IS ANYBODY HOME? THE ROLE OF COMPANY WEBSITES FOR SMALL BUILDING CONTRACTORS IN SWEDEN

Martine Buser[1] and Veronica Carlsson

[1] *Construction Management, Chalmers University of Technology, Gothenburg, Sweden*

During the last decades, being visible on the Internet has been advertised as the solution to develop businesses. Among other benefits, it should increase profitability by enlarging the number of customers and accelerating processes and communication. Indeed by 2012, 92% of the Swedish micro, small and medium sized enterprises (SMEs) had a website presenting their companies; the construction sector for once is no exception. Looking at SME building contractors we inquire into whether the announced potential of being online has been realized and, in particular if their relations to customers have improved. Referring to customer relationship management and e-business studies, we focus on 4 aspects of websites to assess their qualities: content, convenience, control and interaction. The material consists of a sample of 90 building contractors of the region of Gothenburg in Sweden. We have examined the companies' websites, checked their profile, contacted them by phone and carried out in-depth interviews with 21 of them. The results show quite diversified strategies and benefits of their use of websites. Updating the sites regularly or gaining customers seem to be the exception, and the uses of the web sites are so far rather rudimentary. If there is no surprise in the SMEs building their customers relationship on direct contact and local network, the passivity and lack of visibility towards new customers and business opportunity are nevertheless intriguing. Even more as the sector is facing a rather bad reputation in the public. Finally a close contact with clients is said to be one of the most important factors contributing to innovation which these SMEs acutely need to face the new energy regulations.

Keywords: SME, websites, customers' relations, renovation.

INTRODUCTION

Once a novelty, internet has by now transformed the way we study, work, travel, go to the doctor, socialize or love. Business relations in particular have been reconfigured and new practices have developed (Zott *et al*. 2011). During the last decades, being visible on the Internet has been advertised as the solution to develop businesses and improve contact with customers. Among others it should increase profitability by enlarging the number of clients and speeding up processes and communication (Pool *et al*. 2006). Indeed by 2012, 92% of the Swedish micro, small and medium sized enterprises (SMEs) has websites presenting their companies; and the construction sector is in line with this figure. But being present on the web is not an aim as such; it should be a mean to access new jobs and customers (Taylor and Murphy 2004). Whereas the integration of the Internet in SMEs as a tool to develop business

[1] buser@chalmers.se

Buser, M and Carlsson, V (2014) Is anybody home? The role of company websites for small building contractors in Sweden *In:* Raiden, A B and Aboagye-Nimo, E (Eds) *Procs 30th Annual ARCOM Conference,* 1-3 September 2014, Portsmouth, UK, Association of Researchers in Construction Management, 977-986.

opportunities has been fairly studied during the years 2000-2005, especially in term of describing potential and models to achieve these benefits, there are only few updates on the use of websites in 2014 according to our searches. In the construction sector it seems that SMEs, their clients and internet are currently either a hole in the research map or taken for granted as we could not find recent studies on the subject in the usual publications databases nor in the special construction sector bases (ITcon, Arcom, Cib, etc.). SMEs, defined as less than 250 employees (EU 2005) constitute more than 80% of the Swedish construction sector (Eurostat 2013), and consequently are important contributors to employment, economic growth and the development of a sustainable society.

Building on an ongoing research on these companies in the Southwest of Sweden, we look at how these SMEs are using websites in 2014, what changes this has brought to their relationships to customers and what might be the main barriers to optimise their use of the Internet?

SMES AND WEBSITES

According to e-business strategies (Cruz-Cunha and Varajão 2010, Pool *et al*. 2006, Zott *et al*. 2011), the company's website should provide information on goods, services or technologies. The company can demonstrate their specific knowledge competences and products using text, pictures, video clips, social networks or customers' feedback,. They can also indicate the scope of the delivery in terms of physical areas, sizes of projects, or type of clients. All this should be done to enhance the quality of companies' services to customers and to attract new customers. By collecting information on customers' needs and demands, the company can also initiate product development or innovation. By providing direct link to e-mail accounts or contact forms, the company can give potential and existing clients access to their services on a 24/7 base. In doing so, it increases the speed of interaction with customers and assures that the communication from the clients gets through. It can also increase its business potential and expand its market geographically.

Likewise for the customers the benefits are a greater accessibility and visibility to companies' products and services; the possibility to contact companies outside of the traditional opening hours; an increase in market; a price transparency as well as the possibility to compare between the different providers (Chaffey 2010).

According to previous studies regardless of sectors, SMEs have problems to benefit from their presence on-line and do not realise the potential that larger companies have succeeded to obtain (Pool *et al*. 2006, Jones *et al*. 2011). Taylor and Murphy (2004) have identified four barriers for SMEs to a successful management of the web interface: the first barrier is the content: it should be an eye-catching and convincing presentation of a product or service; the second is the convenience: it should be usable and fit customers purpose for search; the third is control: the company should define processes of control to update its website and to respond to customer inquiries; the fourth is interaction: the company should build relationships with customers and other businesses and make these relationships visible. Taylor and Murphy (2004) also mention price sensitivity and brand image as issues to be tackled. ICT organisational competence, cost as well as environmental factors of firm size and industry types do not seem to be meaningful regarding SMEs' adoption of e-business (Ifinedo 2011). Still SMEs seem to be struggling to find out how internet based relations can complement and not destroy traditional, face-to-face customer relationships (Harrigan *et al*. 2011).

BUILDING CONTRACTORS SMES

For the building contractors SMEs, their business is usually portrayed as based on a market of proximity, geographically very narrow and limited. The sector is also said to be based on local and personal network as SMEs rely on personal recommendations to get new jobs and customers. However Forman and Haugbølle (2011) found that for SMEs active in building prefab detached houses, the most effective marketing approaches was *"word of mouth"*. And also the companies' own websites, closely followed by promotional material and ads at the construction site. Regarding the aspiration of these SMEs towards the future, it should not be taken for granted that all SMEs are aiming at increasing size and turn over, some are not really interested in increasing the numbers of customers or in developing their business (Barrett and Sexton 2006). In this context, where business as usual seems to be sufficient, the need to develop businesses and in particular relations to new customers does not seem to be a priority for these SMEs.

RENOVATION CONTEXT

However, following EU regulations, Sweden has now formulated ambitious national policies regarding sustainability but is challenged when facing design and implementation of solutions to reach the climate targets. In order to reshape the existing built environment towards these environmental targets there is a need for innovative solutions (Næss-Schmidt *et al*. 2012). Buildings represent 30% of the total energy consumption in Sweden (Boverket 2010). Energy renovation is therefore one of the most significant contributions to decrease energy usage (Risholt *et al*. 2013). However in order to provide sustainable solutions construction companies need to update their ways of working especially in integrating new technologies and products to their actual offers (Mokhlesian and Holmen 2012). The SMEs are said to be insufficiently equipped to develop and adapt these solutions. Small firms lack the full set of skills and resources to deal with and benefit from the upcoming increase of opportunities (Hardie and Newell, 2011).

SMEs need to reshape their practices and behaviours to attain these energy targets. However the construction related SMEs are not known to be especially active in term of innovation. It is likely though that a business as usual attitude will miss the escalating environmental performance requirements (Hardie and Newell, 2011). Hardie and Newell (2011) highlight that clients and building standards are the most important factors to incite and support these SMEs in their innovation process. In parallel, private house owners are also pressed to renovate to comply with EU´s energy efficient directives (Directive 2010/31/EU). Collaboration with clients is also stated as the most important driving forces of renewal in the construction industry by Håkansson and Ingemansson (2012). Yet both authors seem to take for granted that customers are available. Increasing visibility to potential clients and marketing the company do not seem to present a potential for innovation. These are seen -though- as an essential motivation to develop a web interface.

Moreover, the renovation market is not only depending on construction related companies, large Do-it-yourself chains, magazines and TV programmes are also participating by helping clients to carry out jobs themselves. Moonlighting is also a heavy competitor to SME's jobs (Koch 2013). Once the house owners have decided for hiring a craftsman to carry the renovation work, they usually follow their neighbours and employ the same small and medium sized enterprises (Doona and Jarlbro 2009). Yet the possibility, among other given by internet, for the customers to get access to products, solutions as well as services and advices increases their ability to make energy efficient choices and to require specific solutions (Risholt and Berker 2013). This also puts pressure on the SMEs not only to innovate and increase their portfolio of solutions but also to be knowledgeable about the various possibilities and therefore able to advocate and argue for their choices when meeting their clients. To summarise it seems that construction SMES visibility and close relation to their customers could support and benefit not only the business development of the companies but also the achievement of climate targets.

METHOD

The material used for this paper is taken from an ongoing action research project (2013-2015) aiming at developing SMEs' business models for energy renovations of detached houses. For this exploratory paper, we adopt an interpretive sociological framework using a mixed method approach combining quantitative and qualitative data (Bryman and Bell 2011). Quantitative data have been gathered through desk research when studying the 90 websites of the potential participants to the ongoing project as well as when trying to establish a first contact with them. Qualitative data have been collected during interviews, workshops and participant observation with the owners of the 21 enterprises participating in the project.

The enterprises were partly sought out from a map search engine in the Southwest region of Sweden using profession related key words and partly through snowballing (Patton, 1980) when interacting with the enterprises. An email, shortly explaining the project and letting the enterprises know they were to expect a phone call was sent out to each one. Between three and five days later a first follow up phone call was made to assess their interest. The ones expressing a positive attitude received an extended description of the project by email. A second phone call was made to confirm the companies' participation. This resulted in a thinning of potential enterprises from 90 till 24. We visited the 24 enterprises for a first interview and 21 of them accepted to be part of the project. The visits lasted of an average of 1hour 40 minutes and part of it consisted of an open interview on their practices regarding customers. Five workshops have so far been carried out with the enterprises; besides 7sessions of selling negotiations between craftsmen and their customers have been observed as well as twelve follow up interviews of an average of 2 hours and 30 minutes.

In the first round the companies sample counts: 52 carpenters, 11 electricians, 9 energy solution providers, 4 plumbers, 7 ventilation, 3 brick layers and 4 tile layers. All are openly active in renovation works.

In the second round it counts 16 carpenters, 2 electricians, 5 energy solution providers, and 1 brick layer

The present paper presents the preliminary results of this ongoing research however we only focus on the information concerning the use of websites. Though gathering an important number of companies, there is no claim that our sample is representative of the structure of the construction SMEs in the Southwest region of Sweden. We find our results nonetheless informative about these companies' behaviours.

FINDINGS

The presentation of the findings is divided into two sections. The first section presents the results of the survey of the websites structured by the four barriers identified by Taylor and Murphy (2004); the second the preliminary results of the interviews and workshops.

Features of the web sites

The content

The 90 websites visited provided all information about the companies sector of business and their contact information (address and telephone number) but for 30 of them there was nothing else to be found. 55 were showing pictures of their realisations but only one had provided a before and after comparison of the performed work. We did not discover any explanations of how the work would be conducted. 6 websites were offering services to their customers such as ordering material or contacting other suppliers. No estimation of cost was given regarding the type of work the company could carry out and the only pricelists we found were given by a link to their suppliers on 6 of the websites. However 14 websites were giving links to supplier's product catalogues. One site though proposed a handyman for the price of 1800 SKR per day (around 163 GBP). We did not find either estimation of the time needed to perform any standardised tasks.

Regarding the quality of their services, 33 were mentioning and showing various quality certificates they have obtained such as bathroom quality or sustainable environmental work certifications. Providing pictures of refurbishments executed for the customers can also be seen as a quality proof of the execution. To the exception of one site, none of the other websites did offer a space for customers' feedback. However connections to social networks such as Facebook or Twitter were present in 11 of the sites.

Finally regarding the impression given by the websites in terms of the companies illustrating their professionalism or their aesthetic expression, it would be worth to engage in a *"semiotic"* study as the quality of the sites varies greatly. Still there are virtually no websites which really looked homemade, the large majority offers well designed sites even if one can wonder if the fleet of the company's vans really is the best way to represent the company profile.

Convenience

Convenience for customers are supported by the functions available to simplify the clients navigation and access. 57 sites provided a direct electronic connection to the company for the customers. Either by providing an e-mail address or a small window for the customers to write their request. One site provided a scroll menu where the client could choose the kind of services s/he was looking for. None of the websites asked for the clients to provide their contact information so the company could call back.

There is very little information to gather for the potential customers. The absence of work description in term of estimation of work load, planning, execution and prices make any comparison between the different companies very difficult. However the 9 energy solution SMEs did provide general information about the different energy saving solutions which they could implement, such as geothermal heating, air source heat pumps, solar panels etc. as well as prices related to the different systems however these prices did not cover the installation cost.

Control

The processes of control reside in updates of websites and answers to customer inquiries. Many of the sites were created in 2008, when a new possibility for subsidy to reduce cost of renovation for private persons was provided by the government. Some of the sites seem not to have been updated since. The following chart presents the update rates of the websites we have looked at. Only 17 of the companies have a regular update routine with a scope of frequency spreading from once a week to once every 3 to 4 months. Most of the companies of our samples do modify their site once or twice a year.

Table 1: Frequency of updates of the content of the web sites by type of company

Frequency	Carp.	Plumb	energy	Tile	Brick	El	Vent.	total
every1-2 months	3	1	5			2		11
every 3-4 months	5		1					6
2 a year	12			2		3		17
1 year	25	1	1	1	3	3	5	39
>1 year	7	2	2	1		3	2	17

Regarding the answers to customers' enquiries our own experiences are saying: even if we are not customers, we saw only two companies that answer the first e-mail we sent out: one to accept and the other one to decline. This low feedback on the first e-mail questions the quality of reactivity of these companies to electronic inquiries.

However, the first round of phone calls did get a slightly better result. 11 of the carpenter companies answered on the first trial when we were calling, 8 out of them had an administrative employee doing so. All of the 9 energy solution companies answered on the first trial. On the other end of responding to clients enquires, 5 active companies never answered our calls regardless of what time of the day we tried and the number of calls we made (up to 20). For the others, it took between 2 and 12 trials before getting through.

Interaction

Interaction features focus on how the companies build relationships with customers and other businesses and make these relationships visible. There are signs of networking between companies as 47 websites are providing links to or advertising for other professional collaborative partners. The relations to customers are not visible on the websites to the exceptions of pictures of realised executions. There are no links to professional websites or customers oriented portals providing clients with support for choices of craftsman and offers.

A few websites, 10, offer the possibility to apply directly for a job in their company and 4 use the site as an advertising space for other types of businesses such as Systembolaget (the government owned chain having monopoly on providing alcohol in Sweden).

Table 2: Summary of the web sites features by type of company

Company / Web site features	Carp.	Plumb	energy	Tile	Brick	El	Vent.	total
Info and contact	52	4	9	4	3	11	7	90
Catalogues	3	2	9					14
Prices list	2	1	2			1		6
Service to the clients	6		1			1		8
E-contact	29	2	4	4	1	7	2	49
Jobs pictures	33		5	4	3	9	1	55
Network	27	4	4	3	2	5	2	47
Quality certificates	16	1	4	2	2	5	3	33

Based on our assessment following the mentioned criteria, we order the websites in 4 groups: the first is a group of very active SMEs which gathered 6 companies who provide frequent regular updated information on their activities and offers, easy access and services for the clients as well as links to various supporting sites; the second is the active group, counting 14 members who update the website regularly and have adequate interface tools; the third group, minimum, contains 37 companies and represent the low activity group who offers electronic connection for the customers and some pictures of their realisations however without any regular updates. The last group, passive, encompasses 30 SMEs who only provide contact and sector related activity information.

Table 3: Distribution of companies' web sites in term of activities

Website / Companies	Very active	Active	Mini	Passive	Out of job	total
Carpenter	1	8	25	15	3	52
Electrician	1	2	5	3		11
Energy	4	2		3		9
Plumber		1		3		4
ventilation			4	3		7
Brick layer			1	2		3
Tile		1	2	1		4
Total	6	14	37	30	3	90

To deduce that the last category contains the least customers' oriented companies would be a mistake as two of the carpenters belonging to this group appear to be very skilled and praised companies with a reputation spreading largely outside of the local boundaries. They have chosen to present themselves in a very a minimalist but very aesthetic fashion. Also the 21 enterprises partaking in the project are to be found in all the activity groups.

Customers and websites as described during the interviews and workshops

This section presents the preliminary results of the first interviews and workshops held with 21 of the companies.

Regarding their relations to customers, the participants express two different positions the first concerns the relations to their own customers and the second relates to the reputation of the trades for the public in general.

Regarding their own customers, they insist of the close proximity they have with them. They describe their relations as based on trust and honour and recognise the importance of the network and the dependency to their former clients to get new jobs. The companies interviewed estimate an average of 90% of new clients is linked to their existing network. For many, writing down contract with these customers is not needed as shaking hands will seal the deal. It is only when they do business with unknown clients that formal work contracts are mobilised. But they also recognise that the share of these unknown clients is increasing and that websites for the younger customers is becoming a common tool.

Regarding their trades in general, the bad reputation the sector has among the public is really an issue. As there are a few fraudsters on the market, the whole sector seems to suffer from it. The following statement form one of the SMEs’ owner seems to summarise the contractors’ opinions: *"For the clients we are crooks, they believe we only aim at cheating them…"*

The shadow of foreign workers or companies entering the market with low quality performance is also perceived as a threat for the professions. To remediate to the situation mouth to mouth and face to face approaches seem to be the chosen methods.

5 of the companies know for sure that their web site has provided new customers and 7 others do believe the site is bringing new business opportunities. For the others mentioning the subject seemed to create a feeling of guilt as the companies having a passive or minimally active website said they ought to do more to increase the performance of their sight. They explained the lack of activities by not having time or competence to work further with the interface.

If they expressed belief in the potential of the websites to increase their business they also expressed doubt about what to really use these websites for. At the exception of a few, the companies do not express a clear vision or strategy for their sites. They neither have a segmentation understanding of their customers nor do they know what types of information the internet users would be likely to request.

At the same time, they recognise the increase of clients’ knowledge regarding solutions and possibilities as well as new technology performances. Many interviewees agreed that they prefer clearly to work with knowledgeable customers who tell what they want and have a hunch of the price. This does not however motivate them to put their own information on their web sites. Negotiations with unclear or undecided customers seem to be challenging for some of the respondents, who would rather avoid these types of interactions with their clients.

Regarding taken for granted assumptions of the local aspects of the trade, whereas several of the enterprises we have talked to prefers to work *"close"* to the enterprise (10-20 min by car), they also take on jobs 1,5 hour drive away. Several shared the following statement: *"as long as I can go to a customer, get the work done and be able to get home within the hours of the workday I am fine with it…"*

DISUCSSION AND CONCLUSION

The four barriers identified in 2004 by Taylor and Murphy seem to still be contemporary for our sample of SMEs as the companies have in general a rather poor web site content. Though complaining about their difficult relation the public, these companies do not exploit the possibilities offered by the Internet to reassure their customers and show visibility and transparency in term of activities, prices, quality or competitive advantages. Their relation to customers seems to be more reactive than active, if the demands regarding the use of internet increase, they are prepared to answer it, but so far very few are taking the lead and proposing new services.

For the customers the benefits of the Internet based businesses are not realised as very little information are available online. This lack of information in particular regarding task descriptions and price estimations prevent the clients from benefiting of the usual advantages of using companies' websites.

A quick browsing through UK renovation SMEs web sites tends to highlight that our Swedish companies are definitely not any leaders in the usage of internet towards their customers. This could be explained by the relative stable situation of the market for the construction SMEs, though 3 companies did close down since last September. Another explanation could relate to culture and the apparent non competitiveness between enterprises active in the same business on the Swedish market. So far our general impression is that the customer relationships are something the craftsmen need to have done in order to carry out their *"real"* job, which is to rebuild and reinstall building components.

But the market sees new regulations and new segments of clients coming up. A large group of houses built during the 1950-1975 will need to be renovated to fit with new legislations. New generations of owners are taking over; they may not be relying so much on local network and are used to search information and services on the Internet . This group may represent a new rather voluminous segment in term of job possibilities. The SMEs participating in our research are slowly realising they may miss these developments if they overlook the potential of using the Internet.

Construction related SMEs as a group are a major economic player and associated with the new energy legislation their businesses can be a major contribution to economic growth. Going online to develop the sustainable renovation business seems to a be a fruitful solution, however our study suggests that in our sample though almost all the companies are present on the web, their manifestation is still rather rudimentary. These results correspond to other studies carried out on the use of the Internet by SMEs (Jones *et al*. 2011, Ifinedo, 2011). But the use of websites or rather lack of use can be seen as a symptom rather than a cause. These companies seem to have difficulties to engage and develop new relationships with their customers over the net. What we need is to better understand how these SMEs recognize and develop business opportunities rather than why they might or might not engage with specific technologies. As so far, new and close contacts with customers do not seem to be a priority … sometimes it really feels like nobody’s home.

REFERENCES

Barrett, P. and Sexton, M. G. (2006) Innovation in small, project-based construction firms. *“British Journal of Management”*, **17**(4), 331-346.

Bryman, B. and Bell, E. (2011) Business Research Methods, 3rd ed., Oxford: Oxford

Chaffey D, (2010) *“E-Business and E-Commerce Management: Strategy, Implementation and Practice”*, 4th edition Prentice Hall Press Upper Saddle River

Cruz-Cunha M. and Varajão J. (2010) E-Business Issues, Challenges and Opportunities for SMEs: Driving Competitiveness, Business Science.

EU (2005) *"The new SME definition. User guide and model declaration. European Commission"*. Enterprise and Industry Publications Bruxelles.

Eurostat (2013) Analyse af den danske byggesektor. *"Hovedrapport"*. Deloitte.

Forman M. and Haugbølle K. (2011) The role of clients/end-users in innovation of standardised detached houses, In: Egbu, C and Lou, E C W (Eds.), *"Proceedings 27th Annual ARCOM Conference"*, 5-7 September 2011, Bristol, UK.

Harrigan P., Ramsey E. and Ibbotson, P. (2011) Critical Factors Underpinning the e-CRM Activities of SMEs. *"Journal of Marketing Management"*, **27**, 5-6.

Ifinedo P. (2011) Internet/e-business technologies acceptance in Canada's SMEs: an exploratory investigation. *"Internet Research"*, 21(3), 255 - 281.

Jones, P., Packham, G., Beynon-Davies, P., and Pickernell, D. (2011). False promises: E-business deployment in wales' SME community. *"Journal of Systems and Information Technology"*, **13**(2), 163-178.

Koch C (2013) When blues eyes meet the blues: Danish Management, Technology and Work between Democracy and Globalisation. In Sandberg (ed.)(2013): *"Northern Lights. Work Management and Welfare"*. SNS Förlag, Stockholm. 257-276.

Michael Taylor, Andrew Murphy, (2004) SMEs and e-business, *"Journal of Small Business and Enterprise Development"*, **11**(3), 280 - 289.

Mokhlesian S. and Holmen M. (2012) Business model change and green construction processes. *"Construction Management and Economic"*, **30**, 761-775.

Næss-Schmidt H.S., Hansen M.B. Danielsson C. U. (2012). Multiple benefits of investing in energy efficient renovation of buildings. Copenhagen Economics Commissioned by *"Renovate Europe"*, Copenhagen.

Patton, M. Q. (1980) *"Qualitative evaluation methods"*. Berverly Hills, CA: Sage.

Pool, P., Parnell, J., Spillan, J., Carraher, S., and Lester, D. (2006). Are SMEs meeting the challenge of integrating e-commerce into their businesses? A review of the development, challenges and opportunities. *"International Journal of Information Technology and Management"*. **5(**2/3), 97-113.

Risholt B., and Berker T. (2013) Success for energy efficient renovation of dwellings - Learning from private homeowners. *"Energy Policy"*, **61**, 1022-1030.

Risholt B., Waernes E., Time B., and Hestnes A-G. (2013) Renovation status and technical condition of Norwegian dwellings, *"Structural Survey"*, **31**(5), 334 - 346

Hardie M. and Newell G. (2011) Factors influencing technical innovation in construction SMEs: an Australian perspective. *"Engineering, Construction and Architectural Management"*, **18**(6), 618-636.

Zott, C., Amit, R., and Massa, L. (2011) The Business Model: Recent Developments and Future Research, *"Journal of Management"*. **37**(4), 1019-1042.