



# High potential – but not yet self-running

Swiss PropTech Report | May 2019



PropTech Report 2019 Main findings PropTech Survey 2019 Detailed results Real Estate Industry Survey 2019 **Detailed results** 

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# Imprint

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In the last years and especially in its founding peak in 2017, the Swiss PropTech industry has shown a tremendous growth up to more than 200 PropTechs in Switzerland as of today. A potential indicator for a massive change in the real estate industry?

PropTechs are regarded as innovative startups that accelerate a holistic digital change. Hereby, collaboration is of utmost importance. But what happens when traditional firms in an industry that is considered as rigid encounter dynamic startups – will those tremendously disparate mindsets complement one another to an engine for the real estate sector's transformation or rather end up in a clash? What are challenges in the context of collaboration and communication between these parties? These and many more issues are examined in our second PropTech study.

We wish you an enjoyable and stimulating read!

Christoph Schumacher Global Head Real Estate

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# High potential – but not yet selfrunning

PropTech companies are the driving forces behind digital development in the real estate industry. They dominate headlines and sometimes cause restlessness among established real estate companies. Within a short period of time, a dazzling landscape of PropTechs has developed in Switzerland. The PropTech The word "PropTech" stands for "Property Technology" and refers to technological innovations landscape in full that pursue the goal of improving the real estate industry's efficiency. PropTech companies or blossom PropTechs that are dedicated to this technology are beginning to change the real estate industry and are themselves shaped by the industry. The large number of awards, pitches, and accelerator workshops manifest the interest of the real estate industry in these young companies. The former is hoping for innovations and improvements in its processes and the latter for growth opportunities and applications of their solutions, which often require a paradigm shift. The relationship between the real estate industry and the young PropTech sector is therefore symbiotic, albeit not completely free of conflict. PropTech: Strong Nothing better could have happened to the real estate industry, known for its inertia, than the growth and enormous emergence of about two hundred agile, technology-savvy and forward-thinking micro-enterprises, potential inspired by a desire to discard traditional patterns and revolutionize existing business models. After an initial hesitation, the services of PropTech are being used by a vast majority of the real estate industry in one form or another. This, albeit at low levels, is reflected in the respectable growth figures of PropTech companies. But this is only the beginning. Considering the amount of capital tied up in the Swiss real estate market and the continuing high attractiveness of the asset class, the earnings potential is enormous. Seriousness of life Wherever there is light, there must be shadow as well. The stormy founding years are mostly beains for the coming to an end. Growth requires continuous inflows of funds and potential mistakes cannot just PropTech sector be offset by the enthusiasm of the founding generation and the initial start-up capital. In this respect, it is important for PropTechs to critically look at their performance and make necessary corrections to their strategy and operative aspects. Not everyone will succeed, and this was clear from the beginning. The landscape of the PropTech companies, which Schwyter Digital keeps track of, already knows its cemetery, where PropTechs, whose names have disappeared or have been merged with others, are saved from oblivion. Second Swiss In autumn 2017, we conducted the first nationwide survey of PropTech companies to shed some PropTech survey light on this new sector. At that time, we deliberately limited ourselves to companies that had not been founded earlier than 2010 in order to appreciate and explore the start-up character of the PropTech sector. In our second survey in 2019, the classification as a start-up is no longer being considered as a necessary condition for analysis. The analysis focuses on all companies that use the technology to develop solutions for the real estate industry regardless of when they were founded. We would like to take this opportunity to thank all survey participants for their contributions and support in improving the mutual understanding between the PropTech and the real estate industries. To illustrate the PropTech sector, we have again randomly selected four Prop-Techs out of the respondents who completed the survey and present them at the end of the report (page 18).

#### Swiss PropTech Survey 2019

| Survey – key points                                                                 | As with our first survey in 2017, we developed the current survey together with the industry net-<br>work SwissPropTech and distributed it through various channels to PropTech companies that are<br>active in Switzerland. A total of 58 companies provided us with complete feedback, which forms<br>the basis of our evaluations. At the time of the survey, Schwyter Digital's PropTech map for Swit-<br>zerland comprised 201 entries from active PropTech companies. Therefore, the coverage of our<br>sample is 29% of the industry, which should allow for quite reliable results.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Aim and purpose of<br>the survey                                                    | The survey not only aims to feel the PropTech industry's pulse but also to contribute toward im-<br>proving the mutual understanding between PropTech and established real estate companies. For<br>the latter, integration with the digital world is a necessity in order to take advantage of the oppor-<br>tunities to modernize their own processes and develop new products. Only in this way can the<br>companies ensure that they will continue to rank among the leading players in their industry in the<br>future (see detailed results of the PropTech Survey 2019 on p. 9 ff.).                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Simultaneous surveys<br>of the real estate<br>industry and the<br>PropTech industry | It was therefore important for us not only to gather information from PropTech companies but also to consult the real estate industry. For this purpose we conducted a separate survey among the "100 heads of the real estate industry", as they have been identified by the ImmobilienBusiness magazine in June 2018. This is a very representative sample of the real estate industry in Switzer-land as well as of the proven experts in the local market. The response rate of over 50% after only one invitation to participate can be seen as an indication of the keen interest that the real estate industry is having for PropTechs (see detailed results of the real estate industry survey on p. 15 ff.).                                                                                                                                                                                                                                                                                                                            |
|                                                                                     | Main results of the survey                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Start-up fever has<br>cooled down<br>considerably                                   | The first PropTech companies were founded before 2010 when the name did not even exist (Fig. 3, page 9). In many cases, these were real estate portals, which from the turn of the millennium began to transform the marketing of and search for real estate, or were companies that programmed software for the management of real estate. The actual wave of start-ups that developed solutions for the real estate industry began in 2012/2013 and began to take off in 2014/2015. There are now over 200 PropTechs in Switzerland and the industry is on its way to adulthood. The start-up fever has now cooled off substantially. After three years of eleven new PropTech start-ups being founded on average among the participants of our survey alone, last year only five were founded.                                                                                                                                                                                                                                                |
| Majority are now in<br>the scaling phase                                            | Meanwhile, half of the PropTechs are in the scaling phase (Fig. 4, page 9). This phase is charac-<br>terized by practically all other goals being subordinated to growth. The scaling phase follows the<br>validation phase, in which the suitability of the business model is examined and continuously im-<br>proved in various test runs and initial pilot projects. In the scaling phase, the product or service is<br>rolled out broadly in the market and offered to as many customers as possible. 51% of the Prop-<br>Techs surveyed are in this phase, in which the primary objective is to increase revenue.                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Sales, sales and<br>sales again                                                     | The PropTechs surveyed named increasing sales figures as the most urgent challenge (Fig. 11, page 11). Even before raising capital and hiring additional personnel, broadening the customer base across all phases of the lifecycle is considered as the number one challenge. This is related to the extremely large network effects of many digital business models and the pronounced economies of scale that often lead to a "the winner takes it all" situation. The implementation of an algorithm for various customers involves only little additional cost. Anyone who has managed to rank among the top companies in a specific field of activity has a good chance of operating a highly profitable business. Speed is therefore a must and forces many start-ups in the digital sector to broaden their customer base at a time when business models are not yet self-supporting. In this phase, of course, additional specialists will be sought. Above all, programmers and sales managers are urgently needed (Fig. 12, page 12). |
| Strong drive for<br>international<br>expansion                                      | Approximately 80% of the small and medium-sized companies (SMEs) in Switzerland do not gen-<br>erate sales abroad. They therefore largely restrict their business activities to the domestic market.<br>The PropTechs are quite different. Only 15% of the respondents did not want to know anything<br>about international expansion. Approximately one-third are already internationally positioned and<br>about 20% plan to take this step within a year (Fig. 10, page 11). All in all, over 80% of respond-<br>ents are aiming for international expansion sooner or later. The pressure to offer one's own prod-                                                                                                                                                                                                                                                                                                                                                                                                                           |

|                                                     | uct or service as quickly as possible to as many customers as possible makes the urge for interna-<br>tional expansion appear to be a logical consequence of a company's development in the scaling<br>phase.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No exuberant<br>welcome                             | The PropTech industry has been welcomed well by the real estate industry, but its excitement is not as strong as the PropTechs may have wished. Only 7% of the interviewed PropTech companies describe the real estate industry as "very receptive" to the solutions of the young companies (Fig. 13, page 12). More than half of the PropTechs stated that the real estate industry is "reasonably receptive". The PropTechs are struggling above all with a problem that is common to all newcomers: the low level of brand recognition. With brands that are hardly visible and the market-ing resources of small companies, the fight for the attention of the real estate industry is a difficult undertaking. The PropTechs see these difficulties as their greatest challenge in rapidly increasing their sales figures (Fig. 14, page 12).                                                                                                                                                                                                                                                                                                                     |
| Respectable success<br>for the PropTech<br>industry | Nevertheless, the PropTech industry can show respectable initial success. All the respondents were able to maintain or increase their sales figures in 2018 (Fig. 18, page 14). 90% reported an increase in sales and three-quarters of the respondents reported sales growth even greater than 50%. Quite a few were even able to more than double their sales. This backdrop also explains the brisk – not to say euphoric – growth intentions of the PropTech sector with regard to hiring (Fig. 17, page 13). Not a single survey participant wanted to know anything about a reduction in employment. 88% expected further growth despite the fact that PropTech was already able to achieve high employment growth in 2018. The PropTech sector is mainly active in B2B business and focuses its products and services primarily on companies active in the real estate industry.                                                                                                                                                                                                                                                                                |
| but still not self-<br>propelling                   | Despite these astonishing growth figures, the road is still long and the continued successful de-<br>velopment is not carved in stone. Based on the information provided by the survey participants, we<br>conclude that only an estimated fifth of the PropTech companies are profitable. Many PropTech<br>companies are struggling with the long and complex decision-making processes in the real estate<br>industry (Fig. 15, page 13). Two different worlds collide here. There are massive differences be-<br>tween the established companies in the real estate industry and the young PropTech companies in<br>terms of size, agility and corporate culture, which are not favorable for potential cooperation be-<br>tween both the parties. In addition, although the PropTech sector is very technology oriented,<br>knowledge of real estate – the "prop" – is rather weak. Less than one fifth of all founders come<br>from the real estate sector (Fig. 19, page 14) and most come from the IT sector (29%) or the<br>university environment (24%). This means the PropTechs can offer a fresh and unencumbered<br>approach to the topic of real estate. |
| High market<br>penetration                          | The cooperation between the PropTech industry and the real estate industry is at a good level.<br>Only 14% of the exponents of the real estate industry surveyed by us do not work with PropTechs<br>in any form currently (Fig. 22, page 15). Accordingly, 86% currently maintain partnerships with<br>PropTechs or purchase one or more products or processes from them. 42% of real estate com-<br>panies even state that they have business relationships with three or more PropTechs. However,<br>the majority of the business relationships were established only over the last three years. The<br>initiative for cooperation came somewhat more frequently from the real estate industry. The latter<br>often relies on external consultants when it comes to identifying the most suitable offer.                                                                                                                                                                                                                                                                                                                                                            |
| despite mixed<br>performance                        | As far as the results of mutual cooperation are concerned, there is still room for improvement.<br>Only 18% of the real estate industry participants were completely satisfied with the joint projects<br>(Fig. 24, page 16) although a clear majority considers the objectives to have been met in full or by<br>a large margin. In 33% of cases, however, the targets were only partially achieved and in 11% of<br>cases only marginally. Only slightly more than half of the real estate companies already working<br>with PropTechs are planning additional cooperation in 2019 (Fig. 25, page 16). Two fifths have<br>yet to make up their minds. These issues point toward certain coordination problems. In addition, a<br>few PropTechs self-critically observed that it is unclear what the added value of their products for<br>the customer is (Fig. 14, page 12). This was mentioned as the second most important obstacle to<br>generating higher sales figures.                                                                                                                                                                                         |
| Homework to do                                      | PropTech therefore has some homework to do if it wants to continue its previous successes. And<br>the sector is dependent on a continuation of this development. As already mentioned, it is esti-<br>mated that only one fifth of the PropTech companies are profitable. In this respect, it is important<br>for PropTech to take the proposed measures for improving interaction between the two worlds.<br>The real estate industry, for example, would like PropTech to have a better understanding of its                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

decision-making processes (Fig. 28, page 17). Furthermore, more frequent contacts and more offers for pilot projects are also seen as conducive for cooperation. In addition, the segments of the real estate industry that PropTech is targeting are only partially congruent with the fields in which the real estate industry hopes for fruitful cooperation (Fig. 1 and Fig. 2).

#### **Mutual approach** It will be interesting to observe whether, with further progress in mutual cooperation, PropTech will be able to maintain its independence or whether the two areas will come closer together or merge. Today, 11% of the real estate industry has already acquired one or more PropTech companies and a further 26% claim to have a financial share in one or more PropTech companies (Fig. 29, page 17). In addition, it can be assumed that the real estate industry will increasingly try to use these technologies in-house and thus become more similar to PropTech over time. In the future, it will therefore become increasingly difficult to distinguish between the two sectors and study them separately. Should this no longer become possible at some point, the goal of the PropTech to revolutionize the real estate industry would have been achieved.

#### **Fig. 1: Industry interest only partially identical with PropTech focus** Target segments of PropTechs compared to desired cooperation segments according to real estate industry



Source: Credit Suisse PropTech & Real Estate Industry Survey 2019

Fig. 2: Segments with underused and overstretched potential Difference (in percentage points) between PropTechs' target segments and the desired cooperation segments according to real estate industry Untapped potential of cooperation Property/Asset management Consulting/Valuation Construction/Construction management Design/Planning/Development Portfolio management Facility management

Source: Credit Suisse PropTech & Real Estate Industry Survey 2019

Other

-6% -4%

-2% 0% 2%

4%

6%

Sale

Short-term rental

Long-term rental

Financing/Crowdfunding

Corporate real estate

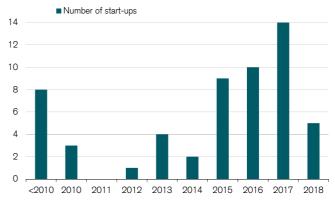
Home services (furniture shipping,.

#### Founding fever has cooled off

The actual wave of PropTech start-ups seriously began in 2015. In our survey of 2017, the year 2014 was also conspicuous by a number of start-ups. The peak was reached in 2017, the year when the public started to take notice of the PropTech phenomenon. In the mean-time, the founding fever has cooled off. After a three-year average of 11 start-ups, the year 2018 clearly fell with only five start-ups. On average, the PropTechs of the founding wave starting 2012 are 3 years old. Their predecessors are on average older than 10 years.

#### Fig. 3: Founding year of surveyed PropTech companies

"In which year was your company founded (commercial register entry)?"



Source: Credit Suisse PropTech Survey 2019 (N=56)

#### Half of the PropTechs are in the scaling phase

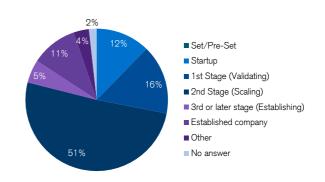
Most PropTech companies are young companies. More than a quarter (28%) is still in the start-up phase or in the subsequent phase of validating the business model. More than half (51%) are now in the scaling phase, where the primary objective is to increase sales and find a broader customer base for the business model that has proven to be suitable in individual cases. In our last survey, only a good third had reached that stage. Only 5% have reached the establishment phase. 11% of the surveyed companies describe themselves as already established. The majority of them were founded before 2010.

#### High self-financing of the PropTech industry

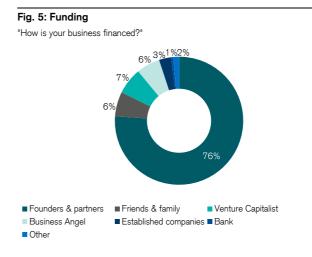
Three quarters of the capital of the PropTech companies come from founders and their partners. This can partly be attributed to the difficult search for capital, which 12% described as "very difficult" and 48% as "somewhat difficult". Almost 30%, however, answered the question about the difficulty of raising capital with "I don't know", which suggests that they did not have to or did not want to try to raise capital at all. The equipment costs are relatively manageable for a typical PropTech company and only when wage payments have to be made to employees does the capital requirement grow. Nevertheless, since the 2017 survey, the financing shares of investors (venture capitalists, business angels and established companies) have increased. But they still account for no more than 16%.

#### Fig. 4: Life cycle phase of the companies

"What phase of the start-up lifecycle is your company in?"



Source: Credit Suisse PropTech Survey 2019 (N=57)



Source: Credit Suisse PropTech Survey 2019 (N=50)

# PropTech Survey 2019: Detailed Results II

#### Broad and balanced spectrum of action

The added value created by the PropTechs is distributed fairly evenly across a wide range of fields. On average, PropTech reported 3.6 different fields of activity. The most frequently mentioned are better use of data and information (21%), cost reductions (20%), and process acceleration (18%). Further important factors are improvement in user experience (12%), new products (10%), and increase in sales (10%). Several respondents also mentioned an improvement in transparency.

#### PropTechs are strongly technology oriented and even more innovative

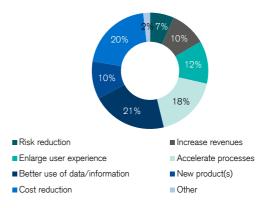
Not surprisingly, many PropTech companies described their products and services as relatively technology heavy on a scale of 1-10. Only 12% placed their products and services in the lower half of the scale. 28% of the respondents even stated the highest two categories. The innovation grade is even more pronounced, with 32% describing their products/services as highly innovative. This is one of the reasons why many real estate companies seek and appreciate the services of the PropTech industry.

#### One third of PropTechs dedicated to platform business

A respectable part of the PropTech sector (31%) operates a classic platform business or can be assigned to the Software/Data Management segment (21%). In these two fields there are a particularly large number of companies that focus exclusively on these two areas. On average, PropTechs rely on 2.4 tech drivers. The field of artificial intelligence/big data (15%) is already astonishingly wide-spread, whereas building information modeling (BIM; 3%) is still rather neglected. Those who rely on blockchain (7%) are usually also heavily involved in the platform business at the same time.

#### Fig. 6: Main effect of PropTech products

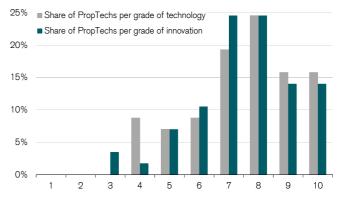
"What is the central impact of your products/services?" (multiple answers possible)



Source: Credit Suisse PropTech Survey 2019 (N=58)

#### Fig. 7: Technology and innovation grade

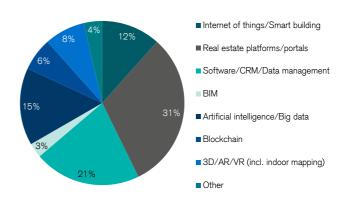
"What is the degree of technology/innovation of your products/services (scale 1-10)?"



Source: Credit Suisse PropTech Survey 2019 (N=57)

#### Fig. 8: Tech drivers

"What technology drivers does your company rely on?" (multiple answers possible)



Source: Credit Suisse PropTech Survey 2019 (N=50)

#### Strong investment focus in target segments

With its products/services, PropTech is primarily targeting the investment areas consisting of portfolio management (10%) and asset management (15%) as well as the sale/transaction area (12%). In these areas, a lot of capital is involved, which basically increases sales opportunities for PropTechs. The valuation function (9%) is also often mentioned as a target segment, which is mainly due to its dataheavy working method. Overall, a strong B2B focus can be discerned. Accordingly, PropTechs only rarely address the end users of the space and therefore domestic services are not the focus of much attention (2%).

#### Strong international expansion drive

Only just 15% of respondents do not want to know anything about internationalization. Approximately one third are already internationally positioned and just under 20% plan to take this step within a year. Immediately, i.e., within the next six months, only about 2% of the PropTechs plan international expansion. It therefore appears as if PropTechs are still being challenged in the domestic market. Altogether, over 80% are planning an international expansion sooner or later. This is a high figure if one compares it with Swiss SMEs, where almost 80% have no presence abroad at all.

#### Increasing sales is the most pressing problem

Of the challenges facing PropTech, the most pressing is clearly to broaden the customer base and increase sales (33%). This is closely followed by fundraising (20%). The scaling phase is usually accompanied by considerable investments, which is why the need for funds increases significantly. If it is not possible or not yet possible to generate this through a higher turnover, financing has to step in. In third place comes the search for skilled workers (17%), which also becomes urgent in the scaling phase at the latest. Competitors and organizational problems, on the other hand, only become a noticeable challenge from the establishment phase onward.

#### Fig. 9: Target segments

"Which segments of the real estate market is your company primarily targeting?" (multiple answers possible)



Source: Credit Suisse PropTech Survey 2019 (N=57)

#### Fig. 10: International expansion drive

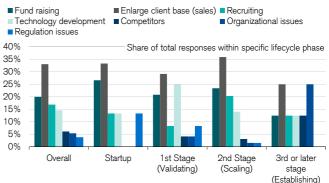
"How quickly are you striving for international expansion?"



Source: Credit Suisse PropTech Survey 2019 (N=58)

#### Fig. 11: Challenges

"What are the main challenges you are currently facing?" (multiple answers possible)



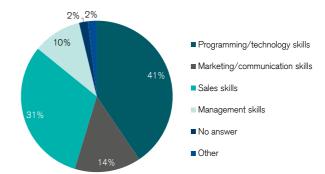
Source: Credit Suisse PropTech Survey 2019 (N=57)

#### Wanted: Programmers and sales managers

As far as professionals are concerned, programmers and technicians are the most sought after profiles (41%). Sales managers are also in high demand (31%), which underlines the urgent challenge of increasing sales figures. These two profiles account for three quarters of the responses. There is also a need for marketing and communication skills (14%) and, to a lesser extent, management skills (10%).

Fig. 12: Sought-after skills

"Which skills are most needed in recruiting personnel?" (multiple answers possible)



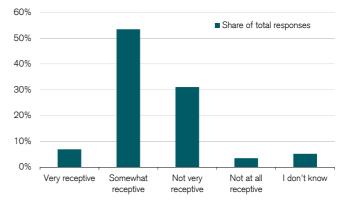
Source: Credit Suisse PropTech Survey 2019 (N=57)

#### PropTechs are not welcomed exuberantly

PropTechs have been welcomed well by the real estate industry, but their excitement is not as strong as the Prop-Techs may have wished. Only 7% of the interviewed Prop-Tech companies described the real estate industry as "very receptive" to PropTech solutions. Nevertheless, interest is there. More than half (53%) think the real estate industry is "somewhat receptive". This is a good start, but it is difficult for the whole thing to become a self-propelled success. The PropTechs face challenges accordingly.

#### Fig. 13: Open-mindedness towards PropTechs

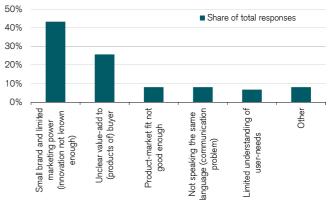
"How receptive is the real estate industry in Switzerland to solutions from PropTechs in general?"



Source: Credit Suisse PropTech Survey 2019 (N=58)

#### Fig. 14: Obstacles to PropTechs

"What are the biggest hurdles for PropTechs on the side of the PropTech industry to achieving better sales figures?" (multiple answers possible)



Source: Credit Suisse PropTech Survey 2019 (N=58)

#### Battle for attention

When asked about the barriers in the development of Prop-Tech, companies cited the low level of brand recogni-tion or limited marketing resources as the main problem (43%). However, they were also quite self-critical and were unclear about the added value provided for buyers by their products/services (26%). Limited understanding of user-needs (7%), communication problems (8%), or weak productmarket fit (8%) was mentioned only by a few respondents. Every 8th PropTech either did not want to provide any information on this question or could not identify any hurdles.

#### Long and complex decision paths of PropTech customers

Hurdles are not limited to the PropTech sector. Complex and lengthy decision-making processes in the real estate industry (35%) are perceived by respondents as the biggest hurdle to better sales figures. A rather low level of decisionmaking pleasure (21%) is also often mentioned and is probably related to the first factor. Sometimes, however, there is simply a lack of willingness to cooperate on the part of the real estate industry (16%) or the cost of replacing the existing technology solution proves to be too high for customers (16%). It was also mentioned that many companies prefer their own development to purchasing.

#### Access to the executive floor as the most effective countermeasure

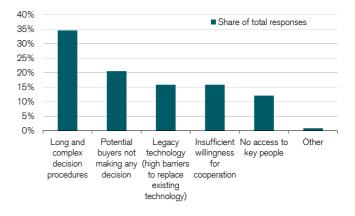
When asked about solutions to narrow the gap in understanding between the PropTech and the real estate industry, direct access to top management was primarily mentioned as the first choice. Of course, this could also solve the problem of a lack of brand recognition. Events and conferences are also seen as helpful in raising awareness and improving the exchange of information. The PropTechs surveyed favored the establishment of Innovation Labs even more. On the other hand, PropTechs are rather reserved about exchange of personnel, which points to larger (presumed) cultural differences.

#### High employment growth in the last 12 months

PropTech recorded strong workforce growth in 2018. An increase was reported by 69% of the respondents, a decrease only by 5% and an unchanged number of full-time employees by 22%. In absolute terms, the majority of staff expansions ranged between 0-5 jobs. For the PropTech companies, which tend to be small, this is reflected in high relative increase in employment numbers. For more than two thirds of the PropTech companies that increased their staff, employment growth exceeded 40%. Compared to the last survey in 2017, the share of PropTechs with 10-20 employees increased sharply.

#### Fig. 15: Obstacles in the real estate industry

"What are the biggest hurdles for PropTechs on the side of the real estate industry to achieving better sales figures?" (multiple answers possible)



Source: Credit Suisse PropTech Survey 2019 (N=51)

#### Fig. 16: Solutions for better communication

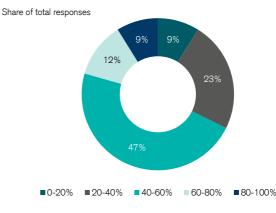
"How could the understanding gap between PropTechs and the real estate industry be closed?" (multiple answers possible)



Source: Credit Suisse PropTech Survey 2019 (N=51)

#### Fig. 17: Employment growth at PropTechs

"To what extent did the number of employees increase in 2018 compared to the previous year?"



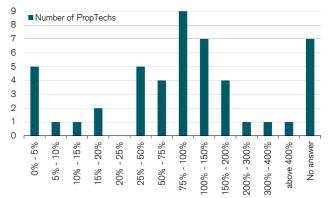
Source: Credit Suisse PropTech Survey 2019 (N=34)

#### Strong expansion plans due to high sales growth

Regarding employee expansion in the next 12 months, PropTechs are without exception very optimistic, not to say euphoric. 88% expect growth and only 9% stagnation. Nobody wanted to know anything about a decline in the number of employees. These expansion plans are to be read against the backdrop of overall very strong sales growth in the last 12 months. Only 5 PropTechs (10%) recorded no growth. For the remaining 90%, the median of the sales growth was at 50%-100%. Quite a few PropTechs more than doubled their sales in the last 12 months.

#### Fig. 18: Sales development in the last 12 months

"How has sales changed compared to the previous year?"



Source: Credit Suisse PropTech Survey 2019 (N=48)

#### More than half of the founders have IT or academic backgrounds

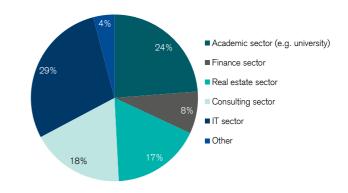
Only 52% and thus a narrow majority of PropTech founders are Swiss. 37% come from Europe and a further 6% from North America. Less than a fifth of all founders come from the real estate sector. Three quarters of the founders come neither from the financial nor the real estate sector. They have a fresh and "unencumbered" approach to real estate. Most of the founders come from the IT sector (29%) or the university environment (24%). A further 18% were previously active in the consulting sector. 66% of the founders are still managing the business. A further 20% concentrate on strategic activities with the board of directors.

#### Strong concentration of PropTechs in Zug and Zurich

90% of the interviewed PropTechs have their headquarters in Switzerland. Another 7% in Europe. Within Switzerland, the Canton of Zurich is by far home to the largest number of PropTechs, followed by Zug and Bern. If, however, the number of local PropTechs is related to the level of employment (full-time equivalents) in a canton, the canton of Zug wins the race ahead of the cantons of Zurich and Schaffhausen.

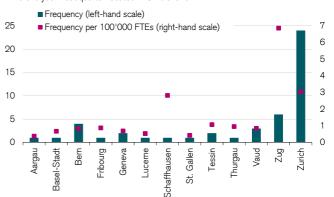
#### Fig. 19: Origin of founders

"What sector do the founders of the company come from?" (multiple answers possible)



Source: Credit Suisse PropTech Survey 2019 (N=58)

Fig. 20: Headquarter locations of PropTechs in Switzerland "Where is your headquarter located in Switzerland?"



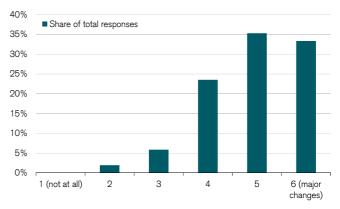
Source: Credit Suisse PropTech Survey 2019 (N=48)

#### The real estate industry expects massive changes

One third of the real estate industry respondents (33%) expected massive changes in their products or business processes due to digitization in the next 5 years. 35% of the respondents chose the second highest value on a six-point scale as a measure of expected change. The real estate industry, which is perceived as sluggish and not very innovative, therefore expects major changes in its products and business processes.

#### Fig. 21: Extent of digitization-related changes

"Do you expect your products or business processes are going to change in the next 5 years as a result of the digitization?"



Source: Credit Suisse Real Estate Industry Survey 2019 (N=51)

#### Extensive cooperation with PropTechs

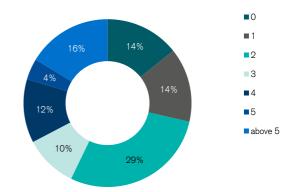
Only 14% of the respondents from the real estate industry in our survey are currently not working with PropTechs in any way, including by way of partnerships and/or the purchase of a product or process. 42% of them even have business relationships with 3 or more PropTechs. Therefore the industry currently seems to be gaining extensive experience. 16% of the respondents are even power users and have more than 5 collaborations running. 20% of respondents have been working with PropTechs since 2012 or earlier. 61% have only started working with PropTechs in the last 3 years.

#### Mutual approach to each other

According to the real estate industry, in 24% of the cases the cooperation came about as a result of a search for a specific/innovative product. In 15% of the cases, the impetus came from PropTechs. The real estate industry became aware of PropTech companies in approximately equal parts due to conferences/media reports/awards (9%), by way of a recommendation from a third party (8%) or due to company network (8%). However, 34% of companies that have at least one business relationship with a PropTech did not want to or could not answer this question.

# Fig. 22: Intensity of the collaboration with PropTechs

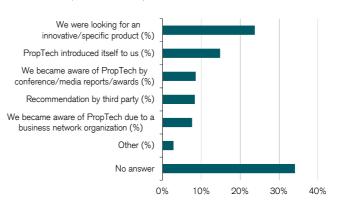
"How many PropTechs are you collaborating with?"



Source: Credit Suisse Real Estate Industry Survey 2019 (N=51, incl. no answer =2)

#### Fig. 23: Origin of the cooperation

"How did the cooperation with a PropTech come about?"



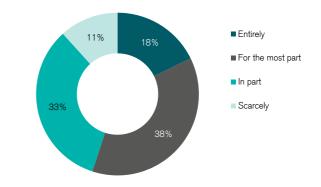
Source: Credit Suisse Real Estate Industry Survey 2019 (N=44, incl. no answer = 15)

#### Moderate degree of target achievement

A sign that the real estate industry and the PropTech world do not yet completely understand each other is the rather moderate degree of target achievement of previous cooperations. Only 18% of the real estate industry respondents were completely satisfied. Nevertheless, a clear majority considered the targets to have been mostly or completely met. For 33%, the targets were only partially achieved and for 11% only sparsely. The high number of respondents who had entered into collaborations with PropTechs but did not want to answer this question is a debatable issue (15 out of 44).

#### Fig. 24: Degree of target achievement

"Did the previous cooperation with PropTechs meet the targets?"



Source: Credit Suisse Real Estate Industry Survey 2019 (N=44, incl. no answer = 15)

#### More than half plan further collaboration with PropTechs

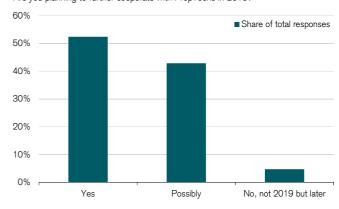
More than half (52%) of the real estate industry participants that have already worked with PropTechs intend to enter into further collaboration with PropTechs in 2019. 43% consider further cooperations to be possible but have not yet made up their minds. For 5% no further cooperations have been planned in 2019, but they consider such cooperations possible after 2019.

#### A clear minority does not see any need for collaborations

14% of the surveyed real estate companies have never worked with a PropTech before. A few companies stated that the main reason for this so far has been missing demand (50%). In 10% of the cases collaborations were considered but no decisions were made yet. In 20% of the cases a lack of information about products and services of PropTechs was the cause. Unclear benefits or the independent development of such solutions in-house were also mentioned albeit less often. Due to the small number of answers, the results are to be read only as an indication.

#### Fig. 25: Future cooperation

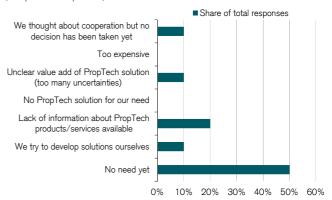
"Are you planning to further cooperate with PropTechs in 2019?"



Source: Credit Suisse Real Estate Industry Survey 2019 (N=44, incl. no answer = 2)

#### Fig. 26: Reasons for previous refusal to cooperate

"Why have you never cooperated with a PropTech company?" (multiple answers possible)



Source: Credit Suisse Real Estate Industry Survey 2019 (N=7)

# Real Estate Industry Survey 2019: Detailed Results III

#### How to find the right PropTech company?

When asked about measures to identify the right PropTech company for their own needs, 27% of the respondents named external consultants and 27% named websites with examples of successful collaborations. For 18%, independent information from a business network was the measure. Only a few respondents mentioned: educational courses with case studies, an open library with all available PropTech innovations, and employing an innovation expert. In contrast to the PropTech sector, the general view is that no added value is given by additional events and conferences. The knowledge conveyed therein is probably regarded as too superficial.

#### More empathy for the real estate industry

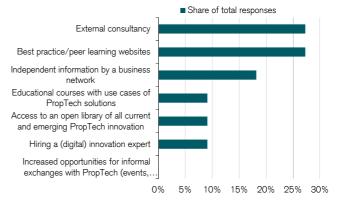
When asked about what could improve the collaboration between PropTech and the real estate industry, 32% of the real estate industry respondents mentioned a better understanding of the real estate industry's decision-making processes. A more frequent exchange and an increased number of pilot projects were mentioned with 23% for each. Better data availability was mentioned somewhat less often, which seems to be only a partial problem. Missing pilot projects and a very strong focus on profound paradigm shifts instead of step-by-step solutions were independently mentioned.

#### Real estate industry interested not just in PropTech products

The real estate industry is not only interested in PropTech's services but is also seeking financial stakes or takeovers. The propensity to invest is clearly present among the representatives of the real estate industry surveyed. But this has led to a takeover (11%) or financial participation (26%) only among a minority of companies and is not yet the case for almost two thirds of the real estate sector.

#### Fig. 27: Measures to identify the right PropTech company

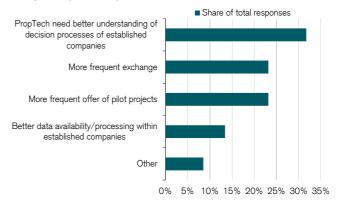
"Which measures would help you to identify the right PropTech company?" (multiple answers possible)



Source: Credit Suisse Real Estate Industry Survey 2019 (N=11)

#### Fig. 28: Measures for a better collaboration

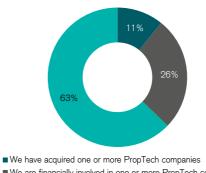
"What would be necessary to better integrate the PropTechs within the real estate industry?" (multiple answers possible)



Source: Credit Suisse Real Estate Industry Survey 2019 (N=45)

#### Fig. 29: Propensity to invest in PropTechs

"Did your company invest in PropTech?"



We are financially involved in one or more PropTech companies
No

Source: Credit Suisse Real Estate Industry Survey 2019 (N=51)

**Random selection** 

As part of our survey incentives program, we randomly selected four participants to present their PropTech company.



#### Smino - puts an end to the chaos in construction projects

smino is a project platform and a productivity tool that prevents information asymmetries and data chaos in construction projects. The cloud-based app focuses on strong collaboration between all stakeholders and provides structured and clear information management. All involved parties such as planners, landlords, contractors and authorities are connected in a virtual project room. The provided features optimize time-consuming and repetitive workflows with automation and structured data handling. smino users safe significant amount of time, reduce administrative efforts, avoid mistakes and gain general oversight in their projects. smino is available on web and as a mobile app with offline functionality.

http://www.smino.ch



#### Swiss Interactive – the visual company

Founded in 2000, Swiss Interactive AG is a pioneer of digital property marketing. Although initially the company specialised in just 3D visualisations, now its range of services includes virtual image and experience worlds such as 3D animations, 3D 360-degree panorama walkthroughs, virtual and augmented reality, spatial design and concepts as well as visual communications and web design to promote properties. As a one-stop partner, SIAG also offers the use of innovation rooms, advice and the development of customisable and personalised solutions. Our long-standing experience is appreciated not only by project developers, but also by prime contractors, property marketers, architects, engineers and the public sector.

L http://www.swissinteractive.ch

#### performance buildings

#### Performance Buildings - digitally operated buildings

Performance Buildings AG creates solutions for offering space as a service with its pb3 platform. We target office buildings, serviced offices and apartments, co-working spaces, meeting and conference rooms, and hotels. Our solutions are deployed by occupants (ABB, Servicenow), property owners (PSP, Mobimo) and Serviced Office providers (Design Offices) alike. We also operate daycrunch, which is our own brand of workspaces, and these are fully automated from booking, occupying to billing with our pb3 platform.



### https://www.performancebuildings.ch



#### Foxstone - real estate crowdfunding platform

Specializing in real estate crowdfunding, Foxstone offers direct access to the Swiss real estate market from CHF 50'000 to democratize investments in stone in Switzerland. Focused on simplicity and transparency, the intuitive platform allows investors to become co-owners of a yield building and benefit from rental income. Foxstone offers a turnkey service where every procedure is done online. From the selection to the management of the building, Foxstone takes care of all the formalities on behalf of the investors. Based in Geneva, the company employs 14 specialists in real estate, finance, technology and operational management.

http://www.foxstone.ch

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