MODUL UNIVERSITY VIENNA
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ONLINE BRAND ESTABLISHMENT FOR A NEW SCIENTIFIC TERM

Building digital brand awareness in real estate development, what online channels are the most effective to establish a new scientific term - “Smart Occupancy” - in the research field?

Master Thesis submitted in fulfillment of the Degree

Master of Business Administration

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AFFIDAVIT

I hereby affirm that this Master's Thesis represents my own written work and that I have used no sources and aids other than those indicated. All passages quoted from publications or paraphrased from these sources are properly cited and attributed.

The thesis was not submitted in the same or in a substantially similar version, not even partially, to another examination board and was not published elsewhere.

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ABSTRACT

This thesis aims to tap into a neglected research field: online branding for science with the help of selected, significant online tools. Classic and even online marketing and branding itself have been transforming rapidly, some industries require above average adaptation in the daily operation. However, ***science, in the field of online branding has not had so far, a hyped research period or fame***, with the advantages of online presence and existence. For that reason, the establishment and future development of online science-branding should get also highlighted attention.

In this experiment, we have tested some selected online social media channels and their power of generating traffic to an informational website. Our aim was to observe the build-up phase and online establishment of the real estate development term "Smart Occupancy": how many interactions, impressions and what grade of engagement can be generated to a newly built website or web page with static and dynamic content in 8 weeks, via 8 posts, with the same posting strategy on various social media channels. The experiment, research material, and the results intend to build a starter-kit, guide for online presence establishment in science and provide further direction for future strategy and long-term online content management.

ACKNOWLEDGMENTS

A special thanks to Univ. Prof. Dietmar Wiegand and Dr. Lyndon J.B. Nixon, who were open to the idea to make this experiment happen as smooth as possible.

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LIST OF ABBREVIATIONS

API: Application Programming Interface

CRM: Customer Relationship Management

CTR: click-through rate

eWOM: electronic word of mouth

IoT: Internet of Things

KPI: Key Performance Indicator

SEO: Search Engine Optimizations

SEM: Search Engine Marketing

SMI: Social Media Intelligence

SMCM: Social Media Content Management

SMM: Social Media Marketing

SMO: Social Media Optimization

TU: Technische Universität Wien - Vienna University of Technology

GLOSSARY

Cross-tagging: adding non-relevant or partially relevant hashtags to posts to reach a larger potential audience

Cross-tagged content: social media post or content, using cross-tagging

IPRE: Institute of Property Management (ipre.at) – the institute behind Smart Occupancy research and establishment of the term

Property Management: "The process of managing property that is available for lease by maintaining and handling all the day-to-day activities that are centred around the piece of real estate. Property management may involve seeking out tenants to occupy the space, collecting monthly rental payment, maintaining the property, and upkeep of the grounds. Apartment complexes are handled by some type of property management company"[1]

Smart Occupancy: Intensification of building and space usage in unused times to avoid further establishment or space expansion. The term was established by Univ. Prof. Dietmar Wiegand (see references)

[1] (http://www.businessdictionary.com/definition/property-management.html) [Accessed on: 30 Nov. 2018]

1 INTRODUCTION

The aim of this paper is to investigate a rare but important research area. What if someone would like to spread a new scientific definition and establish its online presence only by using organic Search Engine Optimization and some chosen Social Media channels? Can be a "scientific brand", a scientific expression established just by using the same online marketing methods, as brand awareness would be built for a commercial product? The jungle of available online tools to boost any business can make anyone lose their focus quickly about the targets or the way to reach them.

Building any brand with a mixture of classic (mostly offline) and digital (online) marketing tools nowadays is a huge challenge. Finding the best mixture of them and applying them in practice requires a significant level of practical and theoretical experience. Smart Occupancy is the English scientific term for multiple uses of a definitive space in time (Wiegand and Wirth, 2017). With hospitality and hotel management background someone can confirm that hotels, meetings facilities' aim is to fill their space in the most optimal way and have the biggest possible revenue for a defined period (Pullmann and Rodgers, 2010) In addition, in industries like hotel business or airline companies the time factor is crucial in the business model: the product (in this case: tickets, rooms) can be sold only until a specific deadline and after this timeframe the product cannot be stored for a later transaction. The flight or a hotel room that was not sold on Tuesday, cannot be sold three times on another day and bring a triple revenue later on in another time slot. For that reason, the optimization of unused spaces in time has not just social but economic effect. E.g. unused spaces of a campus or congress center in off-peak can be used for charity events, that brings people to an unused spot, support creativity and further ideas of space use.

Properties, real estate assets have the same problem: topping bad occupancy utilization with not optimized or non-existing facility management anyone can multiply the amount of buildings' non-used time frames and slots. The term Smart Occupancy was established to avoid creating and generating more unused spaces and reduce the abandoned spaces in previously or at other times fully used, crowded places. Smart Occupancy also tries to meet stakeholders halfway: old rental contracts set barriers for modern facility management and office usage. Startups, small, midsized or even bigger companies struggle to find the best contracts for their offices to optimize their rental costs. One of the modern success stories is the We Work

co-working space, worldwide chain (www.wework.com); by setting new lease contracts with "modern" terms and having as many companies under one (in their case many) roofs as they can, the created one of the most flexible worldwide solutions, locally adjusted.

This thesis is taking the term "Smart Occupancy" under the loop of digital product branding. Can we take the steps of building digital brand awareness even if we do not want to commercialize a product? How does a scientific "product" influence the way of branding in the online era? Can a non-profit organization be as successful as a commercial product? What advantages and disadvantages does a non-profit organization have – in our case a research institute? Can we use online tools successfully for educational purposes for society?

Therefore, the research proposes the following hypotheses:

H1: "Awareness of the scientific term 'Smart Occupancy' can be increased by digital branding approaches"

H0: "Digital branding approaches do not influence significantly the awareness of the scientific term 'Smart Occupancy'"

In the following experiment, the focus was set on mixing theories with practice. From the beginning, highly empirical work has been provided with results, guided by continuous feedback and adjusted strategy. As an outcome, the frame of the long-term online brand strategy of Smart Occupancy via Search Engine Optimization and Social Media Management will be built on the result and conclusion of this paper.

With previous research, business development background and personal interest in digitalization, it was an exciting and challenging task to further research and investigate case studies regarding Smart Occupancy and building the online presence of the term in real estate development. The term was established by Prof. Dietmar Wiegand, the research initiative belongs to him and the IPRE (www.ipre.at) in cooperation with the Real Estate Development dimension of TU Wien – the Vienna University of Technology (www.red.tuwien.ac.at).

2 LITERATURE REVIEW - DESCRIBING THE PROBLEM

2.1 Introduction

Some years ago, a partner institute of IPRE published a research about online media's influence on real estate marketing (Hoyer 2014). However, the institute or the university faculty did not work on full staff in the past years, for that reason, there were no responsible colleagues who could start to build and develop the online presence of the Institute of Property Research (IPRE), the term or any of its products. Preparing and managing online content requires at least a part-time employee even at a small company. In addition, besides the current "smart" buzz words there is a created term "Smart Occupancy" and a tool built on it (www.more-space.ch). The term is originated from the German name "Mehrfachnutzung" – multiple uses. The institute and its partners' long-term goal is to educate people about Smart Occupancy and provide a commercial solution for non-optimized space utilization for offices, campuses etc.

Looking at fancy blogs and social media accounts anyone can think, building an online empire is not a big deal. However, dealing with the daily struggle by getting the right target audience, any online marketers will confirm it: this is not a piece of cake. Struggling through good and bad literature (classic and modern), web pages, blogs, videos or any written and audio materials, and actually finding the best working strategy for you and your product is the first big challenge that every brand manager has to take. Some of the current popular materials will just give an insight and a possible structure and strategy building as a good start, does not matter if it is employee branding, storytelling or influencer marketing (Sonntag, 2015; Rupp, 2016; Hennessy, 2018).

From the perspective of the research, this experiment aims to support the field of "branding for science" as this has not been a popular scientifically discussed story. With the rise of Social Media and the researchers' presence on Twitter has established some articles and reflections on them, although there are still not many researches to examine the success of "Social Media preaching". Open data in science and online science journal channels (Voytek, 2017) raise the question of branding to science or at least searching the right way to it. A recent study (Côté and Darling, 2018) examined researchers' Twitter account, their existing community and their significance to the researcher's profile. Their result shows, that science needs a power-

ful marketing strategy, PR and storytelling to attract decision makers, as they tend to follow rather "popular scientists" (accounts with more followers).

Although there are many types of research on social media and its influence, also some science fields use social media for different educational purposes (Chytas, 2018; Hwong et al.2017)

2.2 About Smart Occupancy

"Intensity of the use of buildings and open space over time is societal highly relevant for cities and metropolitan regions with rapidly growing numbers of inhabitants. Limited space, growing demand, and attractivity for investment in periods of low interest make up for a price rally in real estate. Smart Occupancy is aimed to make available more space without more buildings, traffic areas and other infrastructure while reducing the sealing of soils and urban sprawl." (Wiegand and Wirth, 2017)

Prof. Wiegand led - prior to the term "Smart Occupancy" - a study to examining the usage of educational centers, the occupancy of campuses and corporate offices with over 500 employees in Austria. The result of various studies showed that classrooms, some lecture halls, and office spaces are not used 90-95 % of their lifetime. These spaces require though heating, cooling, maintenance etc. like any used building. A conclusion of their summary states: the eco-friendliest buildings are the non-built buildings what can be substituted by the efficient use of existing buildings while they are unused. The intensification of unused spaces is Smart Occupancy. In their study they also pointed at the importance of the following fact behind the curtains: most of the facility managers and real estate developers do not even consider a higher usage or a better space-time-management of their managed building. Facility managers should consider a usage calculation of their buildings before they would think of space expansion.

There are few available researches especially based on Asian green buildings or smart, green occupancies and what do these terms mean to decision makers in daily life, how the buildings are used in the post-occupancy phase (Torunski et al. 2012; Li et al. 2018; Wang et al. 2018) as in Asia, Smart Occupancy could be a solution for overcrowded spaces. One paper mentions "smart occupancy sensors" (Garg and Bansal 2000); also, there are few consulting startups and their tools of smart occupancy sensors and their connected IoTs (https://jooxter.com). However, successful term establishment means, the term will be cited with its author and the

term will be used with its definition. The institute's aim is to reach this stage for Smart Occupancy in the future with the support of online marketing tools.

The term and the movement behind it are important factors especially for Smart Cities and societies who aim to build higher awareness of sustainability, share economy, asset utilization. In the City of Vienna, there has been an existing project coordination for "Mehrfachnutzung" – multiple uses – and the realization of a different kind of multiple uses to make communities, parts of the city, even whole districts more liveable (Kleedorfer, 2018). The website of http://smart-occupancy.org/ is dedicated to providing all the available information about Smart Occupancy, its publications and success stories.

The figure below (Figure 2-1) shows a search term comparison from the past 12 months between "smart occupancy" and "smart city". The difference between an online well-established and a non-established term is well displayed. If "smart occupancy" can reach half of "smart city's" success in the next two years, the future online presence strategy should be then considered successful. Smart Occupancy is used at the moment almost exclusively in the context of "smart occupancy sensor" what does not match 100% with the idea behind the term of "Smart Occupancy" and it is rather the first adjective of the sensor than occupancy (smart sensor vs. smart occupancy).

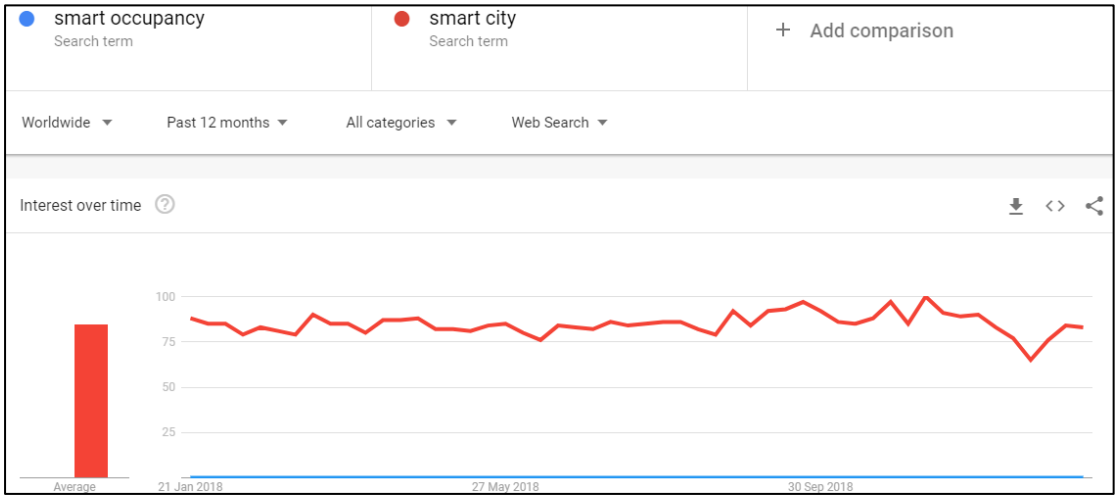

FIGURE 2-1 GOOGLE TREND – SEARCH TERM TREND COMPARISON "SMART OCCUPANCY" VS. "SMART CITY" IN THE PAST 12 MONTHS [ACCESSED ON 10 JAN. 2019]

2.3 About non-profit organizations

Non-profit organizations tend to have more support than for-profit organizations. Some of the reviewed research papers have shown, people will more likely give financial support for

non-profit causes than help growing enterprises even bigger (Greitemeyer and Sagioglou, 2017). Some researches already tapped into the pool of Social Media's effect on non-profit organizations (Waters and Jamal, 2011; Lovejoy et al. 2012; Bürger 2015) or generally how non-profits use web presence (McMahon et al. 2015). Although universities are not non-profit organizations, it is interesting to look at marketing strategies of educational institutes (Besana 2014).

IPRE is a non-profit research institute founded by real estate researchers, industry professionals, architects, project managers. Generally, various software licenses are eligible for non-profit organizations for free or minimal investments. Worldwide companies and global commercial enterprises offer their product free or for very low administration costs for foundations and any form of non-profit organizations to spread their good cause for society.

First of all, the institute, which would like to apply for different technical or software support, must review the local support regulation in its registered country (in Austria the fastest way is to register on https://www.stifter-helfen.de/). After the national screening, the institute's status will be confirmed and will be eligible to apply for different grants. During the first weeks into strategy building, the information of Google Grants came across. In addition, there are free available Salesforce user licenses for data and contact management (CRM) or even crowd-funding, and many different tools in the world of digitalization, that can help to build various departments and their strategies in many non-profit organizations where the budget can be tight.

Few papers can be found about "non-profit organizations' behaviour on social media". How do non-profit organizations use Twitter, Facebook or YouTube and how successfully can they engage their users to their cause (Auger, 2013).

Looking at different solutions and learning about new ways of financial or technical support in the modern, digitalized world, this information about further social media intelligence support and their long-term effect on an institute's online approach can reform anytime an existing or to-be-launched strategy. Building digital Customer Relationship Management and databank for a non-profit organization and its long-term effect can be the topic of another research paper. However, learning about Google Grants and Salesforce support helped to shape our next stage strategy of online presence and marketing.

2.4 About digital marketing and brand awareness – establishing a new brand

The long-term aim of brand building is to engage people and might let customers co-create the brand to have a continuously developing product in a frame of storytelling but with a strong core brand identity. (Essamri, McKechnie, Winklhofer, 2017). In the age of Social Media and the rapidly growing number of online users, online marketing requires to keep the product's brand health and find the right balance for its content management (Ahmad, Musa, and Harun, 2015). "Overall, previous research suggests that the effects of online media sequence on how much consumers are persuaded about a brand, or a product depends on their message elaboration." (Dong and Li, 2018)

Where should one start with branding? This is probably such a question as "what should I eat today or tomorrow for breakfast?" For some, it is an automatized daily process, gets the same rhythm every time; others tend to try a new seasoning by the next meal or try to cook up an innovative dish. However, in both cases the variety of starting points or different kind of strategies is infinity. That turns someone's simple working process to others' mission impossible. However, there are many bestsellers, great guides for newbies and oldies in marketing and branding at the same time (Wheeler 2013; Millman 2013; Lee Yohn 2014; Miller 2015; Van den Berg and Behrer 2016).

As Social Media and its literature is growing in the pace as big data, and people can share basically any moment anywhere online, classic marketers' headache is also exponentially growing with the number of new questions, alterations, and challenges in branding.

These bullet points from Shopify's[2] suggestions are focused on a profit-oriented brand establishment:

- Research the target audience and competitors.
- Pick the focus and personality.
- Choose a business name.
- Write a slogan.
- Choose the look of the brand (colours and font).

[2] https://www.shopify.com/blog/how-to-build-a-brand [Accessed on 10 Dec 2018]

- Design a logo.
- Apply branding across the business and evolve it as it grows.

Online presence and Social Media have enormously decreased the exchange time-frame among business stakeholders, so for that reason, in the world of digitalization online marketers say and global enterprise CEOs confirm, nowadays not the best, but the fastest marketers, companies, people etc. win. What if the focus of a branding process is shifting from the profit-oriented world to non-profit processes? In this case, the currency of converted revenue is shifted to "converted", engaged customers, who in the future eventually can generate revenue by donating money.

Placing Smart Occupancy on the market of researchers or term establishments, the following summary can be added to the term's branding:

- Target audience: researchers in real estate development, smart city establishment and development, facility managers
- Focus: teaching society of the term and the meaning of it
- Business name = term establishment
- Apply branding: explain to every internal stakeholder and engage them to share the online content at appropriate occasions.

Why does science need branding? Some innovations, researches or terms got "hyped" even just as founding an equation attractive on a t-shirt (Pavlus 2011; Kalb 2013; Brewer 2016). Nowadays, everything is smart, online, digitalized as the list could go on. However, having an important meaning and implement it in society is the real converted revenue and win in the field of science. The goal of the online branding is to spread the message behind Smart Occupancy and reach decision makers who can be influenced to a change their point of view.

Online marketing gives the opportunity to reach worldwide audience 24/7. Social Media gave the opportunity to people to "sell themselves" by branding their life. Influencers got in charge and lead opinions where previously complex branding projects defined and served a need. Opinion or brand communities can hold together globally and create bigger groups than offline strategies could have been ever imagined. There are infinite ways of branding and therefore infinity opportunities to start online brand establishment.

As there was no similar experiment found, this research takes the term as a scientific product and manages its online presence to build as any commercial product. As many online re-

sources and online marketing companies are trying to catch their future clients with the "best online branding hacks" or tags as "how to generate traffic to your website starting from the scratch", this paper examines one of the word-of-mouth or eWOM myths: can a website get significant web traffic and build engaged audience only by using the relevant hashtags with Social Media postings, and taken the same content, which social channel can generate most of the traffic to the website (Erz, Marder and Osadchaya, 2018)? In addition, what KPIs are the most helpful and useful to make online presence building understandable for anyone (Kucheriavy 2017; Pollitt 2017)

2.5 Conclusion

The literature review and the theoretical basis of the experiment consist of three main parts: theory and publications about Smart Occupancy, the theory of online branding, specifically for science, and the perception of non-profit organizations and how online and social media presence can help their goal achievements.

Branding in commerce vs. in science in short summary:

Product(term) + branding = customer engagement (community engagement)

Goal (profit) in profit-oriented environment = financial growth, money	Goal (profit) in science = contacts, connections, engagement, community-building, society education

These facts show the main goal differences between commercial and science branding. The structure of IPRE would have given the chance to research many other full or partial commercialization processes (among others e.g. CRM, crowd-funding – research fund sourcing in a commercial way, classic Sales and Marketing optimization, etc.). However, in this experiment, we take a closer look only on the establishment of online presence and examine a scientific term in a more commercial, social media environment. In the past, there were some successful researches using web analytics as research method (Gross 2012; Beasley 2013, Pintar et al. 2015; Gordon et al. 2016; Ahmada et al. 2016, Martínez et al. 2017; Cheng et al. 2018), from many different perspectives e.g. online content analysis, influence of Twitter & Facebook, creating online communities and engagement etc. This experiment continues to extend this field with a new direction in online scientific term establishment.

3 METHODOLOGY

3.1 Introduction

Working in a non-profit organization has advantages and disadvantages as working anywhere else. Although, one of the competitive advantages is getting experimental tools, licenses for free or at very low costs, where commercial enterprises pay a heavy amount of money. It is also one of the known facts in online marketing that free tools give the best opportunities to learn about your product before anyone would invest unnecessarily in any highly appreciated paid tools. Any information system tutorial books for social media intelligence (Prohaska and Costello, 2012) but even the official prologue to Google Search Engine Optimization have the same information: know your organization, goals, and budget (!) to know if it will be dealt with online marketing on its own, someone will purchase many tools and invest in strategies or outsourcing the whole department to a third party is the solution.

At the very beginning, two long-term online strategies were agreed on: "Smart Occupancy" as a term must be taught to society and its responsible stakeholders (smart cities and destinations and their decision makers, architects, facility managers, real estate developers, and so on). If the targeted decision makers and networkers, future cooperation partners share the same view and opinion about the cause of the term, the #smartoccupancy tool, more-space™ by GESIM, as a partner's product can be monetized as a supportive tool for bigger offices and educational centres, campuses (Wiegand et al. 2012). The very first step on this road is to build an online "business card" as people tend to look for everything first online. In the digital age soon, the saying is not a myth anymore, but daily routine: what is not online, does not exist (Stevens-Rayburn and Bouton, 1998).

Later on, in a 2-3 years plan, with the help of various online tools, the full digitalization of the institute can be established: research asset libraries and management, social media management, CRM & event management (pre- & post-organization) can be all automatized. Building an online presence with a community and finding the most related contacts to it, this is the establishment of a long-term customer engagement strategy.

As a research institute, my position got the opportunity for an experimental strategy establishment to boost a scientific term and promote online the institute. In the first part, the orig-

inal idea and strategy testing will be described, later, the planned, experimental adjustments and their results' analysis will follow.

Tracked online traffic will be measured on each activated channel and summarized via Google Analytics. Our data collection is based on Google and its products help to create the best online experience for admins and customers at the same time. The result analysis and conclusion will reflect on the theoretical and adjusted online strategy to summarize the best practices.

3.2 Building an online strategy

The domain of smart-occupancy.org was registered prior to the experiment, but the website and its content had to be set. The following points were agreed on at the point of "online brand building from scratch":

- Definition of the online long-term goal of Smart Occupancy and the institute (teaching society, generating more buzz etc.)
- Signing up to Neil Patel's newsletter (www.neilpatel.com) and follow his SEO/SMM (*see the list of abbreviations*) related advice, how to generate cost-effective more, *relevant* traffic to a website
- A website set up by fulfilling the theoretical requirements of search engine friendly web pages/blog
- SMM setup and channel research (what are the topics and hashtags per channel for the targeted audience)
- Timing and preparation of posts to generate traffic to the website.

After the theoretical setup, during the experiment, the strategy and theory were adjusted continuously to the practical feedback. Getting higher customer engagement and finding the right audience is the main goal of the long-term strategy, what establishes among others the following questions: which social channel will bring practically more engaged people to the website's content? E.g. the SMM setups according to theory, or cross-tagging? Should be prepared an experiment to examine theoretical paths vs. "just simply" using cross-tagging to

tap into word of mouth pools? Are there enough resources in the research to cover each test[3]?

3.3 Possible adjustments

According to theory, the website and its social media channels were set. The content posting was prepared, there were defined 8 posts through 6 weeks on LinkedIn, Facebook, Twitter; during the experiment the posting period was extended with two weeks to a total of 8 weeks, remaining with 8 posts. Some of the posts (depending on content) could be posted also on Xing (mostly for DACH region) and videos on YouTube.

The role of a social media manager is not necessary including content production. If content preparation is delayed or disturbed, there should be another solution of creating posts. The main goal is generating traffic to the website of smart-occupancy.org using the theory or online marketing and its tools, and see which channels are the most effective during the experiment. For generating a relevant number of users and visitors, the strategy must be continuously adjusted after every feedback round to have the best possible results.

3.4 Future strategy and goals of the channels

After the theoretical strategy description diverse social media channels, and the website itself were adjusted to have a better customer experience, which platform, for what purpose should be used. A website must have a high-quality performance and content management to fill the "simplest" but most important criteria to develop further the online strategy. E.g. the institute cannot apply for Google Grant at all, if they do not fill the application quality criteria. In the following section, the used online channels and their use for the brand establishment were described in detail.

3.4.1 Facebook - https://www.facebook.com/

IPRE had only an older Facebook page for news sharing. The institute was reshaped in 2017 and with the new board, a new name was also established. Facebook is still the biggest social

[3] Important note: the strategy building and brand establishment in this experience was using exclusively manual social media management. After the strategy testing period and the conclusion of the experience, a semi- or full-automatized social media content management had been established. See more at "5.5 Recommendations".

media channel where personal and business interest can be mixed at the same time. For that reason, it has a huge e-commerce impact: as one of the ground rules of innovation boosting and crowdfunding is "first start with the 4F: fans, family, friends and fools" (Abrams, 2017), Facebook can quickly build a fan-base group around any topic. Not in the first stage, but later in the future, Facebook can be a huge help to organize any event or share quick news about presentations or happenings around the institute or any topic. With some more time investments even crowdfunding can be boosted via the web page. This is the focus of this channel.

3.4.2 Twitter - https://twitter.com/

The mostly in English available content (due to the majority of US users) is the first address for scientific content. Twitter is also the most favourable channel to research e.g. in the field of big data, as the content is available for free up to a certain limit[4]. The Twitter strategy is to post blog articles from the website with a teaser of "What is Smart Occupancy". The targeted audience should be marked by relevant hashtags.

3.4.3 LinkedIn - https://www.linkedin.com/

LinkedIn owned by Microsoft is the biggest professional networking social channel. In April 2017 they surpassed the 500 million users, and their number is continuously growing ever since. As most of the social media channels, LinkedIn has also its own Marketing department and Business Solutions, if someone decides to use exclusively this channel, it might be worth to invest for product launches and finding the right audience for any business solution and research products via the LinkedIn SMM. Free trial and starting financial support for any business accounts are available.

3.4.4 Xing - https://www.xing.com/

Xing is like Marmite, you either love it or hate it[5]. However, with their employee branding platform "Kununu" they got a huge audience in the German-speaking countries, so for that reason, even non-German speakers must enter Xing by creating a profile and target key decision makers when they are about to promote their companies. Xing has many different adjectives e.g. the "German LinkedIn" or "Professional Facebook". With its "stalking" features it

[4] https://developer.twitter.com/en/pricing.html [Accessed on 17 Jan. 2019]

[5] https://www.theguardian.com/commentisfree/2011/nov/30/marmite-love-it-hate-it-pr [Accessed on 1 Dec. 2018]

would be worth to write a study about and research professional people's stalking experience. Xing is the personal, professional, private Facebook for many German-speaker business people.

3.4.5 YouTube - https://www.youtube.com/

Using different media assets can be advantageous but also challenging. IPRE wanted to build a new long-term strategy to have more professional support and network exchange. Part of their plan was to create more videos about current, buzzing real estate (development) topics with Viennese, Austrian key-note speakers, and share them on YoutTube. In addition, part of the Smart Occupancy lecture at the Vienna University of Technology the future architecture students must prepare in teams an educational, easily understandable video to explain what Smart Occupancy in daily practice is, or right away they could propose a solution for an abandoned building, office or warehouse in the city, to present a case study. Some of the most successful videos were published on the Smart Occupancy YouTube channel and had a written summary as an article on the website.

3.4.6 Website - http://smart-occupancy.org/

Organic search and SEO are some of the most useful and free tools. Without understanding their function, there is no point to invest in Social Media Marketing (e.g. Google Ads). A well-picked term or product name can create wonders without any additional costs and mostly a well-filled and managed content to a website is the gold mine of crawlers. The website of smart-occupancy.org should be an informative, educative website for further future experiments and researches. To generate content, beside the available publications and further information there is an included blog, that should present best-practices and existing Smart Occupancy solutions.

3.5 Measurement tools

The research methodology is based on online traffic generation, data collection, and reflection on the used methods and tools. Beside the most important social content platforms, there are the most important online, free analytical tools and their partners.

3.5.1 Google Analytics

After setting up a website or taking over the control and management of a website, the most important analytical tool is Google Analytics. Important side note: all the above-mentioned

social media channels have their own analytical tool mostly called “Insights”. In case of organic results (means there is no paid advertising on the channels) After a post there is available analytics to see how many people were reached (how many of them were engaged with the content: liked or commented) and how many impressions did the activity, post create. Of course, if there is SMM in use, organic and paid targets will be differentiated.

Google Analytics can be tricky for first-time users, there are also available very well-advanced reports for advanced users. However, if someone would just simply like to know how many people visited their website, this can be easily done. After setting up Analytics and one or two different SEO tools on the website, the following tools and adjustments will be recommended: “Google verifying” the website (the user will be linked and authorized through a code), that also gives a better ranking to a website when Google crawls; Google Search Console (former Webmaster) tracks the organic searches and gives feedback by the tracked searched words and phrases; Google Ads is the tool for SEM, after registration, website owners can plan their campaigns by selecting the targeted search keywords on different languages, the key countries, geographical areas etc. Finally, Google My Business must be mentioned, that gives a better view to a company by adding the business information directly to Google: website, contact, map view etc. that will be added to the top of the page if someone googles the company. To reach every organic tools’ maximum usage, these services were activated for smart-occupancy.org and linked to Google Analytics to have the best possible result and analysis of the data.

3.5.2 Google Search Console

Description of GSC by Google: “Google Search Console (previously Google Webmaster Tools) is a no-charge web service by Google for webmasters. It allows webmasters to check indexing status and optimize visibility of their websites. As of May 20, 2015, Google rebranded Google Webmaster Tools as Google Search Console.” (Wikipedia on December 7, 2018)

“Why use Search Console?

Make sure that Google can access your content

- Submit new content for crawling and remove content you don't want to be shown in search results
- Create and monitor content that delivers visually engaging search results
- Maintain your site with minimal disruption to search performance

- Monitor and resolve malware or spam issues so your site stays clean

Discover how does Google Search —and the world—see your site:

- Which queries caused your site to appear in search results?
- Did some queries result in more traffic to your site than others?
- Are your product prices, company contact info, or events highlighted in rich search results?
- Which sites are linking to your website?
- Is your mobile site performing well for visitors searching on mobile?"[6]

"Search phrases are terms that describe your business and help determine when your ad should appear for a potential customer. You can view your search phrases and their performance in your Smart campaigns dashboard."[7]

Practical feedback to the Search Console and used Google Tools:

- The website admin must allow Google to crawl the site for the best result
- The organic keywords of the posts/pages should reflect well the content. Note: it is much easier to set up a new website and its content from zero regarding the SEO criteria than adjust an existing website's content to SEO
- Search and crawl issues and alarms were taken care as soon as possible (e.g. a non-published post could be still crawled by Google even if this was not public, the Search Console warned the admin about a possible search failure)
- Search Console shows the organic terms and keywords, what were searched to get users to the website.
- Based on the business profile and content, the Search Console gave the following potential keyword set to use in the future:

[6] https://support.google.com/webmasters/answer/4559176?hl=en [Accessed on 7 Dec., 2018]
[7] https://support.google.com/google-ads/answer/7653460?hl=en [Accessed on 15 Nov., 2018]

inventory management software
facility management: fm, asset management
architectural design real estate
real estate development
building builder agency
building builder company
building builder experts
building builder firm
building constructor agency
building constructor company
building constructor experts
building constructor service
building developer agency
building developer
building developer experts
building developer service
building renovation property developers
collective property acquisitions
collective property auctioneer
commercial building builder
duplex acquisitions
educational building builder
educational property builder
educational property construction
educational real estate builder
home developers
house auctioneer
land developers area
land development for sale
market analysed property developments
multi family development companies
private property acquisitions
private property auctioneer
property builder agency
property builder
property constructor agency
property constructor business
property constructor experts
property constructor firm
property constructor service
property development
property developer agency
property developer experts
property market analyses service
real estate builder agency
real estate builders
real estate constructor agency
real estate constructor business
real estate constructor company
real estate constructor experts
real estate constructor firm
real estate constructor service
real estate consultants
real estate developer agency
residential building builder
residential building construction
residential developers
residential development land for sale
residential property builder
residential property construction
residential real estate construction
structural renovations property developers
town house land development
smart occupancy
renovation real estate developer

3.5.3 Google Ads

If someone wants to go beyond organic search or has the budget for advertising, the next setup is getting into Google Ads (the Search Console, Google AdWords was rebranded and renamed to Google Ads in July 2018). Although, there is a trick to set up an account without giving payment information. This way the user can have an overview of any paid keywords, their worth and the costs of possible campaigns. In case of non-profit organizations, there is an option to sign up for Google Grants[8]. Besides having a mission there are strict technical criteria for the website that should be promoted: must have high-quality content, most of the current Google and SEO criteria and features (e.g. SSL certificate). Starting an application to the program must include a verification of the country's non-profit authority where the organization is registered. After all, if the criteria of the website are fulfilled, the first campaign can start within the granted amount.

3.5.4 Google My Business

Among others, Google's aim is to collect and own data and keep people most of the time on Google's site, instead of going to other pages. Registering the company to Google My Business will give a better overall ranking if users search directly for the business or company (in case of IPRE e.g. "ipre vienna") the first target will be ipre.at thanks to the registered business information on My Business (contact, opening hours, map view, etc.). After registering Smart Occupancy on Google My Business, the website shows up as a research institute, also giving a better ranking.

Unfortunately, the difference between the browser layout of desktop vs. mobile can confuse the users: as Figure 3-2 shows, on a mobile browser the website of smart-occupancy.org thanks to Google My Business gets the first ranking. However, on the desktop (Figure 3-1), Google My Business replaces the website to the right corner. Although this result takes the biggest space on the results' list, users can automatically ignore it and jump to the second option, what is originally only the second result in the ranking. In our case, thanks to the parent institute's website and SEO setups, the first on the list – (second in the results) will be the "smart-occupancy" subpage of ipre.at.

[8] (https://www.google.com.hk/intl/en/grants/) [Accessed on 15 Nov., 2018]

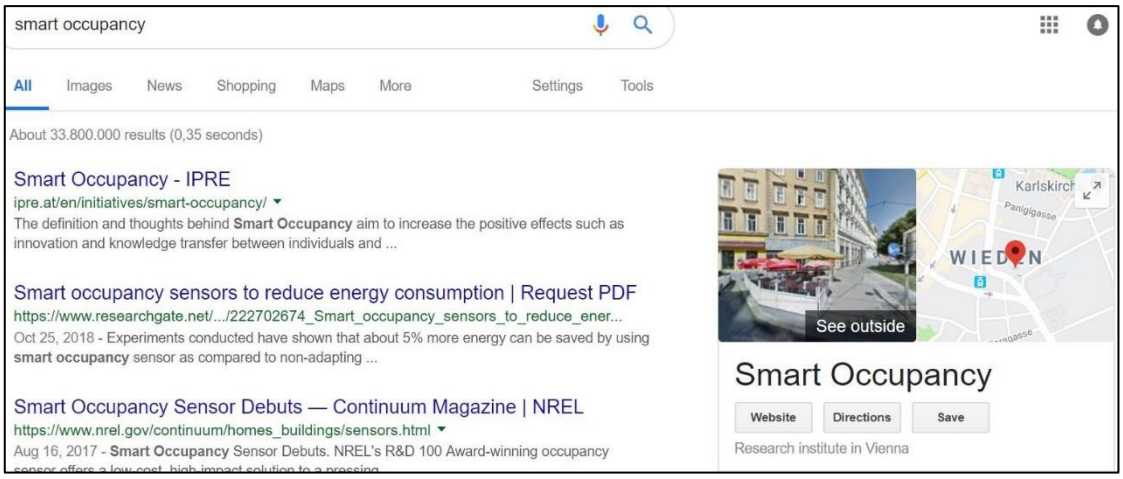

FIGURE 3-1 SCREENSHOT OF THE GOOGLE SEARCH RESULT "SMART OCCUPANCY" ON THE DESKTOP [ACCESSED ON 15 JAN. 2019]

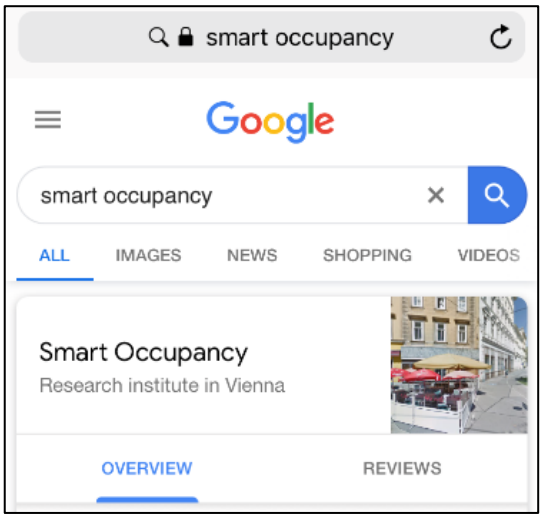

FIGURE 3-2 SCREENSHOT OF THE GOOGLE SEARCH RESULT "SMART OCCUPANCY" ON MOBILE [ACCESSED ON 15 JAN. 2019]

3.6 Conclusion: web traffic success indicators and the goal of the experiment

Besides measuring the generated traffic by social media channels, the following KPIs are the most important data of the experiment. After 8 posts on the chosen Social Media channels, 3 of the following defined KPIs of the website must be fulfilled to have an engaged audience of http://smart-occupancy.org/ and have significant traffic for further detailed analysis:

1. Desired proportion of New vs. Returning visitor: 35% vs. 65 %
2. Average Session Duration on Page: at least 2 minutes
3. Pages Viewed Per Session: at least 3
4. Bounce Rate: less than 50%
5. Total page view during the experiment: at least 800

6. Total Users during the experiment: at least 400 (average 50 each post)

The defined KPIs are listed in the order of their importance: a higher proportion of returning visitors, longer session durations and the number of viewed pages indicate a well-engaged audience & qualitative data, while bounce rate, total users and total page views add quantitative data to the experience. As the customer or target audience's engagement is the most important in case of any product placing on the market, speaking of a niche market audience the qualitative indicators are way more important than the quantitative data, especially in online marketing. As it was mentioned before, influencer marketing is based on only customer engagement and not on the number of inactive followers.

The detailed explanation of posting, analysis of the KPIs and the results can be found in section *"4.1. Description of the posts, posting method and analysis of the channels' insights*" from page 21 and *"4.3. Reflecting on the KPIs of the experiment"* from page 28.

4 EXECUTIONS AND RESULTS

4.1 Description of the posts, posting method and analysis of the channels' insights

The first part of the experiment was to establish content on the website and set the social media channels (see Figure 4-1). Besides the basic publications, it was planned to post some of the best videos made by architect students at the Vienna University of Technology, explaining Smart Occupancy in the most compact way or they prepared a video as a study case. To the videos was added a short script of the content in German and English, also subtitles were prepared on both languages to the videos.

The examination period was defined between 15th November 2018 and 31st December 2018 with 8 posts on the following channels: LinkedIn, Xing, Facebook, Twitter. The first post was distributed on 16th November 2018, the last one on 7th January 2019. As the content was adjusted to availability, YouTube could not participate in the channels' final comparison: there were not enough prepared significant content videos for the experiment. For that reason, YouTube could not have generated any traffic in the rounds without video content and could not participate in the full length of the experiment.

List of the experimental posts:

1. Post: Smart Occupancy of the North Railway Hall (Nordbahnhalle)
   Professional video of the Nordbahnhalle with English/German subtitle and short article summary (video script)
2. Post: The Pop Up Kitchen
   Student project video with English/German subtitle and short article summary (video script)
3. Post: Available publications on smart-occupancy.org
   Boosting post for a sub-page of the website
4. Post: Smart Occupancy in the Lebensmittel Zeitung
   Article without video
5. Post: Smart Occupancy for Smart Cities
6. Interview without video
   Post: Merry Christmas & Happy New Year 2019
   Personalized Christmas card

7. Post: Smart Occupancy as part of Share Economy
   Article without video
8. Post: Smart Occupancy in the frame of project coordination
   Article with an added video

The experiment was limited to this period because the simultaneous build-up of online presence of IPRE and Smart Occupancy allowed using both websites' SMM to measure traffic for the topic without creating all the strategic channels separately exclusively for Smart Occupancy. The term of Smart Occupancy belongs to IPRE and will be used and boosted as one of the institute's initiatives. The YouTube and Twitter channel of Smart Occupancy will be separately used in the future, while the Facebook, Xing and LinkedIn channels of IPRE was used in the build-up phase exclusively for Smart Occupancy, in the future these channels will represent any of the institute's research initiatives and news. For that reason, the traffic measurement for the website of Smart Occupancy was clearer in this setup and avoided further social media channel creations.

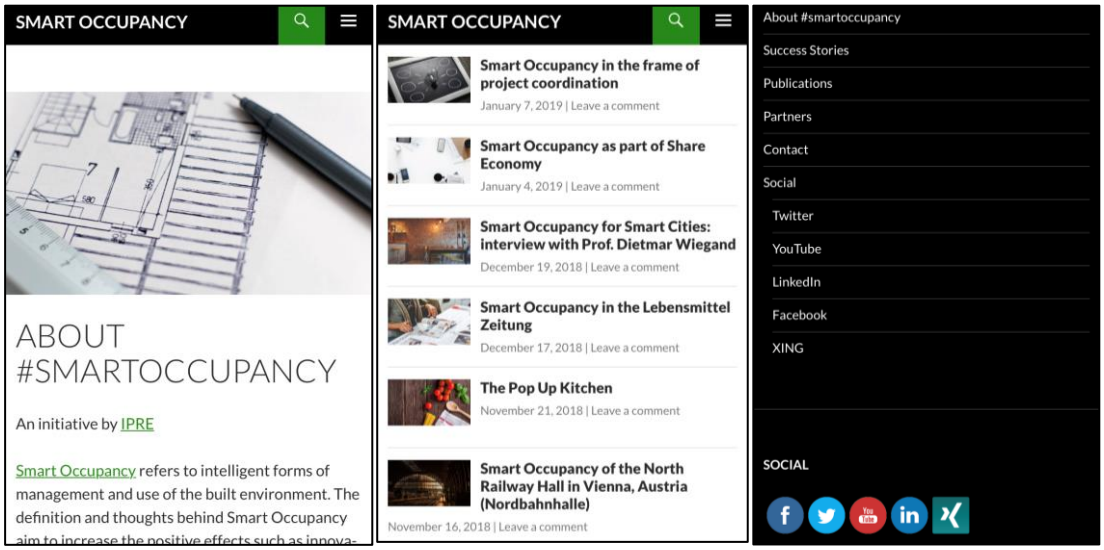

FIGURE 4-1 SMARTPHONE LAYOUT IMPRESSIONS OF THE HTTP://SMART-OCCUPANCY.ORG/ WEBSITE. HOMEPAGE, ARTICLES, MENU [ACCESSED ON 3 JAN. 2019]

Although Google Analytics gives the overall result of the website traffic, to understand the individual social media channels' community and behaviour in the selected market and target audience, it is required to view the individual channel results. The attached graphs are screenshots of the diverse channel behaviours in the experimental period. It is not enough to mention, in the experiment, only organic tools and setups were used to explore the potential future community, paid advertisements or any investment was not used for SMM.

Figure 4-1 shows some impressions of the smartphone layout of the website. Figure 4-2 is a part of the compact summary of the Facebook posts. During the experiment, two altered posts' re-

sults got in the summary, that must be explained: Post 4 – interview with Prof. Wiegand ("Why is Smart Occupancy important for Smart Cites?") was shared on the private feed of a follower that automatically increased the number of impressions of the post (see Figure 4-2). The other unexpected result is the "HITZLER INGENIEURE" – the post was not planned in the experiment. However, an ex-student of the institute asked for help by sharing their job advertisement on every available channel (Social Media and web pages). Although the post did not get more than average likes, it created 11 clicks by post hashtags. One of the internal learning, note, and conclusion was including more job posts in the future to help partners and create more buzz to the channels and website. Smart Occupancy will not have an individual Facebook web page, any future news, publication or article will be shared on the IPRE's channel as part of the institute.

Reach: Organic / Paid | Post Clicks | Reactions, Comments & Shares

Published	Post	Type	Targeting	Reach	Engagement	Promote
01/07/2019 2:20 PM	#smartoccupancy #globalization #urbanization #smartcities			6	3 3	Boost Post
01/04/2019 5:24 PM	http://smart-occupancy.org/2019/01/04/smart-			6	2 2	Boost Post
01/04/2019 3:17 PM	HITZLER INGENIEURE sucht einen Praktikanten im Bereich			7	11 3	Boost Post
01/03/2019 1:02 PM	New construction regulations in Vienna from 2019. More information			6	2 3	Boost Post
12/22/2018 9:28 AM	IPRE wünscht Ihnen frohe Weihnachten, viel Glück und Erfolg im			7	0 0	Boost Post
12/19/2018 2:28 PM	Why is Smart Occupancy important for Smart Cities? Prof. Dietmar			50	2 3	Boost Post
12/18/2018 12:14 PM	http://smart-occupancy.org/2018/12/17/smart-			6	0 2	Boost Post

FIGURE 4-2 FACEBOOK INSIGHTS – PART OF THE SMART OCCUPANCY POST ENGAGEMENT RESULT ON IPRE'S FACEBOOK'S CHANNEL [ACCESSED ON 3 JAN. 2019]

Figure 4-3 and Appendix 1 show the Twitter Analytics for the experimental period. Appendix 1 shows, that the 8 tweets created a total of ~3000 impressions in 62 days. If we look at Figure 4-3, more detailed data is available. During the experiment, the 8 tweets created a total of 2656 impression on Twitter with a 2,8% engagement rate. The insight view shows that a channel's success does not depend necessarily on the number of followers if the diverse posts (in this case Tweets) are tagged accordingly to the content and reflecting on them they are individually successful. Re-posts and likes with lower number of followers provide equal engagement to a channel.

Before and during the experiment, #smartoccupancy was established and well developed, so most of the #smartoccupancy posts on Twitter are related to the term. In the future, the Twit-

ter channel of Smart Occupancy will be used for exchange with the currently enrolled students and their case studies for Smart Occupancy; also new and publication, scientific development in the topic will get their spot on this channel.

Figure 4-4 shows LinkedIn Analytics, the page visitors' behaviour on the channel. The number of page visitors is divided into two categories – based on user access – desktop or mobile phone users. Figure 4-5 reflects on the total number of impressions during the research period. The posts generated a total number of 573 impressions and over 50 page visitors. Figure 4-6 and 4-7 show the visitors by job function and industry. The posts brought people from the field of Business Development, Entrepreneurship, Research, Education and the Real Estate field, what confirms that the used hashtags are searched and read in the targeted communities. Content improvement can attract higher engagement rate in the future but the way of reaching out to the target group is positively confirmed in this experiment.

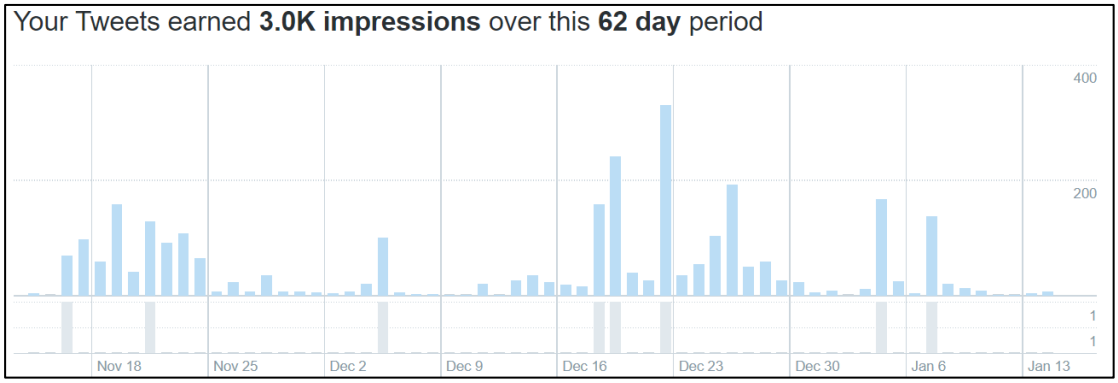

FIGURE 4-3 TWITTER ANALYTICS – OVERVIEW OF THE ORGANIC IMPRESSIONS OF THE POSTS BETWEEN 14 NOVEMBER 2018 - 11 JANUARY 2019 [ACCESSED ON 14 JAN. 2019]

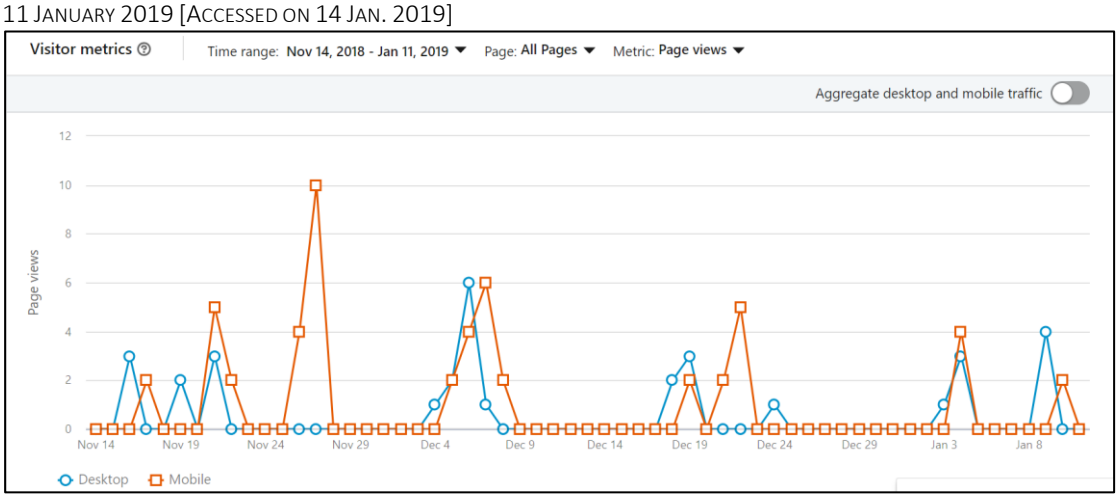

FIGURE 4-4 LINKEDIN ANALYTICS – PAGE VISITORS OF IPRE'S LINKEDIN SITE BETWEEN 14 NOVEMBER 2018 - 11 JANUARY 2019 [ACCESSED ON 14 JAN. 2019]

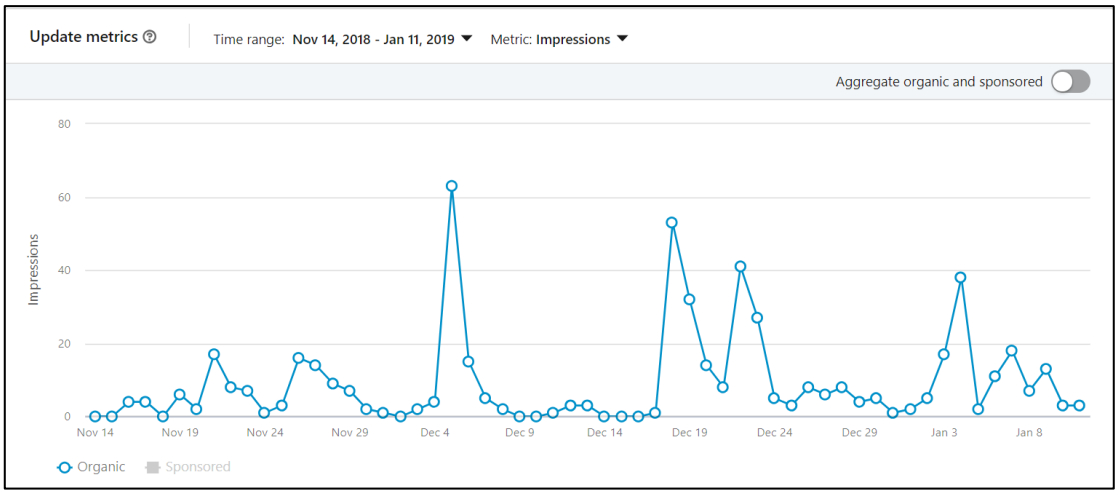

FIGURE 4-5 LINKEDIN ANALYTICS – PAGE IMPRESSIONS OF IPRE'S LINKEDIN SITE BETWEEN 14 NOVEMBER 2018 - 11 JANUARY 2019 [ACCESSED ON 14 JAN. 2019]

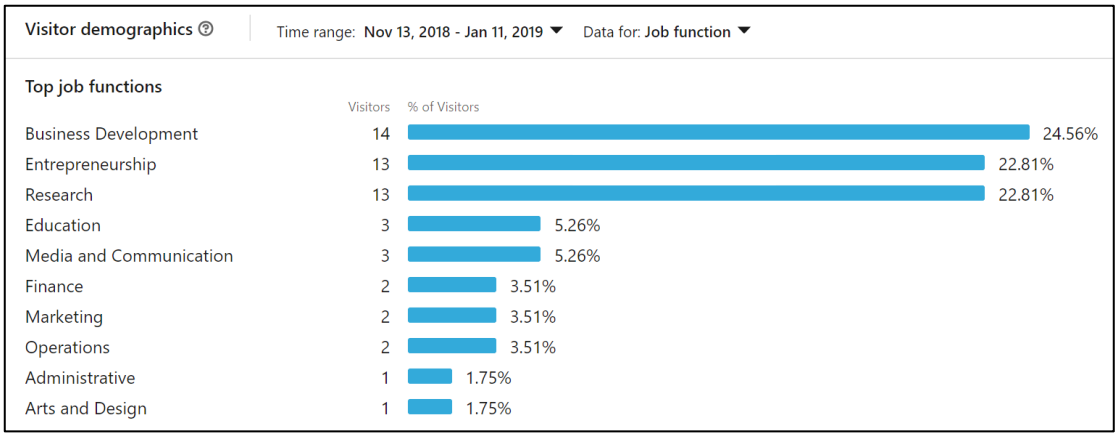

FIGURE 4-6 LINKEDIN ANALYTICS – VISITOR DEMOGRAPHICS BY JOB FUNCTION ON IPRE'S LINKEDIN SITE BETWEEN 14 NOVEMBER 2018 - 11 JANUARY 2019 [ACCESSED ON 14 JAN. 2019]

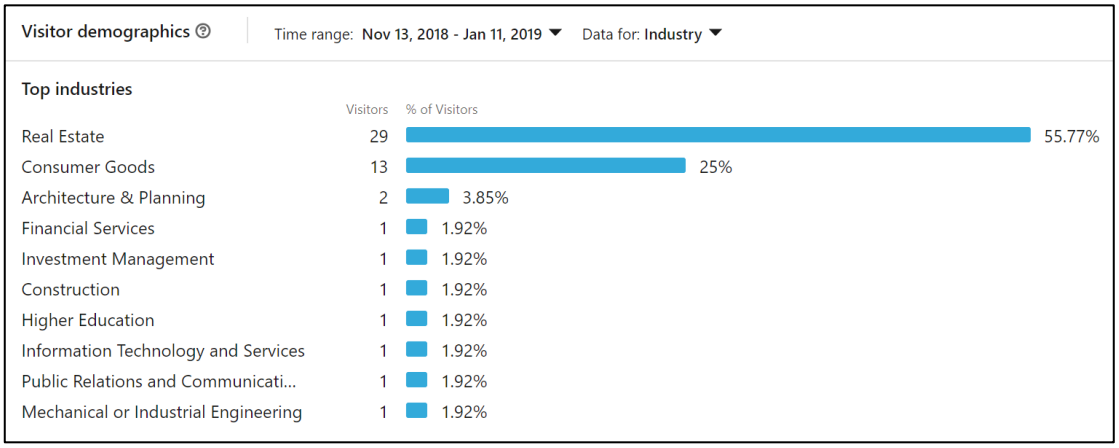

FIGURE 4-7 LINKEDIN ANALYTICS – VISITOR DEMOGRAPHICS BY INDUSTRY ON IPRE'S LINKEDIN SITE BETWEEN 14 NOVEMBER 2018 - 11 JANUARY 2019 [ACCESSED ON 14 JAN. 2019]

Figure 4-8 points at the Xing Business Page results. In comparison to any other social media channels, Xing is the ultimate loser of this experiment: any detailed insight or simple user analytics are available only upon paid subscription. Hashtags are not active in posts, so for that

reason, a Xing organic company profile without paid add-ons is simply a digital business card and ultimately an extra page to display the company's content. The identical posts of the research generated 12 visitors to the Xing profile with a basic Business Page.

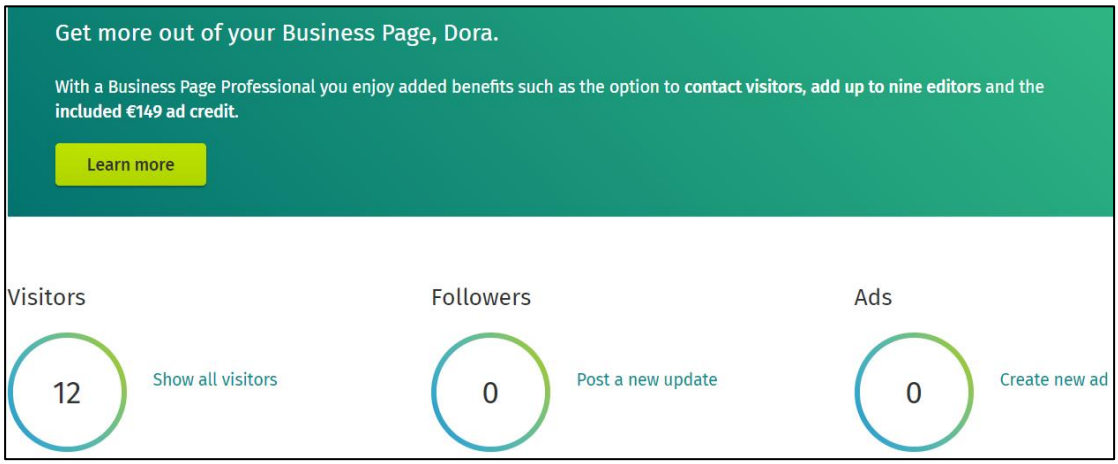

FIGURE 4-8 XING INSIGHT – RESULT OF THE ORGANIC USE OF THE XING BUSINESS PAGE SITE BETWEEN 14 NOVEMBER 2018 - 11 JANUARY 2019 [ACCESSED ON 14 JAN. 2019]

Although **YouTube** was not included in the final channel mix, some relevant data must be mentioned. Before the posted videos in the experiment, four videos were uploaded to the YouTube channel of Smart Occupancy. If we name the videos in chronological order Video 1 to Video 7, Video 4 & 5 were included in the first two posts of the research. The Video 1-7 have the following number of views: 32, 17, 13 (uploaded 4 months ago) and 36, 45, 5, 8 (uploaded during the experiment). Video 4 & 5 has significantly more views as they were shared on various social media channels in integrated articles and posts. YouTube marketing alone requires increased time and financial investment (to produce own content) compare to other social media and do not generate significant traffic to other channels (YouTube tends to keep the users on YouTube as any other channels, but more successfully), if someone wants to be successful "YouTuber", should get involved in other social media channels to generate more traffic and views to the video channel and websites.

Among the big players, **Instagram** should be mentioned as one of the fastest growing social media channels by registered and active users. In the phase of strategy building, Instagram did not seem to be fit in the branding of a scientific term as instagrammable content was not ready at that point as well sharing a picture vs. text did not make the channel integrable in the experimental channel mix. "Science" and "research" mostly can be found on Instagram in the context of the empowering female researchers.

4.2 Summary of the individual insights

Social Media Intelligence tools can handle automatized online content management and reflect on them with automatized user analysis. These (mostly) paid services can summarize more channels and analyses what has happened during online social interactions. However, the examined tools – except Xing – offer free, detailed analysis of the interactions with available summary downloads or various visually representative graphs. Taking Xing in comparison with the global players had been a brave movement, on the other hand, disproves some urban myths and confirms the dysfunctionality of the portal in this experiment. Unless a company's marketing strategy requires tapping into Xing-friendly industries, the amount of the investment is not worth for an upgrade of Xing Business Page Professional (Figure 4-8) as other available channels can substitute this use free of charge.

Facebook gives the feeling of fast-paced analytics as the user experience is. From a business perspective, Figure 4-2 is the most useful table. In short summary, the page's owner can get a good overview of the Facebook interactions, although generally, the Insight does not tell a lot about the followers if there is not enough interaction on the page.

In comparison, Twitter gives a detailed overview of the generated impressions (Figure 4-3) to show the potential reachable audience of targeted hashtags. Appendix 1 reflects on the time between Tweets and their interaction. After tweeting how many impressions, what grade of engagement was generated and when. Clicking individually on the Tweets, the channel owner can get even more detailed information of the post. Twitter generally provides an overview of all the Twitter users – specifically of US users. A quick glance at this overview shows marketers the most important demographic data of the US Twitter users, what is a great help for analysis of English speaker target groups in the US.

However, the most useful free data and feedback analysis in this experiment were provided by LinkedIn. The figures 4-4 to 4-7 show a summary of the reached user's pool. With the chosen hashtags, the posts of the experiment have reached in 55,77% professionals in the real estate industry. By job functions, almost 70% of the reached users are involved in Business Development, Entrepreneurship, and Research (22-24% each). Future events, job posts or even in case of research fundraising, tapping into the right audience pool and reach the desired target group via Social Media, LinkedIn is the most useful professional global online platform.

All in all, from the perspective of a non-profit, educational purpose, Twitter and LinkedIn (occasionally Facebook, e.g. in case event management or even fundraising) are the most powerful and useful social media platforms from the channel owner's point of view.

4.3 Reflecting on the KPIs' result in the experiment

The following table shows the desired outcome of the experiment vs. actual results (also Figure 4-9):

KPI	Expected result	Result	Achieved
New vs. Returning visitor:	35% vs. 65 %	17.6% vs. 82.4%	N
Average Session on Page:	more than 2 minutes	00:03:21	Y
Pages Viewed Per Session:	3	3.90	Y
Bounce Rate:	< 50%	53.66%	N
Total page views:	800	959	Y
Total Users:	400 (50/post)	147	N

As Google explains it, a bounce is a single-page view. Higher bounce rate shows a lower interest of the audience for further page view, except the website is a single-page blog, where the audience can view only one page. Starting meaningful content building of a website from scratch is not easy, although in the case of Smart Occupancy there is a more-page website, mostly for educational purpose. The homepage is the quick explanation and definition of Smart Occupancy, other sub-pages contain more success stories and various information and data. Although, the main goal is to educate people about the term (see homepage), a high bounce rate in this experiment is not required. By setting less than 50% for bounce rate was more of a wish, but 53.66% outcome cannot be considered as a bad result for a test period. Future actions can be taken (Egri and Bayrak, 2014) among others by changing the front page to the "news" section (more informal, containing pictures and articles) or having more impulsive data on the homepage (language switcher, social media buttons, quick news etc.).

The structure of the website gives the possibility of more than one-page view. The expected 3 pages per session is an average for less than 50% bounce rate: some users expected to check out every page while others bounce off the homepage immediately. 3.90 pages/session achieves the expected goal. 3 minutes and 21 seconds as average session duration also surpasses the research limit positively, as the page views of total 959. Setting successful key metrics for data collection needed elasticity of the data ranges while they remain realistic. E.g. the originally

planned 400 users should have generated a higher number of page views to surpass the KPI limit while it could have generated a higher bounce rate.

For audience engagement in science the defined metrics and their results are succeeding the building period of online presence and indicate some developments for the future. While a lower bounce rate and a higher number of returning visitors are required, the content of the website must be adjusted and regularly updated to maintain the achieved metrics. News, only-on-website available data and changing, informative environment is the key to reach engaged, more returning visitors.

The experiment was successful by reaching 3 out of 6 targets. In addition, half of the total number of acquired users came to the website with the help of activated online tools (Figure 4-13).

Based on the results of the experiment H^1 can be accepted and H^0 is rejected:

H^1: “Awareness of the scientific term 'Smart Occupancy' can be increased by digital branding approaches“: ACCEPTED

H^0: “Digital branding approaches do not influence significantly the awareness of the scientific term 'Smart Occupancy'”: REJECTED

Understanding the KPIs and building future strategies, further metrics must be looked at.

4.4 Detailed analysis of Google Analytics metrics

Figure 4-9 to 4-24 show the most related Google Analytics data of the experiment. The following section is dedicated to seeing in detail, how the KPIs were formed and what relevant information can be read from further details. In some of the figures can be seen “goal value” with an overall result of 0 USD – as only organic functions were used and no financial conversion was involved in the research, obviously there cannot be found any generated value of the online interactions.

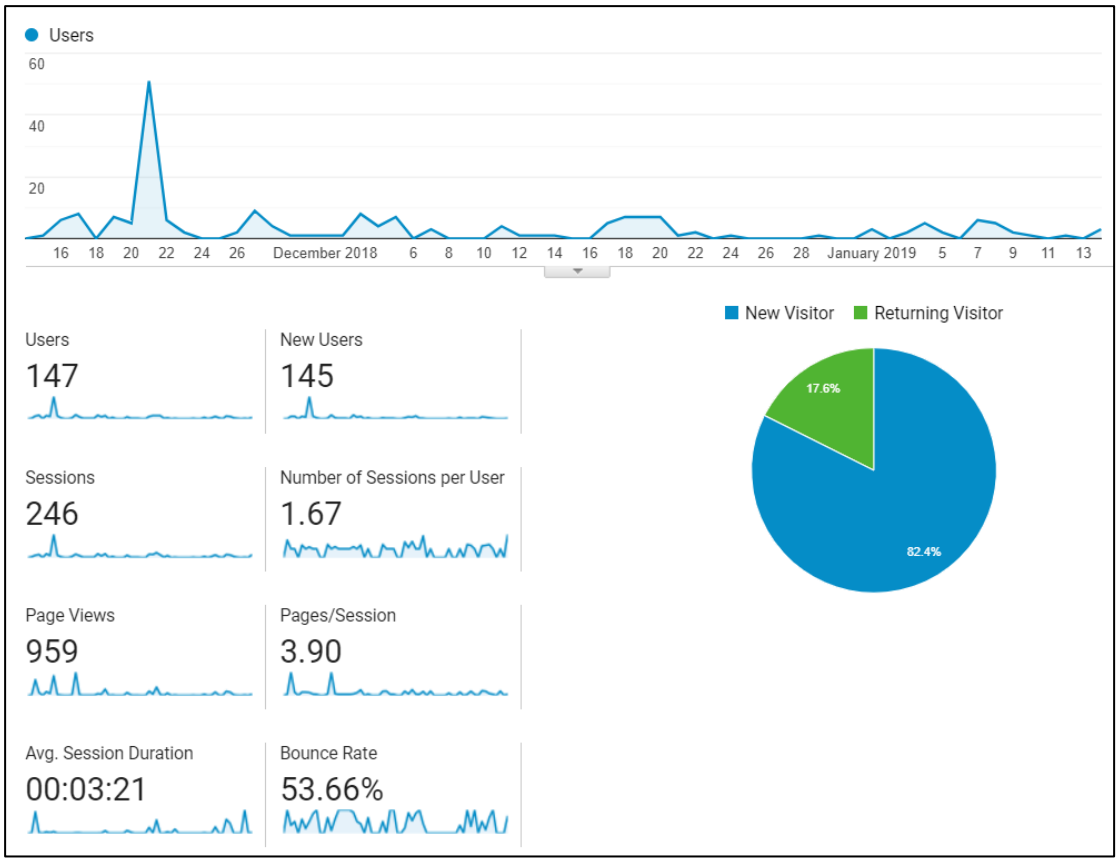

FIGURE 4-9 GOOGLE ANALYTICS OF SMART-OCCUPANCY.ORG – AUDIENCE OVERVIEW, THE SUMMARY OF THE KPIS IN THE EXAMINED PERIOD BETWEEN 14 NOV. 2018 – 14 JAN. 2019 [ACCESSED ON 15 JAN. 2019]

Figure 4-10 reflects on the top 10 nationalities of the users. The English and German-speaking countries considered as a success, the other countries got involved through post-shares on private feed. Further on, 9 countries (not displayed: Colombia, Denmark, Croatia, Ireland, India, Maldives, Philippines, Slovakia, Vietnam) added 1 user each. The United States' second position can be thanked to the bilingual posts. Although the institute and the team behind Smart Occupancy are physically located in Vienna, Austria, the term is assigned to reach beside German speakers also English speakers. This result is a good basis to work deeper on the US market, especially with the help of Twitter's detailed user behavioural reports.

Country	Acquisition			Behaviour			Conversions Goal 1: Media play	
	Users	New Users	Sessions	Bounce Rate	Pages/Session	Avg. Session Duration	Media play (Goal 1 Conversion Rate)	Media play (Goal 1 Completions)
	147 % of Total: 100.00% (147)	145 % of Total: 100.00% (145)	246 % of Total: 100.00% (246)	53.66% Avg for View: 53.66% (0.00%)	3.90 Avg for View: 3.90 (0.00%)	00:03:21 Avg for View: 00:03:21 (0.00%)	57.72% Avg for View: 57.72% (0.00%)	142 % of Total: 100.00% (142)
1. Austria	78 (52.70%)	76 (52.41%)	175 (71.14%)	48.00%	3.69	00:04:16	58.29%	102 (71.83%)
2. United States	30 (20.27%)	30 (20.69%)	30 (12.20%)	73.33%	5.50	00:00:13	76.67%	23 (16.20%)
3. Hungary	11 (7.43%)	11 (7.59%)	11 (4.47%)	81.82%	1.27	00:00:06	9.09%	1 (0.70%)
4. Germany	8 (5.41%)	8 (5.52%)	9 (3.66%)	33.33%	8.78	00:00:38	77.78%	7 (4.93%)
5. United Kingdom	3 (2.03%)	3 (2.07%)	3 (1.22%)	33.33%	7.00	00:19:23	66.67%	2 (1.41%)
6. Spain	2 (1.35%)	2 (1.38%)	2 (0.81%)	100.00%	1.00	00:00:00	50.00%	1 (0.70%)
7. France	2 (1.35%)	2 (1.38%)	2 (0.81%)	50.00%	2.00	00:00:26	50.00%	1 (0.70%)
8. Romania	2 (1.35%)	2 (1.38%)	2 (0.81%)	100.00%	1.00	00:00:00	0.00%	0 (0.00%)
9. Russia	2 (1.35%)	2 (1.38%)	2 (0.81%)	100.00%	1.00	00:00:00	100.00%	2 (1.41%)
10. Bulgaria	1 (0.68%)	1 (0.69%)	1 (0.41%)	0.00%	3.00	00:00:28	0.00%	0 (0.00%)

FIGURE 4-10 GOOGLE ANALYTICS OF SMART-OCCUPANCY.ORG – AUDIENCE OVERVIEW BY COUNTRY IN THE EXAMINED PERIOD BETWEEN 14 NOV. 2018 – 14 JAN. 2019 [ACCESSED ON 15 JAN. 2019]

User Type	Acquisition			Behaviour			Conversions Goal 1: Media play	
	Users	New Users	Sessions	Bounce Rate	Pages/Session	Avg. Session Duration	Media play (Goal 1 Conversion Rate)	Media play (Goal 1 Completions)
	147 % of Total: 100.00% (147)	145 % of Total: 100.00% (145)	246 % of Total: 100.00% (246)	53.66% Avg for View: 53.66% (0.00%)	3.90 Avg for View: 3.90 (0.00%)	00:03:21 Avg for View: 00:03:21 (0.00%)	57.72% Avg for View: 57.72% (0.00%)	142 % of Total: 100.00% (142)
1. New Visitor	145 (82.39%)	145(100.00%)	145 (58.94%)	61.38%	4.17	00:02:03	48.97%	71 (50.00%)
2. Returning Visitor	31 (17.61%)	0 (0.00%)	101 (41.06%)	42.57%	3.50	00:05:13	70.30%	71 (50.00%)

FIGURE 4-11 GOOGLE ANALYTICS OF SMART-OCCUPANCY.ORG – AUDIENCE BEHAVIOUR NEW VS. RETURNING VISITOR IN THE EXAMINED PERIOD BETWEEN 14 NOV. 2018 – 14 JAN. 2019 [ACCESSED ON 15 JAN. 2019]

Figure 4-11 and 4-12 summarizes the visitor's behaviour in time. The bigger part of the audience consists of new visitors and they spent an average of 2 minutes in each session with an average bounce rate of 61.38%. In comparison, the returning visitors spent a bit more than 5 minutes in each session with 42.57% bounce rate. This data consists of some of the research team's action: page testing, link testing but also could be the result of social media channelling, e.g. a LinkedIn follower clicks on the latest news and reads only the shared article, so this rate is not definitely a bad result as their average spent time on the website is a result to keep and maintain also as a future goal. This outcome demonstrates a small but engaged community as part of the traffic.

Figure 4-12 reveals a breakdown of the session duration (spent time) and page views. 183 of the total of 959 page views took average 0-10 seconds in 155 sessions. That means, the weakest action and engagement of the traffic led to average 1.2 page views of these sessions, adding the biggest portion to the higher all over bounce rate. The future adjustment towards to higher rate

of the engaged audience (returning visitors) requires sorting out and reduce the traffic of the fast, one-page clicker users to the minimum.

Sessions
246
% of Total: 100.00% (246)

Page Views
959
% of Total: 100.00% (959)

Session Duration	Sessions	Page Views
0-10 seconds	155	183
11-30 seconds	19	113
31-60 seconds	21	215
61-180 seconds	13	74
181-600 seconds	12	64
601-1800 seconds	20	121
1801+ seconds	6	189

FIGURE 4-12 GOOGLE ANALYTICS OF SMART-OCCUPANCY.ORG – AUDIENCE BEHAVIOUR ENGAGEMENT IN THE EXAMINED PERIOD BETWEEN 14 NOV. 2018 – 14 JAN. 2019 [ACCESSED ON 15 JAN. 2019]

Figure 4-13 presents the user acquisition by the various channels: out of 147 users 77 new users entered directly smart.occupancy.org, 58 new users were brought by social media, 8 by referral, and 2 by organic search. Direct and referral users have average session duration on the website while the average social media users are below, and organic search users are way over the average session duration. As the most important result of the experiment is the "Social" acquisition, the category breakdown shows various results in comparison to the category average.

Default Channel Grouping	Acquisition			Behaviour			Conversions Goal 1: Media play	
	Users	New Users	Sessions	Bounce Rate	Pages/Session	Avg. Session Duration	Media play (Goal 1 Conversion Rate)	Media play (Goal 1 Completions)
	147 % of Total: 100.00% (147)	145 % of Total: 100.00% (145)	246 % of Total: 100.00% (246)	53.66% Avg for View: 53.66% (0.00%)	3.90 Avg for View: 3.90 (0.00%)	00:03:21 Avg for View: 00:03:21 (0.00%)	57.72% Avg for View: 57.72% (0.00%)	142 % of Total: 100.00% (142)
1. Direct	78 (48.75%)	77 (53.10%)	127 (51.63%)	42.52%	5.23	00:03:45	61.42%	78 (54.93%)
2. Social	64 (40.00%)	58 (40.00%)	82 (33.33%)	74.39%	2.00	00:01:09	39.02%	32 (22.54%)
3. Referral	12 (7.50%)	8 (5.52%)	23 (9.35%)	47.83%	2.04	00:03:04	78.26%	18 (12.68%)
4. Organic Search	6 (3.75%)	2 (1.38%)	14 (5.69%)	42.86%	6.00	00:13:08	100.00%	14 (9.86%)

FIGURE 4-13 GOOGLE ANALYTICS OF SMART-OCCUPANCY.ORG – ACQUISITION OF ALL TRAFFIC BY CHANNEL IN THE EXAMINED PERIOD BETWEEN 14 NOV. 2018 – 14 JAN. 2019 [ACCESSED ON 15 JAN. 2019]

Getting to the research question and the goal of the experiment, Figure 4-14 represents the website traffic of smart-occupancy.org generated by the activated and observed social media platforms. At this point, the result requires a quick add-on explanation but also gives insight and clarification to the denotation of the experiment. At first glance, Facebook wins by the number of users. As it can be seen in Figure 4-9, on 21st November 2018 was the peak of the number of users, that was the outcome of one Facebook follower's re-post on the private feed. This action on Facebook generated 52 new users (of the total of 57 - see Figure 4-14) causing the Facebook

leads' result with an average 76.67% bounce rate and an average session of 26 seconds. This action should be considered as part of the experience to prove how most of the "influencers" work – generating fast and quick interaction, most of the time without any meaningful result. Therefore, engaged audience is more important – especially among influencers – than the number of non-reacting, non-engaged followers.

Social Network	Acquisition			Behaviour			Conversions Goal 1: Media play		
	Users	New Users	Sessions	Bounce Rate	Pages/Session	Avg. Session Duration	Media play (Goal 1 Conversion Rate)	Media play (Goal 1 Completions)	Media play (Goal 1 Value)
	64 % of Total: 43.54% (147)	58 % of Total: 40.00% (145)	82 % of Total: 33.33% (246)	74.39% Avg for View: 53.66% (38.64%)	2.00 Avg for View: 3.90 (-48.70%)	00:01:09 Avg for View: 00:03:21 (-65.60%)	39.02% Avg for View: 57.72% (-32.39%)	32 % of Total: 22.54% (142)	US$0.00 % of Total: 0.00% (US$0.00)
1. Facebook	57 (85.07%)	52 (89.66%)	60 (73.17%)	76.67%	1.93	00:00:26	36.67%	22 (68.75%)	US$0.00 (0.00%)
2. Twitter	5 (7.46%)	2 (3.45%)	16 (19.51%)	62.50%	2.25	00:04:15	37.50%	6 (18.75%)	US$0.00 (0.00%)
3. LinkedIn	3 (4.48%)	3 (5.17%)	3 (3.66%)	100.00%	1.00	00:00:00	100.00%	3 (9.38%)	US$0.00 (0.00%)
4. XING	1 (1.49%)	1 (1.72%)	1 (1.22%)	0.00%	7.00	00:00:40	100.00%	1 (3.12%)	US$0.00 (0.00%)
5. YouTube	1 (1.49%)	0 (0.00%)	2 (2.44%)	100.00%	1.00	00:00:00	0.00%	0 (0.00%)	US$0.00 (0.00%)

FIGURE 4-14 GOOGLE ANALYTICS OF SMART-OCCUPANCY.ORG – ACQUISITION OF ALL TRAFFIC BY SOCIAL MEDIA CHANNELS IN THE EXAMINED PERIOD BETWEEN 14 NOV. 2018 – 14 JAN. 2019 [ACCESSED ON 15 JAN. 2019]

YouTube and LinkedIn brought 1 and 3 users to the website with a 100% bounce rate while YouTube was excluded officially from the experience after the first adjustments. Although followers of the LinkedIn channel shared also some of the posts on their personal feed and generated extra impressions (see Figure 4-5), the users did not tend to click towards the website but remained in the LinkedIn flow in the moment of the impression. Xing generated one fast-clicker user in one session with 7 pages and 40 seconds.

Twitter brought 5 users to the website, 2 out of the new users – meaning the other 3 users have visited the website prior. The 5 users generated 16 session with 62.50% bounce rate and average 4 minutes 15 seconds session time. 6 times the indicated link was followed to complete the media play goal. Altogether with the provided information of Twitter Analytics, **Twitter is the most useful online channel to generate significant traffic to a scientific online content** (**Côté and Darling, 2018; Shepherd 2018**). How the success of the content management is shaping later, depends again on the storytelling of the channel, term, and brand, how is adjusting itself to the audience's feedback and reaction. In addition, excessive posting can measure a bigger quantity of traffic but raise the question of quality of the audience. However, the next step of the community building is to reach out to people online with personalized messages or live at any relevant occasions (e.g. presentations, workshops, university lectures).

Figure 4-15 is the breakdown list of the referrals. The users redirected from the parent institute's website (ipre.at) spent a bit more than 3 minutes per session, aligning with the average

duration of all users. The Search Console results on Figure 4-16 shows the results of SEO: the keywords generated 44 impressions and 3 clicks, leading to an average CTR of 6.8% and an average result position of 7.3 (is the average of the highest result position in Google search). On the other hand, the breakdown of the Organic Search in the Google Analytics shows an acquired user with the search term "smart occupancy" and further 5 users who spent over the average time on the website. The Search Console listed the following queries with recorded impressions: smart occupancy, erzherzog johann, smart education, smart institute, forschungsinstitut, smart research (Figure 4-24). As a breakdown to detail Figure 4-18 shows the integrated Search Console results, in which countries were the impressions generated and where were the clicks coming from. The average position by country is a great help to see the development of SEO and the key search terms.

Source	Acquisition			Behaviour			Conversions Goal 1: Media play		
	Users	New Users	Sessions	Bounce Rate	Pages/Session	Avg. Session Duration	Media play (Goal 1 Conversion Rate)	Media play (Goal 1 Completions)	Media play (Goal 1 Value)
	12 % of Total: 8.16% (147)	8 % of Total: 5.52% (145)	23 % of Total: 9.35% (246)	47.83% Avg for View: 53.66% (-10.87%)	2.04 Avg for View: 3.90 (-47.58%)	00:03:04 Avg for View: 00:03:21 (-8.52%)	78.26% Avg for View: 57.72% (35.58%)	18 % of Total: 12.68% (142)	US$0.00 % of Total: 0.00% (US$0.00)
1. ipre.at	11 (91.67%)	8(100.00%)	21 (91.30%)	42.86%	2.14	00:03:22	80.95%	17 (94.44%)	US$0.00 (0.00%)
2. at.search.yahoo.com	1 (8.33%)	0 (0.00%)	2 (8.70%)	100.00%	1.00	00:00:00	50.00%	1 (5.56%)	US$0.00 (0.00%)

FIGURE 4-15 GOOGLE ANALYTICS OF SMART-OCCUPANCY.ORG – ACQUISITION OF ALL TRAFFIC BY REFERRALS IN THE EXAMINED PERIOD BETWEEN 14 NOV. 2018 – 14 JAN. 2019 [ACCESSED ON 15 JAN. 2019]

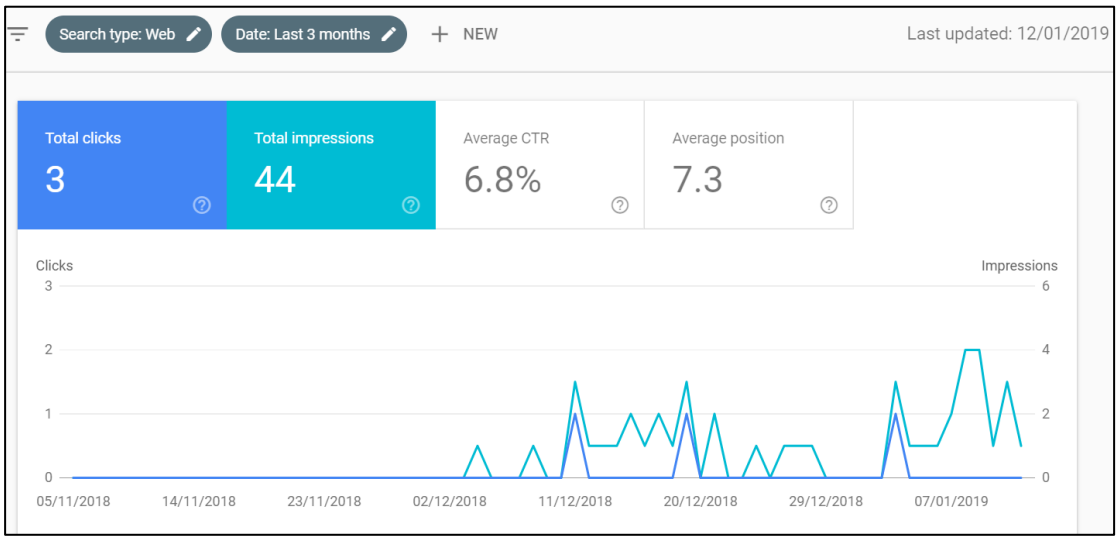

FIGURE 4-16 GOOGLE SEARCH CONSOLE – WEB IMPRESSIONS AND CLICKS OF SMART-OCCUPANCY.ORG/ BETWEEN 5 NOVEMBER 2018 – 12 JANUARY 2019

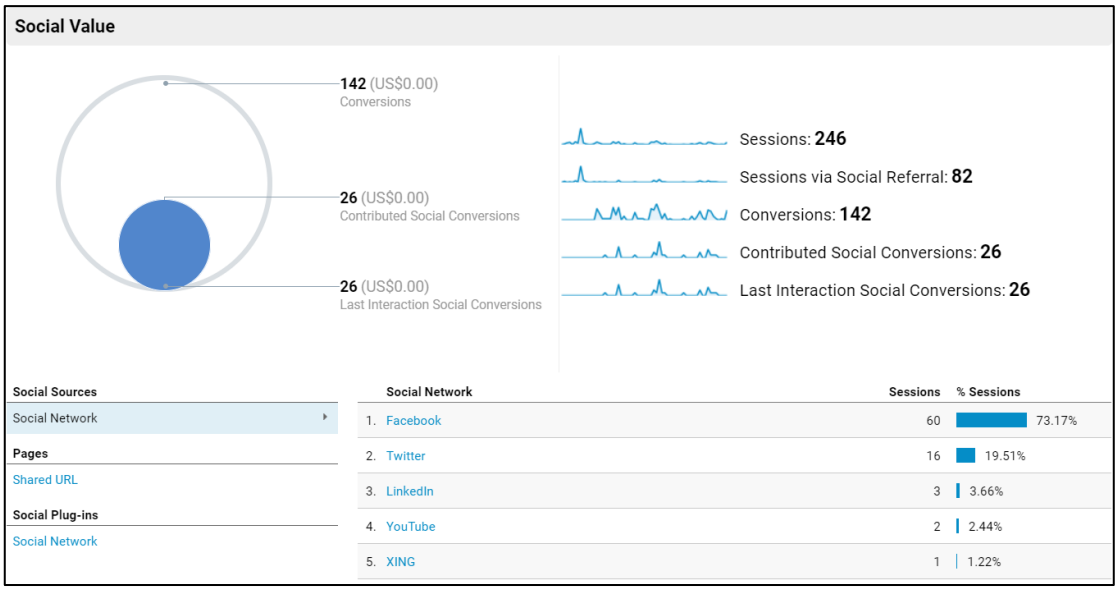

FIGURE 4-17 GOOGLE ANALYTICS OF SMART-OCCUPANCY.ORG – ACQUISITION AND SOCIAL VALUE OF THE SOCIAL MEDIA USERS IN THE EXAMINED PERIOD BETWEEN 14 NOV. 2018 – 14 JAN. 2019 [ACCESSED ON 15 JAN. 2019]

Keyword	Acquisition			Behaviour			Conversions Goal 1: Media play		
	Users	New Users	Sessions	Bounce Rate	Pages/Session	Avg. Session Duration	Media play (Goal 1 Conversion Rate)	Media play (Goal 1 Completions)	Media play (Goal 1 Value)
	6 % of Total: 4.08% (147)	2 % of Total: 1.38% (145)	14 % of Total: 5.69% (246)	42.86% Avg for View: 53.66% (-20.13%)	6.00 Avg for View: 3.90 (53.91%)	00:13:08 Avg for View: 00:03:21 (291.55%)	100.00% Avg for View: 57.72% (73.24%)	14 % of Total: 9.86% (142)	US$0.00 % of Total: 0.00% (US$0.00)
1. (not provided)	5 (83.33%)	1 (50.00%)	12 (85.71%)	41.67%	6.75	00:15:19	100.00%	12 (85.71%)	US$0.00 (0.00%)
2. smart occupancy	1 (16.67%)	1 (50.00%)	2 (14.29%)	50.00%	1.50	00:00:03	100.00%	2 (14.29%)	US$0.00 (0.00%)

FIGURE 4-18 GOOGLE ANALYTICS OF SMART-OCCUPANCY.ORG – ACQUISITION OF ALL TRAFFIC BY CHANNEL OF ORGANIC SEARCH IN THE EXAMINED PERIOD BETWEEN 14 NOV. 2018 – 14 JAN. 2019 [ACCESSED ON 15 JAN. 2019]

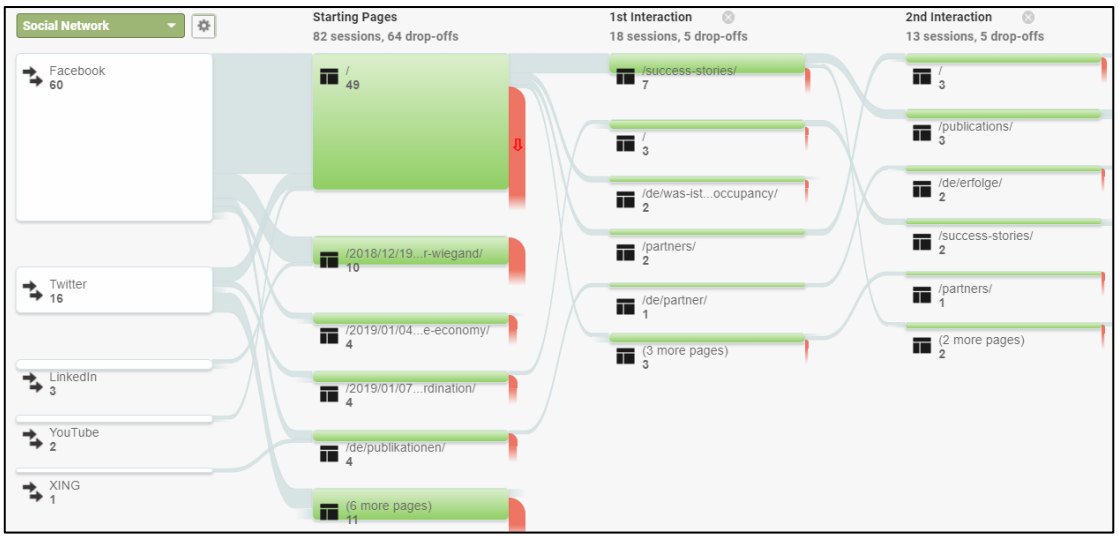

FIGURE 4-19 GOOGLE ANALYTICS OF SMART-OCCUPANCY.ORG – USER FLOW OF THE SOCIAL MEDIA USERS ON THE WEBSITE IN THE EXAMINED PERIOD BETWEEN 14 NOV. 2018 – 14 JAN. 2019 [ACCESSED ON 15 JAN. 2019]

Source/Medium	Acquisition			Behaviour			Conversions Goal 1: Media play	
	Users	New Users	Sessions	Bounce Rate	Pages/Session	Avg. Session Duration	Media play (Goal 1 Conversion Rate)	Media play (Goal 1 Completions)
	147 % of Total: 100.00% (147)	145 % of Total: 100.00% (145)	246 % of Total: 100.00% (246)	53.66% Avg for View: 53.66% (0.00%)	3.90 Avg for View: 3.90 (0.00%)	00:03:21 Avg for View: 00:03:21 (0.00%)	57.72% Avg for View: 57.72% (0.00%)	142 % of Total: 100.00% (142)
1. (direct) / (none)	78 (47.85%)	77 (53.10%)	127 (51.63%)	42.52%	5.23	00:03:45	61.42%	78 (54.93%)
2. m.facebook.com / referral	38 (23.31%)	37 (25.52%)	39 (15.85%)	79.49%	1.90	00:00:33	33.33%	13 (9.15%)
3. facebook.com / referral	17 (10.43%)	13 (8.97%)	19 (7.72%)	73.68%	1.95	00:00:09	42.11%	8 (5.63%)
4. ipre.at / referral	11 (6.75%)	8 (5.52%)	21 (8.54%)	42.86%	2.14	00:03:22	80.95%	17 (11.97%)
5. google / organic	5 (3.07%)	1 (0.69%)	12 (4.88%)	41.67%	6.75	00:15:19	100.00%	12 (8.45%)
6. t.co / referral	5 (3.07%)	2 (1.38%)	16 (6.50%)	62.50%	2.25	00:04:15	37.50%	6 (4.23%)
7. linkedin.com / referral	3 (1.84%)	3 (2.07%)	3 (1.22%)	100.00%	1.00	00:00:00	100.00%	3 (2.11%)
8. l.facebook.com / referral	2 (1.23%)	2 (1.38%)	2 (0.81%)	50.00%	2.50	00:00:48	50.00%	1 (0.70%)
9. at.search.yahoo.com / referral	1 (0.61%)	0 (0.00%)	2 (0.81%)	100.00%	1.00	00:00:00	50.00%	1 (0.70%)
10. bing / organic	1 (0.61%)	1 (0.69%)	2 (0.81%)	50.00%	1.50	00:00:03	100.00%	2 (1.41%)

FIGURE 4-20 GOOGLE ANALYTICS OF SMART-OCCUPANCY.ORG – ACQUISITION OF ALL USERS BY SOURCE/MEDIUM IN THE EXAMINED PERIOD BETWEEN 14 NOV. 2018 – 14 JAN. 2019 [ACCESSED ON 15 JAN. 2019]

Country	Acquisition					Behaviour		Conversions Goal 1: Media play		
	Impressions	Clicks	CTR	Average Position	Sessions	Bounce Rate	Pages/Session	Media play (Goal 1 Completions)	Media play (Goal 1 Value)	Media play (Goal 1 Conversion Rate)
	45 % of Total: 100.00% (45)	3 % of Total: 100.00% (3)	6.67% Avg for View: 6.67% (0.00%)	7.3 Avg for View: 7.3 (0.00%)	12 % of Total: 4.88% (246)	41.67% Avg for View: 53.66% (-22.35%)	6.75 Avg for View: 3.90 (73.15%)	12 % of Total: 8.45% (142)	US$0.00 % of Total: 0.00% (US$0.00)	100.00% Avg for View: 57.72% (73.24%)
1. Austria	32 (71.11%)	2 (66.67%)	6.25%	5.1	11 (91.67%)	36.36%	7.27	11 (91.67%)	US$0.00 (0.00%)	100.00%
2. Germany	4 (8.89%)	0 (0.00%)	0.00%	6.0	0 (0.00%)	0.00%	0.00	0 (0.00%)	US$0.00 (0.00%)	0.00%
3. United Kingdom	4 (8.89%)	1 (33.33%)	25.00%	1.8	1 (8.33%)	100.00%	1.00	1 (8.33%)	US$0.00 (0.00%)	100.00%
4. France	2 (4.44%)	0 (0.00%)	0.00%	21	0 (0.00%)	0.00%	0.00	0 (0.00%)	US$0.00 (0.00%)	0.00%
5. United States	2 (4.44%)	0 (0.00%)	0.00%	16	0 (0.00%)	0.00%	0.00	0 (0.00%)	US$0.00 (0.00%)	0.00%
6. India	1 (2.22%)	0 (0.00%)	0.00%	61	0 (0.00%)	0.00%	0.00	0 (0.00%)	US$0.00 (0.00%)	0.00%

FIGURE 4-21 GOOGLE ANALYTICS OF SMART-OCCUPANCY.ORG – SEARCH CONSOLE RESULTS BY COUNTRIES OF USERS IN THE EXAMINED PERIOD BETWEEN 14 NOV. 2018 – 14 JAN. 2019 [ACCESSED ON 15 JAN. 2019]

The Social Value (Figure 4-17) displays the value of social media shares and generated traffic in another context. As paid services were not involved in the experiment, in the figures automatically 0 USD is the financial conversion.

For content adjustment and further traffic optimization Figure 4-19 – the social network users flow – can be used and further analyzed. Besides the homepage, the shared articles were visited what reached most of the time the automatic conversion media play goal: the click-through to the desired links. Figure 4-20 displays again the acquisition of the users in a more detailed and complex view: here is confirmed one more time the significance of direct users, referral (redirections) from ipre.at to smart-occupancy.org, the organic search optimization and the Twitter posts as the most powerful tools in the experiment.

For design purposes, Figure 4-23 has a big responsibility: Google Analytics overview and in detail, the Search Console shows the users' devices. As most of the users use desktop or mobile, both website layout editing is important in any future changes (e.g. placing social media buttons, shares, language switch, comment section etc.). Finally, Figure 4-22 shows the landing pages from the Search Console.

Landing Page	Acquisition					Behaviour		Conversions Goal 1: Media play		
	Impressions	Clicks	CTR	Average Position	Sessions	Bounce Rate	Pages/Session	Media play (Goal 1 Completions)	Media play (Goal 1 Value)	Media play (Goal 1 Conversion Rate)
	45 % of Total: 100.00% (45)	3 % of Total: 100.00% (3)	6.67% Avg for View: 6.67% (0.00%)	7.3 Avg for View: 7.3 (0.00%)	12 % of Total: 4.88% (246)	41.67% Avg for View: 53.66% (-22.35%)	6.75 Avg for View: 3.90 (73.15%)	12 % of Total: 8.45% (142)	US$0.00 % of Total: 0.00% (US$0.00)	100.00% Avg for View: 57.72% (73.24%)
1. /	34 (75.56%)	2 (66.67%)	5.88%	7.6	8 (66.67%)	37.50%	6.88	8 (66.67%)	US$0.00 (0.00%)	100.00%
2. /publications/	3 (6.67%)	1 (33.33%)	33.33%	2.0	1 (8.33%)	100.00%	1.00	1 (8.33%)	US$0.00 (0.00%)	100.00%
3. /de/2018/11/16/mehrfachnutzung-der-nordbahnhalle-in-wien/	2 (4.44%)	0 (0.00%)	0.00%	4.0	0 (0.00%)	0.00%	0.00	0 (0.00%)	US$0.00 (0.00%)	0.00%
4. /de/2018/12/19/smart-occupancy-fuer-smart-cities-interview-dietmar-wiegand/	2 (4.44%)	0 (0.00%)	0.00%	9.0	0 (0.00%)	0.00%	0.00	0 (0.00%)	US$0.00 (0.00%)	0.00%
5. /success-stories/	2 (4.44%)	0 (0.00%)	0.00%	16	2 (16.67%)	50.00%	5.00	2 (16.67%)	US$0.00 (0.00%)	100.00%
6. /2018/12/17/smart-occupancy-in-the-lebensmittel-zeitung/	1 (2.22%)	0 (0.00%)	0.00%	1.0	0 (0.00%)	0.00%	0.00	0 (0.00%)	US$0.00 (0.00%)	0.00%
7. /de/2019/01/07/smart-occupancy-im-rahmen-der-projektkoordination/	1 (2.22%)	0 (0.00%)	0.00%	7.0	0 (0.00%)	0.00%	0.00	0 (0.00%)	US$0.00 (0.00%)	0.00%

FIGURE 4-22 GOOGLE ANALYTICS OF SMART-OCCUPANCY.ORG – SEARCH CONSOLE RESULTS BY LANDING PAGES IN THE EXAMINED PERIOD BETWEEN 14 NOV. 2018 – 14 JAN. 2019 [ACCESSED ON 15 JAN. 2019]

Device Category	Acquisition					Behaviour		Conversions Goal 1: Media play		
	Impressions	Clicks	CTR	Average Position	Sessions	Bounce Rate	Pages/Session	Media play (Goal 1 Completions)	Media play (Goal 1 Value)	Media play (Goal 1 Conversion Rate)
	45 % of Total: 100.00% (45)	3 % of Total: 100.00% (3)	6.67% Avg for View: 6.67% (0.00%)	7.3 Avg for View: 7.3 (0.00%)	12 % of Total: 4.88% (246)	41.67% Avg for View: 53.66% (-22.35%)	6.75 Avg for View: 3.90 (73.15%)	12 % of Total: 8.45% (142)	US$0.00 % of Total: 0.00% (US$0.00)	100.00% Avg for View: 57.72% (73.24%)
1. desktop	25 (55.56%)	2 (66.67%)	8.00%	8.9	9 (75.00%)	55.56%	6.44	9 (75.00%)	US$0.00 (0.00%)	100.00%
2. mobile	19 (42.22%)	1 (33.33%)	5.26%	5.5	3 (25.00%)	0.00%	7.67	3 (25.00%)	US$0.00 (0.00%)	100.00%
3. tablet	1 (2.22%)	0 (0.00%)	0.00%	1.0	0 (0.00%)	0.00%	0.00	0 (0.00%)	US$0.00 (0.00%)	0.00%

FIGURE 4-23 GOOGLE ANALYTICS OF SMART-OCCUPANCY.ORG – SEARCH CONSOLE RESULTS BY DEVICES IN THE EXAMINED PERIOD BETWEEN 14 NOV. 2018 – 14 JAN. 2019 [ACCESSED ON 15 JAN. 2019]

Search Query	Clicks	Impressions	CTR	Average Position
	2 % of Total: 66.67% (3)	30 % of Total: 68.18% (44)	6.67% Avg for View: 6.82% (-2.22%)	7.9 Avg for View: 7.3 (7.49%)
1. smart occupancy	2(100.00%)	7 (23.33%)	28.57%	10
2. erzherzog johann	0 (0.00%)	12 (40.00%)	0.00%	6.4
3. erzherzogjohann	0 (0.00%)	2 (6.67%)	0.00%	5.5
4. gesim	0 (0.00%)	1 (3.33%)	0.00%	61
5. smart education	0 (0.00%)	5 (16.67%)	0.00%	2.4
6. smart institute	0 (0.00%)	2 (6.67%)	0.00%	1.0
7. smart research	0 (0.00%)	1 (3.33%)	0.00%	2.0

FIGURE 4-24 GOOGLE ANALYTICS OF SMART-OCCUPANCY.ORG – SEARCH CONSOLE RESULTS BY SEARCH QUERIES IN THE EXAMINED PERIOD BETWEEN 14 NOV. 2018 – 14 JAN. 2019 [ACCESSED ON 15 JAN. 2019]

4.5 Summary

Important to mention again, the protagonist of the experiment was a newly built website, using only free, organic tools of the online content management, none of the paid SMM tools were involved in the research. The results showed that without SEO, referrals and social media presence the website would have reached only half of the resulted number of users (78 vs. 147 users in the experimental period). For that reason, investing the same amount of time in social media presence and SEO is just as crucial as the structure design and content management of a website, also in scientific field.

Appendix 2 displays a quick update of Google Analytics between 14 November 2018 and 28 February 2019. If we would have extended the observation period with 6 weeks, we could have observed further, continued, incoming data. The aftermath of the experimental period can be still measured even after 6 weeks of the closed period, the new, thematical posts still generate the significant and desired audience behaviour. This result shows the importance of different online approaches for online presence establishment.

5 CONCLUSION

5.1 Summary

The experiment tapped into a rare research area with limited relevant offline and research literature but a wide range of online material. Selecting relevant and important material and reflecting on them would require itself a stand-alone research. The summary of the personal observations and possible future strategy and opportunities are available on the next pages of the conclusion.

5.2 Observations during the experiment

During the postings the difference of hashtags on different channels can be learnt and the individual way of postings. To tap into different, already existing "hashtag-pools" and communities, the tags must be used according to the media channel's system. E.g. Twitter uses #FacilityMgmt while LinkedIn would use #facilitymanagementfm as a tag. To have a valid hashtag in a post, users must adapt to the channel's community habits and tags.

One of the key factors of building a successful digital presence for any kind of businesses is the ***personal contacts***. Nowadays, with the help of online networks and various channels people can connect worldwide. However, they still must get in contact with each other - actual people - to build a fan-base, community, future clients, customers etc. to be recommended and support the traditional word of mouth marketing besides eWOM.

As this experiment required to start boosting a topic in an online environment from zero, the first content had to be loaded and activity had to be signalized on the websites and every channel. Nowadays, one of the most discussed questions is how digitalization can affect the labour market, how jobs disappear and simultaneously appear one day to another. However, digitalization surrounds every day's life, everyone must understand a critical factor, behind every digitalized process there is still a human being, a person to control. For that reason, some personal observations were noted during the experiment:

- As most of the cases, any sales or marketing job requires to represent fully the company or product, the storyteller should identify himself with the content. In case of online Marketing and Business Development, this relationship requires also a bond.

- The position or task requires self-motivation and continuous adjustments: not reaching KPIs or not in the desired rhythm can be demotivating. However, content, strategy metrics etc. can be anytime feedbacked and adjusted.
- The person should be open to new ideas and should try out different scenarios to reach targets and conversions (reachability, user traffic, SEO scores etc.). The budget can be the only limit for some ideas, but the budget limit can also actively support creativity.
- The channel should be taught and well communicated among colleagues and relevant stakeholders: about its existing, potential, future clients, habits, deeper interest to provide content long-term, what engages them with the institute and its content (videos, buzz stories, local news, regulations, and changes in real estate and so on…)
- Using only specific hashtags does not get any significant traffic or engagement.
- Sharing post among friends is how influencers work nowadays. A meaningful share for a community from the right person creates buzz, 80% of the generated traffic comes within a half day, and echoes (still generate traffic) within the first 1,5-2 days. If a new post or activity does not follow this period, 0 new users can be tracked
- Videos on YouTube can be divided into two categories: shared at additional social media channels or not shared, uploaded only on YouTube. Those videos what have been shared at least once on any other platform has clearly more views than not distributed videos. Within 2-3 weeks, one post brought 30-40 views without fanbase to a video while the non-shared videos had 2-3 views within the same period on the same YouTube channel.

5.3 Implications for relevant stakeholders

The whole experiment influenced and affected less than 10 people in the institute and partners' daily routine. The testing period showed us that only consequent and well-timed posting plan and online interaction can generate traffic, the quality improvement of the content and the posting strategy is the next stage of the online presence development. ***Without Social Media presence and online tool management, the website would have had only a small fraction of the generated traffic***.

What is the importance of stakeholders' action in the future? In the experience, we have tested exclusively online tools. Offline, classic human interactions (presentation, conferences, word of mouth) can generate a different set of data. The third kind of set that could be measured is the mixture of online and offline interactions and the spread of information. The stakeholders' role

is indispensable in offline marketing while content management, online structure, and strategy is the key factor for a successful web presence.

5.4 Future goals and strategy, possible future research topics

The experiment was enough to have a sip of online content management and presence building with the help of SEO and SMM. However, building a successful online platform with an engaged community requires continuous observation and adjustment to the demand of the community.

Seeing the online potential of the target audience raises some questions and further possible research areas. Is the content of the website interesting enough? Must the content be re-wrapped to attract and retain visitors to the website? Is it necessary at all to have a website when people spend most of their time on social media channels and tend to be uninterested to click further than the post or the social media profile itself? Of course, these questions and the answers to them depend mostly on the target audience.

All in all, the opportunities given by the social media channels, the mutual and their added, magnified power, their free use and the possible achievements with them, are truly remarkable. The experiment proved, that some free tools' analytics can be as powerful as paid services, the most important factor is to learn first about goals, needs, demands and mostly: budget. The research helped to give a clear idea about the use of the most important and relevant social media platforms, the required time for content and channel management, and what goals can be expected in different time investment situations.

Smart Occupancy as a term and the non-profit structure of IPRE behind it allows the future strategy to test and research further questions with small financial investment, using paid tools for a discounted price or free of charge.

5.5 Recommendations

Building a successful website can be built from different approaches. This thesis examined one of them, using online channels and tools as add-on elements of an online branding strategy to establish the online presence of a scientific term. The most important KPIs and their rankings (see chapter 3.6.) can give feedback and lead to a build-up of a successful website after an entry-period of accessing the Internet. Further researches can be built on different stages of online branding: e.g. rebranding, reaching out to bigger audiences, increase audience engage-

ment etc. Whatever is the purpose of the experiment, a clear statement must be laid at the founding to reach the best possible results in theory and practice at the same time.

Digitization has a huge impact on our economy, in many perspectives supports sustainability and creates a fast-paced environment for basically anything. As a continuum of this experiment, larger environments could be observed e.g. via Google Grants funded Google Ads. In case of a non-profit institute. Also, a fully automatized CRM system's establishment and its impact on an organization – in connection with Social Media – could be relevant not just for scientific terms, materials, and organizations but small and medium profit-oriented companies.

Getting back to the current research, in my opinion, cross-tagging (as a loophole of the world of SMM) and its impact would worth a documented experiment. A comparison of generated impressions and engagements through content-related hashtags vs. cross-tagged hashtags could prove the online importance of some topics while could disregard famous offline contents.

Another assumption and possible research topic can be the comparison of the strength of organic vs. paid online marketing tools. As the outcome of this experiment, we learnt, that we should manage only 3 social channels that could bring us significant relations in the future. Based on this fact and being aware of our next steps and mid-term strategies, we have implemented for the second online content series the API called "Buffer"[9] – that could be used up to 3 channels. Buffer is one of the scheduled content management tools infusing all the active social media channels' posts and analytics. In a tiny non-profit organization's life a free, automatized content management tool could save a significant amount of time.

Last but not least, the most relevant recommendation is clearly the branding and online branding of science, in a more aggressive, intensive, bigger and deeper context. The dawn of big data has given the chance for a more successful way of branding, commercializing processes where commercial processes have never been seen. Online social media channels give the opportunity to teach society and give awareness to worldwide issues that have not been faced or not enough stakeholders were reached. The power of the global network should be used in a more optimized way for science. That is why science needs branding and especially online branding.

[9] https://buffer.com/pricing [Accessed on 20 Jan. 2019]

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APPENDICES

Appendix 1: Twitter Analytics – a detailed overview of the organic impressions, engagements between 14 November 2018 - 11 January 2019. [Accessed on 14 Jan. 2019]

Tweets | Top Tweets | Tweets and replies | Promoted

	Impressions	Engagements	Engagement rate
Smart-Occupancy @SmartOccupancy · Jan 7 #smartoccupancy #urbanization #smartcities #sustainability #realestatedevelopment #facilitymanagement #smartgrowth #sustainabledevelopment #sustainabledesign #mehrfachnutzung #research #institutionalresearch #researchdevelopment #researchprojects smart-occupancy.org/2019/01/07/sma… View Tweet activity	115	2	1.7%
Smart-Occupancy @SmartOccupancy · Jan 4 smart-occupancy.org/2019/01/04/sma… #smartoccupancy #urbanization #smartcities #sustainability #realestatedevelopment #facilitymanagement #smartgrowth #sustainabledevelopment #sustainabledesign #mehrfachnutzung #research #institutionalresearch #researchdevelopment #researchprojects View Tweet activity	147	4	2.7%
Smart-Occupancy @SmartOccupancy · Dec 22 IPRE wünscht Ihnen frohe Weihnachten, viel Glück und Erfolg im kommenden Jahr! #smartoccupancy #smartcities #sustainability #realestatedevelopment #facilitymanagement #SustainableDevelopment #mehrfachnutzung #research #institutionalresearch #researchdevelopment #researchprojects pic.twitter.com/qIGLgzAZZh View Tweet activity	325	3	0.9%
Smart-Occupancy @SmartOccupancy · Dec 19 Why is #smartoccupancy important for #SmartCities? tinyurl.com/y8mh9kyk Interview with @DietmarFor Wiegand. #globalization #urbanization #sustainability #realestatedevelopment #facilitymanagement #smartgrowth #sustainabledevelopment #sustainablearchitecture #mehrfachnutzung pic.twitter.com/A4h4Z8uJBH View Tweet activity	594	6	1.0%
Smart-Occupancy @SmartOccupancy · Dec 18 smart-occupancy.org/2018/12/17/sma… #lebensmittelzeitung #smartoccupancy #globalization #urbanization #smartcities #sustainability #realestatedevelopment #facilitymanagement #smartgrowth #sustainabledevelopment #mehrfachnutzung #research #institutionalresearch #researchdevelopment View Tweet activity	329	4	1.2%
Smart-Occupancy @SmartOccupancy · Dec 5 Check the available publications of #smartoccupancy: smart-occupancy.org/publications/ #researchers #research #ResearchHighlight #Researchpaper #Sustainability #SustainableDevelopment #PropertyManagement #RealEstate #development #nonprofit #institute #SmartCities #FacilitiesManagement pic.twitter.com/PoWu3bshBr View Tweet activity	159	5	3.1%
Smart-Occupancy @SmartOccupancy · Nov 21 The next chapter is online! Follow #SmartOccupancy Die nächste Folge von #Mehrfachnutzung smart-occupancy.org/de/2018/11/21/… #PopUp #FacilitiesMgmt #urbanplanning #stadtentwicklung #SmartCity #PropertyManagement #PropertyResearch #SmartBuilding #efficiency #Entrepreneur #Entrepreneurship View Tweet activity	227	9	4.0%
Smart-Occupancy @SmartOccupancy · Nov 16 What is #smartoccupancy? Was ist Smart Occupancy, oder #merhfachnutzung? Read more here/Mehr Info unter: tinyurl.com/ybalvb52 #realestatedevelopment #urbanplanning #propertyresearch #raumplanung #Immobilien #RealEstate #PropertyManagement #facilitiesmanagement #FacilitiesMgmt View Tweet activity	760	34	4.5%

Engagements
Showing 62 days with daily frequency

Engagement rate
2.8%
Jan 14
0.0% engagement rate

Link clicks
17
Jan 14
0 link clicks

On average, you earned **0 link clicks** per day

Retweets
0
Jan 14
0 Retweets

On average, you earned **0 Retweets** per day

Likes
11
Jan 14
0 likes

On average, you earned **0 likes** per day

Replies
0
Jan 14
0 replies

On average, you earned **0 replies** per day

Appendix 2: Part of the Google Analytics Data of smart-occupancy.org between 14. November 2018 and 28. February 2019 – mobile version [Accessed on 2 March 2019]

Audience by acquisition

Users	Sessions	New users
202	317	200

Users by default channel grouping

Default channel grouping	Users
Direct	114
Social	70
Referral	23
Organic Search	9

Behaviour by acquisition

Bounce rate	Page views	Avg. session duration
56,78%	1.1K	00:03:13

Bounce rate by default channel grouping

Default channel grouping	Bounce rate
Direct	50,60%
Social	73,33%
Referral	47,50%
Organic Search	52,63%

New users by time of day

200