Innovation, Start-ups and Real Estate Locations in the 21st Century

New technologies and concepts in the European competition of real estate locations

Location factors are dramatically changing

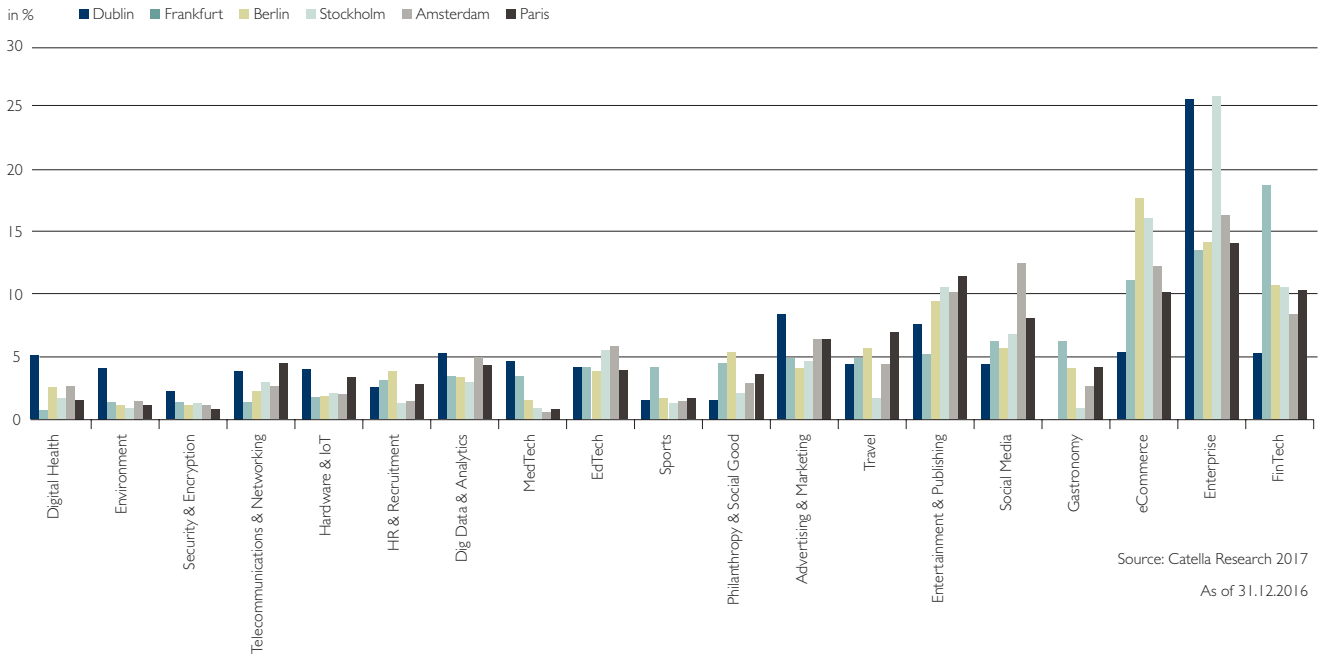
Amsterdam, Paris, Frankfurt or perhaps Dublin? There is a long list of potential profiteers of Brexit. But a simple decision based on "better financial infrastructure" or the cheapest rent is not in line with the modern politics of location decisions. Even in the year after the British decision to leave the EU, it is unclear which of the above mentioned cities will be the main beneficiaries. In this context, a detailed review of these cities can be useful. For the UK, the relocation of companies from the financial sector to mainland Europe will, in no doubt, affect the country's capital London. This metropolis, known as the most important business and financial location of the world as we know it, will try everything in its power to prevent this "brain drain" and continue to play a leading role in global capital markets as well as in tech markets. But who will be the likely beneficiaries on the continent? It has become evident that in the 21. century, it is more than "hard" location factors, which are quantifiable location factors such as commercial tax, rent prices and office stock, that will influence this decision. What characterizes tech locations and financial centres today? Can so-called start-ups and tech companies in general be seen as indicators to identify locations with potential and focus on finances? So far, it has become evident, that the question of "How much of London will relocate?" causes huge speculation, which disregards advances in digitalization and workplace prognosis though. However, this can be practically analysed with the examples Frankfurt and Dublin.

The Diamonds Frankfurt and Dublin

Cities and regions that have a large agglomeration of activities and parties of certain industries can be found in many countries in Europe; they are usually referred to as clusters. Certain locations are said to be particularly interesting for certain industries, such as the "Terza Italia" in the North of Italy, known for its large share of the leather processing industry. Porter's Diamond is a theory which focuses on the reasons for development of such clusters (Porter, Fig. 2).

In a cluster, a network of business relationships as well as private ones can develop between the companies of each industry, which can have positive effects for all actors of a cluster. As an environment conducive to innovation, the region is potentially attractive for new firms as well as existing companies of the industry. Start-ups can be especially important for the long-term economic success of the region, which

FIG.1: DISTRIBUTION OF START-UPS BY INDUSTRIES IN PERCENT (%)



Source: Catella Research 2017

As of 31.12.2016

Catella is a leading specialist in property investments, fund management and banking, with operations in 12 European countries. The group has sales of approximately EUR 211million and manages assets of approximately EUR 16 billion. Catella is listed on Nasdaq Stockholm in the Mid Cap segment. Read more at catella.com.

Your contacts:

Dr. Thomas Beyerle
thomas.beyerle@catella.de
+49 (0)69 31 01 930-220

Sean Nolan
sean.nolan@catella.de
+49 (0)69 31 01 930-275

David Trisl
david.trisl@catella.de
+49 (0)69 31 01 930-276

is the reason why the active promotion of start-ups can be decisive (Potter, Fig. 2). Therefore, the development of a start-up ecosystem with start-ups from many different industries is a factor that can positively influence the entire economy of the region. In the distribution of start-ups by industries, **Stockholm** and **Dublin**, who both promote themselves as IT-Hubs internationally, have the largest number of start-ups in the local "Enterprise"-sector (B2B-technologies), the financial centre **Frankfurt** has the largest number in the "Fintech"-sector. The amount as well as the character of start-ups can be seen as indicators for economically successful regions and can offer a foresight into the future position of these regions in the global markets.

Dublin is an example for the development of a start-up infrastructure which has advantages for established companies as well as for the entire economy. In Dublin, many "Multinationals" such as Google, Facebook, Twitter or LinkedIn, influence the local tech-scene, which has led to the development of different institutions and authorities, who help boost the local economy.

With its global banks, the European Central Bank and the largest stock exchange in Germany, Frankfurt has a reputation of being one of the most important financial centres. There are 289 start-ups in Frankfurt (as of 31.12.2016), which is a lot less than e.g. Dublin (1.220), Paris (718) or Berlin (708) and a distinctive start-up infrastructure has not fully developed to the same extent. Nevertheless, Frankfurt, which occupies the largest Internet Exchange of the world DE-CIX, already has the largest share of Fintech start-ups of the examined cities. In the coming years, this number could rise significantly through intensified efforts of different parties.

The "creative class" as office occupants

According to Richard Florida, there is a particular group of people which a region should attract, if it aims to be conducive to innovation and entrepreneurship. The "creative class" sees highly creative individuals as decisive for the economic efficiency of a region. The conditions for this are included in Florida's theory of the "3Ts" (technology, talent and tolerance). Technology describes the presence of future-oriented technologies in the region, talent refers to the regionally available human capital and tolerance to the environment of the region.

Due to the established "Multinationals" and supporting tech-institutions as well as a number of universities and a young workforce, Dublin is quite well equipped regarding the "3Ts". In terms of property, Dublin struggles with high rent prices and a relatively small office stock.

On property level, the extensive implementation of mixed-use-concepts shows the object-specific application of the modern working environment where the borders between work life and private life are becoming increasingly blurred. Flexibility is also evident in the increasing use of new office concepts, with "pay-per-use"-concepts among others. This is particularly relevant for start-ups, as they can occupy office space without any expensive commitments in the long-term.

Start-ups. Start-ups. Start-ups.

The number of existing start-ups and the development of an appropriate infrastructure are of large importance in the current location competition in Europe. In the current debates regarding innovation and location, a functional start-up ecosystem forms the foundation from which the potential property area likely to develop in the following years can be derived. This foundation will determine the decisions regarding relocations. The so-called soft location factors, which are difficult to quantify, will play an important role. Despite all current euphoria, start-ups on their own are a sufficient but not mandatory market mechanism for the future viability of functional office markets in Europe. As a boost for innovation, they are no doubt hugely important, as they can play a structure-altering role.

FIG.2: THEORIES ON CLUSTERS AND INNOVATION IN COMPARISON

Porter's Diamond by Michael Porter (1991):
Examination of the reasons for competitive advantages for companies at certain locations, 4 factor conditions

Examples: Grenoble-Isére, HamburgAviation, Silicon Valley

Clusters, Innovation and Entrepreneurship by Jonathan Potter (OECD, 2009)
Examination of the relevance of start-ups for the long-term success of clusters

Examples: Silicon Valley, Dublin, Stockholm

Creative Class by Richard Florida (2002)
Highly creative individuals as the key driving force for economic development, also in clusters; 3Ts

Examples: San Francisco, Boston, Helsinki, Berlin

Source: Catella Research 2017

FIG. 3: COMPARISON OF EUROPEAN START-UP HUBS

CITY	NUMBER OF START-UPS	NUMBER OF OFFICE EMPLOYEES (in thou.)	OFFICE STOCK (in mn. sqm.)	PRIME RENTS (in €/sqm/month)	START-UP DENSITY
Amsterdam	344	204.3	6.0	27.0	2
Berlin	708	736.9	17.8	25.0	2
Dublin	1,220	175.1	3.3	55.9	1
Frankfurt	289	344.3	10.4	35.8	3
Paris	718	901.6	17.5	61.6	2
Stockholm	236	466.3	11.5	41.8	3

Source: Catella Research 2017

*Definition: relation number of start-ups/ office stock; 1 = high, 2 = middle, 3 = low
As of 31.12.2016