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# Crowdfunding in urban planning: Opportunities and Obstacles

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Keywords: Urban Planning, Crowdfunding, Public Participation, Real Estate

The Real Estate and Construction sectors, still reeling from the 2007 housing crash have understood the need to find both new ways of raising capital and worthwhile projects to invest in. The emerging paradigms of urban regeneration, rehabilitation or retrofitting have been accepted, in political and academic circles, as solutions compatible with the goals of sustainable development. To achieve these goals, local and regional institutions have increasingly looked towards planning as a way to integrate them with the desires of their communities. Today, most local governments are facing considerable economic headwinds but the needs of the people they represent have not subsided, derelict neighborhoods and neglected urban spaces still permeate our cities. Finding new ways to raise capital becomes an important task to continue the improvement of the urban environment. Crowdfunding, still in its infancy, has been touted by some as a revolutionary form of raising capital, using social networking, from large pools of unsophisticated investors committing low sums. By adjusting this method to urban planning it may become possible to better intertwine the fate of urban projects and developments with the desires of the community as they now have "skin in the game". This may bring a sense of greater public participation but many obstacles remain. The aim of this paper is to kickstart the discussion on the ways this new concept of public participation in planning can help create better communities.

# Introduction

# The housing crash and the financial crisis

The bursting, in 2007, of the housing bubble has been one of the most traumatic events in global financial history. It caused a crisis in the financial sector that is still today, 6 years later, having repercussions such as high levels of unemployment, sluggish growth throughout most of the developed world and more importantly for the scope of this paper, financial difficulty for governments and its institutions and reduced availability of credit for private enterprise.

## The housing bubble

Although there is little consensus on what caused the U.S. housing bubble (Levitin and Wachter, 2011), which burst first in the United States and then spread to other countries, there are several factors that are widely reported in journalistic and academic sources that are considered more or less important in the overall scheme. The degree in which these factors caused, influenced or exacerbated the financial crisis varies between authors (Acharya and Richardson, 2009; Ferguson, 2009; Holt, 2009; Levitin and Wachter, 2011; Mauboussin, 2007; Rahn, 2012; Roubini and Mihm, 2010).

According to (Mauboussin, 2007) all crisis are born with the seed of success. The dynamism of the U.S. housing market had resulted, before 2007, in an unprecedented appreciation of home values. The S&P/Case-Shiller Home Price Index ("S&P | S&P/Case-Shiller Home Price Indices | Americas," n.d.) appreciated, between 1997 and 2006, around 188% (nominal). Although this rise seems, at first glance typical of an asset bubble there is still no consensus on whether or not it was in fact a bubble (Levitin and Wachter, 2011).

What caused this unrelenting appreciation of housing prices? Some authors point to interest rates. Decades of low interest rates flooded the market with abundant cash resulting in artificially cheap mortgage credit. According to (Roubini and Mihm, 2010), the Federal Reserve, immediately after the crash of the 90's tech bubble lowered the interest rates from 6,5% to 1% leading to what investors called the "Greenspan put" or the expectation that when thing got troublesome Federal Reserve Chairman Alan Greenspan would ease monetary policy and get investors out of losses.

Irrational exuberance is a term first coined by Alan Greenspan, at a black tie dinner in Washington in 1996, to describe the behavior of some stock market investors. The day after markets dropped precipitously (Shiller, 2009). According to the same author this term is now widely used to describe a social phenomenon that appears to have happened again and again in history when markets have lifted asset prices to unsustainable levels under the influence of some sort of market psychology, creating the basis for a speculative bubble.

Another factor widely discussed by authors was the innovation and institutional support of new sub-prime mortgages. Government policies, directed at enabling poorer consumers the ability to own homes, and financial innovations in the lending market created new mortgages directed at less creditworthy consumers which lead to a sharp deterioration in lending standards. Some of the most notable innovations where: 0% down payments, NINJA loans (No

Income, No Job, no Asset verification), interest rate only loans, negative amortization, teaser rates etc. (Ferguson, 2009; Roubini and Mihm, 2010; Sowell, 2010)

Institutional policies such as the Community Reinvestment Act or the subsidization of housing by government sponsored enterprises Fannie and Freddie, which at the peak of the bubble were leveraged over 65-1 (Ferguson, 2009), contributed to a glut of investment in housing. Also contributing to the emergence of the bubble was the deregulation of the private securization market and the further development of complex financial instruments such as mortgage backed securities. Furthermore as (Levitin and Wachter, 2011; Roubini and Mihm, 2010) pointed out the information asymmetries in the complex mortgage backed securities market between investors and financial institutions were exploited at the expense of credulous investors.

#### The financial crisis

(Mauboussin, 2007) presented simplified timeline of the financial crisis as follows: Rising defaults in the subprime mortgage market combined with stalled home appreciation quickly materialized into losses of highly leveraged investors. These investors, spurred by low returns in the bond market, higher yields in the housing market and the ratings of credit agencies had snapped up gigantic amounts of low and lower quality mortgage backed securities. In the final phase lenders begin to raise collateral requirements but as asset prices dip lenders require more and more capital as collateral forcing investors to sell assets further depressing prices. The additional price drop spurs a round of margin calls and the positive feedback loop spins out of control affecting all classes of assets held by under-duress investors whether unrelated to the housing market or not.

## Issues for local and regional governments

Local governments make expenditures on a variety of services including transportation, policing, fire protection, water and sewers, garbage collection and disposal, housing, health, recreation and culture, education, and social expenditures. They fund these services and the infrastructure associated with them from a variety of sources (Slack, 2009).

With the onset of the global financial crisis the panorama of public finance has changed, perhaps forever. It has impacted all urban communities across the world and while the magnitude of the financial problems facing local governments vary widely from country to country, and within them, the post crisis recovery will be a long process (Paulais, 2009).

Local governments grappling with the effects of the global financial crisis face various constraints that although different in nature have a cumulative effect on their financial health (Paulais, 2009) they are:

- Revenue, either tax revenue or state transfers are subject to sharp decline, mostly due to reduced economic activity (such as construction) and state/national budget woes;
- Expenditures, which are rising due to increases in social programs and other welfare needs (resulting from a slowdown in economic activity);
- Financing capacity, which is shrinking owing to the cost of money or ability to get loans, particularly in countries with lower credit ratings;

Foreign investment, which has declined leaving projects cancelled or delayed;

As Ben Horowitz described in his piece (Horowitz, 2011) it should come as no surprise that local governments are in trouble. The author draws similarity between U.S. local governments and institutions and European sovereign governments describing their balance sheet as "egregiously messy". He notes that, in an era of widespread debt it isn't as this problem surfaced suddenly. For years governments and institutions have been on an unsustainable trajectory with declining revenues and soaring obligations.

### **Issues for private enterprise**

Private real estate companies have also found it increasingly difficult to finance their new or ongoing investments and developments particularly in the countries most affected by housing crashes or sovereign debt issues. The sudden depreciation of home value changed the underlying basis of many loans contracted by private developers in the construction sector. Ongoing projects where abandoned and new developments halted. Today the number one concern for small to medium sized companies is access to credit, even though they are profitable and are growing. This is in part due to risk-aversion in the banking sector and the concurrent increase in scrutiny when reviewing loan applications (Klein, 2010). Sovereign debt problems reflect negatively on the private sector of the affected country, if the government cannot repay its debts and needs to restructure them the ability to raise credit from foreign capital markets is greatly reduced for private sector companies (Arteta and Hale, 2006).

In some countries an bloated construction sector contracted so much debt and contributed to such a big percentage of jobs and growth that its contraction has sent unemployment levels to massive numbers (Smyth and Urban, 2013). The amount of unsold homes in some markets is so massive that new projects have a hard time being financed and constructions companies are failing in large numbers. Banks, on top of other problems brought about by the financial crisis, have been repossessing homes from families that cannot pay their loans. This has created issues for banks as properties pay taxes and they cannot afford to keep these properties on their balance sheets for ever, particularly when they are going down in value.

## Emerging paradigms of urban planning and governance

Urban rehabilitation has been increasingly a part of public policy, state-sponsored gentrification as a process to regenerate the urban environment has long been accepted by both public and business as a part of a wider strategy towards economic development. Public spaces particularly have been seen as useful components of these strategies in that they can kickstart or assist in improving an areas attractiveness (1996; Inroy, 2000; McDonald et al., 2009). But property led regeneration (through flagship developments) has also been used as a way to lead area-wide regeneration projects usually by having private developers pick up abandoned or underused properties and create anchor developments whether office, commercial or residential, although some research points out that this approach fails to address social issues (Loftman and Nevin, 1995).

In the past decade the Internet and the World Wide Web have created new processes to harness the creativity of people, create new business models and reshape our economy. Newer generations that have grown up alongside the Web are using it to explore their creativity and collaborate to address various challenges (O'Reilly, 2011, p. 2). According to

O'Reilly government is, at its core, a mechanism for collective action where we as people band together to make laws, pay taxes and build the institutions required to solve the complex problems arising from our collective life. This author believes that the type of new government will use technology, particularly the internet, to engage its citizens in the collaborative solving of the problems that affect it at all levels, local, regional, national and even international and that internet technologies, particularly social networks will enable us to build a participatory government with a more direct democracy. This participation in urban planning is fast becoming an inescapable reality (Sanoff, 2000). In the United Kingdom, for example, community involvement has become a central element in urban regeneration policies since the 1990's (Ball, 2004). Public involvement is now a central concern for urban planners but the question now becomes how to effectively implement it given its many difficulties (Brabham, 2009).

# Crowdfunding

#### **Definition**

To understand Crowdfunding we must first understand that it is encompassed in the broader concept of crowdsourcing (Belleflamme et al., 2012; Kuile, 2011). Crowdsourcing has been defined by (Schenk and Guittard, 2011) as a composite of the words Crowd and Outsourcing meaning outsourcing to the crowd. The term itself was made famous by Jeff Howe and Mark Robinson in a Wired magazine piece entitled "The Rise of Crowdsourcing" (Howe, 2006). According to the authors "...Crowdsourcing represents the act of a company or institution taking a function once performed by employees and outsourcing it to an undefined (and generally large) network of people in the form of an open call. This can take the form of peerproduction (when the job is performed collaboratively), but is also often Undertaken by sole individuals. The crucial prerequisite is the use of the open call format and the wide network of potential laborers." Crowdsourcing is therefore a form of reaching out to a large pools of anonymous individuals to work on a set project that should in the end conform to the company's needs (Schenk and Guittard, 2011). Another widely used definition of crowdsourcing is given by (Kleemann et al., 2008) who defines for the profit making sector as taking place "...when a profit oriented firm outsources specific tasks essential for the making or sale of its product to the general public (the crowd) in the form of an open call over the internet, with the intention of animating individuals to make a (voluntary) contribution to the firm's production process for free or for significantly less than that contribution is worth to the firm". Having defined crowdsourcing we can easily grasp the definition of crowdfunding as "... defined as a collective effort of many individuals who network and pool their resources to support efforts initiated by other people or organizations. This is usually done via or with the help of the Internet. Individual projects and businesses are financed with small contributions from a large number of individuals, allowing innovators, entrepreneurs and business owners to utilize their social networks to raise capital." (De Buysere et al., 2012).

## Why crowdfunding

Why are entrepreneurs adopting this new way of funding instead of the traditional avenues open to them? Would it be fair to state that the greatest obstacle stems from the lack of available funding due to the global financial crisis? There is a case for this (Foster, 2012;

Jeffries, 2012) but we must also look at the types of endeavors being funded through crowdfunding platforms, from traditional product building companies to public spaces to social projects. The various types of crowdfunding platforms available will be discussed below but to put it briefly the ecosystem is so vast and varied (and growing) that we can't generalize. There are still other reasons why crowdfunding is growing at a rapid pace (De Buysere et al., 2012; Etherington, 2013; "Indiegogo's 2012 In Crowdfunding," n.d.; Kuile, 2011) but the question remains: why are entrepreneurs are looking towards crowdfunding to finance their ventures? Some of these reasons and issues are explained at length in a paper by (Schwienbacher and Larralde, 2010) and are related to the various types of crowdfunding ventures:

- Lack of pre-existing resources; the entrepreneur does not have the existing resources to finance the process outright
- Risk; unwillingness to bear big amounts of risks.
- **Organizational form;** for-profit entities have a tougher time achieving their targets since they usually need to set their quantity-quality mix to ensure profits.
- **Control preferences;** in crowdfunding the existence of many "investors" or "members" could diffuse managerial decisions depending on the types of rewards offered.
- Amounts required by other means of finance; financiers have pre-defined amounts
  they are willing to invest, furthermore there are legal minimal thresholds to be
  observed in other forms of financing.
- **Legal issues;** regulation on equity issuance for private companies may hinder crowdfunding as a viable source of financing.
- Wisdom of the crowd; although crowdfunders might not have any specific knowledge on a particular field the "wisdom of the crowd" argument states that a crowd can be more efficient in solving problems.

And why are crowdfunders parting with their money? According to several authors (De Buysere et al., 2012; Howe, 2006; Ordanini et al., 2011; Simons, 2012) the motivation behind project funders can be of three types: social, material and financial. With social returns the funders have an intrinsic motivation and the fulfillment of the project is the reward they are seeking. Material returns are broadly associated with product driven ventures and occur when funders are satisfied with a return of (usually) lower economic value than the monetary input as, for example, entrance to a concert or meeting. Financial returns are motived when a funder is searching financial returns in addition to supporting the project.

#### How does it work?

Crowdfunding is usually delivered via web2.0 based platforms or individual sites and the way in which platforms operate are as follows:

- 1. Online platforms are setup to receive applications from project developers intent on crowdfunding their venture.
- These platforms normally have a defined set of criteria to pre-select and screen each
  application in order to reduce risk (some automatically publish every project idea).
   They also have guidelines to help entrepreneurs maximize their chances of a successful
  campaign.

- 3. The project developer is then tasked to structure its "reward" system and develop a "marketing pitch" to sell his or her project to the platforms audience using various media formats and publicizing it through the various available social networking platforms.
- 4. The developer will then keep the funders updated on the process with regular updates
- 5. If the goals are reached within the set timeframe the campaign is closed and the developer receives the money if not then the platforms reimburse the funders.
- 6. Some forms of post-campaign involvement are common such as voting rights or creative input, this can be done through the original crowdfunding platform.

Individual sites function much in the same manner as platforms but are not open to external proposals.

## **Models and Platforms**

There are currently many crowdfunding platforms that usually work as a middle man between entrepreneurs and crowdfunders, some are generic while some are geared towards a specific purpose. A recent article (Gadja, n.d.) found that, in late 2012, about 200 crowdfunding platforms have spread throughout Europe representing every imaginable kind of business models. (De Buysere et al., 2012) considered that crowdfunding is transformative of existing business models and can be integrated into four models:

- **Donation**: a donor contract without existential reward.
- **Reward**: purchase contract for some type of product or service.
- **Lending**: credit contract, credit is repaid plus interest.
- **Equity**: shareholding contract, shares, equity-like instruments or revenue sharing in the project/business potential up-side at exit.

Furthermore the authors considered that the relative strength of crowdfunding lies in its ability to combine different models such as:

- Donations: donations are ear-marked towards specific projects making donors more willing and loyal;
- Rewards: rewards of symbolic value (lower value than the donation but greater perception value);
- Pre-Sales: donation guarantees product will be made (and sold at a discount);
- Lending: company borrows money from the public instead of a bank;
- **Social-Lending**: lending to social projects with no interest being offered;
- Peer-to-Peer Lending: used by borrowers looking for a lower interest rate, does not create new money;
- Peer-to-Business Lending: equivalent to Peer-to-Peer but on a small and medium business scale;
- **Equity Crowdfunding**: similar to business angels, investors are looking for some returns on their investment.

And variations on these such as:

- Revenue Sharing: funders receive returns based of future revenue via revenuesharing arrangements;
- In Kind (reward): payoff are given in kind based on the monetary input;
- In Kind (funding): funders participate with goods or services instead of money;
- Hybrid Models: combinations of the above

It is important to state that, according to crowdscourcing.org the primary revenue model for crowdfunding platforms is percentage based commissions on funds paid out to entrepreneurs.

### **Data and Growth**

According to a report by crowdsourcing, LCC the total amount of crowdfunding platforms worldwide reached 452 and was expected to reach 536 by December 2012. These numbers demonstrate a very healthy growth as shown in the next picture (yellow bar from April to December 2012).

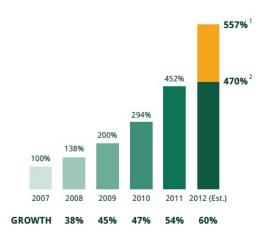


Figure 1 - Crowdfunding Platform Growth. Source: Crowdsourcing, LCC.

The same report states that while early platforms are still growing in terms of funds raised early entrants are securing a larger relative percentage of new funds raised.

The article (Gadja, n.d.) stated that, in 2011 the amount of funds raised through social crowdfunding platforms is expected to teach around €450 million. These funds were spread through 600,000 individual campaigns set up in all the different funding platforms. This is paltry in comparison with the €3.9 billion raised by European venture capital for SMEs. Although the difference is large the growth some platforms have experienced shows the enormous potential.

In 2012 the crowdfunding industry and its various models (equity, donations, lending, reward crowdfunding) will grow to \$2.8 billion from \$1.5 billion raised in 2011 according to research firm Massolution (Caldbeck, 2012). Fred Wilson, co-founder of the venture capital firm Union Square Ventures (which has invested in Twitter, Tumblr, Foursquare, and Zynga), predicts that once it gets up and running, the equity crowdfunding market will reach \$300 billion and will be largely driven by families and individuals investing a small percentage of their assets via crowdfunding (Scharwath, 2012).

Some however (Rosenberg, 2013) have pointed that there may be a difference between the expectations of investors and entrepreneurs which may lead multiple companies to get involved in crowdfunding. This increase in offer may leave many ventures unfunded

#### **Obstacles**

Crowdfunding is a nascent industry and therefore the rules and regulations that are necessary for it to be a just an efficient market are still not yet in place. Oliver Gadja in his article (Gadja, n.d.) states that "There can be little doubt as to the promise of crowdfunding as a basic and democratic concept - with its success rooted in a mix of intrinsic, social and financial motivations. There can also be little doubt about its prospective global impact through computer and mobile networks. However, the full potential of crowdfunding will only be reached if regulation and legislations are drawn up with a global and enabling view rather than a local or disabling one. Today, financial regulation leaves much of the aspects around crowdfunding untouched or open to different interpretations across Europe, thus resulting in up to 30 different interpretations on a national level." He concluded that the European Union would benefit from a harmonized regime that enables crowdfunding in its variety of services, understanding the different nature and motivations in comparison to other financial services, while at the same time protecting customers from misuse. It is important however not to argue for regulation for regulations sake as the report on crowdfunding by the European Crowdfunding Network notes: creating heavy and complex regulations may stifle the growth of the crowdfunding sector (De Buysere et al., 2012).

In the United States, the recent JOBS ACT has opened equity-based crowdfunding to unaccredited investors. Its implementation will not however lead to an immediate explosion in 2013 because the Securities and Exchange Commission (SEC) hasn't yet drafted the necessary rules to comply with the legislation and when they do they may make it extremely difficult for non-accredited investors to fund these types of ventures (Caldbeck, 2012; Clifford, 2013; Rosenberg, 2013).

Other obstacles that face crowdfunding are related with every type of business venture but may be exacerbated due to its nature. Fraud is a typical example, fraud occurs in every type of activity that involves money but in crowdfunding as the investor pool typically has no personal contact with the entrepreneur (geographical separation) or specific knowledge of the business idea the potential for it is larger. On the other hand (De Buysere et al., 2012) points out that the very nature of social networks may indeed help mitigate fraud as competition between platforms may hinge on fraud detection and prevention. Correct valuations are another problem in crowdfunding as there are many parts of a business venture that may difficult to quantify particularly by someone with no financial or business experience, this may be mitigated by auctioning shares or by allowing flexibility in equity setting throughout the campaign. Risk assessment and mitigation is another problem facing crowdfunding, its open nature invites many funders with no experience in financing business venture and they may lack the ability to assess risk. To ensure that this hurdle is transposed it is necessary to create metrics, standards and certifications that may help unqualified investors grasp the consequences of their actions and work to mitigate the associated risks. Conflicts of interest may also arise from usage of privy information by entrepreneurs or specific parties of funders to generate superior returns to other funders (De Buysere et al., 2012).

# **Examples**

Crowdfunding, as most transformative ideas has the potential to create new avenues and new "markets" for human endeavor and activity. (O'Reilly, 2011), explored the concept of government within the transformative technology of the internet, of which crowdfunding and sourcing are children. This transformation is already taking place all around us and in this chapter some noteworthy examples from around the world are described. They demonstrate the ways in which crowdfunding can transform the housing market, urban design and ultimately municipal planning.

The Glyncoch Community Center ("Glyncoch Community Centre," n.d.) project involves building a new multi-purpose community center in the town of Glyncoch. From a dilapidated shed the new community center wants to be an energy efficient center with properly landscaped external areas that can host workshops, community groups, conference suites for local businesses and ultimately reverse the cycle of depravation of that area.

The campaign was successful in raising nearly £800.000 from various funders. Most money was granted by local and regional development funds, charities and foundations with the Welsh government's Levy Fund pledging £403.000.



Figure 2 - Community Center - Source: Spacehive.com

This project shows the potential for Municipalities hoping to improve their urban environments without having to disburse too much financial resources. These types of community driven projects, based on non-financial rewards can be easily integrated with other municipal tools such as participatory budgets. It is of the Municipalities interest to nurture this kind of fundraising whether by participating with money or in-kind donations (land, materials, manpower and expertise) or facilitating other tools such as platforms or contact networks that can maximize the effectiveness of the funding campaign.

**Fundrise's** first endeavor (Badger, n.d.) (Fundrise's second is ("Fundrise 906 H Street NE LLC," n.d.)) has been touted as a visionary form of real estate transformation that can change the face of many run down properties throughout the United States and elsewhere.

Originally brothers Dan and Ben Miller (owners of Fundrise) purchased a property in Washington D.C to renovate an existing building and lease it to a new business. Having invested \$500,000 of their own money they realized that, due to the neighborhood's nature, it

would very difficult for far flung investors to put down money in their usual fashion (think beachside condos). Furthermore these potential investors are not savvy about the reality of this neighborhood so, they thought that what would make sense is to get the local community to invest.

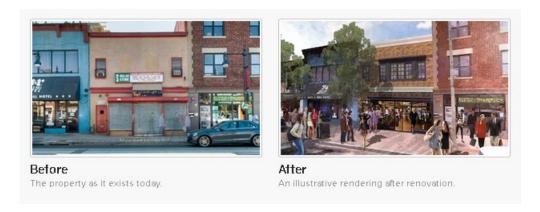


Figure 3 - Property Development. Source: Fundrise, LCC.

Through the issuance of shares the Company (Fundrise 1351 H Street LLC) rewards funders with a share of:

- 1. Ownership of the real-estate property
- 2. 30% Share of profits of tenant (a new retailer)
- 3. Rights of Ownership (various in-kind rewards such as, invitations to cocktails, opening, gear from tenant, shareholder events etc.)

The projected financial returns are:

- 8.4% ROI (return on investment) from rental income over the 10 year lease term.
- The tenant will pay 30% of any profits as additional rent.

In a world still struggling with a financial crisis that is forcing de-leveraging all forms of securing funding are welcome. The ability of the internet to disrupt business models is already legendary and real estate finance may be the next victim. Traditional real estate funds are detached from the reality in which they operate and in many ways can have negative consequences by driving projects that are ill suited to their location or by over supplying highquality and luxury housing developments. "They don't get it" what the Miller Brothers felt when looking for the traditional financial options, but if you are young live nearby "you get it" why can't you fund our project? (Badger, n.d.). This innovation, if correctly handled by regulators, can create numerous new real-estate companies operating in a more localized fashion. These companies will, like Fundrise, search out properties which they feel have been unjustly neglected (in a business sense) and, more importantly, seek to rent them to innovative businesses that may otherwise find it difficult to rent space in a traditional shopping-mall with its high rents. If this model bears full fruition countless abandoned properties in commercial streets may get a second shot. As all innovations there is ample possibility of failure, there is after all a reason why shopping malls exist in the first space (parking, critical-mass, diversity of offerings, etc.) and local business have been endlessly struggling the last decades, although there has been resurgence of late. Municipalities and

regional governments are also a piece of this puzzle as they hold the power of licensing, there is a possibility that these innovative and paradigm breaking businesses find it hard to get past municipal laws and regulations (and taxation) and end up closing.

**Stevenson square** lies in the Manchester City Centre and the idea behind this venture is transforming it by landscaping it with new trees and edible plants ("Stevenson Square Green Makeover," n.d.). This project is interesting because it shows that smaller projects that aim to enhance the urban environment can also be successful. This project requires £39,354 with a deadline of 7 June 2013. In April 2013 the project has already raised £33,763 from funders such as local business and city council grants that have pledge not only money but also services and materials such as trees, pavements, hanging baskets.



Figure 4 - Stevenson Square. Source: Spacehive.com

Prodigy networks most recent development in Colombia: **BD Bacatá** is the most ambitious building in Latin America and could become and icon for both urban renewal and crowdfunding. The project will have five distinct uses: homes, shops, hotel, mall, public and private parking and is expected to draw 12,000 visitors per day.

Bacatá commercial sits on the first three floors of the Bacatá tower and spreads out in 4,465 square meters with about 30 rentable spaces for reputable global brands. The hotel will have a business center, restaurant, spa, gym and an observation deck and is to be managed by Eurostar hotels. The funding for this project was open to all Colombians who poured \$240 million dollars from 3,500 contributions (69 thousand dollars average) into FiDis which, unlike financial investments, do not guarantee a return or redemption on a set term. The return of these instruments depends on the performance of the underlying real estate asset. This skyscraper is set to become a milestone in crowdfunding and one of the most pioneering buildings in Latin America, not just because of its height but because it points to new ways of securing urban renewal through financial innovation.



Figure 5 – BD Bacatá real estate development. Source: Prodigynetwork.com

These examples show different types of ventures that can have a net positive effect in the urban environment: A Public Equipment (Community Center) a small Private Property development (Fundrise's H Street) and an urban square makeover (Stevenson Square) and a big downtown building (Bacatá Colombia). These projects show that there is a possibility of new investment in urban environments in new non-traditional ways.

# Conclusions and future developments

Crowdfunding is still a nascent tool, but it can be integrated in practically every sector of economic activity. One of the sectors where we believe crowdfunding could play a positive role is in the local governmental sector. Municipalities have been, in the more recent decades, integrating participatory tools into their urban planning frameworks, these tools are being used to foster a more direct relationship between citizens and their urban environment. Crowdsourcing is a natural fit for these types of processes (Brabham, 2009), by using social media and other avenues municipalities can "call to action" a large number of interested citizens to participate in the design of ongoing municipal projects or even propose new ones such as the example of Stevenson square in Manchester. Most participatory budgets, where citizens propose their own projects, can only fund a small percentage of the proposed projects but by using crowdfunding the municipality could boost available funding and increase the amount of funded projects. Municipalities could also run their own crowdfunding platforms continuously instead of integrating them into seasonal budget actions. These platforms would increase the visibility of public participation in urban planning and could generate, besides funding, increased awareness and interest in the urban environment.

Increased funding for new or renovated public spaces and properties has some drawbacks. As the amount of funded endeavors increases so does the municipal maintenance expenditure. Breaking ground on new public works is exciting but the everyday keep necessary to maintain them is not and it would be difficult to generate enough interest to crowdfund their maintenance. This means that even though a project might have a successful crowdfunding campaign it is not liquid that the municipality can accept it on the grounds that it may be too costly to maintain.

Another issue that could arise from an increase in crowdfunded projects is the widely perceived but false assertion that crowdsourced or funded projects in the public realm have automatic wide public acceptance, this may not be the case and already projects that had good public participation end up being cancelled or suspended during construction because it turned out that there was a substantial section of constituents did not want it. This is particularly troublesome when projects break ground and start construction because cancelled

or even altered projects cost money in fines, legal battles, and other penalties. To avoid this problem a greater public involvement is necessary to ensure that all accepted projects are as consensual as possible

In private real estate development the way forward hinges on the development of rules and regulations that enable the growth of equity-based offerings. The success of Fundrise is as of yet limited (only two properties funded) but, as the company is geared towards a specific local markets it is not expected to change the paradigm by itself. However there are now companies spawning almost on a monthly basis, some are geared towards investors and others looking for larger pools of funders. The expectation is that other companies with their local expertise can start to create more and more development projects and change the way our cities look by betting on rehabilitation and leasing to innovative businesses. This approach may yield a more sane housing market where projects are more closely scrutinized than those by far-flung investors who can't really oversee the projects they are investing in other than check their annual returns. Some crowdfunding companies however are not bound by the same goals and are using crowdfunding to fund large real estate projects such as skyscrapers, malls and offer timeshares in hotels. Empty luxury projects that have nonetheless sold-out their units to funds and real-estate investors are called by some as a sort of urban cancer and crowdfunding won't cure it (it may even create more cancers), but if crowdfunding can look at underdeveloped real-estate markets and find both value and returns for investors then it may in the long run improve both the economy and the urban environment. For crowdfunding to succeed there needs to be capital in private individual hands and it may be very difficult to fund these types of ventures in lower-income areas where there is little or no disposable income. Furthermore crowdfunding does not control the original or future property prices and by investing in derelict or abandoned properties the gentrification effect will occur and may "force" poorer inhabitants of more run-down areas to leave them.

Crowdfunding and crowdsourcing are innovations and must be viewed as such. Market disruptions don't necessarily mean that the "old ways" will disappear or even cease to be prevalent. Much of the capital sought by crowdfunding entrepreneurs was not used in conventional financing both because regulations impeding individuals from being accredited investors and because the quantity of capital was insufficient. With crowdfunding entrepreneurs are looking to break free of the restrictions and tap into a much larger pool of available capital. As the examples showed demonstrate it is not necessarily small donations from many funders that get the job done, institutions and donors can also participate with bigger sums and (usually) a bigger share of notoriety.

It is also a question of economic growth "By implementing crowdfunding as a sustainable and safe offering to both, entrepreneurs and investors alike, Europe will be able to mobilize resources worth billions of Euro to be invested in customer approved and co-created innovation and entrepreneurship — and to support much needed economic growth across member states." (Gadja, n.d.). Although some question the ability of crowdfunding to grow the economy the fact is that it remains one of the few bright lights in this very sluggish recovery or stagnation.

Urban planning and the urban environment were not the primary focus of crowdfunding with technology ventures being the obvious first choice and indeed being responsible for a majority

of the crowdfunding pie. The potential nonetheless is there, if the necessary steps are taken in the regulatory and institutional aspect crowdfunding could have a very beneficial goal in communities whether by building new public infrastructure, enhancing the urban environment or developing abandoned properties to create jobs and improve the quality of public spaces.

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