"Amaze Your Customers and Boost Your Profits by 10, 20 or 30% With Spectacular Findings from Survey Data."

How Consultants and Market Researchers Turn Their Customers Into a Life-Long Cash Source Using Latest Cause-Effect Analysis

By Frank Buckler, PhD (Cologne, Germany) - Printable version

Sitemap

Why do your customers buy from you?

Is it because you are the cheapest or because **you are an expert** in a specific field? How would **it boost your business** if you extend your services with another highly differentiated field, **overnight**? How would you be able to amaze your customers, if you drew mind-blowing causal-effects insight from survey data, which where not possible until now?

As **you read every word of this article,** you will learn why existing causal analysis methods are of limited use, why nobody until now developed a solution, which exiting oportunities arise thru a potential new methodology and most importantly how you will be able to profit from it tomorrow.

Why are existing causal analysis methods like LISREL or PLS of limited help?

First of all, they are complex and demand a lot of methodical knowledge. Even worse, to apply the methods you need to know all cause-effect relations in advance! And if you do, it only helps you to determine the magnitude and significance of relations. However, most practitioners know that in many cases **we do know too little about the true interdependencies of variables.**

Not enough that today's methods require comprehensive knowledge about the relation network, they also assume every effect to be linear and every two causes to be independent from each other. Although there might be attempts to circumvent this – if you do not know the property of the effects in advance, **today's methods do not help at all.**

As a consequence, **most causal analysis studies are "*wrong*"!**

Professor Hennig-Thurau and I took a deeper look into four arbitrarily chosen datasets, published in the world's most reputed scientific journals "*Journal of Marketing Research*" and "*Journal of Marketing*". We found in ever study clear indications for other unknown relations, for nonlinear effects or interactions. If worlds leading researcher fail to sensibly exploit today's causal analysis methods, how should ever practitioner do so?

If problems are so obvious,

The short answer is: The solution is not obvious.

The detailed answer lies in the following four reasons:

- First of all, the mathematical paradigms of today's methods (Structural

Equation Modeling) are not suited to solve exploratory problems. Because of this it is hard to think of an improved Structural Equation Modeling method that solve the problem.

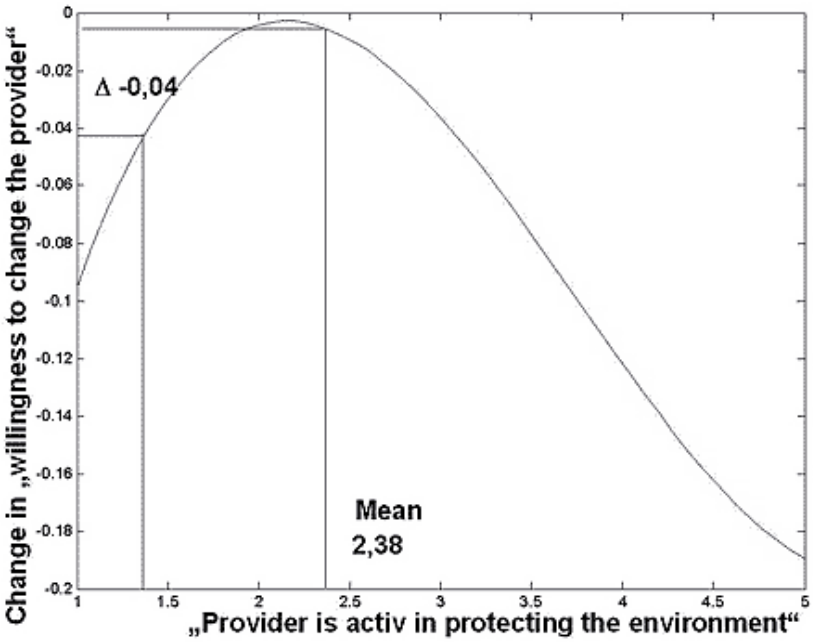
- Furthermore, the Structural Equation Modeling research community is dominated by a confirmatory research approach and often **simply does not belief in a solution** to this obvious problem.
- Modern multivariate and exploratory methods as Artificial Neural Networks experienced major developments just in recent years.
- Latest methods such as Artificial Neural Networks were not suited since they suffer from the Black Box Problem: they increase predictive performance but fail in conveying the "why".

Imagine a solution ...

... that is able to explore cause-effect-relations with little a priori knowledge… that is able to reveal u-shape relations if existent… that shows you that improving sales only works if you deploy direct marketing and radio advertising jointly.

Imagine …

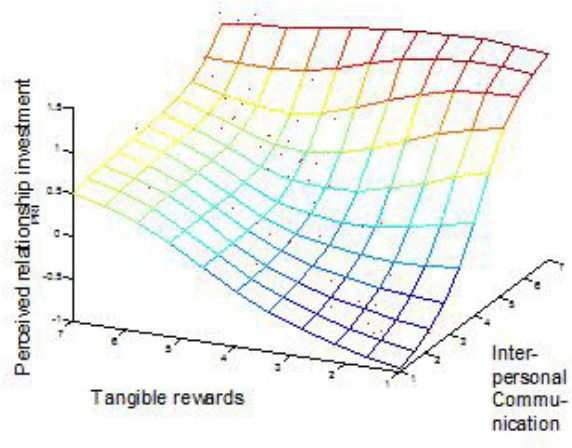
… a regional utility provider asks you to figure out: "How does a green image improve customer loyalty?". Imagine you present an analysis result as this:



Here is what you tell the customer about the graph: "Dear Mr. Customer, a moderately green image is perfect and we are today already close to perfection. By focusing on green initiatives you might win some 'tree hugger'. All other customers get the impression that you would waste money instead of lowering prices." The customer is exited – the stop of a wrong-leaded image campaign saves him 2 million. You get your fair share of the value when being hired for the next job, which he is immediately planning with you.

Imagine ...

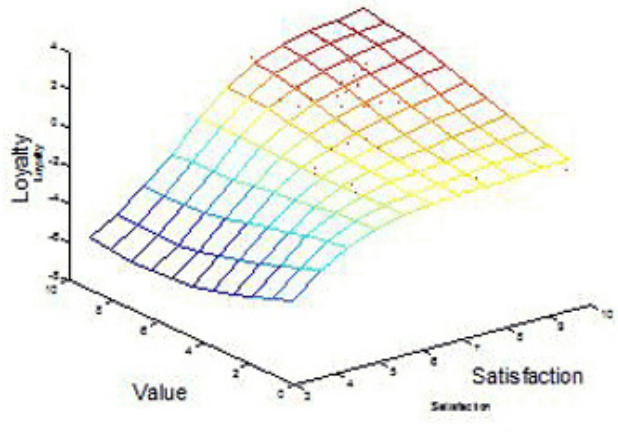
… **a woman cloth retail store chain** wants to boost profits. You find out that perceived relationship investment is a main prerequisite for repetitive purchases. With your analysis you show…



… that excellent interpersonal communication with customers is doing all the work. Expensive "tangible rewards" (especially free gifts as shoe polish) are only an alternative but a less effective tool. Just by skipping that, you cut 1,5% of overall costs, which boosted his profit by almost 30%. After this job, you are a life-time consultant of this corporation.

Imagine ...

… a national cellular network corporation ask you to find the specific driver of customer loyalty. Your analysis reveals the following graph:



Using this, **you teach your customer** the following lessons:

- Medium satisfaction is sufficient to keep customer loyal
- Unlike textbook theories, "value for money" has a direct causal influence on loyalty
- High perceived "value for money" increase loyalty **only** if a customer is already satisfied

Again you help your customer to craft a very efficient strategy that focuses on eliminating "satisfaction killer" instead of "getting perfect". Complain-response process get optimized. Instead skipping some discounts for unsatisfied customers save the company 1,5 million.

After that: What do you think **your customer is willing to pay for your service**, next time?

Which methodology can do this all?

Here is how everything started: As a student I dreamed to be able to forecast stock prices. I started a 5 year research into Artificial Neural Networks together with my friend Harun Gebhardt. In 1999 we launched Profit-Station.de, were the proven performance can still be experienced today. In the same year I started my PhD studies – with the ambitious aim to reinvent causal analytics – the "crown jewels" of social science researchers. In 2001 I published the book "NEUSREL" –describing a causal analysis methodology using the same Artificial Neural Networks methodology which already made Profit-Station work. In the following years the method were deployed and refined in many research and consulting projects. After several improvements – mainly stimulated by Professor Hennig-Thurau - I renamed the method into "Universal Structural Modeling" (USM). USM is a result of 15 years of my dedicated research.

How does USM work? Causal-effect networks are built in two steps:

1. The measurement level, where survey data get compressed to latent variables
2. The structural level, where causal-effect relation between latent variables are analysed

At the measurement level I use principal component analyses to compute the latent variables. At structural level a specific Neural Network is trained for every dependent latent variable, determining the influence of all latent variables. The type of Neural Network used ensues that irrelevant effect path' are killed. The black box problem is mainly tackled by a methodology introduced by Plate in 1998. It allows visualizing the separate causal effects. That's it.

I don't want to go into lengthy detail at this point. If you like to know more, the best way is to consult my latest scientific article published in "*Marketing – Journal of Research and Management*" which I co-authored with Professor Hennig-Thurau.

Interested readers I give the opportunity to get this article for free as a PDF per Email. Send an Email with your Name, Phone, Position and Organisation to usm(at)neusrel.com.

How you profit from USM?

A lot of readers asked me how they could profit from USM in their business. In order to enable a quick and cheap start, first-time users can use my analysis service. You fill an Excel-template with data and option settings – and I run the calculations and send you the results per Email. Take advantage of it to experience USM by yourself.

For frequent users of USM I provide a **software licence.** See here to learn about a limited trial occasion.

Here some **reference users** that already used USM:

- **GFK Trustmark**
  (GFK is Europes largest market research firm)
- **Strategy & Marketing Institute GmbH**
  (this is the consultancy founded by my doctorial supervisor Professor Wiedmann)
- **Buxel Unternehmensberatung**
  (specialized management consultancy for nutrition industry)

What **experts** say about USM:

- "I had the chance to read the book NEUSREL in 2001 as an early draft. Within the scientific tradition of data-mining, I believe that both NEUSREL and Universal Structure Modeling (USM) add a powerful instrument to uncover hidden, more complex, and perhaps meaningful relationships among variables."
  Prof. Dr. Dr. Rene Weber, University of California at Santa Barbara, USA
- "I use USM whenever I am working on a problem that falls within its capabilities, for example, to estimate structural equation models with many nominal variables such as gender. In the field of customer confusion we found that confusion is particularly prevalent among medium-income consumers, whereas low- and high-income consumers employ buying heuristics that shield them from confusion. A simple finding, however one we would have never found without USM",
  Professor Dr. Gianfranco Walsh, Strathclyde Business School, University Glasgow & University of Koblenz
- "We are planning to apply USM for communication controlling and planning in the advertising-intensive food industry. We estimate to save companies a considerable part of their communication spendings",
  Professor Dr. Holger Buxel, University of Applied Science Muenster
- "I used to be a strong advocate of Structural Equation Modeling methods. After many long fruitful discussion nights with Frank, I have to admit: USM is simply what was missing - not only in science. It is the missing link which brings causal analysis into practical applications",
  Professor Dr. Alexander Klee, University of Applied Science Flensburg

How to summarize all said?

Todays causal analysis methods are design to test existing theories and are not designed to explore new pathes, unknown nonlinearities and moderating effects. But exactly this is needed to be useful in practical applications.

A solution to this problem was not developed so far since scientific community did mainly ignored the practical issue. Furthermore it was nessessery to pursue a methodically new approach. Die foundation to this new aproach where just developed in the last years. Because of this a method as USM where only possible since then.

USM (Universal Structural Modeling) is a new causal analysis using artificial neural networks, which plays for the following advantages ...

1. **Exploration:** Less a priori knowledge needed
2. **Nonlinearity:** Explores (even unknown) nonlinear relationships
3. **Interactions:** Finds, shows and quantifies interactions between causes
4. **Universality:** Makes use of arbitrary distributed variables. Especially nominal scaled variable as gender, profession, brand name, etc. And: it is able to model circular causal networks – no need to distinguish between endogen and exogenous variables.
5. **Quantification:** No matter if for path strength, linear path coefficient, interaction strength or significance figures, every important property get quantified.
6. **Simplicity** – Easy to use, no need for detailed option settings.

Clearly, numerous success stories show the huge value USM delivers. In nearly every sizable corporation the deployment of USM can save millions in costs and foster for millions in additional profits.

With the aid of my analysis service and a test of a software licence, you have the chance to experience the potential of USM on your own data. This is your step towards amazed loyal customers, which will lead to significant additional profits.

Analysis Service:
You take advantage of an analysis service to experience USM by yourself.

Software Licence: You learn about your limited trial occasion for a software licence.

Limited to 15. September 2008
I will analyse for readers one dataset at NO costs (without Bootstapping) including my interpretation. The actual value of this service is US$ 600 ! Don't miss this occasion and send an email to buckler(at)neusrel.de

Latest note: Please be patent, since I have to manage the workload.

…and let me know of every exiting discoveries you made with the use of USM.

Frank Buckler
Email: Buckler(at)neusrel.de

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disclaimer