

Market Participants Should Proceed Resolutely with SEPA Migration

You Reap What You Sow! Differences in Knowledge Exchange Effectiveness Between Communication Types

Security Risks in Cloud Adoption – A Study in the Financial Industry

Education – The Key to Investor’s Success





Impressum

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Gestaltung
Novensis Communication GmbH
Bad Homburg

1. Ausgabe, 2014
Auflage 1.600 Stück

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Printed in Germany
ISSN 1866-1238

Editorial

Market Participants Should Proceed Resolutely with SEPA Migration

Carl-Ludwig Thiele

Two years ago, European legislators passed the SEPA end-date Regulation (No 260/2012) stating February 1st, 2014, as the end date for the legacy credit transfer and direct debit schemes. The European Commission proposed on January 9th, 2014, that payment service providers should be allowed to continue accepting legacy credit transfers and direct debits until August 1st, 2014. This would postpone the end date for SEPA by six months. The proposal can enter into force if endorsed by the European Parliament and the Council of Ministers. The time and effort invested in the change-over has not been in vain – SEPA is definitely coming. Under no circumstances should the European Commission's proposal cause uncertainty among market participants as they prepare for migration. They should proceed resolutely with their SEPA projects and assume that the change-over will take place on February 1st, 2014, in order to benefit from the advantages of the Single Euro Payments Area.

The European Commission's proposal does not alter the fact that SEPA will put an end to the national borders in payments.

SEPA offers concrete advantages in payments:

- SEPA means that cashless payments can now be made across Europe as simply and securely as within national borders.
- SEPA will intensify pan-European competition. As a result, users of payment services all over Europe – including those countries where payment procedures were perhaps not quite as efficient as in Germany – are likely to see the quality of service improve over the medium term.
- SEPA will give users the freedom to hold an account anywhere in Europe. Individuals, enterprises and organisations will be able to take care of all their euro payment transactions, anywhere in Europe, from just one account.
- SEPA will allow enterprises to manage their liquidity more simply and efficiently, thanks to reduced complexity, fewer interfaces, and the automated use of remittance reference information in business accounting systems. This could be particularly beneficial for the many small and medium-sized enterprises in Germany that operate in other EU countries.
- The SEPA direct debit scheme will allow the



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Member of the Executive Board
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use of direct debits across national borders for the first time.

- SEPA will pave the way for innovative payment solutions such as mobile and online payment schemes.

SEPA will herald a technical standard in European payments that will set a new benchmark for payments around the world. Europe will be the world's first currency area to convert its entire payment system to the state-of-the-art ISO 20022 XML standard. For instance, the DTA format has been the technological foundation for German retail payments since 1975. SEPA will thereby make a major contribution to enhancing Europe's competitiveness. Unlike the single European currency in its physical form, in cashless payment systems the national schemes and the new SEPA scheme currently coexist. These schemes have been operating in parallel since January 2008, with national and European credit transfer schemes being offered side by side. For direct debits, this state of affairs began in November 2009. Despite the fact that the introduction of SEPA may be postponed by six months, we are

now on the home stretch in our efforts to end this inefficient dual existence of services; the goal of creating a single market in cashless payments is just ahead. With this step, Europe will do justice to its position as the world's leading economic area in payment systems, too. After all, SEPA constitutes a veritable quantum leap in payments.

The introduction of SEPA will expand the present reach of payments many times over. To begin with, domestic and cross-border euro-denominated credit transfers and direct debits will be made via SEPA in all euro-area countries. More than 140 million credit transfers and direct debits are carried out in the euro area each business day. From October 2016, SEPA will also be available for euro-denominated credit transfers and direct debits in those EU member states in which the euro is not legal tender. This will give SEPA even greater reach than before. Moreover, the European Economic Area countries, together with Monaco and Switzerland, are also part of the SEPA area; thus, a total of 33 countries will be using a uniform technical standard for euro-denominated credit transfers and direct debits.

Research Report

You Reap What You Sow! Differences in Knowledge Exchange Effectiveness Between Communication Types

FOR KNOWLEDGE-INTENSIVE ORGANIZATIONS IN THE FINANCE INDUSTRY, AN EFFECTIVE KNOWLEDGE EXCHANGE AMONG EMPLOYEES IS CRUCIAL FOR THE COMPETITIVE PERFORMANCE. THEREFORE, COMPANIES INCREASINGLY RELY ON SOCIAL MEDIA PLATFORMS TO FACILITATE COMMUNICATION AND COLLABORATION. TO ENHANCE OUR UNDERSTANDING OF SUCCESSFUL COMMUNICATION IN ENTERPRISE SOCIAL MEDIA, WE APPLY HUMAN CODING AND QUANTITATIVE ANALYSIS TO THE CONTENT AND TONE OF 15,505 ENTERPRISE MICROBLOGGING MESSAGES CREATED BY 1,166 EMPLOYEES OF AN INTERNATIONAL FINANCIAL SERVICE PROVIDER. OUR RESULTS SUGGEST THAT A MORE FACTUAL-ORIENTED COMMUNICATION TYPE BENEFITS FROM A HIGHER KNOWLEDGE EXCHANGE EFFECTIVENESS COMPARED TO A PRIMARILY SELF-DISCLOSING COMMUNICATION TYPE.

Marten Risius

Introduction

Organizational knowledge is considered being the most important asset to differentiate a company from its contenders and achieve competitive advantages. Consequently, its utilization and effective management is pivotal for enterprises. A growing body of literature has demonstrated that Enterprise Social Media (ESM) is a promising solution to support collaboration and knowledge exchange among employees. Knowledge in this sense is not an immobile object acquired by an individual, but is actively co-constructed through social exchanges and collaborations in networks. Hence, the way individuals are connected in social net-

Roman Beck

works influences the acquisition, construction, and exchange of knowledge.

The necessary prerequisite of knowledge exchange is communication. For networked learning environments, literature suggests that different communication types (CT) can influence the structure of social networks, the diversity of relational linkages as well as business outcomes. However, no research has explored the different CTs in ESM and their role in knowledge exchange especially from a knowledge seeker perspective.

This study will examine the knowledge exchange

interaction via ESM from a communication perspective. Specifically, we assume that the way in which users typically communicate within an enterprise microblogging (EMB) platform influences their network structure – comparable to social networks – which ultimately affects the quality of knowledge they receive upon request. Therefore, we differentiate between four different communication styles (CS) on the single message level, based on the content and tone of the message, and a user’s overall communication type, as an aggregation of the individual CSs expressed in the messages. To do so, we analyzed a large dataset of EMB messages to explore *what kind of communication type users adopt* on the EMB platform. Moreover, we assess the quality of each answer to these users’ questions to examine *how communication types differ concerning effective knowledge exchange* from a knowledge seeker perspective.

Regarding the CS, we analyze each message through the lens of the distinguished “communication square” model of Schulz von Thun (2008), which differentiates four styles of a message: factual information, self-statement, relationship indicator, and appeal. This approach allows us to analyze the style of single messages without having to rely on self-report measures.

Theoretical Background

Knowledge and its exchange among employees is an organization’s key resource for maintaining a competitive advantage in the market. In this regard, ESM technologies have shown to be a promising solution to support collaborative knowledge exchange between an organization’s (distributed) employees. We consider knowledge exchange as a

dyadic communication process between two individuals, the knowledge seeker (recipient) and the knowledge contributor (source).

The quality of answers on Social Media platforms has largely been evaluated in the comparable terms of relevance, corpora, and recency. Due to given difficulties of applying these categories to the field of ESM in general and EMB in particular, ESM research has assessed the quality of answers by means of their helpfulness (Wasko and Faraj, 2005). We follow this approach to determine the quality of answers, since helpfulness is similar to the relation or relevance criterion.

By influencing the structure of a person’s social network, CTs substantially influence the process of knowledge creation and exchange. The commonly established idea that individuals exhibit personality-like differences in their general CTs resulted in numerous self-report CT indices. In this work, however, we will examine communication on a single message basis. By considering the tone and content of communication, we will first identify four potential communication styles within each message, and then derive overall CTs statistically. Given its potential to analyze single messages while respecting the complexity of communication, we build our analysis of CSs upon the “communication square” model (Schulz von Thun, 2008).

Based on the work on human communication, Schulz von Thun (2008) distinguishes in his seminal model of a communication square four different CSs within one message. He proposes that any message principally contains information on four “sides” (in metaphorical terms of the communica-

tion “square”): the matter as such (factual information), the sender (self-statement), the receiver (relationship-indicator) and the intended impact (appeal).

Empirical Study – Communication Types in Enterprise Microblogging

Out of the different Social Media technologies worth analyzing with respect to our research questions, EMB is considered one of the most pervasive forms of electronic communication, and as such, is a promising technology for improving knowledge exchange and collaboration in organizations. Despite practitioners’ concerns of productivity losses and information overload issues, scientific studies have already demonstrated the potential benefits of EMB in supporting collaboration and creating productive work environments. Accordingly, we suggest that especially EMB is a promising Social Media technology for fostering organizational collaboration and communication.

Analysis and Results

The main goal of our analysis is to identify different communication types and compare them with regard to the quality of knowledge they receive upon their questions. Therefore, we first categorized users into different CTs by conducting a cluster analysis based on the CS of the messages

Factual Information	Relationship Indicator	Self-Statement	Appeal
4,110	845	3,064	439
{86.4%}	{17.1%}	{59.5%}	{9.9%}

Table 1: Total and relative number of communication styles in EMB messages (sample size N = 6,306)

that they posted. The descriptive results (see Table 1) revealed that the most frequent CSs were factual information (86.4%) and self-statements (59.5%), while relationship indicators (17.1%) and appeals (9.9%) are rather uncommon.

Cluster analysis allowed us to identify groupings of CTs where variations in the CS are minimal within the group but maximal across groups. In reference to previous work by Naaman et al. (2010) in public MB, we labeled the first cluster “Informers” (N = 79) and the second cluster “Meformers” (N = 57). Figure 1 depicts the relative frequency of the CT within the sample and the mean average proportion of CS in the messages for each user as well as their inferential statistics comparison.

We addressed our second research question by comparing the two CT clusters concerning the average quality of answers they received upon their questions and the number of questions left unanswered. We assumed that a higher number of non-responded questions indicate a lower quality of knowledge exchange. Therefore, we conducted a MANOVA that revealed significant differences between CTs concerning both dependent variables. Based on these results, we thus conclude that users who send more factual information and appeal messages (“Informers”) receive significantly higher quality and more frequently answers than those who make more self-statements (“Meformers”).

Conclusion

The primary theoretical contribution of this work is our analysis of CT on Social Media platforms based on the established communication square

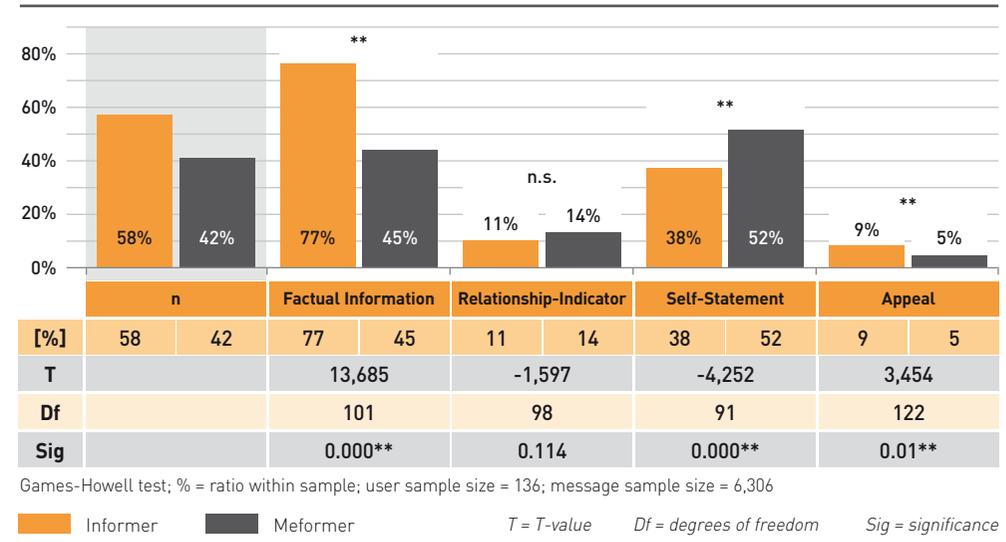


Figure 1: Post-hoc results on CS between CTs

model. Thereby, we consider and extend previously identified CTs. As a consequence, we found evidence for the existence of two different CTs. “Informers” primarily communicate factual information and appeals while “Meformers” focus on self-statements and less on factual information. The results of our analysis provide implications for practice in so far that it points out the importance of managing the CS on EMB platforms to support effective knowledge exchange. Informers’ questions are responded more probably and with higher quality than questions of Meformers. Therefore, it can be assumed that generally adopting a factual oriented CS is more rewarding when searching for answers than self-disclosing. As users seem to adapt their communicative behavior to the context, a strategic CS management should focus on the promotion of Informer-like behavior to leverage effective knowledge exchange.

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Research Report

Security Risks in Cloud Adoption – A Study in the Financial Industry

WHILE CLOUD COMPUTING PROMISES COST SAVINGS, IT ALSO POSES A VARIETY OF POTENTIAL SECURITY ISSUES. BASED ON INTERVIEWS WITH 12 EXPERTS FROM THE FINANCIAL INDUSTRY, WE ASSESS THE PRACTICAL RELEVANCE OF SELECTED SECURITY PROBLEMS FOR CLOUD ADOPTION IN THAT SECTOR.

Ulrich Lampe

Olga Wenge

Alexander Müller

Ralf Schaarschmidt*

Introduction

IT is undoubtedly among the most important production factors in the financial industry, given that the processing of information is the key element of practically all business processes in the regarded sector. At the same time, IT also constitutes a substantial expense post.

Given these aspects, cloud computing has recently raised the interest of companies in the financial sector. This paradigm promises to reduce IT spending through characteristics such as self-service, scalability, and pay-per-use pricing schemes.

However, our previous research has shown that cloud computing is also associated with a large number of potential security problems

(Lampe et al., 2012). Given the legal requirements and regulatory pressure that the financial sector is facing and the sensitivity of the data it operates on, these security issues may pose significant obstacles to cloud adoption.

In our work, we assess the relevance of selected security issues through a case study, based on interviews with multiple representatives from the financial industry. Accordingly, our leading research question is: *“To what extent do security concerns pose an obstacle for the adoption of cloud computing in the financial industry?”*

Methodology

We identified 23 potential security problems or risks in cloud computing based on a literature survey in our previous research (Lampe et al., 2012). Subsequently, we structured these problems using the ten domains of the so-called

CISSP (Certified Information Systems Security Professional) certificate, a comprehensive certification that covers diverse areas of IT security, ranging from the physical security of facilities to legal aspects (Conrad et al., 2010; Harris, 2010). Furthermore, for each problem, we identified the threatened security objectives using the classic “CIA triad” as a basis. It defines confidentiality (C), integrity (I), and availability (A) of data as primary concerns (Conrad et al., 2010).

In order to empirically answer our research questions, i.e., assess the relevance of the previously identified security problems, we chose the qualitative instrument of a case study. As primary data source, we selected personal interviews. While this instrument does not permit for statistical analysis of data and requires careful interpretation, it allows a targeted examination of a specific topic, and hence potentially more insights than a purely quantitative approach. As guideline for the interviews, we compiled a questionnaire consisting of approximately 40 items.

Based on this questionnaire, we conducted a series of 12 interviews with representatives of three German financial services companies. Two of these companies act in the international market, while one company is more focused on the national market. Each interview lasted approximately one hour, was digitally recorded, and subsequently transcribed into written text. Given the sensitive nature of our research, we

allowed for a subsequent editing and authorization step by the interviewees. The authorized transcripts were then analyzed using the method of *qualitative content analysis* (Gläser and Laudel, 2010).

Study Results

Due to space restrictions, we focus on a selected set of six security issues, for which we received the most extensive and insightful answers. An overview is provided in Table 1. For each issue, we briefly explain its significance and present the key findings of our study. A more extensive presentation can be found in our recent conference paper (Lampe et al., 2013).

Findings concerning “Insufficient Security Monitoring Policies”

Monitoring systems are seen as an important instrument to detect security glitches and take appropriate countermeasures. However, such mechanisms are seen as non-existent or rudimentary and poorly interoperable in the cloud computing domain (Ardelt et al., 2011; Heinle and Strebel, 2010). Due to this situation, the security objectives confidentiality, availability, and integrity may be threatened by cloud adoption.

According to our interview partners, monitoring solutions – preferably proactive, rather than reactive ones – are widely deployed within the existing IT infrastructure of the respective institutes. However, their capabilities are limited; as one interviewee put it, “monitoring everything is illusionary”, and hence, another

explained, “[companies] need to trust their employees from some point on”.

Concerning external cloud providers, monitoring is perceived as a suitable instrument to address security risks. However, as pointed out by our interviewees, this would require corresponding legal and technical arrangements with the cloud provider. In addition, for external cloud computing, the same limitations with respect to monitoring – e.g., the inability to

monitor on the level of individual data records – apply as for internal IT.

Findings concerning “Lack of Interoperability between Cloud Service Providers”

Various authors have previously identified the lack of interoperability among providers, resulting in the risk of provider lock-in or data lock-in, as one of the key obstacles for cloud adoption (Armbrust et al., 2010; Heinle and Strebel, 2010; Streitberger and Ruppel, 2009). While this risk

only threatens the objective of availability upon first sight, it may – in our opinion – also endanger data integrity and confidentiality due to the need for a conversion or migration processes, which may potentially be error-prone and insecure.

Concerning this issue, we received highly controversial statements in our study. Some respondents claimed that services are becoming increasingly standardized, leading to improved interoperability and thus the inability of cloud providers to lock in their customers. One interviewee explicitly noted an ongoing convergence process in the cloud market, saying that individual providers would soon be exchangeable, similar to “cellular providers” today.

In contrast, another group of respondents saw the risk of lock-in as “fundamental inhibitor” for cloud adoption, specifically in public clouds where users only control “very small segments [of the overall IT infrastructure]”.

Findings concerning “Abuse of Administrative Privileges or Rights”

While the abuse of administrative privileges has been a well-known security problem for many years, it is aggravated in cloud computing, most notably due to a lack of transparency concerning the hiring or monitoring policies of services providers (Hubbard and Sutton, 2010). The problem specifically applies for infrastructure services, where cloud administrators may gain access to virtual machines and data residing on them (Ardelt et al., 2011),

thus threatening all three aforementioned security objectives.

Our respondents saw the abuse of administrative privileges as a “valid scenario” with “a massive potential for abuse”. Hence, external parties and their staff members would have to be subjected to the same control systems, involving measures such as background screening, as internal employees.

At the same time, our respondents acknowledged that while such procedures may be legally negotiated, their correct implementation could not be fully validated. Based on that notion, one interviewee said that “highly sensitive data cannot be outsourced”. However, the use of encryption and exclusive ownership of the corresponding encryption keys may provide a technical solution to prevent abuse.

Findings concerning “Abuse or Theft of User Accounts”

Theft of user accounts has grown into a considerable problem in recent years, e.g., based on attack methods, such as phishing or the exploitation of software vulnerabilities (Hubbard and Sutton, 2010). While the problem is not exclusive to cloud computing, this paradigm opens additional attack vectors and brings new risks, such as the exploitation of cloud resources for attacks on third parties (Hubbard and Sutton, 2010). As can easily be reasoned, the abuse or theft of user accounts threatens all three considered security objectives, i.e., confidentiality, integrity, and availability.

CISSP Domain	Problem or Risk	Threatened Security Objective	Sources
Information Security Governance and Risk Management	Insufficient security monitoring policies	C, I, A	Ardelt et al., 2011; Heinle and Strebel, 2010; Hubbard and Sutton, 2010
	Lack of interoperability between cloud service providers	C, I, A	Ardelt et al., 2011; Armbrust et al., 2010; Streitberger and Ruppel, 2009
Access Control	Abuse of administrative privileges or rights	C, I, A	Ardelt et al., 2011; Hubbard and Sutton, 2010
	Abuse or theft of user accounts	C, I, A	Armbrust et al., 2010; Conrad et al., 2010; Hubbard and Sutton, 2010
Business Continuity Planning and Disaster Recovery Planning	Failure of the communication link or data center	A	Armbrust et al., 2010; Conrad et al., 2010
Legal, Regulations, Investigations, and Compliance	Migration of data between different data center locations	C	Ardelt et al., 2011; Streitberger and Ruppel, 2009

Table 1: Overview of considered security problems that were examined in our study (Abbreviations: C – Confidentiality; I – Integrity; A – Availability)

Most interviewees in our study judged the abuse of user accounts as practical or even “inherent” risk. Hence, as similarly proposed for the previous issue of administrative privilege abuse, one respondent argued that “service providers have to be incorporated into the [internal] security measures”.

As potential countermeasures, “certificatebased authentication” was proposed, and the importance of “appropriate processes” was stressed. This specifically includes training measures among employees to raise awareness for attacks that target user credentials.

Findings concerning “Failure of the Communication Link or Data Center”

A lack of service availability is considered among the top obstacles for cloud adoption by Armbrust et al. (2010). Service outages have various reasons, ranging from software bugs to natural catastrophes (Conrad et al. 2010). Specifically, the former may not be restricted to individual data centers, but may concern all services of a cloud provider.

Our interviewees explained that – despite the perception that cloud computing mostly relies on public networks – private communication lines are preferred. Hence, handling of outages is primarily addressed through legal arrangements. However, technical measures, such as redundant lines, also come into play.

In the current IT infrastructure, mirroring strategies are applied for data centers, with these measures being constantly verified through simula-

tion and auditing. Hence, a cloud-based infrastructure would have to provide for similar redundancy, with one respondent explicitly saying that “a cloud scenario would require the practical ability to replace a data center”.

Findings concerning “Migration of Data between Different Data Center Locations”

Ardelt et al. (2011) identify the uncertainty concerning the physical location of data as main difference between traditional IT outsourcing and cloud computing. In (public) clouds, data is potentially moved between different data centers and hence jurisdictions. Thus, cloud users may violate legal or regulatory requirements, specifically when sensitive data – such as prevalent in the financial industry – is concerned. Depending on the applicable laws, authorities may gain access to the data and threaten its confidentiality.

The participants of our study perceive the potential migration of data between physical locations as problematic. In general, data is classified according to the applicable regulatory requirements, resulting in three perimeters, namely Germany, the European Union (EU), and (unsafe) third countries. Accordingly, data has to reside within the matching physical locations. In this context, the safe harbor agreement – which permits data transfer to the United States under certain conditions – is seen as insufficient, because “American authorities have comprehensive [data] access rights in the case of legal investigations”. However, legal agreements are generally perceived as suitable means to ensure data safety.

Summary

In conclusion, with respect to our initially stated research question, our case study confirms that security problems pose an important obstacle for cloud adoption. While some of these issues may be resolved through technical measures, such as the use of more sophisticated authentication mechanisms or monitoring solutions, others – most notably uncertainty about data location – will likely remain challenging in the future, since they result from the inherent properties of cloud computing. Hence, we believe that a focus of financial service companies will remain on the adoption of internal, private clouds in the future, potentially complemented by the use of public clouds for less security-sensitive applications.

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Insideview

Education – The Key to Investor’s Success

INTERVIEW WITH ANDREAS HACKETHAL

Prof. Hackethal, you recently launched the blog “Deutschland lernt sparen”. What was your motivation for the blog and the video clips?

It was actually our own empirical work that triggered the blog. Our data on thousands of retail investors told us the same stories over and over again: Due to poor investment decisions, people leave a lot of money on the table. The performance gap is more than four percentage points per year for the average investor. Unfortunately, professional financial advice is no panacea. We find that many clients do not adhere to the advice, even if the advice is of high quality and adherence would be fully in the clients’ interest. Fresh ideas are needed to overcome the widespread cognitive and behavioral gaps in the population. Our initiative is a modest attempt to identify new ways to close the cognitive gap.

What other measures could be helpful in closing this gap?

I see at least two additional measures that might work as complements to financial education. One is to use technology to equip households with better information on their

current financial situation. For example, the citizens of Denmark and Sweden have real-time access to comprehensive information on their individual pension claims from public, occupational, and private schemes. They can read their pension gap off their mobile phones. People in Germany would also greatly benefit from this transparency and advisors would gain a solid basis for their recommendations. The second measure is a sound reporting standard for retail brokerage accounts. Today, it is virtually impossible for retail investors to learn from past investment mistakes such as low diversification, bad market timing, and excessive cost. If they obtained concise information on their portfolio risk and return and how they fared as compared to other investors, this information would give solid guidance for future investment decisions and the choice of an advisor.

What about additional regulation for financial institutions? Would this improve investor decision-making?

I believe that bank regulation on investor pro-



Prof. Dr. Andreas Hackethal
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Dean, Faculty of Economics and
Business Administration, Goethe University

tection is not a sufficient measure. Additional product documentation and mandatory transcripts of advisory meetings have limited potential to change client behavior when clients are not prepared to comprehend the information. Further regulation is therefore no substitute for better investor education but rather a complement.

Are there already some lessons learned from your financial education initiative?

Our video clips on basic investment rules sparked off many questions from the viewers. Some questions indicate that videos are indeed a promising tool to reach a wider audience and to convey basic concepts. However, many other questions indicate that viewers are not fully prepared to implement the basic concepts on their own. The current content on Deutschland-lernt-sparen.de might help narrow the cognitive gap, but it is definitely not sufficient to close the behavioral gap.

We will therefore produce a second series of videos. The new videos will demonstrate how

to apply the basic concepts in practice. We can certainly also polish the format of the videos and produce different versions that cater to people from different backgrounds. It would also be exciting to use the content as part of other edutainment formats.

How does this initiative relate to your research at E-Finance Lab?

Our layer “Customers in E-Finance” investigates how new technologies enable financial institutions to add more client value. This requires a thorough understanding of investor decision-making and of how institutions can improve decision quality. Technology will certainly allow financial advisors to add more value, but it will also lead to the emergence of new businesses that cater to self-directed investors. The initiative allows to challenge some of our own assumptions on value propositions to retail investors.

Thank you for this interesting interview.

Infopool

News

New Colleagues

Jascha-Alexander Koch joined Prof. Dr. Peter Gomber's team in layer 2 of the E-Finance Lab in August 2013. He holds a Master's degree in Industrial Engineering, Specialized in Electrical Engineering from the University of Braunschweig, Institute of Technology, where he completed his studies in April 2013. In his research, Jascha-Alexander will focus on risks in the transforming financial industry.

Alexander Vetterl joined Prof. Dr. Wolfgang König's team in layer 1 of the E-Finance Lab in November 2013. He holds a Master's degree in Management and Information Technology from the University of St. Andrews, where he completed his studies in October 2013. In his research, Alexander will focus on IS enabled support for operative processes in the financial services industry.

Best Paper Nomination

The work of Marten Risius and Prof. Roman Beck (layer 1) on "You Reap What You Sow? How Knowledge Exchange Effectiveness is Affected by Different Types of Communication in Enterprise Social Media" was nominated for the best paper award at the 47th Hawaii International Conference on System Sciences.

"Meet the Best Students"

On November 5th, 2013, the E-Finance Lab invited all industry partners to a "Get-in-Touch" event with the best students from Frankfurt and Darmstadt. All professors invited last year's best bachelor and master students from the areas of finance, marketing, informatics, and information systems. Over 50 students got the chance to personally meet representatives of various EFL industry partners Deutsche Bank, Deutsche Börse, IBM, Interactive Data, and Union Investment Group.

E-Finance Lab is a partner at "BITKOM Big Data Summit 2014", March, 26th, Hanau

The conference will cover business opportunities of Big Data in a number of different industries and there will be a full track on the financial service industry. Partners of the E-Finance Lab such as IBM will present their research work in this area. For more information, see <http://www.bitkom-bigdata.de/> or contact Professor Skiera (skiera@wiwi.uni-frankfurt.de).

E-Finance Lab Spring Conference 2014

The E-Finance Lab cordially invites you to its annual Spring Conference. The event will be held on January 30th, 2014, at Campus Westend of Goethe University Frankfurt. Participants have the chance to discuss the topic "Aspiration and Reality in Retail Banking – Which business and regulation models do (not) work out?" with speakers from the academic and business world. In this context, we are specifically proud to announce economist Stephan Siegel from the University of Washington as our key note speaker. Please find further information on our Web site (<http://www.efinancelab.de/>), where you can also register for the event. The participation is free of charge.

Selected E-Finance Lab Publications

Barrot, C.; Becker, J.; Hinz, O.; Skiera, B.:

Superspreader – Welche Kunden sich für Virale Marketing-Kampagnen eignen.
In: Planung und Analyse, 30 (2013) 4, pp. 32-34.

Bhattacharya, U.; Loos, B.; Meyer, S.; Kaesler, S.; Hackethal, A.:

The Dark Side of ETFs and Index Funds.
In: Proceedings of the 40th Annual Conference of the European Finance Association, Cambridge, United Kingdom, 2013.

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Infopool

RESEARCH PAPER: GAME THEORETIC MODELING OF COOPERATION AMONG SERVICE PROVIDERS IN MOBILE CLOUD COMPUTING ENVIRONMENTS

Mobile cloud computing combines wireless access service and cloud computing to improve performance of mobile applications and enhance the resource utilization and the profit maximization of service providers. In this regard, Niyato et al. examine building coalitions between cloud providers as a novel approach to optimize the capacity expansion and maximize the cloud providers' monetary benefits. The authors consider cooperative game theory and the Nash equilibrium principles in their approach and propose admission control and revenue sharing strategies for building cloud provider coalitions and resource pool for mobile applications. Furthermore, the authors provide numerical results of their approach with three mobile clouds and fifteen service areas, which illustrate the improvement of cloud providers' capacity and profit by entering such cloud coalitions.

Niyato, D.; Wang, P.; Hossain, E.; Saad, W.; Han, Z.

In: Proceedings of the 2012 IEEE Wireless Communications and Networking Conference, pp. 3128-3133.

RESEARCH PAPER: MARKET VALUE OF VOLUNTARY DISCLOSURES CONCERNING INFORMATION SECURITY

This article examines whether there is a value to the voluntary disclosure of information security incidents. Based on 1,641 disclosing and 19,266 non-disclosing firms, the authors found strong evidence that voluntary disclosure of security incidents is associated positively with the market value using the stock price of a firm. However, for both the finance and banking industry the results indicate that voluntary disclosure does not have any effect on firm's price. The market simply expects firms to pay a high level of attention to information security as these industries are heavily regulated by governments.

Gordon, L. A., Loeb, M. P., Sohail, T.

In: MIS Quarterly, 34 (2010) 3, pp. 567-594.

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The E-Finance Lab conducts two kinds of newsletters which both appear quarterly so that each six weeks the audience is supplied by new research results and information about research in progress. The focus of the printed newsletter is the description of two research results on a managerial level – complemented by an editorial, an interview, and some short news. For subscription, please send an E-mail to eflquarterly@efinancelab.com or mail your business card with the note "please printed newsletter" to

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