



# The Long-Term ROI of TV Advertising in a Digital World

*Raimund Wildner and Guido Modenbach*

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KEYWORDS

*TV advertising,  
Advertising Effect, Marketing ROI,  
Long-Term Effects*

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THE AUTHORS

*Raimund Wildner,*  
Managing Director and Vice President  
of GfK Verein and Professor of  
Business Administration and Statistics at the  
University of Erlangen-Nuremberg,  
Germany  
[raimund.wildner@gfk-verein.org](mailto:raimund.wildner@gfk-verein.org)

*Guido Modenbach,*  
Managing Director of Seven One Media,  
Munich, Germany  
[guido.modenbach@sevenonemedia.de](mailto:guido.modenbach@sevenonemedia.de)

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**TV advertising in the age of social media** /// "I know at least half of my advertising budget works. I just don't know which half," Henry Ford is believed to have said. While methods of measuring market success and advertising effect may now be more sophisticated and precise than they were in Ford's day, identifying cause and effect in the world of marketing is still a challenge. There are so many influential factors, and more and more communication channels are becoming available for addressing consumers and promoting one's brand. So how does good old TV advertising stack up in this environment? Has it become obsolete in the age of social media? Does it belong to the half of the advertising that does not work? If you consider both the short- and long-term effects, the answer is an unequivocal no. That was the result of the calculations of a model developed by Seven One Media, GfK Fundamental Research of GfK Verein and GfK TV Audience Research for determining the return on investment (ROI) of TV advertising.

**TV advertising pays off, particularly over the long term**

/// There are two challenges in particular that make measuring advertising success difficult. On the one hand, you have to isolate the effects of other advertising measures and promotions in the case of integrated marketing. On the other, both short- and long-term effects need to be taken into account. The ROI analyzer masters both of these challenges. It shows that TV advertising achieved a positive ROI for 65 % of all

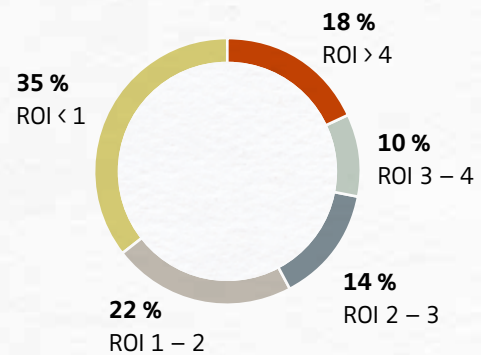
{Box 1}

## ROI CALCULATION FOR THE TV ADVERTISING OF 204 BRANDS

A Seven One Media project carried out in collaboration with GfK TV Audience Research and GfK Verein calculated the ROI for 204 TV advertising campaigns. Only those cases were examined in which TV advertising accounted for more than 80 % of the total advertising budget, using a collection of data derived from the AGF/GfK TV viewer panel and the GfK consumer panel. The calculation was based on a simulation of the household purchases between 2010 and 2014. In one simulation, the advertising for 2010 was incorporated as it actually occurred (the corresponding data was sourced from Nielsen's advertising expenditure statistics). In a second simulation, the advertising for 2010 was set to zero. Calculations were based on no advertising for the years 2011 to 2014 and otherwise with the influential variables of 2010. The differences in sales between the two simulations can therefore only be explained through the existence or omission of advertising for 2010. The ROI is the ratio of the increase in sales to net advertising expenditure.

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**FIGURE 1:**  
Size of long-term ROI effect



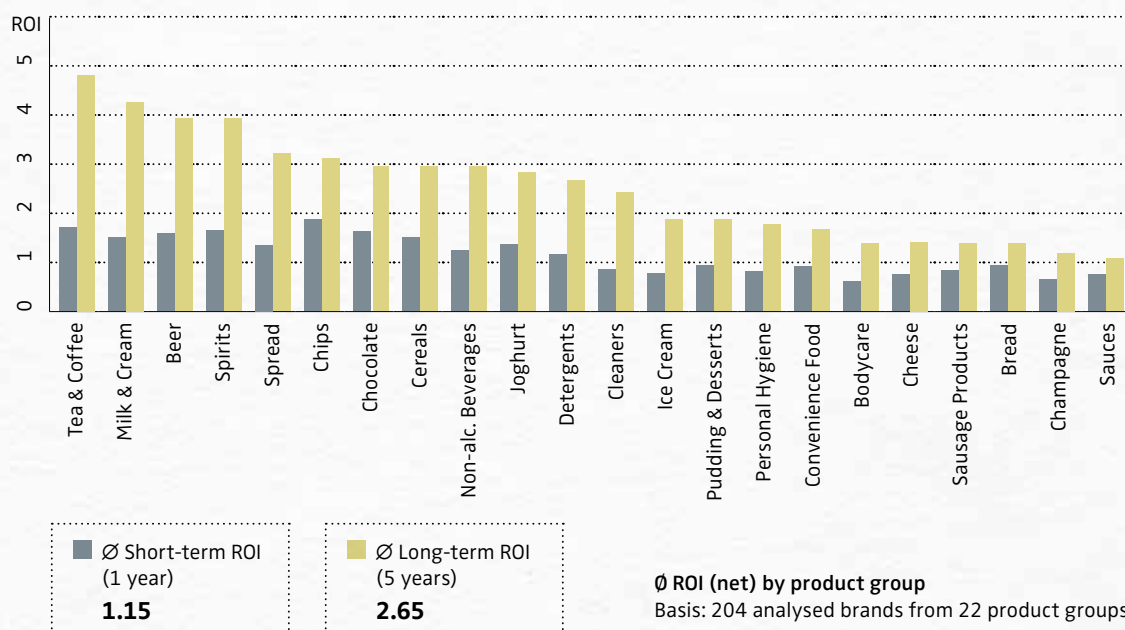
examined brands used on a daily basis. The average long-term ROI was 2.65, while the average short-term ROI in the year of the advertising was only 1.15. Long-term effects are therefore essential for obtaining a fair evaluation of advertising effects (see Figure 1 and 2 for details).

The long-term ROI was higher than 1 for 65 % of all brands and even higher than 2 for 42 %. It was only for 35 % of all brands that the increase in sales was insufficient to cover net advertising expenditure even over the long term. So the likelihood that TV advertising not only covers its costs with an increase in sales but also contributes to profit is very high.

### **The model for calculating advertising effect and ROI** ///

The ROI analyzer builds on the STAS differential, a renowned system for measuring advertising effect developed by John Philip Jones at Syracuse University in the 1990s. "STAS" stands for "short-term advertising strength." The model is based on single-source data, meaning data acquired through a combined household and TV viewer panel. Purchasing behavior as regards consumer goods used on a daily basis and TV viewing behavior in the same households were examined. The purchases made by households that had seen TV advertising for brand A in the seven days prior were added to the pot with advertising effect. Other purchases were added to the pot without advertising effect. The groups were then compared, and the difference was indicated as a

**FIGURE 2:**  
ROI of TV advertising for the examined product groups



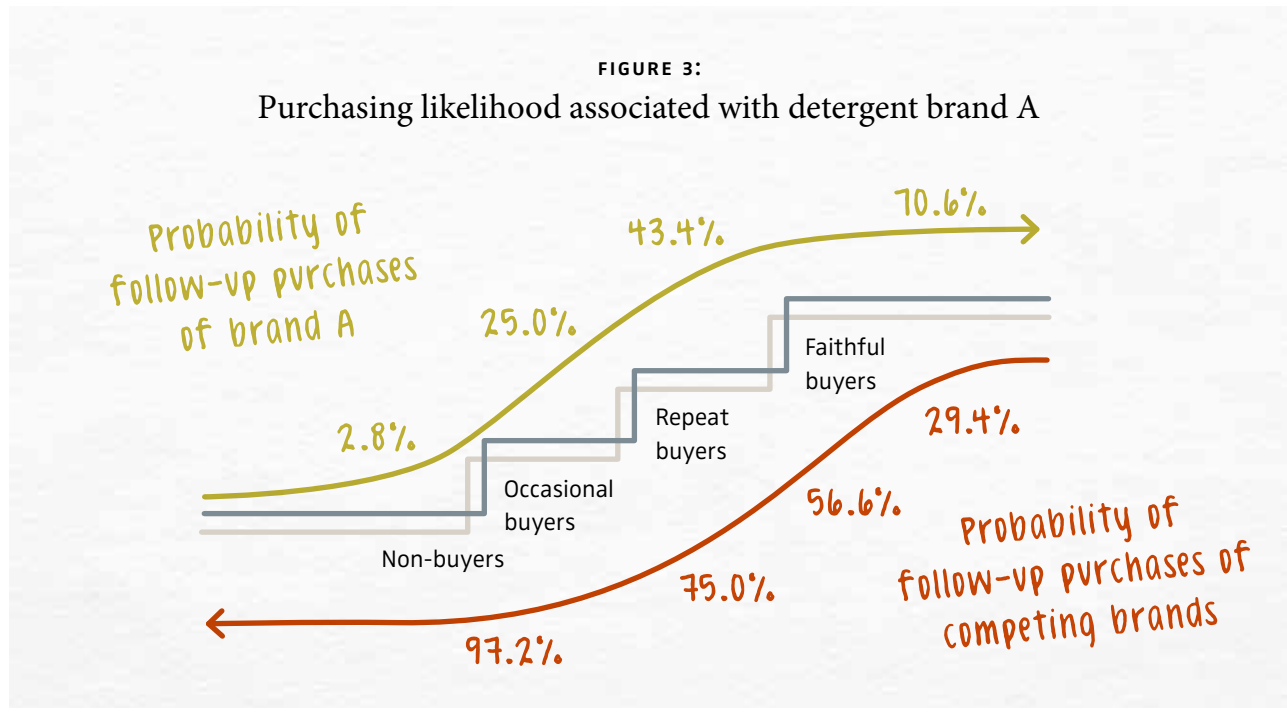
including umbrella brand effects of 139 brands; net-investment (average estimation based on Nielsen Media Research, ZAW)  
Source: GfK / SevenOne Media

STAS differential and translated into short-term advertising strength. For example, if the pot for the purchases motivated by advertising contained 12 % for brand A and the other pot just 10 %, the STAS differential was 12 % divided by 10 %, or 1.2, and the short-term advertising effect was +20 %.

Though the concept was intuitive, it was also criticized, as many factors such as socio-demographic criteria and key behavior differences between the two groups were not taken into consideration. It was also not possible to isolate the effects of other marketing initiatives, such as promotions, occurring at the same time. What's more, the system was only capable of measuring short-term advertising effects, as the name suggests. We focused on these critical points as we began the development process.

The first two problems were solved by explicitly incorporating into the model those variables whose influence could get mixed up with the influence of advertising in the analysis. This applies to socio-demographic factors, the length of time spent viewing the advertising and other marketing mix variables such as promotions.

We solved the problem of short-term effect by incorporating into our model consumer relationships with the individual brands and thus the strength of brand loyalty. The idea behind it is that every consumer occupies one of the rungs on the brand loyalty ladder before a purchase and can either move up or down with each purchase in the product group. If consumers have never purchased a brand, they are considered a non-buyer of the brand. When they make a purchase,



they become a first-time buyer and, with each subsequent purchase, a repeat buyer and then a loyal buyer. They maintain this position as long as they do not buy a competitor's brand. If they do buy a competitor's brand, they move down one rung, turning a loyal buyer into a repeat buyer and a repeat buyer into a first-time buyer.

Purchase likelihood can be calculated for each of the individual rungs. Figure 3 demonstrates these likelihoods using detergent brand A as an example. The likelihood that a non-buyer will buy this brand the next time they need detergent is just below 3%. For first-time buyers, it is already 25%, for repeat buyers an impressive 43% and for loyal buyers over 70%. These relationships are typical. This just goes to show that goods used on a daily basis are purchased out of habit and the more anchored a habit is, the higher the likelihood of a purchase.

Advertising effects over a longer period can be taken into account here because they are not only based on purchases but also on changes in brand loyalty. A move up the brand loyalty ladder means an increase in the likelihood of future brand purchases and thus stands for the long-term effect of the advertising. A simulation can then be used to determine the sales effects of the advertising (Box 1). The calculations for detergent brand A show that just over half the advertising effect can be achieved in the first year and the rest in

the following years. They also show that the additional sales resulting from the advertising amount to nearly five times the net advertising expenditure (Figure 4).

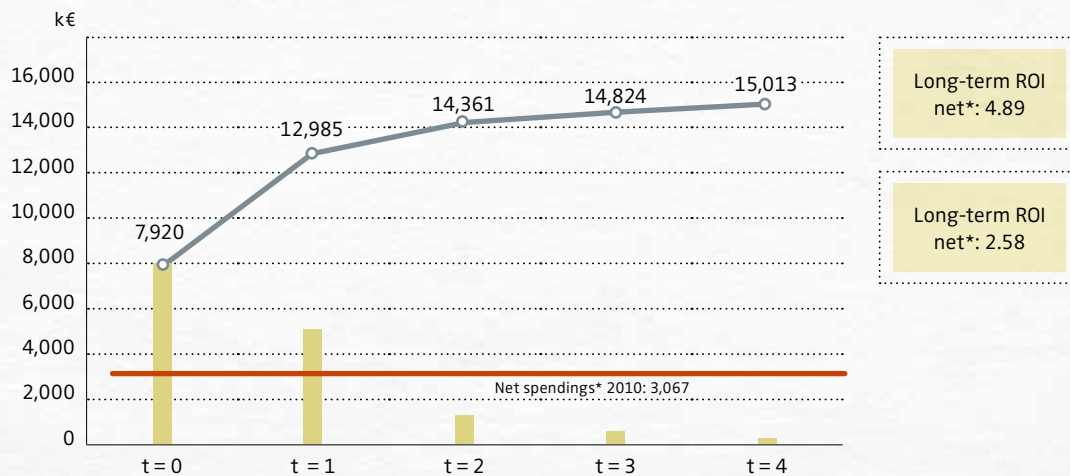
**Additional findings of the ROI study on 204 TV advertising campaigns** /// In addition to the fact that TV advertising was a worthwhile investment for two-thirds of the brands examined when viewed over the long term, there is a whole host of other interesting findings:

- > **Small budgets can also be effective:** Campaigns with smaller budgets were very successful. With the average budget for all 204 campaigns at € 3 million net, the ten smallest budgets were on average just € 0.6 million net. However, these were also able to achieve an average ROI of 2.5.
- > **Umbrella brand strategies increase the advertising effect:** When it comes to umbrella brands, it is necessary to not only consider the ROI for the advertised products but also the effects for the other products of the umbrella brand. At 1.8, the average ROI for the advertised product of an umbrella brand is almost as high as that of individual brands at 2.0. But umbrella brands also enjoy an effect amounting to 1.2 times the advertising expenditure for the other products of the umbrella brand, so that the overall ROI of the umbrella brand advertising is 3.0.

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**FIGURE 4:**  
**ROI of detergent brand A**  
 Additional sales per year resulting from  
 advertising spendings in 2010



\* Net-spending (average estimation based on Nielsen Media Research, ZAW)

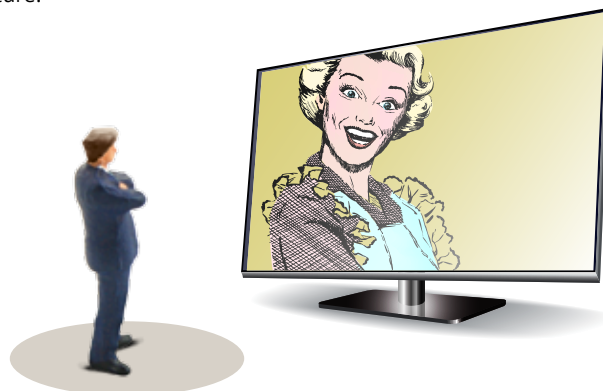
- > **Consistent motifs are more effective:** We analyzed the relationships between the design of the advertising and the ROI for the laundry product campaigns. We found that, on average, consistent motifs achieve higher ROIs than changing ones. This suggests that the fear of overexposure is often unfounded. In fact, advertising has to be learned, which requires repeated viewing.
- > **Informative content extends the length of the effect:** Advertising should not only work with emotions but also provide information. Advertising campaigns that provide information have a longer effect than those that work purely with emotion. Yet complex commercial staging has little effect on the ROI.

#### **How brand managers can profit from ROI analyzer ///**

Brand managers have plenty of opportunities to invest in their brand. In addition to advertising and in particular TV advertising, promotions and product listings compete for limited budgets. Now that we are able to determine both the short and long-term effects of TV advertising, we can compare them with the effects of other measures and thus create a foundation for optimal budget allocation. The database we developed with 204 brands also makes it possible to identify success factors for TV advertising.

An expansion to include print advertising in 2015 is being tested. Online advertising can also be evaluated if the advertiser and their agency work together. Both adaptations can be applied to goods used on a daily basis. Incorporating other product groups would be much more difficult and is not planned in the near future.

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## FURTHER READING

**Jones, John Philip (1998):**

How Advertising Works, Sage Publications 1998

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How to Measure and Judge TV Ads’ Effectiveness with Single Source Data,” from the seminar The Revolution in Panel Research, ESOMAR, Munich and Amsterdam 1997