
very comfortable, usually
worn over a vest, washed at
least a dozen times, so it's
quite used, hope you have
fun with it, let me know if
you were happy with it.

