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# The Dimensions of Trust – Building Confidence through Innovation Communication

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# The Dimensions of Trust – Building Confidence through Innovation Communication

The aspect of trust is critical to the success of the communication of innovations, particularly in the context of the introduction of a new product. Due to the characteristics of innovations – especially those with a high degree of innovation – the target groups often view them with uncertainty or even fear. Since negative feelings have a stronger effect than the desire and interest in the new, (potential) customers are often reserved or even rejectful of the innovation. In order to help alleviate uncertainties and to build trust, companies must communicate their innovation to the target group by means of targeted trust communication. This study examines the aspect of trust using user participation in Web 2.0 innovation communication in the concrete example of the introduction of the hybrid vehicle Chevrolet Volt on the private social networking platform, Facebook. The results of the study allow the identification of four different levels of communication, of the company and of the innovative product.

# **1** Introduction

# 1.1 Adoption of Innovation needs Trust – Trust needs comprehensible Information

Before customers are prepared to adopt an innovation, they have to be convinced that the use of the innovation will not entail negative effects or inacceptable risks. In this respect, the communication of innovations is inextricably linked to the communication of trust. Due to the characteristics of innovations (newness, complexity and low connectivity) target groups lack the information necessary to assess the respective innovation [Zerfaß 2004, Zerfaß/Mast 2005]. From this perspective, the definition of innovation communication upon which this research project is based is:

"systematically planned, executed and evaluated communication of innovations in order to develop understanding of, and trust in the specific innovations as well as positioning the respective organization as a trusted innovator." (Zerfaβ, Sandhu, & Huck, 2004, p. 4)

The communication of the relevant information concerning the new product is essential in order to build understanding and trust in an innovation. In this context, Schmid (2008; 2004) uses the terms Implementation I and Implementation II. Implementation I describes the physical aspects of the innovation, i.e. the implementation of the design of the product in materials. Implementation II consists in the "transfer of the product design into the mind (the realm of emotion and thought), as a symbol, as knowledge and value in the people's brains and hearts, especially the customers', via communication" (Schmid & Schmid-Isler, 2004, p. 29). Implementation II is a critical success factor for an innovation. Challenges stemming from these characteristics of innovations are connected first and foremost to the aspect of newness and the unknown (Zerfaß, 2004; Zerfaß & Mast, 2005). These are

- *Newness:* Innovations are a means-end-combination that was previously unknown or which has not yet been implemented. This can lead emotions as resentment towards the innovation and unwillingness to adopt the new product.
- *Complexity:* The higher the degree of innovation, the more abstract the new product appears to the target group. In this case, the specific advantages of the product are not obvious to the customers and are therefore difficult to communicate.
- *Low degree of connectivity:* Due to the newness and abstract nature of innovations, the target group cannot draw from existing contextual knowledge (i.e. experiences with similar products).
- *High degree of uncertainty:* The factors mentioned above very often increase the perceived insecurity and lead to a lack of trust in the innovation. The uncertainty in respect of the importance of an innovation and in respect to possible negative effects can lead to resentment and aversion.

The involvement of the customers is becoming more and more crucial due to the increasing information overload and the sheer amount of competing advertising messages (Franck, 1998). The consequence of this increasing information-push is the decline of the effectiveness of traditional forms of communication. These conditions have lead to a change in customers' requirements, which call for new methods on the marketing side (Göhring, Happ, & Müller, 2006).

#### 1.2 Feed the sheep but don't wake the lions: Educating Consumers without alerting Competitors

The communicative introduction of innovations is referred to as the product announcement phase. The announcement of the product or innovation is described

by Kohli as a "firm's planned act of signaling its future intentions to a specific audience" Kohli (1999, p. 45). The signals associated with the communication of the innovation always lie within an area of conflict between market education and competitive reaction. On the one hand, companies have to prepare the market in order to successfully launch the innovation, i.e. achieve the quick and thorough diffusion and adoption of the new product by consumers. The quick adoption of innovations can be achieved by properly informing and preparing the potential buyers with regard to the planned introduction. This includes the provision of relevant information on the new product and the communication of its advantages in order to build trust, reduce perceived risks and insecurities (Kohli, 1999).

On the other hand, the communication of launch plans will also inform competitors about the characteristics of the new product. This might help competitors to plan the introduction of their own competitive products and adopt similar product features, prices or launch dates. However, the announcement of innovations can also have negative consequences on the customer side. Customers might postpone planned purchases and wait for the new product to be launched. Additionally, firms might lose their integrity and reputation in the eyes of the customers if the announced innovation is not introduced on time or with the promised features (Kohli, 1999).

The announcement of innovative products can also be used by firms to intentionally misinform the market and its competitors. Bayus et. al. (2001) examined the communication of so called "vaporware", i.e. the announcement of product innovations that never hit the market. Messages or signals are sent by companies in the knowledge that they will reach not only potential customers, but also competitors. The goal is to send signals that will lead to reactions of the competitors that improve market conditions for the sender. Ideally, competitors will reassess the market based on the communicated information and come to the conclusion that further involvement in the respective business field and the development of own innovations and products is unprofitable (Bayus, et al., 2001).

#### 1.3 Web 2.0 Applications Offer New Opportunities for Innovation Communication

While companies have to fight for the attention of their target groups, the Internet offers many new possibilities of communicating and interacting with their customer base, which can be included under the umbrella term 'Web 2.0'. Using applications such as weblogs, wikis and social networks, consumers can publish their experiences with product innovations and get in contact with like-minded users. Through this user participation of product communication, marketing is provided with a whole new set of possibilities to learn about the customers, their needs and their attitudes toward the company or brand. Based on such customer insights an improved customer segmentation is possible and the communication activities can be customized for the needs of the recipient.

By online word-of-mouth communication among the users, information on innovations is distributed fast across customer groups. An additional advantage of such word-of-mouth communication is the fact that information provided by peers is highly trusted because there are no financial interests involved. These viral effects are desirable when it comes to positive content and have been used intentionally in marketing campaigns (Langner, 2005, 2007; Ozcan, 2004). The challenge for communication managers is to handle negative statements or false allegations of users, which will quickly spread within the network and eventually harm the business.

To date, it seems that there are no clear and generally accepted ways within companies as to how to deal with the active role of the internet users (OM01, 2009). There is still a lack of strategies for companies to manage the participation of the members of the communication. Therefore, the possible potential of Web 2.0 applications for innovation communication has not been exploited to the fullest extent. This research examines the role of trust in innovation communication using the example of the participatory innovation communication of Chevrolet's hybrid vehicle "Volt" via the social network site Facebook. Based on the results obtained, implications for management practice are generated, which will help firms to communicate their innovations via social network sites more efficiently.

# 2 Introduction of an Innovation in a climate of distrust – The Case of the Chevrolet Volt

#### 2.1 Chevrolet Volt: Basic Information

The Chevrolet Volt is an electric vehicle (EV) with extended range capability. The Volt is not a pure electric vehicle, but a hybrid vehicle. It is propelled exclusively by the electric engine. The batteries yield a range of 30 to 50 miles (Chevrolet, 2010). The additional combustion engine functions as a generator to charge the batteries, and extends the range of the vehicle to up to 300 miles (Heise Autos, 2010).

The development version of the Volt was presented to the public at the North American International Auto Show in Detroit, USA. The serial version has been on sale in the US since August 2010. The car will be available in Europe in 2011. GM plans to produce 10,000 to 45,000 vehicles in 2011, depending on the demand (Dennis, 2010).

The starting conditions for the communication of the Chevrolet Volt were greatly influenced by the EV history of the parent company, General Motors, and its economic importance for America. The history of General Motors' involvement

with electric vehicles began with the promulgation of the Zero Emission Vehicle Mandate of the California Air Resource Board (CARB) in 1990. This ordinance requires all manufacturers wishing to sell their products in California to produce at least two percent environmentally-friendly vehicles (Collantes, 2005; Shaheen, 2004). Due to the huge importance of the Californian vehicle market, the Mandate triggered massive research and development efforts among vehicle manufacturers, to enable them to place vehicles with alternative motors on the market by the relevant deadline. General Motors unveiled its electric vehicle, the EV1, in 1996 and embarked on a far-reaching test phase in California and Arizona with the 2,500 vehicles produced (Neil, 2009). In parallel to these development activities, however, American vehicle manufacturers - first and foremost General Motors - joined forces with oil companies and sued the state of California. Due to this intense pressure, the Zero Emission Mandate was abandoned in 2002.

This brief electric car episode at General Motors probably would not have left any mark if it hadn't been for the documentary released by Chris Paine in August 2006, "Who killed the Electric Car"<sup>1</sup>, which depicted the story and the background. The film shows how General Motors put a stop to further developments in electric cars and withdrew and destroyed the test vehicles, much to the dismay of their owners. The reactions of the (interested) public put a lasting dent in General Motor's image and a loss of trust in the company's serious efforts to further electromobility technologies. Thus, it is decisive for General Motors and its brand Chevrolet that they regain credibility and reputation, rebuild trust and credibly communicate their commitment to development work in e-mobility.

The second important aspect in the communication is closely linked with the importance of General Motors (GM) as the figurehead for America's automobile industry. As a result of producing vehicles that failed to meet up to customer demands for many years and the lack of innovations, which would have put the products at an advantage over competitors, the company hit financial difficulties. Consumers doubted whether the company was in a position to develop high-quality marketable innovations that met the needs of the customer.

The automobile group was hit particularly hard by the global financial crisis in 2008/2009. In June 2009 GM filed for insolvency. The group was saved by state subsidies in the amount of 50 billion Dollars, but thousands of jobs remained under threat (Vlasic & Bunkley, 2009). With the development of the Chevrolet Volt the company hopes to position itself as an innovative and future-proof American company.

"Today marks a new beginning for General Motors, one that will allow every employee to get back to the business of designing, building and selling great cars and trucks and serving the needs of our customers." Fritz Henderson, president and CEO General Motors (General Motors, 2009)

<sup>&</sup>lt;sup>1</sup> Information about the film can be accessed at http://www.whokilledtheelectriccar.com/

#### 2.2 Communication Activities for the Chevrolet Volt

Given this background, its reputation as the "murderer of the electric car" and its poor image with regards to the innovativeness and quality of General Motors' products, those responsible for communication relating to the Chevrolet Volt faced a critical, if not hostile atmosphere and a high level of distrust among the public. The vehicle manufacturer expected the media and the general public to question its serious commitment to electromobility and knew that they would be unlikely to believe General Motors' statements.

"(...), our public reputation was relatively poor. People were challenging the companies product portfolio of being a lack of innovation, it lacks in the technology leadership. (...) we were perceived as a blooded company with poor quality vehicles and vehicles which didn't meet the requirements of the people we are looking for. (...) From the electric vehicle perspective, from the documentary 'who killed the electric car' just come out and overall in general, environmentalist said that our launch of the Hummer brand a year before really showed our true colors. (...) we knew that, as soon as we revealed the vehicle to the public they would doubt us, criticize us for introducing a – some type of people refer to these vaporware like the technology that never exist – or green option." (PR04, 2009)

These challenging conditions prompted General Motors to pursue a communication strategy characterized by openness and transparency. By using a dialogue-oriented approach the company hoped to prove that the "new GM" is a company that is interested in its customers' needs, that listens carefully and reacts accordingly.

To counter, or at least alleviate, the hostile atmosphere, even before the official presentation of the vehicle and public communication, the company sought dialogue with opinion leaders from various sectors. From December 2006 until the launch in January 2007, those responsible for communication for the Chevrolet Volt met with around 500 representatives from three areas: political decision-makers (policy makers), environmental groups and media representatives of the automobile press. The participants in these talks also included the director of "Who Killed the Electric Car?", Chris Paine, and former EV1-product manager, Chelsea Sexton, one of the key figures in the documentary.

At these meetings, representatives of the automobile company presented the technological concept of the Chevrolet Volt and attempted to explain the basic services that the engineers hoped to implement in this project. In the meetings, which lasted approximately 90 minutes, GM conveyed all basic information and answered the questions of participants as best it could; only the vehicle itself was not presented at this stage.

This open and transparent approach paid off and General Motors and Chevrolet were able to proceed from an improved starting position for the Volt as a result of

this external communication. When journalists at the official presentation of the Chevrolet Volt at the Detroit Motorshow sought statements and opinions from third parties, they interviewed precisely those people with whom GM had already spoken. Due to the direct talks and the comprehensive provision of information, the interviewees were able to provide in-depth reports of the vehicle and the technology. There was also a decisive shift in the perception of and attitudes towards the company and the innovation: whereas before there was a rather negative and suspicious atmosphere, now, many were enthusiastic and supportive.

In the initial phase in 2007, communication was limited to media and press relations and direct communication with opinion leaders. The manufacturer did not at that point take account of Web 2.0 platforms and the activities in the 'blogosphere' for the purposes of communication. The online channel was used only insofar as representatives of the digital automobile press were also included in the flow of information.

The communication strategy of General Motors and Chevrolet for the presentation and market introduction of the Volt comprises two stages: in the first stage, knowledge about the innovation is to be built in the target group, by reporting on the development of and technology used in the Volt. This includes persons involved in the innovation, presenting them, their expertise, passions and commitment during the development of the vehicle. In the second stage, the relevant information for the commercialization of the vehicle, i.e. when and where the vehicle will be available and at what price, is to be disseminated.

Those responsible for communication relating to the Chevrolet Volt painful experience that content must be presented very accurately, that is, in an objective and transparent manner. As soon as content and/or the tone of the messages become too playful, emotional or euphoric, strong criticism results:

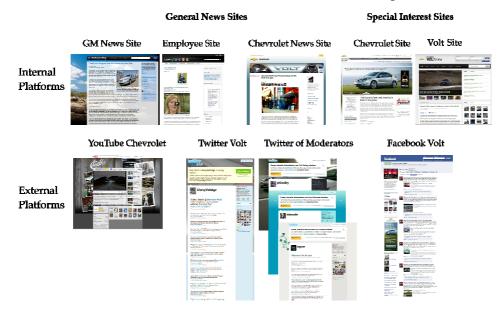
"As long as we are delivering tangible news we are in good shape. When we were off of that and we do things like the Volt song and dance (...) when we were off of that approach we get hammered. (...) But what happens is when we don't give them something credible the heated up and they spit of accurate because it becomes a complete negative to us. So we really have to stand straight and narrow on our pieces. With the educating way it is news based vs. hype based." (PR04, 2009)

In addition to the work of the opinion leaders, the innovation communication at the launch of the Chevrolet Volt focused primarily on press and events, such as motor shows. In online communication, the innovation is communicated on various company (Web 2.0) platforms and on those of external providers.

To distribute product information and detailed facts about the Volt, Chevrolet uses a three-stage solution. Target groups that wish to obtain basic, easy to understand information about the innovation are to be targeted via the product pages on chevrolet.com. Those with a deeper interest who wish to be automatically updated with information about the Volt are to be reached via Facebook and Twitter. What

is special about this is that the three moderators of the Facebook fanpage have their own Twitter accounts, which they can use to report any news relating to the innovation in their own name.

Those interested in intensive discussion about the innovation can use the Voltage.com website. The company wanted to access three target groups with its own social network website: (1) those generally interested in electric vehicles, (2) environmental activists and (3) the automobile-media/press.



#### GM Chevrolet Volt Online-Strategie

Figure 1: Online Activities of GM for Chevrolet Volt

#### 2.3 Chevrolet Volt Facebook Fanpage

The Facebook fanpage for the Chevrolet Volt<sup>2</sup> (see Figure 2 below) was launched on 22 June 2009 and the first entries were posted on the same day. In Chevrolet's view, its presence on this private social network:

"... is reactive. So for instance, I'm fan of the Chevrolet Volt, I click on it, became a Fan, I get updates send me ... I don't actually have to engage in the website it comes to me. I engage in my interest." (PR04, 2009)

Chevrolet hopes to use the fanpage to serve a target group that wishes to automatically receive the most up-to-date information about the innovation, but is not interested in any deeper involvement or discussion at this stage. Those

<sup>&</sup>lt;sup>2</sup> http://www.facebook.com/chevroletvolt

responsible for the communication are aware that many people interested in the technology have joined the Facebook page as fans. In Chevrolet's opinion, however, their involvement in this independent social network platform differs from interaction on its own platform Voltage.com.

Chevrolet uses quantitative and qualitative methods to continually review the performance of its online communication. To manage interaction with fans, Chevrolet uses 'site managers' for the Facebook fanpage, which give the company a voice and a face and accompany the conversation throughout the entire period. The task of the site managers is to manage the online presence for the Chevrolet Volt, and monitor the feedback and involvement of the community.

The three moderators worked during the investigation period from 22.06.2009 to 22.12.2009. These moderators were profiled on the Facebook fanpage on the continually visible side-bar with pictures, first names and in some instances surnames and their Twitter accounts, but without any mention of their title or function within the company.

On accessing the Facebook fanpage for the Chevrolet Volt, visitors are redirected to the wall on the website, which displays postings by both the manufacturer and the fans.

The company welcomes its Facebook visitors as follows:

"Welcome to the official Chevrolet Volt Fanpage. We want this page to be a place for Volt and electric vehicle enthusiasts on Facebook to get the latest news and engage in intelligent discussion about the Volt, electric vehicles and electrification." (Chevrolet Volt, 2010)

It should be explained that there is no netiquette or guidelines on any of the pages of Chevrolet Volt that state the do's & don'ts for the website. This is a conscious decision taken by those responsible for communication at Chevrolet Volt for the interaction with its community:

"... you have to let the conversation go. You have to take the good with the bad. There become organizational people like your strategy, your technical strategy and there will be people that think that your strategy stinks. You have to allow them to have their opinion. And you have to leave it up there and you have to share the bad news as the level of sharing the good news." (PR04, 2009)



Figure 2: Facebook Fanpage by Chevrolet Volt

## 3 Research Method

#### 3.1 Instrument

The method selected for this study was case study research, firstly because it is suitable for an explorative investigation into a complex social phenomenon in a real context (Eisenhardt, 1989; Yin, 2003). Secondly, this method facilitates the observation of formal and informal processes (such as social interaction) within a social system (the group of participating individuals) (Hartley, 2009). Further reasons for selecting case study analysis are that it facilitates the description of real phenomena in practice (Gassmann, 1999), the identification of patterns and allows explanations for current events to be put forward (Yin, 2003). Case study research is particularly well-suited to research into earlier stages of a subject (Eisenhardt, 1989), as is the case with regard to the investigation of innovation communication using Web 2.0 applications. As yet, there are few findings regarding the use of Web 2.0-applications for the communication of innovations and by taking this explorative approach, the intention is to further develop this field of research.

#### 3.2 Data Collection and Analysis

To systematically record the participative innovation communication on Facebook, an observation grid was developed in which data for the analysis could be collected. The elements to be recorded comprise the components of interaction on this platform (see Figure 3). An interaction unit or wall post consists of the name and profile picture of the author, the contents of the post, any internal or external links to media (such as photos, videos or website pages) as well as a time stamp stating the date and time at which the post was uploaded. If there is any response to the post, the response elements include the number of people who have "liked" the post, as well as the number of comments on the post. The individual comments also feature the name and profile picture of the person who left the comment as well as the date and time. The function that allows users to "like" comments was only introduced after data collection began.

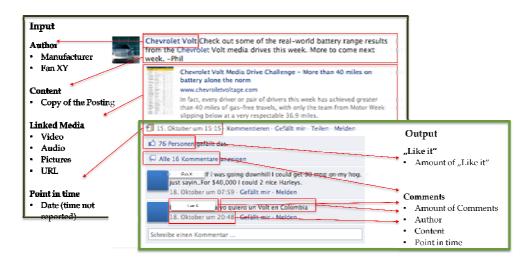


Figure 3: Source of Data

The study of the Chevrolet Volt fanpage began with the launch of the Internet presence and comprises the period from June 22, 2009 to December 22, 2009. During these six months a total of 861 postings were published on the Facebook page. The postings had an average length of 225 characters, with the longest totaling 1,049 characters. In total, 300 posts (35 percent) were "liked" and 608 (71 percent) of the postings were commented on. The total number of "likes" in the study period was 4,874; a total of 5,250 comments were posted.

The purpose of the analysis of the case study data is to provide the most comprehensive image possible of the communication within the case and to identify findings and patterns therein. The data recorded and stored in an Excel table could be used for both quantitative and qualitative analysis (see Table 1).

Quantitative Analyses	Qualitative Analyses
<ul> <li>Number of various forms (posts, comments, "likes")</li> <li>Linked content (URL, images, video)</li> <li>Length of the message (number of characters)</li> <li>Intensity of participation of individual authors</li> </ul>	<ul> <li>Tone</li> <li>Topics</li> <li>Instruments</li> <li>Dynamics of interaction</li> </ul>

Table 1: Quantitative and qualitative Analyses of the Data

The analysis of the contents of the Facebook records was carried out in accordance with the recommendations of Mayring (2008), Auerbach and Silverstein (2003) as well as Miles and Huberman (1994). In the first stage of the analysis, the data of the case were openly coded, i.e. the contents were viewed in full and those contributions with a large number of comments and "likes" were identified; if there

is a larger number of participants, any patterns will be identified. To identify such patterns, the relevant passages were marked and notes added. In the second stage, an analysis of the notes and the passages marked as relevant highlighted recurrent ideas (patterns), which were interpreted and categorized with the aid of information from the literature analysis. In addition, the data was sorted into categories and diagrams were prepared to identify additional patterns. In order to evaluate the data based on these criteria in the next stage, the information was analyzed again individually according to the categories identified. Posts with higher-than-average participation were compared with those that did not trigger any reaction whatsoever. In order to identify decisive factors, the data were also depicted in various groupings and processed visually.

# 4 Findings: Communication of Trust on various Levels

The word-frequency analysis of the 50 terms used most commonly in the fan commentaries, that is, excluding contributions by the manufacturer, visualized in the form of a Word Cloud (see Figure 4), makes clear what the members of the fanpage are interested in. Mentions of the product name of the innovation "Volt" dominate, whereby this is obviously a vehicle (*car/cars*). The fans frequently mention GM in the comments (company level). Interestingly, however, neither Chevrolet nor the abbreviated form, "Chevy", are among the 50 most commonly used terms. The comments clearly show the interest in the technological aspects of the innovation (technology level). Discussion centers mainly around batteries and motor technology (*battery, charge, and electric*), as well as the subject of energy (*power, gas, fuel*). It is in this context that discussions regarding the efficiency of the product innovation (product level) with regard to range (*miles, range*) appear.

Fans write about their positive attitude toward the innovation and the technology (*like, good, better*) as well as their wishes and intentions (*see one, drive one, need one, want one, get one, buy one*). The price aspect is also the topic of discussion (price, cost). Interestingly, the most commonly-used terms include "*Phil*" and "*Dave*" (relationship level), since fans react to the comments of the two moderators, enter into dialogue with them and address them directly. It is also significant that a competitor product is mentioned frequently (*Prius*). This is a result of the fans associating and comparing the innovation Chevrolet Volt with a vehicle that is already on the market and for which there are already empirical values ("2011 Chevy Volt - 0-60 in 8.5-9.0 seconds, 2010 Toyota Prius - 0-60 in 10.1 seconds").

Fans also publish posts and comments that express their distrust, misgivings and fears. The analysis of the Facebook communication shows that the subject of trust is important primarily on four levels of interaction between fans and Chevrolet

Volt, namely trust on the level of relationships and communication as well as trust in the company, in the technology and in this product.



Figure 4: Word Cloud with 50 most commonly used terms in fan comments

#### 4.1 Communication of Trust on the Level of Relationships and on the Communication Level

As described above, the "new General Motors" is pursuing a customer-oriented strategy, which is expressed in an open and transparent communication with target groups. In the interaction on the Facebook fanpage for the Chevrolet Volt, the moderators bring this strategy to life through the wording of their posts and comments, as well as the nature of their interaction. The moderators display a high level of interaction activity with the fans and not only regularly post information, but also respond at the comments level to questions and comments of members. Through this (pro-)active behaviour and their commitment they reflect how important the fanpage is to them. Furthermore, their commentary activity makes clear that they regularly follow the communication and respond to the needs and questions in their community, whom they address personally.

Chevrolet Volt "**Hi Moroni, yes.** The early development vehicles are under all kinds of road, climate, and other tests in EV and Extended-Range modes. We expect the battery to last 10 years or 150,000 miles. This is similar to a traditional car on the road today. We have not announced warranty coverage yet. – **Dave**"<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Note: the wording of the posts and comments featured here by means of an example was not changed at all and was taken word for word from the database. Emphasis in the form of bold text was subsequently added in the course of this study.

A further aspect of the personal approach of the moderators' communication is that they introduce themselves on the fanpage with their name and profile picture and when this subject is brought up, they do mention their position in the company to the fans on the page.

Chevrolet Volt "Hi Andrew. My name is Dave Darovitz, and I manage Communications and Media Relations for the Volt. I am one of a few PR people that manage this page."

They also appreciate the activities and the involvement of the fans and publicly express this appreciation.

Chevrolet Volt "Thanks Lyle, for sharing your independent Volt Twitter page with other Volt fans like you. Keep up the good work."

It is particularly important for building and maintaining a trusting communication or relationship level between Community members that the moderators of Chevrolet Volt monitor the compliance with the rules published by Facebook and actively take efforts to ensure a friendly and appropriate tone. As the analysis of the posts shows, some fans can be very rule and aggressive and will not stop short of direct insults.

Fan: "Adam you are an idiot. Unless you're being sarcastic."

*Fan: "Jason, you are a moron.* Stop being lame and derailing the conversation with **bullshit**. (...)"

Fan: "This guy looks like a gigantic douche. Sounds like one, too"

Fan: "Dunno about GM cars falling apart. (...) Is it \*false\* that they fall apart? Fucking moron."

Chevrolet Volt: "Michael: Appreciate the sentiment above, but I have to take your first comment down. We want to make this a place for all opinions, but keep the profanity and insults to a minimum. We have a great community here and just want to keep the conversation civil. I hope you understand. –Phil"

#### 4.2 Communication of Trust at the Company Level

As mentioned the parent company of Chevrolet, General Motors, lost face and the trust of its customers as a result of the EV1 debacle, the film "Who killed the Electric Car", which documents this project, and the corporate stance in recent years. As a result, fans distrust the company group, the messages it issues and the earnestness of its efforts with regard to electromobility. This distrust is also reflected in the interaction on the fanpage, through which the moderators are required to provide active trust work for the company.

Fan: "Chevrolet Volt: So uhhh.... why didn't you corporate jackals create this cars years ago when it was quite obvious we would need it so soon? And please, moderator, before you get defensive of your beloved company, watch the movie WHO KILLED THE ELECTRIC CAR. As far as I can see, you and GM want the same thing in the end- \$\$\$. Something is going on... it smells a bit fishy when monolith corporations like you have been buying patents for cars that use anything but oil for years (...)"

On Facebook, those responsible for communication relating to the Chevrolet Volt follow the strategy of countering this distrust and the associated criticisms proactively, with openness, transparency and direct dialogue.

Chevrolet Volt: "Michael,

We've not only watched the movie, but we've met with it's director Chris Paine and one of the movies primary characters Chelsea Sexton. Like you, they were skeptical of our efforts in the beginning, but have come to see the sincerity of the effort to bring the Volt and other plug-in vehicles to market. (Chelsea drove one of our mule vehicles this summer, link to her blog post is below:)

Bottom line, there's no conspiracy going on with the Volt. **It'll launch late next year** - about the same time Chris Paine plans to release his next film "The Revenge of the Electric Vehicle" in which he chronicles the development of this generation of plug-in vehicles. Please hurry back with

your movie review on that one as well.

-r"

The moderators of Chevrolet Volt are very committed to breaking down distrust and doubts in the community, in order in this way to emphasize the earnest efforts of the company.

Chevrolet Volt: "Here's a good Orlando Sentinel Q&A with Britta Gross who handles commercialization for electrical and hydrogen infrastructures. ,No program alone can change a company, **but what (the** 

*Volt) does is draw your eyes to a company that is really, really working hard to capture leadership again.* '*–Phil*''

Information relating to the production is intended to credibly communicate that the Volt is not just "vaporware", i.e. an innovation that is never actually produced and placed on the market.

Chevrolet Volt: "This morning we confirmed the location of where the Volt's battery will be built. Production of battery packs for General Motors Co. electric vehicles will begin at a new facility in the fourth quarter of 2010. – Dave"

However, not all fans have such a negative attitude towards the company group, its subsidiaries and the products. They recognize and appreciate General Motors' efforts to change. They give the company a second chance, react to criticism from peers on the platform and act as advocates of the company.

Fan: "Yes it was a stupid mistake on their part, but if GM is willing to change their ways and offer cleaner cars...we shouldn't let our anger towards them result in harming the environment and our pocketbooks by staying addicted to oil. Time to forgive and forget no matter how betrayed we feel."

#### 4.3 Communication of Trust on the Technology Level

Consumers are still unfamiliar with electromobility technology. They do not have any knowledge that they can rely on to enable them to assess or evaluate this technology, either from personal experience, or the experiences of friends and acquaintances. Chevrolet attempts to bridge this knowledge gap by referring firstly to Facebook with multimedia and clear, comprehensible contributions containing relevant information:

*Chevrolet:* "What's the difference between an electric vehicle and an electric vehicle with a range extender? This video explains what drivers can expect."

On the other hand, Chevrolet Volt not only uses the Facebook platform for indirect communication, but also refers its fans to direct communication offers, in which it uses the platform for references for personal exchange in real time and the dissemination of information on various on- and offline platforms.

Chevrolet: "We have a bunch of DC-area fans of this page and wanted to give you a heads-up about a tweetup this Wednesday, Sept. 9 in Arlington.

Chevy will have Project Driveway drivers, Equinox fuel cell electric vehicles and other experts on-hand **at Sette Bello restaurant to talk** hydrogen and give rides. If you're in the DC-area... and interested in fuel cells and hydrogen, RSVP at the link below **and join us** on Wednesday. – Phil"

A further measure that the communication concerning the technology has to prove is that it really is serviceable and that the innovation is accepted. For instance, the issue of the charging infrastructure has not yet been clarified in many regions. Chevrolet uses news items on new charging stations to foster trust with regards to the recharging of batteries.

Chevrolet Volt: "Good news for Virginia fans of electric vehicles, **EV** charging stations will be installed at select state rest areas as part of the Renew Virginia initiative and the first one is already operational at the New Kent Safety Rest Area on Interstate 64. (...) –Phil"

#### 4.4 Communication of Trust on the Product Level

Since electric vehicles are a new technology for consumers, many react with uncertainty and distrust. They are unable to gain any personal experience thereof and, as a rule, there is no-one in their circle of friends and acquaintances with experience of an electric vehicle. Chevrolet Volt thus attempts through the publication of test reports to provide knowledge about the innovation, to build trust in the capacities of the innovation and to dispel distrust and fears.

Chevrolet Volt: "Here's a quick development update from Voltec powertrain engineer Alex Cattelan. Alex has been all over the U.S. and Canada of late testing and validating the Volt pre-production vehicles. "System testing to date verifies that we can properly balance vehicle requirements such as drive performance, drive feel, thermal conditions and efficiency. Everything we are doing proves the Volt is right on track." Enjoy. -Phil."

Furthermore, there is still a great deal of uncertainty as to how electric vehicles will develop in future and whether and when they will succeed on the market. Chevrolet Volt provides its consumers with a market evaluation by publishing an independent study underlining this innovation's chances of success.

Chevrolet Volt: "Interesting study by Pike Research that helps reaffirm why we think the Volt will succeed. To reiterate, the Volt is an EREV, not a PHEV, but their baseline battery electric range of 40 miles matches the Volt. What's most fascinating is they found "82% of respondents drive 40

*miles or less per day, with an average daily driving distance of 27 miles," which is right in line with our findings. –Phil*"

## 5 Conclusions

#### 5.1 Levels of Trust in Innovation Communication

The introduction of innovations generally involves great uncertainty and a lack of trust. In practice, however, building trust is cited by communication and innovation managers only as the fifth and final goal of innovation communication, following image-building, the development of new markets, boosting sales figures, customer retention/customer satisfaction (Zerfaß & Ernst, 2008).

In the case study examined here, the fans' Facebook posts make it clear that there is a great deal of uncertainty among users regarding the innovation. Thus, it is natural that potential buyers ask many questions in advance. To prevent these uncertainties and doubts from culminating in reserved buying behavior or rejection of the innovation, manufacturers must carry out trust-building communication work.

As the definition outlines, an important goal of innovation communication is to build "trust in the innovation" (Zerfaß et al., 2004). The early building of a trusting relationship with the stakeholders concerned is seen as a crucial component of successful innovation communication (Zerfaß, 2005). The results of this study make it clear that communication of innovations must go beyond the product and relationship levels, and that there must also be an active dispersal of uncertainty and building of trust with regards both to the innovation field and the company as a manufacturer. In the following, the four levels of trust identified in the introduction of the innovation on Facebook, referring also to the determinants and design factors identified in the research, will be presented. This chapter concludes with the practical recommendations that can be derived from these findings.

#### 5.1.1 Level 1 – Relationship and Communication Level

Since trust is seen as one of the decisive factors for the degree of participation of users (Chiu, Hsu, & Wang, 2006), to achieve a general readiness to participate among users, a foundation of trust must be created on the relationship level and on the communication level; in other words, trust in the Web 2.0 platform Facebook and the communication partners that interact via that platform. The fans must be sure that they are acting in a trustworthy communication environment and be aware that their actions could have negative consequences for them.

Both the provider of the platform Facebook and the provider of the fan community concerned are responsible for the creation and maintenance of such an environment of trust. The "Facebook principles", which are intended to regulate Facebook's relationship with its users and other interaction partners were created in order to establish this trust. The principles list guidelines for use, rights and duties of Facebook users and outline the position with regard to data security, privacy controls and third party rights (Facebook, 2010). Facebook members and business partners who contravene these principles can be excluded from the platform.

However, it is apparent that, ultimately, it is the providers of the respective fan community who are responsible for compliance with these principles, and the company must assume both supervisory and clean-up tasks. It is not enough for behavioral guidelines simply to be written down; the operators of the fancommunity must constantly monitor compliance with these principles and take immediate action in the event of a breach. The operator of the platform must notice any breach of netiquette at an early stage, issue a warning and, if necessary, exclude objectionable users in order to keep the peace in the Community and uphold a trusting communication culture.

#### 5.1.2 Level 2 – Innovation Area Level

In order to create a positive purchase decision in favor of a product innovation, it is first necessary to convince potential customers of the benefits, prospects and trustworthiness of the innovation. In the present instance, for example, users must trust that electromobility is a relevant and future-proof technological development before they will be seriously interested in buying such a vehicle. The building of trust in the innovation area can take place on two levels. The target group of innovators and 'early adopters' can be convinced that with their decision to adopt they are providing an important contribution to the establishment of a relevant innovation. The group of followers can provide trust work on the company's behalf by communicating the likelihood of the innovation becoming established on the market and conveying the sentiment that the decision to adopt this innovation is by no means the wrong decision.

In order to contribute even more to this trust-building account, the manufacturer in the cases examined published market studies and provided potential customers with an opportunity to speak with experts that underline the great importance of this area of innovation and provide information about the future development of the new technology. The information published by the manufacturer concerning its activities relating to the establishment of conditions (infrastructure) can also help to build trust in the area of innovation.

#### 5.1.3 Level 3 – Corporate Level

The case study examined clearly shows that many fans distrust the statements of the manufacturer that it actually wishes to place the product innovation on the market. For the communication of innovations on Facebook this means that the

manufacturer must build trust both in the capabilities of the company to implement such innovation and in the seriousness of their intentions to place the product on the market. An important factor for the implementation of this communication of trust is the transparency of corporate activities. The users should be constantly updated on the status of the project, and informed of any important changes. But here, too, companies face the challenge of finding the right balance and not bombarding the users with too much, overly-complicated information or issuing potentially sensitive information that could harm the company.

In the case studies this form of communication of trust was provided e.g. through the forwarding of production updates, in which the manufacturers demonstrate that the innovative project is moving forward. Information on strategic and corporate policy decisions was provided through the publication of press information referencing press dates with the management and forwarding of media reports. Furthermore, presenting the people behind the innovative project, i.e. establishing a communicative involvement of the responsible employees by presenting their expertise and what they do within the innovative project, can help foster trust in the company and the sincerity of its intentions. Communicating employee expertise also underlines the competence of the company as a whole, thereby conveying its capacity to successfully implement such an innovation.

#### 5.1.4 Level 4 – Innovative Product Level

Potential customers must be comprehensively informed about the product characteristics of the innovation in a straightforward manner that is easy to understand. Comprehensive means that the manufacturer highlights not only the advantages of the innovation, but must also openly disclose any limitations or even disadvantages of the innovation. The information must be straightforward and easy for potential customers to understand, so that the target group can recognize the value of the innovation and can decide whether it delivers a convincing added value and is worth buying.

In the case studies examined, the manufacturers were able, through various measures, to contribute to the creation of trust in the innovation, e.g. by forwarding media reports in which independent experts report on and recommend the innovation, and also by referring to awards won, which confirm the quality of the innovation.

Reports and recommendations from peers and acquaintances (word of mouth) are considered particularly credible and trustworthy, since these persons are not under any suspicion of pursuing their own economic goals (Awad & Ragowsky, 2008; Doh & Hwang, 2009; Franz, 2010). Manufacturers can encourage the preparation and distribution of such authentic reports by peers by calling on the community on the Facebook platform to comment on and/or evaluate the innovation as a whole or in part.

#### 5.2 Managerial Implications

The following recommendations for the communication of innovations in Web 2.0 via Facebook are derived from the levels of trust identified in the communicative introduction of the electric car, the Chevrolet Volt.

#### 1) Relationship and Communication Level

In order to build a trust relation and communication with the fans, fan contributions must be continuously moderated and swift action taken in the event of any breach of netiquette.

#### 2) Corporate Level

Companies must credibly convey to their target groups that they are capable of and willing to place the innovation on the market. This trust in the company can be fostered by means of ongoing information about the status of the implementation of the project and important strategic decisions, as well as by involving the employees responsible for the project.

#### 3) Area of Innovation Level

The goal is to strengthen trust in the area of innovation by passing on positive market prognoses from recognized, independent institutions and communicating the company's own efforts in the field of the structural promotion of the innovation.

#### 4) Innovative Product Level

The goal is to build trust in the innovative product through neutral, comprehensive and comprehensible statements from independent experts and members of the community.

#### Table 2: Recommendations for the Communication of Trust

# 6 Limitations and Future Research

The focus of this study on the automobile sector and electromobility limits its general application to other sectors of industry and innovative products. The automobile sector represents a 'High Involvement Market', offering relatively high-cost products, the acquisition and ownership of which are highly emotive for many people. Due to the considerable purchase price and the correspondingly high risk of a bad investment, purchasers spend more time thinking about the purchase decision and accordingly inform themselves more intensively prior to purchase. This is not the case, or only to a certain degree, in other areas e.g. everyday consumer products.

This empirical study represents a first stage in the research into the participative communication of innovations in Web 2.0. Many companies are still at the very beginning in terms of corporate, brand and product communication in Web 2.0 and are only starting to explore the possibilities for the introduction of innovations in this field. In addition, Facebook is itself undergoing a constant process of growth and change, so that the results of this study must be seen in the light of the current communication environment of the social network.

The present study identified four levels – relationship and communication, the company, the area of innovation and the innovative product – in which trustbuilding work is needed in the course of the communication of innovations to final consumers. In order to support this result, the levels of trust identified here should be reviewed again using a larger sample. A focused study should also be carried out to test whether there are any additional levels, and which forms targeted trustbuilding work in the communication of innovations could take.

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