

# Towards a new business model for collective self-organised housing interventions

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**ABSTRACT:** The paper aims at introducing the preliminary ideas of a business model that supports community self-organized new construction activities. (Community self-organization means the activity of groups of individuals that have a decisive role in planning and implementing their new homes.) The paper concentrates on the description of the business conditions of CSO new construction projects focusing on their particular traits concerning the end-users demand for participatory planning, community life, shared services and the business answers that provide flexible however streamlined solutions for each specialized cases. The business model is supported by an E-market place where the demand side (CSO communities) and the supply side (network of SMEs) can meet, cooperate and adjust their needs to each other.

## 1 THE PROFICIENT PROJECT

The Proficient project is carried out as part of the 7<sup>th</sup> research framework programme of the European Union. The research project with 17 participating partners from 9 countries intends to work out solutions for SME network business models that can encourage the new construction and energy efficient retrofitting process carried out by collective self-organized (CSO) groups of individuals and result in new residential districts or districts in which buildings are renovated from an energy efficient point of view.

The Proficient project also intends to create an E-market place platform which would assist both the self-organized communities and the SME networks in the planning activity, group formation and communication.

Two papers have been submitted for the conference (10<sup>th</sup> European Conference on Product and Process Modeling) that describe the first achievements of the Proficient project. The current one describes the main characteristics of the CSO market while the other (by Peter Bonsma) presents the first ideas of the E-market place.

## 2 THE CSO HOUSING MARKET

By definition CSO housing ‘refers to a group of individuals that act in association to organise and commission the processes of formation, requirement definition, planning, design, implementation and / or maintaining their own housing project (new construction, refurbishment and retrofitting projects). A CSO housing project is typically characterized by a mutual dependency between the individuals participating. Participants have the right to step into con-

tractual agreement (both on individual and collective level)’<sup>1</sup>.

Single family houses only belong to CSOs if they are organized on district level, since we can only talk about a collective decision making process in that case. In the vast majority of cases CSOs include owners only, however, the complete exclusion of tenants can lead to the distortion of the real situation. It should be noted that depending on the national legislative environment, the specific contract between the landlord and the tenant, or the specific founding document and regulation of a housing association, tenants can be quite influential with regard to retrofitting plans and other type of investments. Similarly, municipal tenants can sometimes enjoy a high level of influence with regard to retrofitting. Furthermore, the inclusion of tenants in newly forming CSOs is often fostered by municipalities that hope to strengthen the social integration and achieve a relative social mixture in the different neighborhoods.

The meaning and importance of CSOs is substantially different in the new construction and in the retrofitting sector. New construction in the multi-family building (or single family housing in a larger scale) sector is usually a top-down oriented, developer, cooperative or public sphere determined sector where the future inhabitants have a very limited role in the planning and implementation process. Thus the CSO new construction sector is a niche market, and its national prevalence is determined by country specific values, traditions and the institutional support. The share of CSOs in the new construction sector can only be statistically measured in four countries of the EU (Denmark, Germany, Netherlands,

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<sup>1</sup> PROFICIENT Terminology, 2013 August

Sweden), but even there it is less than 5%.<sup>2</sup> There are few dozen examples in other countries like Italy, France, Spain, Belgium, UK, which can be characterised as upcoming markets, and even less prevalent in most East and Central European countries. However CSOs in the new construction sector can be very important in a local context. In and around some cities – e.g. Berlin, Hamburg, Freiburg, The Hague - CSOs have become a relevant part of the new construction industry.

The share of residential communities that can be considered CSOs is substantially bigger in the already existing stock. All those dwellings belong to this category where the residents (being mostly owners but sometimes tenants as well) have the right to express their wish concerning any kind of retrofitting activities directly or throughout an institutional framework (like general assemblies, committees of the owners, etc.). Multi-family housing is more likely to be tenant based in Western and Northern Europe (residential blocks owned by public or private bodies), while they are more likely to be owner occupied in Southern and Eastern Europe. In the later case 30-60% of the housing stock could be considered as a CSO, while it can be 5-30% in the former case. As a result retrofitting of the existing housing stock happens mostly in the CSO sector in Southern and Eastern-Europe, and it is more common in the less CSO based tenement sector in Western and Northern-Europe.

The retrofitting activity in the CSO sector is an everyday activity as buildings must be maintained and energy efficient interventions also become more and more common depending mainly on the price of energy (thus on the economic gain that can be realized throughout the interventions) and the availability of public subsidies.

Thus the CSO retrofitting market is a more mainstream market where general business models operate (except for district level solutions which Proficient aims to encourage). CSO new construction market is a niche market in which new business approaches can result in more visible results thus this paper would like to share the research results in this field.

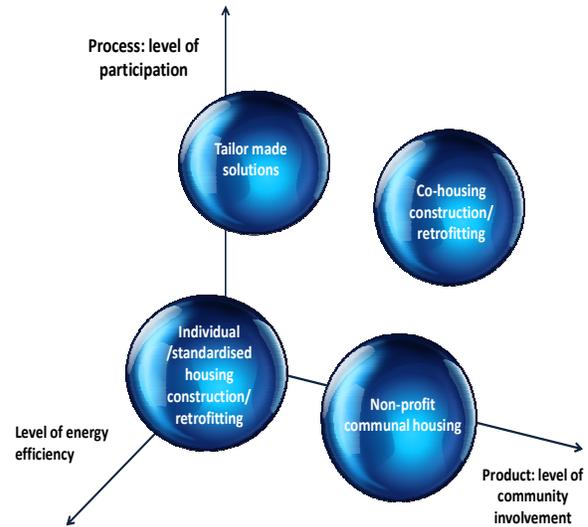


Figure 1. Proficient CSO space

Proficient defined four main market segments of CSO new construction. (See the figure above)

1. High level of participation in the planning process and a low level of community engagement. This segment seems to be quite relevant in the CSO market as most future owners of the properties have the main goal to have a strong influence on the architectural design of their apartment and building, while they do not intend to share their life with others except for some common facilities like garages, garden, swimming pool, etc.
2. High level of participation in the planning process and also high level of community engagement. This segment is covered by co-housings. Co-housings have a defining philosophy with regard to life-style, collective goals and the role of sharing/collective consumption. Residents of the co-housings find a different balance between private and community than normally practiced. They do not regard their home 'as a private retreat from the world beyond'. Rather, 'co-housing schemes provide different alternatives for living' These alternatives manifest themselves in the architectural built of a compound, as well as the daily 'home-making' routines that can include shared care for children and the elderly, shared meals and cooking. (Blunt and Dowling 2012)
3. Low level of participation in the planning process while high level of community engagement. This segment is not a CSO in that respect that the inhabitants (that are mostly tenants) do not have a decisive role in the construction process, their main goal is to

<sup>2</sup> It is extremely complicated to measure the share of CSOs by statistical tools even in those countries where their presence is relevant. E.g. the Dutch statistical bureau, the 'Statistic Netherlands' seems to handle the data as an aggregate. According to a report from 2010, 10% of the construction in the Dutch housing market is privately commissioned (Boelens et al. 2010). Private commission however is an aggregate term, referring to single families commissioning work, co-commissioning – which is a mixture between large developments and collective control – and CSOs.

share their life, to help each other, to use the common facilities they have. These housing are typically owned by local municipalities or cooperatives.

4. Low level of participation in the planning process and low level of community engagement (this is the typical developer driven housing construction which gives restricted freedom of the future inhabitant to choose between some minor elements of their flats, e.g. tiles, doors. This segment dominates the new construction market. Proficient does not consider these construction processes as CSO construction).

There are no definitive borders between these segments of the CSO market as it is a matter of consideration which level of participation in the planning process is considered as 'self-organization', while the level of community engagement also varies.

In addition to all these factors, as a third dimension Proficient analyses the role of energy efficiency in the new construction (and retrofitting processes) trying to work out that type of business models and supporting tools that encourage energy efficiency.

The advantages of the CSO way of construction on a wider society can be the following:

From an economic point of view:

- CSOs are viewed as a form of housing investment that helps to evade the overheating of the markets as the builders construct the apartments for themselves not for selling.
- CSOs can be an effective tool in cutting housing prices by 10-20% - as cases in Germany and Switzerland demonstrate – although there are fewer cases when the CSO process makes the construction more expensive because of the extra values tied to it (like high level of energy efficiency).

From a community point of view

- Many CSOs contribute to urban sustainability by strengthening community involvement and advocating green values.
- The success of the CSO phenomenon is closely tied to the notion of making a community based approach of living available to many people, although CSOs differ substantially with regard to the level of community involvement.
- CSOs can contribute to the achievement of multi-age, multi-cultural and sustainable neighbourhoods, with different housing arrangements attracting members of different social strata.

From an urban development point of view

- CSOs contribute to the reutilisation of unused housing space: be it an abandoned former industrial site, an unused public site, like a school or an unused housing in need of refurbishment.
- CSO developments can become part of larger scale urban renewal projects, forming their backbone by combining social, architectural and ecological goals.

The different actors in the CSO process often see different advantages in the participation. For the end users – including both owners and tenants – the possibility of influencing their immediate living environment is usually one of the most important pull factors. This can mean a variety of different things, ranging from living with close friends or at least with like-minded people to arranging a living environment that is energy and eco conscious. Actually, the importance of ecological motivations seems to be growing among these initiatives. CSO can also be instrumental in offering them services that would not be available otherwise, or the availability of which could be very costly under any other circumstance. Such services can include collective child services for younger families, or the services of a nurse/doctor on a CSO compound created for the elderly.

For municipalities CSOs can offer the prospect of integration, the partial solution of a few pressing social problems and an important tool in strengthening social cohesion. Immigrants, elderly or families in need of social help can find a safe and suitable accommodation in a CSO with the help of the municipality, helping them to integrate into mainstream society. Furthermore, depending on the specificities of the construction, CSOs can also offer cheaper accommodation to all these at-risk households, helping them further on. And CSOs can be useful from an urban point of view. Catering after the needs of the inhabitants means that they are more likely to stay in the neighbourhood, attributing to its sustainability on the long run. So CSOs can be a useful tool in urban renewal projects and revitalisation of somewhat run-down neighbourhoods, but similarly, sustainability and the improvement of social cohesion can also be important factors for housing cooperatives, who want to provide homes that are both affordable and at the same time eco conscious for their inhabitants.

There are many examples showing that the role of public sphere is crucial in bringing about the CSO constructions. The methods of involvement might be varying, depending most importantly on the goals of the municipality, the local parameters with regard to available land/building and the financial situation of the perspective residents.

As it was emphasized earlier the CSO new construction sector is basically a niche market even in

those countries where it has a long tradition (like in Denmark). This can be explained by the extreme complexity of a new construction project which requires different expertise and the clear agreement of the future owners which is not easy to reach. This is most likely that the CSO new construction sector will never be a mainstream market because of the above mentioned causes. However, a slight increase of CSOs in the new construction sector can be expected as a result of:

- community and social values: growing need for looking after the elderly; decreasing time for work thus increasing time for community activities,
- economical operation of infrastructure by means of sharing economy/collective consumption: growing need for commonly operated facilities (like cars, sports, recreational, child care facilities),
- green values: growing environmental consciousness.

### 3 BUSINESS MODELS IN THE CSO NEW CONSTRUCTION MARKET

From the Proficient project's point of view 2 segments of CSOs out of the 4 that were shortly described in the last chapter are the most interesting: high level of participatory planning and high/low level of community engagement. The reason is that Proficient aims at developing that business models that can meet the following two goals at the same time:

- Assisting the CSO group members (that are not experts of the construction process) to express their ideas about the physical output and the way of community life they want to live,
- While generating new business opportunities – that naturally provide profit - for SMEs.

The question is what kind of SMEs the business model should be developed for? There are several business solutions that can be described in connection with the CSO construction process:

- Businesses that provide certain type of services that fit one or two steps of the construction process: e.g. social mediator that helps formulating the CSO group, architects and engineers that design the physical plans, constructors that implement the construction, service providers that provide the utilities and energy, companies that assist the operation of the technical equipments, etc. If the CSO itself dominates the planning and implementation phase than these business are in a subordinate role. Their business model is

about carrying out their everyday services, meaning this is a 'business as usual' case.

- Businesses that are able to cover all or most of the steps of the CSO construction process assisting the group from the first steps (community forming) to the operational phase. This case the business actor is not in a subordinate role, rather a partner or a dominator in the process. The business actor that is able to have such an influential role in the CSO construction process can be either a big enterprise (it is quite frequent when a large scale development is carried out) or a network of SMEs. Proficient intends to assist the latter group by developing innovative business models for them.

It is not easy to develop a proper business model to meet the goals of the CSO groups and the goals of profitability at the same time as these two requirements are somewhat contradictory. The wish of the CSO members to formulate their ideas in a democratic way (decision making inside the CSO group) is a factor which requires time and makes the decision making process long. During this long time period the product (both the architectural design and the community services the design needs to adapt to) should be a tailored made solution that fits to the individual requirements of the CSO group. These requirements (flexibility and long preparation time) are the 'enemies' of profitability from a business point of view. Thus the business model should implement solutions to handle this contradiction. The possible solutions may include a mixture of the following elements:

- Most of the business actors dealing with CSOs have a strong mission. They are devoted either to implement community based projects (because they already built up their community based on these values) or they are devoted to carry out specialized and tailor-made architectural design solutions. If a business actor has such a mission the profit expectations become second in the order of importance. (Meanwhile one can experience that besides the mission statement stepping into the CSO construction field can be a must in order to find a functioning small market segment in the collapsed real estate sector. If the mainstream market is in a crises than any market segment which has financial reserves can produce revenue.)
- The planning and preparation phase can be controlled if the number of CSO members does not exceed a certain number. (Experience shows that the maximum number of households with whom a detailed plan can be worked out is about 25-35). It means that one multi-family building or a limited number of

family or row houses can be implemented based on the CSO idea but larger scale developments may limit the level of involvement of all effected households.

- The SME network dealing with the planning and implementation of a CSO new construction project can somewhat standardize the product (architectural output, built in services) and/or streamline the process of planning (allowing certain choices in certain steps). As this market segment is very sensitive to flexibility and individual choices the standardization and streamlining cannot exceed a certain extent avoiding suggesting that this type of construction is the same as the mainstream developer based new construction process.
- Business actors can only be competitive in this market if they are able to develop a close connection with those actors that have an essential interest in the implementation of community based CSO projects. Involvement of actors like municipalities (that may provide sites on reduced prices, or subsidies for certain social purposes) ESCO companies (that can provide energy sources on reasonable prices) or financial institutions (that can provide loans on lower interest rates) can result in competitive offers.
- Last but not least the use of ICT tools in the planning and implementation process may also increase the efficiency of planning, implementation and operation of CSO construction process. The web-sites and applications already available contain information on how to create a CSO, contain local information on some of the available sites, available business actors in this field. There are also simple applications for architectural design (naturally not containing details like local spatial regulations). The web-pages of architect sometimes are also used as tools for mutual planning and negotiation with the CSOs. There are also innovative web-based marketing tools to promote the CSO projects under formation, etc.

#### 4 POSSIBLE ROLE OF THE E-MARKET PLACE

Proficient aims at developing a web based tool for assisting the CSO new construction process. This website (E-market place) is under development, and has currently three basic functions defined:

1. A special storage place for the already existing information on CSO construction (definitions, cases, sample documents, available projects and sites, etc)

2. A tool for networking both for the CSO communities and the SMEs.
  - For the SMEs the platform may operate like a “virtual guild” that can accredit the potential members of the network (qualifications, references), provide information on tendering opportunities, training possibilities. The major issue in this case is whether real trust can be built with the help of a virtual platform or this would require personal contact. (In the worst case this function can serve as a first filtering level where possible partners of the network can be formulated and the finalization of the network is set up by personalized contacts.)
  - The other aim can be to develop a support tool for community building. This platform should be instrumental in defining core CSO values and rules such as level of green commitment, level of community involvement and level of sharing consumption.
3. A tool for architectural planning which can be used by the CSO members (amateurs) and the SMEs (professionals) at the same time. As the level of knowledge is different in the different target groups the platform should either have different sites for the different target groups and a converter function to ease the communication between the platforms or have a common platform but with different levels of access to modify the results<sup>3</sup>.

The E-market place described above can assist several types of CSO processes. It can assist those CSO communities that would like to control all the planning and implementation phases (CSO dominated model) and chose the right SMEs for each phase, while it can also assist those SME networks that would like to offer complex solutions.

As it was mentioned already there are several existing web-based tools that can assist the CSO construction process but an E-market place (besides developing some missing functions) can also integrate the existing tools and thus create a more complex platform with a wider range of services.

#### 5 CONCLUSIONS

Community self-organized groups of inhabitants that aim at implementing a new construction process to create housing for themselves represent a special and small segment of the new construction market. Even if CSO communities can be very different, they have

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<sup>3</sup> A paper from Peter Bonsma is submitted in parallel with this one with the detailed description of the E-market place.

some common characteristics: a) the future owners have a strong intention to define the architectural character of their houses and apartments, b) the future owners intend to share some part of their life with the other inhabitants (e.g. common dining activity, car pools, swimming pool, child-care service, health care service).

Business actors that intend to provide products and services for these communities have to handle these specialties of this market segment and have to produce profit in spite of the fact that some characteristics of the CS process are 'against' of profit producing methods, e.g. long time period for planning, tailor-made solutions.

The crucial question is what kind of innovative SME network business models and assisting tools can result in the increase of the market share of CSO construction.

Proficient project is in the first phase of the research despite that it seems to be obvious that the business model:

- Should be flexible while standardized/streamlined at the same time. Different market segments in the CSO market require different level of individualisation/standardization.
- Should be built on a strong network (being it a temporary or a permanent one) of different actors of the value chain (e.g. social mediator, architect, engineer, constructor, ESCO company)
- Should be built on a close cooperation with the key actors outside the network in order to internalize the social benefits of CSO construction. (E.g. municipal cooperation, cooperation with banks)

The evolution of the CSO sector can also be encouraged by new ICS solutions that can either make the community forming and planning process more efficient (e.g. by an E-market place) or provide web based solutions that can manage sharing consumption inside the community (e.g. platforms for arranging the use of common goods).

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