

## Economics Alert

October 31, 2017

### Swiss PropTech Survey 2017

# PropTech: New kids on the block

The term property technology – or PropTech for short – stands for modern technological developments in the real estate business. This generally includes the introduction or optimization of products, processes or entire business ideas using the latest information and communication technologies. Around the world as well as in Switzerland, PropTech companies are gaining ground with the aim to disrupt established, traditional business models. To find out more about these PropTech firms, which are in most cases start-ups, Credit Suisse and SwissPropTech joined forces to conduct the Swiss PropTech Survey. This publication summarizes the key findings of this survey, the first of its kind.

### New business models for old problems

What all PropTech firms have in common is their approach of applying new business models and new technologies to existing value creation chains in the real estate sector in order to develop new solutions. In many cases, PropTech firms alter the value creation chain itself in the process, revealing their disruptive nature. Most of the start-ups pursue the principle that the problems to be solved must be recognized as such by a broad mass and the solution approach must be scalable. Process-based start-ups are considered promising if they can make existing processes significantly more efficient or cost-effective.

### PropTech firms in Switzerland gain acceptance

Although PropTech companies have only come to the fore of the real estate market over the last few years, they have already gained wide acceptance. There is hardly an area on the spectrum of real estate services that is not already being addressed by at least two PropTech firms. PropTech companies and their investors have identified the greatest optimization potential in real estate management – whether asset, property or facility management. However, PropTech companies also focus on real estate marketplaces, the software/CRM/database segment and the internet of things. Specific services in the PropTech sector also have applications in building sales, rentals, property appraisal and visualization,

or the start-ups concentrate on general services related to living and working space.

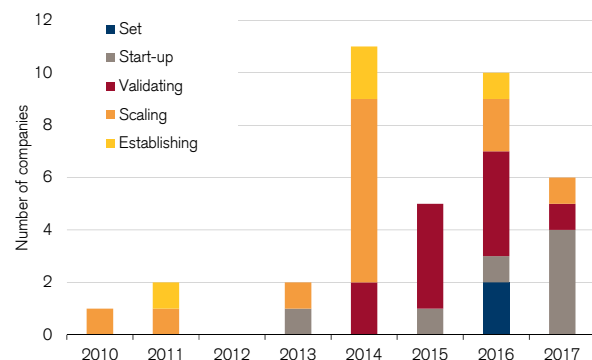
### Solid sample for a relatively small scene

The PropTech landscape in Switzerland remains largely unexplored. To remedy this, Credit Suisse Real Estate Economics joined forces with Swiss PropTech in the summer of 2017 to conduct a survey via various channels of well-known and (as we discovered) as yet unknown actors in the PropTech scene. Around 45 companies participated fully in the first Swiss PropTech survey, answering all the questions. This is a valid observation sample for analysis, given the size of the market. According to Schwyter Digital, the PropTech landscape numbered more than 100 entities for the first time as of July of this year.

Figure 1

### Founding year and phase in the start-up lifecycle

Number of companies responding: N=37



Source: Credit Suisse Real Estate Economics

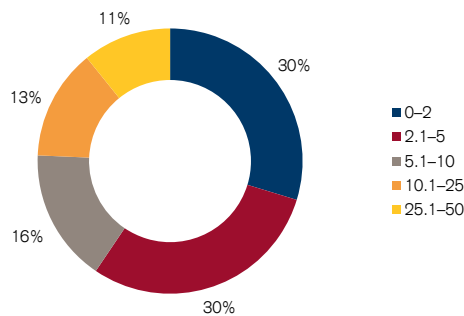
In order to reflect the "start-up" nature of the PropTech scene, we limited our sample to companies founded in 2010 or later (37 respondents). In fact, 86% of the companies in the sample were actually founded after 2013 (cf. fig. 1). One third of these start-ups identify themselves as in the validating phase of the start-up lifecycle, where the task is to ascertain whether the product or service is indeed fit for market. Another third

see themselves in the scaling phase, where the prime objective is to generate as much growth as possible. One fourth of the start-ups are not yet so far along, but are still in the founding or start-up phase. The share of mature companies that have gone through all these phases, is relatively limited at just above 10%.

**Small, agile companies dominate the PropTech economy**

Start-ups are by nature young companies, so their workforce tends to be small. Some 60% of the surveyed PropTechs have a workforce of five or fewer full-time equivalent employees. Only 11% reported a staff of more than 25 full-time employees (cf. fig. 2). It may seem surprising that only 16% of the PropTechs were founded as university spin-offs. This is because a majority of the start-ups do not involve technologies developed at academic research departments, but focus on processes and combinations of existing technologies.

Figure 2  
**Size of PropTech firms by number of employees**  
Percentage of companies with full-time equivalents employed; N=37



Source: Credit Suisse Real Estate Economics

**Many Swiss PropTechs were founded by non-Swiss**

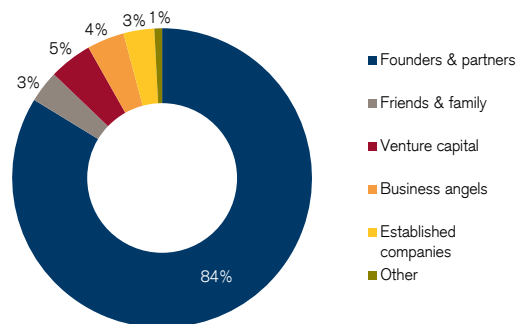
Three quarters of the surveyed companies have their headquarters in Switzerland. Among the host regions, Canton Zurich is the undisputed leader, home to 38% of PropTech companies in Switzerland. The Lake Geneva region comes second with 20%, followed by Cantons Basel-Stadt (12%), Zug (8%) and Schwyz (8%). Although most of the PropTech companies are based in Switzerland, only half of their founders are Swiss citizens. This indicates that Switzerland is a highly attractive location for PropTech companies, as the survey respondents nearly unanimously confirmed. This is particularly true for Europe, the origin of 43% of the founders (without Switzerland).

**PropTech companies take the risk**

Survey results indicate that PropTech firms do not shy away from entrepreneurial risk. Nearly 84% of the PropTech companies are financed by their founders and partners (cf. fig. 3). Venture capitalists and business angels also play a role, but tend to get involved at a later stage – typically the growth

phase. The same is true for established companies, which usually offer financing only after the start-up has positioned itself in the market. In contrast, friends and families are more likely to provide the start-ups with substantial support at a very early stage, but do not play a major role overall. On balance, it is the founders and their partners who assume the overwhelming majority of the risk of a financial default. There is therefore ample room for external investors to provide start-ups with assets and take on some of the risk.

Figure 3  
**Financing base for PropTech firms**  
Financing sources for companies in %; N=30

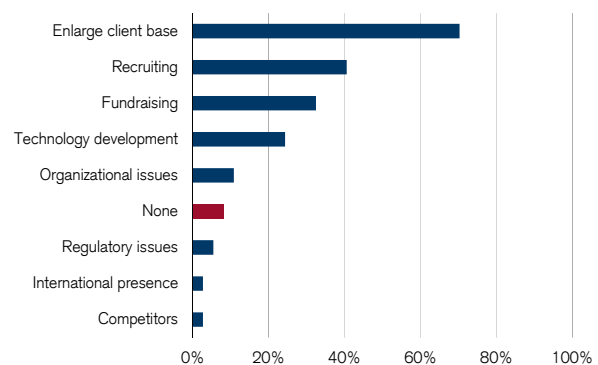


Source: Credit Suisse Real Estate Economics

**Growth before anything else**

Notably, raising sufficient funds to start and develop the business was not cited by PropTech companies as their greatest challenge. Two other tasks are assigned higher priority (cf. fig. 4). Enlarging the client base is by far the main challenge confronting PropTechs (70%). Considering the networking character of many start-ups' business models, their desire for fast growth is understandable. In second place is the challenge of recruiting the right people (41%) – a hurdle that also affects traditional, analog companies.

Figure 4  
**Key challenges for PropTech firms**  
Share of answers in %, multiple answers possible; N=37



Source: Credit Suisse Real Estate Economics

This finding must be viewed against the backdrop of PropTech companies' strong dedication to growth, expressed in survey results showing that on average, they intend to double their workforce over the next 12 months. This strong statement reflects the high level of self-confidence among PropTech companies.

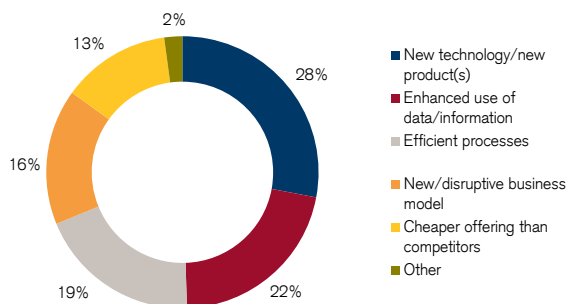
### New, better, more efficient: these are the knock-out strategies

Asked about their main competitive advantage, the PropTech firms most frequently mentioned new technologies or the invention of new products (28%). Better use of data and information (22%), operational improvements through more efficient processes (19%) and new business models (16%) follow in the ranking (cf. fig. 5). Offering cheaper services, on the other hand, is rarely considered the most important competitive advantage (13%). On average, each PropTech company mentioned 2.5 comparative advantages. This suggests that these start-up companies are challenging their traditional rivals at more than one level. Adjusting the results for the variety of multiple answers per participant barely affects the ranking; new technologies/products and more efficient processes gain slightly in significance. At least one of these two competitive advantages was mentioned by every respondent.

Figure 5

#### Most important competitive advantage

Share of answers in %, multiple answers possible; N=36



Source: Credit Suisse Real Estate Economics

### Conclusion: PropTech companies stir up the industry

With the PropTech companies, a fascinating new industry has emerged that is growing fast. CB Insights reports that USD 2.0 billion was invested worldwide in PropTech firms in 2015. By 2016 this figure had already risen to USD 2.7 billion – a respectable rate of growth. The PropTech firms are shaking up the Swiss real estate sector, long known for its complacency. The “new kids” are addressing virtually all the links in the value chain, exhibiting courage and the will to succeed. They identify high potential in the Swiss market, which is not surprising given its estimated value of over CHF 3.5 trillion in real estate. This is a clear challenge to the established players in the market, who are reacting with increasing numbers of mergers and corporate participations. Therefore, the PropTech landscape is likely to remain a changing one. By way of illustration, four randomly selected survey participants present a brief overview of their PropTech company on the following page.

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## Selected PropTech survey participants profiles

We randomly selected four PropTech firms from among the survey participants. Following is a brief presentation of each company.



**Brixel** is a start-up founded by the digital entrepreneurs Michael Wiedemann and Martin Angehrn. Before brixel.ch they had been creating digital products for leading banks and real estate companies in Switzerland. With Brixel, they pursue the goal of completing the entire transaction process on a single platform. Every step is digitalized, from marketing, matchmaking, bidding and negotiation to the final closing of the purchase agreement. The transaction process is as simple as selling an object on ebay: transparent, data-driven and accessible for everyone. The new way to trade real estate.



**Locatee** is a Zurich-based start-up creating the future of office buildings. Its big data platform Locatee Analytics augments the physical workspace with real-time data to create smart and occupant-oriented office buildings. Thanks to Locatee, some of the largest organizations in Switzerland and abroad, such as Swiss Post, ABB, UPC and Biogen, are able to intelligently optimize their real estate and shape the way people interact with their work environment.



**Parquery** AG is an official spin-off from the Federal Institute of Technology in Zurich. Parquery uses computer vision and deep learning algorithms to analyze video feed snapshots and provide clients with operational data through application programming interfaces. The company's first solution is a smart parking management tool already operational in more than 30 cities. In collaboration with industrial partners, Parquery recently developed new smart mobility features to increase its portfolio in mobility, transportation and logistics. These functions include real-time applications such as analysis of mobility flows in an urban environment, passenger counting on-board public transport vehicles and optimization of freight management operations.



**Propmatch** is the first intelligent matching platform for investment properties in Switzerland. The web-based application enables the parties of a real estate transaction to easily and interactively analyze and buy or sell objects. For each parcel in Switzerland, Propmatch finds the most suitable search/buy profile of investors or developers. For each recorded real estate portfolio, Propmatch calculates a detailed search/buy profile on the basis of the individual location characteristics. This makes the intermediation process of off-market transactions for investment properties not only faster but also considerably more cost efficient.

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