

**RIDER ACCEPTANCE OF ADVANCED SAFETY TECHNOLOGY.
A BASIC REQUIREMENT FOR IMPROVED SAFETY.**

**CONCEPT, EXPERIENCE AND RESULTS OF A MULTIMEDIA COMMUNICATION CAMPAIGN
ON ANTILOCK MOTORCYCLE BRAKES.**

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Starting-Point

Although antilock brakes (ABS) for the prevention of accidents are even more important for motorcycles than for cars and contrary to the fact that they are being offered in Germany since 1988, only five percent of motorcycles are equipped with them. According to findings of the Institute for Vehicle Safety (Munich) (Dr. Alexander Spornier) more than 70 deaths and 3000 injured per year could be prevented if all motorcycles were equipped with ABS brakes. For Europe experts estimate a potential of over 400 avoidable fatalities.

Problem Situation

A psychological analysis of causes brought the following basic conflict to light:

Motorcycle manufacturers (excluding BMW and HONDA) do not offer ABS brakes. They argue it is due to the lack of acceptance by the customers. Two manufacturers (Suzuki und Kawasaki) have decided recently to withdraw again models with optional ABS brakes from the German market due to low sales.

Motorcyclists do not request ABS brakes since they generally overestimate their riding skills. They deem it unnecessary because their daily experience (up to the first accident) seemingly validates their assumption that they master their motorcycle. They also lack an understanding about the difficulties associated with braking and the performance possibilities of ABS brakes. Another factor is that ABS brakes do not carry a positive image value. On the contrary: buyers of motorcycles with ABS are often vilified as losers. Added to this is an attitude of suppression. A conscious evaluation with ABS would require the motorcyclists to confront the given dangers and their own vulnerability associated with riding a motorcycle. Since for most of the bikers motorcycle riding is a hobby and leisure activity they try to avoid these confrontations.

An expanded analysis found a co-responsibility with the motorcycle press. In Germany, most magazines had presented ABS brakes for years as negative. On the one hand the existing “weak points“ of the first productions were often highlighted (low working frequency, bad adaption to friction jumps, pulsation at the hand and footbrake, high weight). On the other hand driving tests were conducted on test grounds with highly qualified test riders in which they achieved under laboratory conditions (prior practice phase, optimal outer conditions, mental preparation) better results without ABS and thus shorter braking distances, then with ABS equipment in order to prove that

good riders can measure out braking power better than ABS equipment.

Planning

In 2001, the Dr. Koch Consulting, a private German enterprise specialized in motorcycle related research and safety work, received the request from the German Insurance Industry Association (GDV) to develop a multimedia communication campaign in order to overcome the existing blockade and support the ABS system.

Three alternatives became evident in regard to the target groups and thus for the strategic action:

- Influencing the manufacturers through public pressure in order to get them to offer more motorcycles with ABS brakes
- Influencing the motorcyclists in order to incite them to buy ABS systems
- Influencing the legislation (national governments, EU-Commission) in order to achieve an enforced law for ABS requirement with new motorcycles

The process of careful consideration with all discussed advantages and disadvantages cannot be recorded here, only the result. It was decided to place the emphasis on the motorcyclists since this promised the fastest and longest lasting success. The following strategy was therefore developed for the campaign: the industry shall be incited to offer more motorcycles with ABS brakes through directly stimulating the demands and indirectly through a change of the attitude of the motorcycle press.

In regard to this the following target groups were identified:

- journalists of motorcycle magazines
- car- und motorcycle journalists of the general press
- chiefinstructors and instructors of advanced rider training programs
- safety oriented motorcyclists
- motorcyclists

As partial goals for the achievement of the above mentioned main goal the following was formulated:

- a change in ABS reporting by motorcycle magazines and the daily press
- integration of elements concerning ABS brakes in the existing advanced rider training programs
- informing the motorcyclists about the requirements and difficulties of braking and the advantages of ABS brakes
- raising the acceptance of ABS brakes with motorcyclists
- creation of pressure for demands of ABS brakes with motorcycle dealers and industry
- lifting of existing impediments in regulations and guidelines for example in regard to driving schools and driver's exams.

Transposition

The practical transposition took place on a multi-media level after an integrated concept.

The prelude was a professional symposium on May 21, 2001. Thus the following target groups were reached: journalists (motorcycle magazines and daily press), chief instructors and instructors of advanced rider training programs, driving school teachers, motorcycle dealers and the motorcycle industry. Specialists from universities, research institutes and industry conveyed the newest insights of the research on motorcycle accidents and deduced successfully the necessity of the ABS system. The media reports were extensive and without exception positive.

During the whole motorcycle season of 2001 the campaign was continued on a double track. In the advanced rider training programs, the instructors placed their emphasis on ABS brakes. For that a specially designed campaign video and information folder was used. On top of it the video was also offered to suitable TV stations and to our delight broadcasted frequently.

Besides the knowledge factor a quiz game was used as a motivational tool. The participants of the advanced rider courses were invited to participate in a quiz if they were willing to answer difficult questions on the subject of motorcycle brakes which referred positively to the ABS system and send in a reply card. In December 2001 eight winners were invited to the Motor Show in Essen (the second biggest car and motorcycle fair in Germany). They participated at the booth of the campaign in a quiz show and took a riding test in a

driving simulator. The winner received a motorcycle with ABS brakes (BMW R 1150 R).

The campaign was continued in 2002. Added to the aspects of the year before (transposition in the advanced training programs and quiz show) a transposition took place in 2002 in the driving schools. A brochure was produced for the intensification of the technical and professional discussion with the title: "Better brakes. More safety with modern braking techniques. A guide for motorcyclists." Also a new film for the use in training schools and driving schools was made. Participating driving teachers and moderators were technically schooled.

The final round of the campaign quiz took place in September 2002 at the motorcycle fair "INTERMOT" in Munich, the worlds biggest motorcycle show. The procedures were the same as in 2001. The prize was a HONDA VFR ABS-CBS.

In order to spread the message further and at the same time promote the attainability of the goal an internet site was founded (www.besser-bremsen.de). It was designed interactively for example with discussion rooms, chat rooms and a *newsletter*. Participation online in the campaign quiz was also possible.

Evaluation

A formal evaluation of the campaign results cannot be given at the time due to a lack of comparable data.

However, quite a few positive results came in.

The campaign succeeded in completely changing the attitude of the motorcycle press towards antilock brakes. Not only have all German enthusiast magazines reported positively and extensively about the campaign and its goals, but contrary to the past leading articles refer now positively to ABS brakes. Most of the chief editors have taken on the subject in their editorials by appealing to the industry to offer more ABS brakes and by suggesting to motorcyclists to ask for ABS systems when buying a new motorcycle. Europe's largest motorcycle magazine "Motorrad" has even revised their own test criteria and distributes now extra points for motorcycles with ABS systems. In relative tests a number of magazines have examined and proven that the modern ABS brakes of the third generation are better than the highest qualified test riders under laboratory conditions. Naturally, the advantage of ABS brakes in real dangerous situations increases again substantially because

riders tend to react with shock and panic and often brake too hard and lock the front brake.

Legislation has reacted and contrary to former regulations allows now the use of ABS brakes both in driving schools and on motorcycles used for licensing tests of drivers.

Motorcyclists have shown significant changes in attitude. In a representative inquiry which was done by the Hagstotz Marktforschung, 75% of the interviewed motorcyclists agreed with the statement: "A new motorcycle needs ABS." In an internet inquiry at www.motorrad.de about 22% of the participants say they would definitely buy their next motorcycle with ABS brakes.

Especially significant is the fact that the motorcycle industry reacts positively on the production side while still displaying a rejecting attitude through their Association in Germany as well as in Europe. In September 2002 at the world largest motorcycle exhibition, the INTERMOT in Munich, Peugeot, Yamaha and Ducati also displayed new ABS motorcycles and scooters, even though at the beginning of the campaign motorcycles with ABS brakes were only in the program of BMW and Honda.

The political interest of the European Commission has been awakened by the campaign's presence in the media. The EU-Commission is now supporting the campaign and wishes for an extension to other European countries since their aim is to cut in half the number of traffic deaths in Europe in the next ten years. The Commission appeared as a partner of the campaign in February 2003 at an international symposium in Leipzig which was organized by the

campaign and titled: "Motorcycle Brakes of the Future – Challenge and Responsibility."

Summary

The acceptance of innovative safety elements by motorcyclists cannot be expected a priori which differs from the automobile field. Due to the different motivation structure, the increase of safety by such innovations demands - next to the development and supply - specific and psychologically supported communication measures. Such an example is the campaign "better braking" - regarding ABS brakes. With this campaign it was already possible within two years to expose the contradiction between demand and shortage of supply by winning the motorcycle press for the subject. Also a significant change in attitude can be seen with motorcyclists in regard to the campaign's goals as well as in the industry's creation of new products. Further developments are expected to be positive since the campaign has been discussed intensively in the German motorcycle scene and is seen positively by all important influential supporters. The existing political dialog with the Federal Government and the EU Commission and its subsequent political influence will help to keep the achievements secure in the future. An expansion to other European countries seems logical.

In the future the motorcycle industry has to be prepared that also other innovative safety technologies may need a participating and active communication campaign in order to be accepted by motorcyclists.