INFLUENTIAL?

Keys to a Successful Architectural Office in the Euro-American Context

By Šimon Knettig

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Abstract

Although formed by thousands of individual practices, the field of architecture is represented in media by only a narrow group of offices that gained a significant influence throughout their career. On highly visited internet websites such as ArchDaily, or Dezeen, we recognize a reoccurring pattern of these influential offices with their most recent projects or theories. The frequency and visibility of their work provide them with the power to set up trends and directions within the field, thus becoming an interesting subject of research. This paper focuses on what makes these world-renowned offices stand out from the average via parameters provided by architectural councils' annual reports.

The research is limited to US and EU markets only, for the reason of quick data accessibility and the presence of mutual current and historical influence on each other. Furthermore, a time frame was chosen between 2008, at the time of the last great financial crisis, and 2020 at the time of the covid pandemic. Both crises had a significant influence on the capital and workability of individuals, larger corporates, or even countries, thus including the building industry. On the contrary, between these two terms, a stable rise of economies around the world was occurrent, allowing architecture to flourish providing valuable data for the research.

The key sources became study reports by architectural councils in the US and EU bringing exact data about the markets. This data was then compared to interviews with renowned offices and a theoretical body about management in the field of design. At the end of the paper, conclusions are made about what are some of the keys to a successful architectural practice and what problems stand against that endeavor. Such info then serves as an inspiration for other offices, talent-seekers, investors, governmental institutions, scholars, and new generations of architects in the field.

Keywords

Architecture office, fame, influence, success, US architecture market, EU architecture market

Introduction

Although formed by thousands of individual practices, only a narrow group of studios truly represent the architectural market in media. On highly visited internet websites such as ArchDaily, or Dezeen, we recognize a reoccurring pattern of this group of offices with their most recent projects or theories. The frequency and visibility of their work provide them with a greater influence, and power to set up trends and directions within the field while leaving other offices to follow. What makes these world-renowned studios stand out from the crowd, and become the moving force of the market? Are there common features among them that one can take as an inspiration? And if so, are these features stable, or do they change in time? How does an influential practice differ from a common one?

To be able to address these questions, defining the general market vs standing out influential office is essential for the research. Criteria such as the scale of operation on the market, typologies and prestige of commissions, power on media, and theoretical support are useful for the differentiation, however, the result is still highly dependent on the context of application - the market and its culture. For this reason, as well as quick data accessibility, the paper's focus was narrowed to US and EU markets only. These two markets are highly economically as well as culturally interconnected which makes it easier and more credible to compare. They share similar social values, political systems, and history reducing the number of parameters for making conclusions. Within this similar broader context, the difference in offices' focus and strategies in both markets starts to be interesting - how do architects react to new trends and economic cycles.

To represent such an economic cycle within the research, the time frame was chosen between 2008, at the time of the last great financial crisis, and 2020 at the time of the covid pandemic. Both crises had a significant influence on the capital as well as the workability of individuals, larger corporates, or even countries. Taking into consideration the lack of these financial and material resources, the building industry was negatively affected too. On the other hand, between these two terms, a stable rise of economies around the world was occurrent, allowing architecture to flourish providing valuable data for the research. Within these boundaries, how did the world-renowned offices operate and managed to stay or become influential?

A key source for the comparison became annual architectural council reports executed by the Architects' Council of Europe (ACE) for the European Union in 2019, and 2021, and by the American Institute of Architects (AIA) for the United States in 2020. These documents provide valuable data about the market, practice, and architects themselves allowing us to understand the trends and common features among practices.

Data are valuable, but their interpretation for concluding might be misleading. To direct this interpretation more accurately, the book of Keith Granet: *The Business of Design | Balancing Creativity and Profitability* published in August 2011 served as an important guide. With 30 years of experience as a consultant of some of the biggest and most successful practices such as Gensler or KPF as well as smaller-scale design studios, Granet shares theoretical knowledge proven to work within the field. Additionally, interviews in the book with figures like Michael Graves, Richard Meier, or John Merrill support the credibility of the information provided. With the data, interviews, and theoretical body behind it, the paper concludes about the difference between EU and US markets and the way how some practices can become and stay influential. These results can help other offices to become influential themselves, as well as interested parties (such as investors or governmental institutions) to capture new talents. Finally, the comparison can be an inspiration for new trends, and new generations of architects in the field.

The paper is divided into another two chapters besides the introduction with the first having additional two major subchapters.

The first chapter is the architectural market overview comparison between the European Union and the United States. It is furthermore divided into subchapters – one talking about the scale of the whole market and the other about the scale of a single practice. It provides a comparison and a summary of data provided by the previously mentioned reports on different categories such as "Scale of Business", "Practice Turnover", or "Type of Clients". At the end of each category, the data is interpreted with the help of other sources regarding the topic of influential business – essentially, what does the data say about how to be a successful practice in the field.

The second chapter is a conclusion coming out of the previously assessed data confronted with additional context – this context explains why architects generally struggle with a proper valuation of their work. At the very end, the paper provides a summary of the keys that can help them to overcome these struggles to succeed as an influential practice.

The EU vs the US – An Architectural Market Overview

European Union and the United States are highly interconnected markets due to their shared cultural values, political establishments, and historical contexts. In addition, increasing accessibility through the internet and media makes this interconnection even stronger and faster. Within this context, the building industry and in particular architecture is facing a much larger scale of operation and a much higher number of parameters influencing the practice. To be successful as an architectural office, it becomes crucial to be well informed not just about the country of origin, but about the whole Euro-American cluster if not the whole world. Via a comparison of data gathered by the American Institute of Architects (AIA) and the Architects' Council of Europe (ACE), the following chapters describe the unique specifics as well as common features of these two markets. Such analysis becomes then a valuable source for anyone seeking a greater understanding of business trends that define the focus of architectural practices.

Besides the explanation provided by the author of the paper, a reader should always seek new possible explanations and outcomes of the data provided. Some categories may seem less important than others when determining the influence or success of a practice, however, such assumptions can turn wrong in the future. As an example, the following chapter also talks about the profile of architects, concretely the equality of the number of women and men in the profession. While this is more about moral values that a western society wants to emphasize, an increasing number of women may change how the profession operates and what is its focus. It can indicate a significant shift in architectural service that is worth keeping an eye on – set up a new trend.

As Keith Granet describes in his book: "Success in design comes to those who have a little bit of both, business sense and creative talent, or at least the good sense to collaborate with someone who can complement their strengths and weaknesses."[1] Business is important for economical sustainability and talent for attracting people, attracting new commissions, and standing out from the crowd. They both are required for being successful and they both set up a foundation for becoming influential on a larger scale. And the data helps in this process by showing the overall operation of the market. By its analysis, a reader can determine what works currently, what may work in the future, and how a practice can do it differently to stand out.

Trends and Numbers that Move with the Whole Market

Output

In both markets, the Great Recession emerging in 2008 started a steep decline in construction and thus also architectural billings.[2] In the US, national spending on nonresidential building stock reduced by almost one-third of the pre-crisis value till 2011, and the EU full construction market including infrastructure by 15%. Considering the inflation factor additionally, in the end, the crisis reduced the potential output of the building industry by dozens of percent.[3,4]

While the US reduction was almost double the percentage of the EU, the States' crisis bottom point emerged in 2011 when the EU's economy was declining for another two years. Nevertheless, both markets have started to recover since that point with an annual

[1] (Granet 2011, p. 14)
[2] (Team 2020)
[3] (Baker, et al. 2020, p. 4)
[4] (Mirza & Nacey Research Ltd. 2019, p. 21)

increase in their value as high as 15% and a total of almost 65%. However, before another recession of the Covid pandemic, only the US market got slightly above the level of 2008 underlying the significant effect of the Great Recession on the whole industry.[5,6]

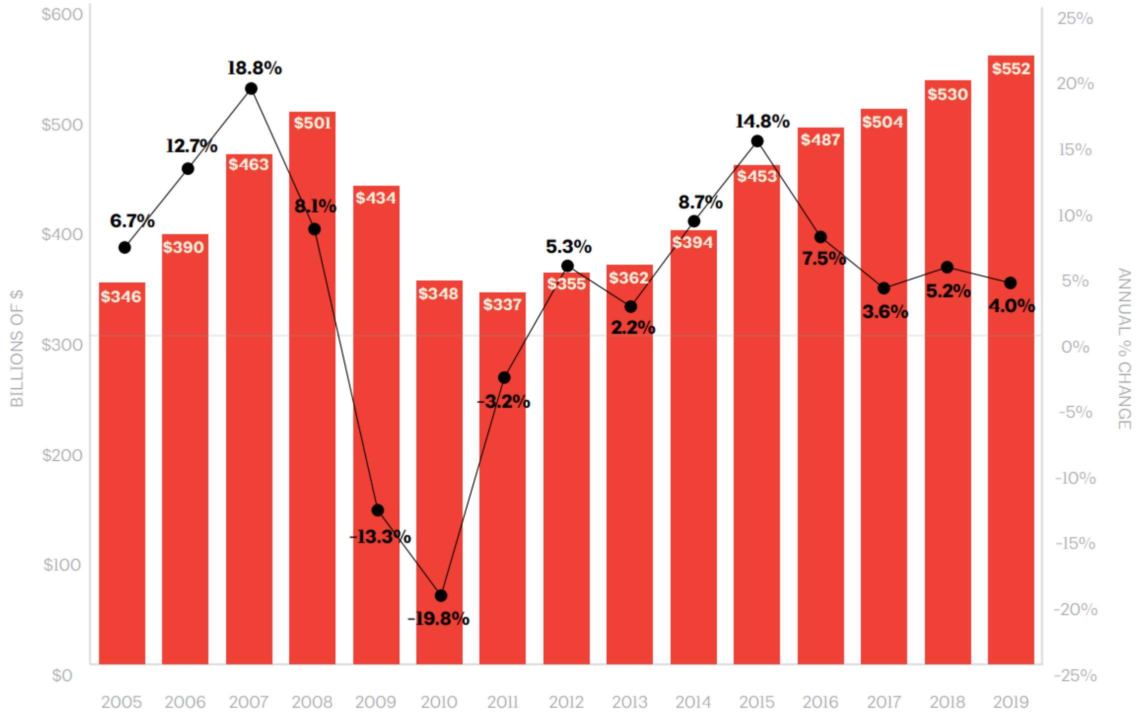

Figure 1: The National Spending on Nonresidential Building, in Billions of US Dollars, and Annual % Change in the US

The outcome of the Great Recession was significant – the market got to the same level almost 10 years later.

(Baker, et al. 2020, p. 4)

Worth mentioning is also the great difference among the members of the European Union. While the AIA in its report did not provide data for individual states in the US, EU countries' changes in construction output last years may vary up to 20% in some cases – such as Greece (less than -3%) vs Poland (more than 15%). Additionally, only four countries – the UK, Germany, France, and Italy – account for more than half of the EU's total construction output defining the average numbers for the union. As an example, the UK, being on the top with an output of around €370 billion and Bulgaria in the lower third of the list with approximately €10 billion… However, when considering the output per head of the population, the leader becomes small Luxembourg with a striking 324% of the average EU value.[7]

[5] (Mirza & Nacey Research Ltd. 2019, p. 20-22)
[6] (Baker, et al. 2020, p. 4)
[7] (Mirza & Nacey Research Ltd. 2019, p. 22-23)

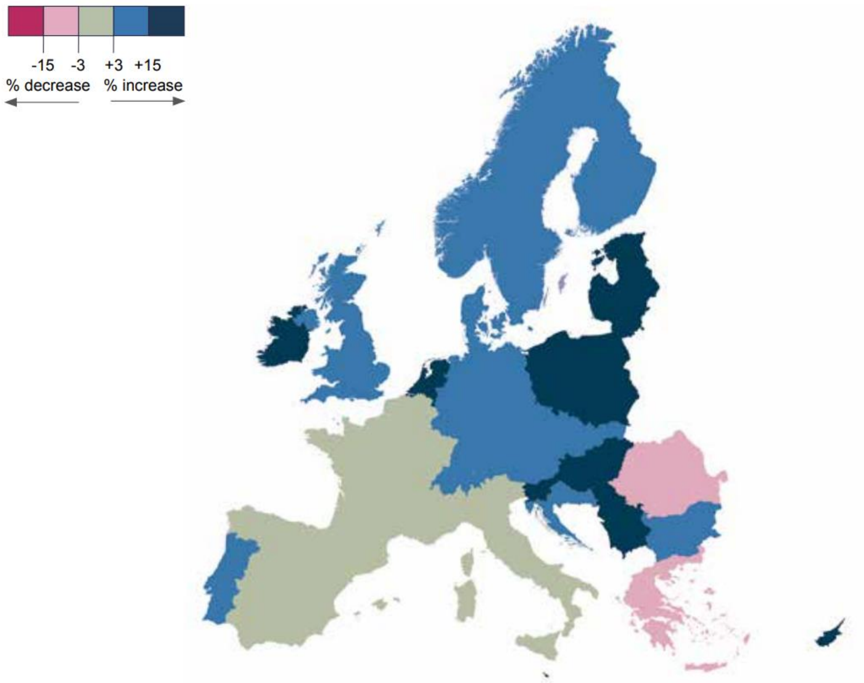

Figure 2: Changes in EU Construction Output 2016 to 2018

Significant differences between individual members of the union underline the importance to relate also to the local context.

(Mirza & Nacey Research Ltd. 2019, p. 22)

While both political entities, the EU and the US, try to speak with a single voice for their members, previous numbers show the scale of diversity we are facing in our markets. For that reason, any generalizing statements, also included in this paper, should be taken with caution, and always referred to the scale of a concrete country, state, region, city, or district.

Understanding the concept of economical cycles is essential for running a successful practice. Before 2008, firms had more work than they could even handle according to Granet. Essentially, “the only thing stopping them from growing was the lack of available talent in the marketplace.” [8] The fall of 2008 was a turning point though. Projects were shutting down daily, and clients were “terrified” to spend anything on a design project. A year later, projects had started to appear, but slowly. Thus, only the companies with a stronger long-term business plan could survive while the others were searching for a quick survival plan or simply diminished.[9] To be successful, practices have to gain a certain level of economic stability, otherwise, they won’t be able to operate long enough to make an influence. What Granet says, a practice should even take advantage of economic downturns and start looking for possible collaborations to create a “buzz” with the market uprise. And if a practice manages to deliver projects even during a recession, it sends a message of strength in hard times, building trust and loyalty to the brand.[10]

[8] (Granet 2011, p. 32)
[9] (Granet 2011, p. 32-33)
[10] (Granet 2011, p. 183-184)

Type & Sector

Out of the stereotype that architects work mainly on new development, both markets have been witnessing a great shift in the proportion of work from new construction to refurbishment. In 2008, only around one-third of projects executed by offices in the US were related to the restoration or upgrading of the existing building stock. With the crisis hitting the market, an expectable decrease in demand for new buildings occurred due to the lack of financing, and, on the contrary, an increase in refurbishment. However, this trend did not disappear when the market started to recover. Quite the opposite, for 2018 the AIA states about 46% for refurbishment and rising where the EU witnessed even higher number – 59%.[11,12] In the case of the EU is worth mentioning though that Italy with its well above average 78% in restoration (due to its culture with rich architectural history) stretches the value for others. Contra to do that, Poland recently invests in new development significantly, thus having an extreme 86% in new stock. In the end, the median value is closer to 50%.[13]

The reasoning behind this trend in refurbishment is explained in the US report with the first key point being sustainability. An estimated 40% of the building stock is over 50 years old, and with the growing concerns about emissions and energy consumption, government, non-profits, and private property owners are motivated to renovate. Adding to that, covid pandemic redefined the way how companies operate increasing home-office and thus reducing the need for a physical office space. For the reasons above, the need for restoring and redefining existing buildings is going to continue in the following years too.[14] For architecture practices, it is thus important to notice that influential projects may not be new outstanding structures anymore, but a redefinition of existing stock. This will put different challenges in front of architects since they won't be able to express solely new concepts but will have to confront their ideas with much more context than before. Another option for them is to look for a developing market at their time, like Poland in this case, where they can operate more freely.[15]

Significant differences between markets are visible in the share of work and involvement by the building sector. Where EU architects clearly focus their practices on private housing in all the years since 2008, the US shows the opposite with the residential portion being the smallest compared to the commercial/industrial and institutional. More than half of EU practices' revenue comes from residential projects. This splits into individual houses being roughly two-thirds of the total and the rest being other forms of private housing such as apartments. Where the EU claims 54%, the US shows only 17,5% for residential building stock. That's more than double the difference. The United States, on the contrary, shows one-third higher participation in office development, and more importantly, 25% market share for educational facilities whereas the EU has only 6%.[16,17] Whether is this difference a question of smaller demand for educational architecture in the EU or that the commissions are executed by non-architectural entities, reports do not provide data about it.

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[11] (Mirza & Nacey Research Ltd. 2019, p. 26)
[12] (Baker, et al. 2020, p. 6-7)
[13] (Mirza & Nacey Research Ltd. 2019, p. 26)
[14] (Baker, et al. 2020, p. 6-7)
[15] (Mirza & Nacey Research Ltd. 2019, p. 26)
[16] (Mirza & Nacey Research Ltd. 2019, p. 26-27)
[17] (Baker, et al. 2020, p. 24, 78)

Apparently, there is a different focus of practices in both markets which creates certain opportunities. If the US mainly focuses on commercial and institutional commissions, there might be unrealized potential, demand for residential high-quality architecture that is yet to be discovered. Practices operating in this market can consider such focus to stand out. However, it is also harder to make greater profits on smaller commissions since the time spent with a client may become the same as with bigger projects with a bigger budget. This is also apparent from the interview with Michael Graves, a member of the influential group called "The New York Five." [18] At the beginning of his career, he was doing a lot of back porches and kitchen renovations struggling to make a profit: "I was still losing money. You have got to do a lot of these small projects. You have to be very efficient. You have to bang them out. I didn't do that. I spent far too much time on them." [19]

On the contrary, practices in the EU can enter more sectors outside of residential and try to sell their value to clients of these projects. They may discover greater opportunities with larger budgets for their ideas to be realized, seen, and become influential.

per cent	new build	refurbishment
Austria	57	43
Belgium	43	57
Croatia	56	44
Cyprus *	77	23
Czech Republic	54	46
Denmark	43	57
Estonia *	70	30
Finland	58	42
France	43	57
Germany	46	54
Greece	37	63
Hungary *	64	36
Ireland	49	51
Italy	22	78
Lithuania	68	32
Luxembourg *	57	43
Malta *	57	43
Netherlands	53	47
Norway	65	35
Poland *	86	14
Portugal	42	58
Romania	64	36
Slovenia *	57	43
Spain	48	52
Sweden	57	43
United Kingdom	41	59
2018 EUROPE-26	41	59
2016 EUROPE-27	*41*	*59*
2014 EUROPE-26	*37*	*63*
2012 EUROPE-25	*n/a*	*n/a*
2010 EUROPE-23	*n/a*	*n/a*
2008 EUROPE-17	*n/a*	*n/a*

* caution - small sample

Figure 4: The Proportion of Work Undertaken by Building Type Analyzed by Country in the EU

The EU shows the trend of refurbishment over new development.

(Mirza & Nacey Research Ltd. 2019, p. 26)

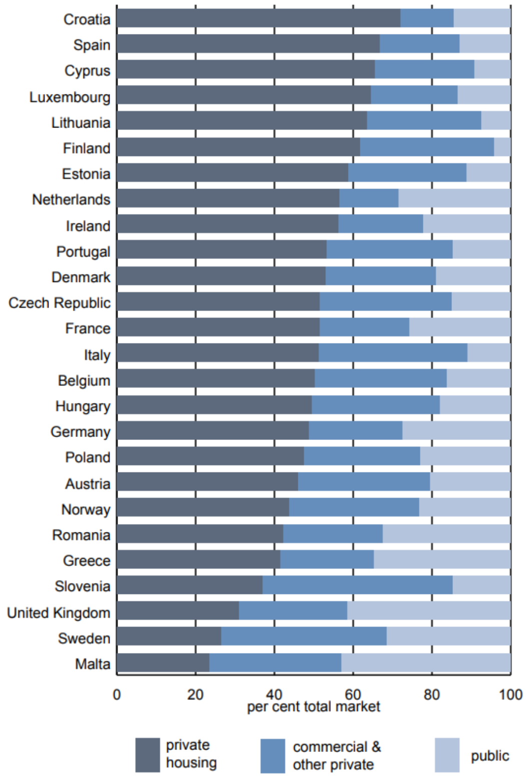

Figure 4: The Proportion of Work Undertaken in Each Main Building Sector Ranked in Order of Highest Private Housing Work in the EU

The EU shows greater interest in private than public commissions contrary to the US.

(Mirza & Nacey Research Ltd. 2019, p. 27)

[18] (Anderson 2022)
[19] (Granet 2011, p. 40)

Another interesting statistic is the multidisciplinarity of practices. Since 2008, US offices tended to turn the market's single focus into a plurality going from 32% to 42% of multidisciplinarity. In 2019, however, this increase declined back again suggesting that the ten-year trend may not continue.[20] The EU doesn't provide direct data about this category but considering the high numbers of practices involved in private housing – 88%, offices 34%, and industrial 23%, there is a high chance of multidisciplinarity.[21] This would suggest another difference between the markets where the US rather focuses on dominating a single typology of service while the EU on plurality, and flexibility.

While there is no right or wrong way, practices should consider what strategy fits their purpose. When focusing on single typology projects, an office can become very quick and efficient in their execution and thus generating more profit. Also, what emerges from the interview with Michael Graves, being publicly recognized for providing certain services gives you credibility in projects of the same kind, and for that reason attracts more clients.[22] However, what the data shows in the following section "Type of Service", typologies of commissions are connected to the economic cycles and trends – some are more efficient during an expansion, some during a recession.[23] Thus, in the end, having a more diverse service portfolio can help to avoid greater downturns when the concrete single typology is not desired.

[20] (Baker, et al. 2020, p. 9)
[21] (Mirza & Nacey Research Ltd. 2019, p. 26)
[22] (Granet 2011, p. 40)
[23] (Mirza & Nacey Research Ltd. 2019, p. 29)

Total Number of Architects

Moving from the practice towards architects themselves, the EU held 562 200 architects compared to the total population being 533 427 181 in 2018. This equals approximately 1.1 architects per 1000 inhabitants. For the profession, it is good to see a steady growth of this proportion since 2008 being 0.9 at that time. An extreme example of density has Italy with its 2.6 architects per 1000 people while the greatest increase between 2016–2018 was experienced in Romania and UK – 12 percent.[24] Probable reasoning for the big density of Italian architects is the presence of extensive historical building stock in their country. Going back to the Roman Empire, the rich architectural history is rooted in the culture drawing attention to the profession.[25] In this case, for the lack of data, comparison to the US is not possible.

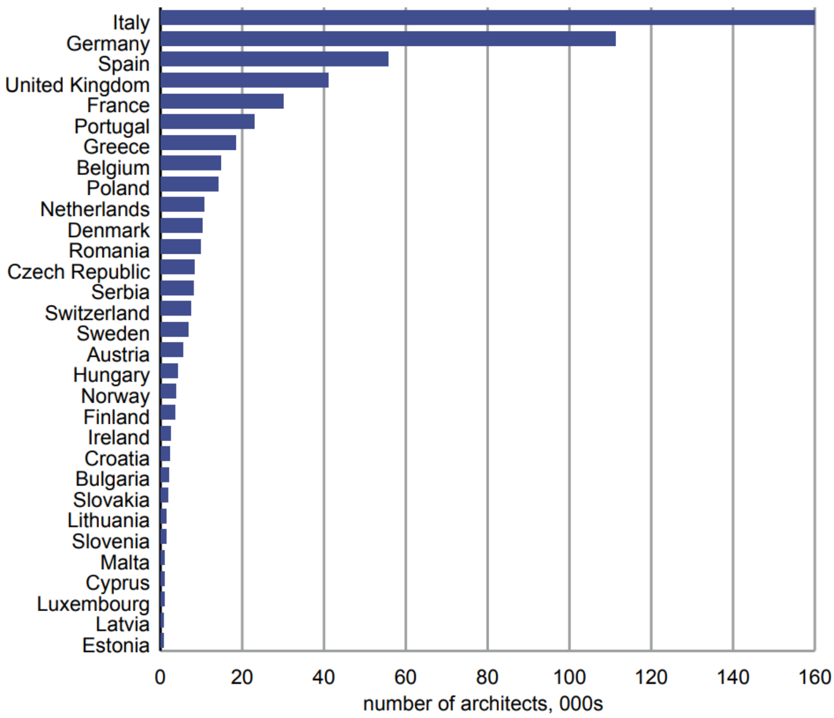

Figure 5: The Estimated Number of Architects in the EU

The total numbers, as well as proportions, vary greatly between countries.

(Mirza & Nacey Research Ltd. 2019, p. 10)

The growing proportion of architects is certainly a good sign of interest for the profession but may cause more struggle in the actual operation of an office. With its extreme density, Italy has the problem of the too overcrowded market: "There are just too many of us, which makes for a very difficult working environment," said an architect from Trieste, Luciano Lazzari for The New York Times. [26] If architects fail to attract more clients within their context, it may simply become impossible to sustain economically and thus gain an influence. In our globalized world where communication and traveling are not as problematic as before, practices should also consider operating internationally. With proper orientation, where is a greater demand for the service and more areas under

[24] (Mirza & Nacey Research Ltd. 2019, p. 10-11)
[25] (Heyman 2015)
[26] (Heyman 2015)

development, practices can stand out more easily. The density together with other data can help with this international orientation.

Profile of Architects

In the context of rising awareness of inequality in the society and work environment particularly, the field of architecture is on the track for improvement. Since 2008, the US recorded an inspiring 8% increase of women within the field getting to 36% overall in 2018. While the EU is slightly better with its 39%, it has not changed significantly since the Great Recession with only a 2% difference, leaving the profession male-dominated. Additionally, the US report claims to have 47% of women in the broader labor force, thus there is still space for improvement.[27,28]

However, the European Union is very diverse, and some countries are even crossing the 50% mark such as Norway, Greece, and Croatia.[29] Furthermore, the AIA reports promising numbers for the trend when talking about the staff composition: “In 2019, 37% of all architectures staff were women, as were 46% of emerging professionals at firms on a path toward licensure and 53% of architecture students working at firms.” [30] Clearly, there is an increasing interest among women to enter the field with new generations currently growing to prove it.

As racial and ethnic diversity became a major topic worldwide and especially in the US, AIA also measured the racially and ethnically diverse demographic group. The increase is similar to the male vs female but falling back to 32% overall and 43% among working students.[31]

The moral question of this trend is only one topic. For offices is rather important to realize the possible impact of this transition on the way how architecture is practiced. It is a field that is highly connected to societal principles, culture, ethnicities, local artificial as well as living contexts. If the practice was mainly dominated by white male architects, ethnical diversity and a better balance between men and women can bring forward questions, ideas that haven’t been seen before. It is also proven by studies from the whole market that diversity can bring companies greater success. According to the report by advisory company McKinsey, “the most diverse companies are now more likely than ever to outperform less diverse peers on profitability.” [32] And it also states, “that companies in the top quartile for gender diversity on executive teams were 25 percent more likely to have above-average profitability than companies in the fourth quartile.” [33] Since these are numbers for the whole market with an overall smaller connection to societal principles, the impact on the field of architecture can become even significantly greater.

[27] (Baker, et al. 2020, p. 5-6)
[28] (Mirza & Nacey Research Ltd. 2019, p. 12)
[29] (Mirza & Nacey Research Ltd. 2019, p. 12)
[30] (Baker, et al. 2020, p. 6)
[31] (Baker, et al. 2020, p. 6)
[32] (Dixon-Fyle, et al. 2019)
[33] (Dixon-Fyle, et al. 2019)

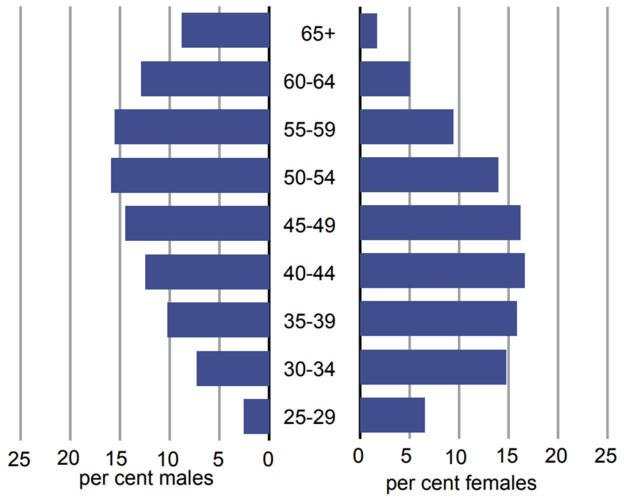

Figure 6: The Population Pyramid – Analysis of Architects by Age and Gender in the EU

The field of architecture is becoming female-dominated – what changes can it bring to the industry?

(Mirza & Nacey Research Ltd. 2019, p. 18)

Market Conclusion

In the current globalized world, macro-level shifts are projecting significantly even to the operation of individual practices. From the broadest spectrum of overall economical cycles to individual trends, offices need to keep themselves updated and find a way to use these shifts as an advantage to stand out. One of the major trends that we can observe is sustainability, concretely the increasing proportion of refurbishments over new development.[34,35] This can redefine the typologies of concepts that become influential – from new building concepts to updating existing stock. Another trend is growing diversity which may bring greater richness to architecture and profitability for those who can amplify its positive effect. [36,37,38] And another trend – growing interest in the profession which, however, doesn't always meet the public demand for the service.[39,40] It is thus important to be successful in marketing and to look for opportunities abroad.

Nevertheless, the data also show that the cultures of individual countries or states may vary greatly, and the mentioned trends are twisted based on the local context. Even between the continents, there is a difference for instance in the sector focus – the EU architects working mainly on residential projects, the US on institutional with single-discipline studios.[41,42] In the end, every project of a practice needs to be addressed locally, but the practice should look for opportunities globally. The combination of these approaches makes the office stronger and more capable of becoming influential.

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[34] (Mirza & Nacey Research Ltd. 2019, p. 26)
[35] (Baker, et al. 2020, p. 6-7)
[36] (Baker, et al. 2020, p. 5-6)
[37] (Mirza & Nacey Research Ltd. 2019, p. 12)
[38] (Dixon-Fyle, et al. 2019)
[39] (Mirza & Nacey Research Ltd. 2019, p. 10-11)
[40] (Heyman 2015)
[41] (Mirza & Nacey Research Ltd. 2019, p. 26-27)
[42] (Baker, et al. 2020, p. 24, 78)

How Euro-American Practices Operate

Scale of businesses

While the number of architects is steadily growing in the EU, a significant decline in the number of practices was happening between 2014 and 2018. However, this trend had not been occurrent since 2008, on the contrary, before 2014 even more significant opposite trend of increase prevailed. The ACE connects this fluctuation simply to the fluctuation of the economy: “as the profession moves into a more positive economic climate, many of the architects who established one or two-person practices during the economic crises have either grown their practices or moved into large practices.” [43] Thus, the most recent decrease of firms “reflects a shift of the profession’s employment away from one or two-person practices towards medium and large ones.” [44]

The presence of an unusual number of small firms in comparison to the overall business standards is a typical feature of the field of architecture for both markets. Nevertheless, where the US witnesses about one-quarter of sole practitioners, the EU has a striking 71%. When considering companies with less than 10 employees, AIA shows already high 75,2% of the total number of practices, but the EU gets almost to the limit with 99%.[45,46] The lack of will or need for forming larger companies in the field in the EU is undoubtful. Even the proportion of employment in the EU shows strong interest in smaller companies with 65% of architects working in 1-5 employees firms. And companies above 50 people employ only 8% of all architects. However, this does not apply to the US market at all. Even though it has also a big share of small companies, over half of all employees are in offices with 50 and more people. Additionally, the share of total billings tends to shift through the last decade towards midsize firms defined as 10-49 employees underlying the importance of larger establishments.[47,48] These numbers prove a significant difference in markets’ mindset with the US being strong in corporate setup and EU in sole entrepreneurship.

[43] (Mirza & Nacey Research Ltd. 2019, p. 33)
[44] (Mirza & Nacey Research Ltd. 2019, p. 33)
[45] (Baker, et al. 2020, p. 4-5, 74)
[46] (Mirza & Nacey Research Ltd. 2019, p. 33-34)
[47] (Baker, et al. 2020, p. 4-5, 74)
[48] (Mirza & Nacey Research Ltd. 2019, p. 33-34)

Figure 9: EU Practices Analyzed by Size

The majority of EU practices are only a single person.

(Mirza & Nacey Research Ltd. 2019, p. 34)

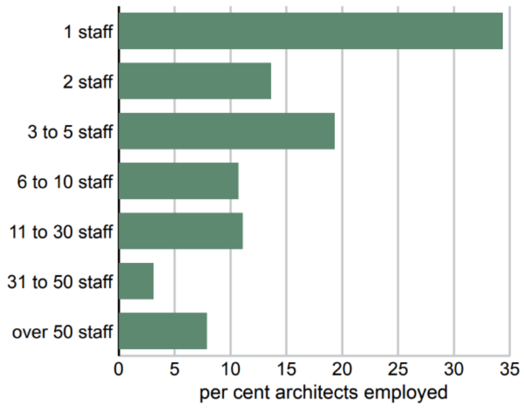

Figure 9: The Proportion of EU Architects Employed in Practices of Different Sizes

The majority of EU architects work in small offices.

(Mirza & Nacey Research Ltd. 2019, p. 34)

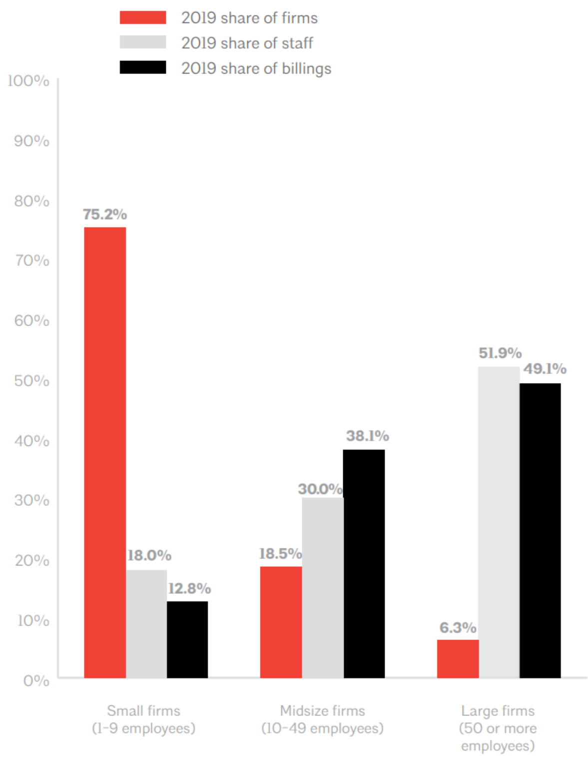

Figure 9: The Percentage of All Firms, Staff, and Gross Billings by Firm Size for 2019 in the US

The majority of US architects work in large offices.

(Baker, et al. 2020, p. 5)

These data also support the explanation in the section of this paper called "Output" talking about the lack of business abilities among architects. The decrease of small offices during economic growth indicates that it's more convenient for some architects to work under larger firms than having their own. The motivation may be for financial reasons, fewer responsibilities as an employee, or to avoid spending too much time on management instead of design. In any of these, it's a question of insufficient business capabilities. From his experience as an advisor, Keith Granet says that "designers and architects are some of the most creative people on earth. (...) But they can be some of the worst businesspeople I've ever met."[49] According to him, offices should even use the economic recessions to their advantage. They should work on marketing, drawing attention, and nurturing relationships with current and future clients, to get ahead of the market and boost the start into a following economic uprise.[50] No matter the scale of the

[49] (Granet 2011, p. 13)
[50] (Granet 2011, p. 183-184)

practice an architect wants to keep, having access to the right commissions and right clients is essential for realizing progressive ideas.

Legal Formation of Practices

On average, two-thirds of architects in the EU recognize themselves as being independent entrepreneurs. These numbers can climb in some countries like Greece to a staggering 89%. Fairly common is also a limited company set up with 20% and partnership with 7% and their proportion is not changing significantly throughout the years. Visibly lower is the presence of public limited company/corporation with only 2% suggesting low interest in this model within the EU.[51] This, however, doesn't apply at all to the US market where corporates accounted for 37% of all firms in 2015 and four years later even 45%. On the contrary, a sole proprietorship in America represents only one-fifth of the market, and partnerships are minor at 3%.[52] These data underline the difference in the business culture of both markets where the US with its great tradition of big-scale publicly owned corporates doesn't follow the EU scheme of providing independent individual professional services.

Two-thirds of EU architects being independent entrepreneurs suggests that they have a will to take responsibility and start practicing on their own. That certainly allows some of them to get more recognized and influential since they can freely express their ideas under their names. However, under this category, we have to also count a high percentage of freelance architects that are being hired on a project-to-project basis in other's offices. This category accounts for 14% of the market and undermines the independence factor.[53] Together with the fact of having small practices, often only on their own, and not many actual employees under a formation like a limited company, indicates that they don't want to manage too many people, or establish larger businesses.[54] And that is a problem because as Granet points out, architecture is primarily a service – from people to other people. Because of that, the staff becomes a number one "asset" for all offices, and "how we treat people is the most significant part of protecting that asset." [55] And to support this statement through the words of Arthur Gensler Jr., founder of the world's biggest architecture company with almost 3000 employees: "It's much easier to recruit people who are smarter than you and let them bring their talents to the organization than it is to prove all the ideas, all the leadership, and all the thinking by yourself." [56,57]

Practice Turnover

After the 2008 recession hit, practices turnover dropped down significantly. At the bottom of the financial crisis, the US net billings in the field were at half the level of 2008's value. Since then, however, a stable rise was occurring with a significant increase between 2017 and 2019. Even with the inflation factor included, they have risen by 21% since the pre-recession state.[58] For the EU is harder to determine the turnover progress for the lack of data as well as changes in members within the union. Nevertheless, the report claims that a consistent rise is occurring with similar behavior as in the US. Additionally, the turnover

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[51] (Mirza & Nacey Research Ltd. 2019, p. 35-36)
[52] (Baker, et al. 2020, p. 45)
[53] (Mirza & Nacey Research Ltd. 2019, p. 14-15)
[54] (Mirza & Nacey Research Ltd. 2019, p. 33-34)
[55] (Baker, et al. 2020, p. 109)
[56] (Archivibe 2020)
[57] (Baker, et al. 2020, p. 11)
[58] (Baker, et al. 2020, p. 17)

tends to rise with an increasing number of employees, approximately double its value with every higher category (1, 2, 3-5, 6-10, 11-30, 31-50, 51+ employees).[59]

Rising turnover as "the complete sum of sales made over a given period" before the deduction of expenses, doesn't necessarily say that practices are more successful.[60] However, it does say that practices gain an overall greater income, and is then the question of their effectiveness to turn the income into a profit. Essentially, how do architects work with their expenses – how high these expenses are, and where are they spent. If a profit is low and turnover high, the practice should in general find the biggest costs and reduce them.[61] In the case of a service-oriented field like architecture, it is most likely the cost of staff.

But simply lowering wages doesn't have to help because as Granet says, the staff is the "number one asset".[62] It is more about, how practices use the potential of their staff and how they help them to grow. In fact, according to Granet, the most successful practices are "whose turnover is low and staff improvement high" because "an office with low turnover but no growth indicates complacency – people are happy to just do the same thing as long as they have a job."[63] Thus, rather than giving money away from the employees, it is better to find a way to use their potential more effectively – help them to grow together with the company.

Some practices have also a portion of their turnover coming from international projects. In the EU, approximately only 4% of studios' turnover is generated from outside the country where the practice is based. There are exceptions like Denmark with almost 15% or Luxembourg with over 20%, however, most of the countries rarely top even 10%. Furthermore, when considering commissions outside of the EU, the value drops even more to 1.4%. And the trend doesn't seem to change since these values tend to decrease – in 2010, the EU average was at 7.7%.[64] The USA is performing slightly better with 5.8% of total

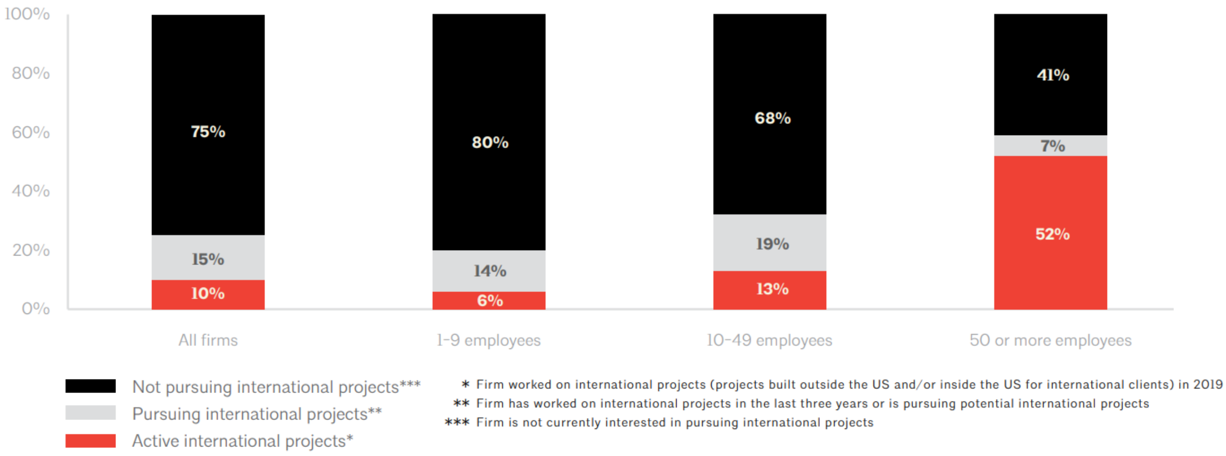

Figure 10: The Percentage of Firms Working on International Projects in the US

The majority of US big offices work internationally.

(Baker, et al. 2020, p. 34)

59 (Mirza & Nacey Research Ltd. 2019, p. 37)
60 (GoCardless 2021)
61 (GoCardless 2021)
62 (Granet 2011, p. 108)
63 (Granet 2011, p. 118)
64 (Mirza & Nacey Research Ltd. 2019, p. 42)

billings and an increasing number of companies pursuing international projects. Also, the projects actually committed outside the country (not only for international clients in the US), tend to be in very distant locations – 18,2% in Sub-Saharan Africa and 19,5% in East Asia and the Pacific.[65]

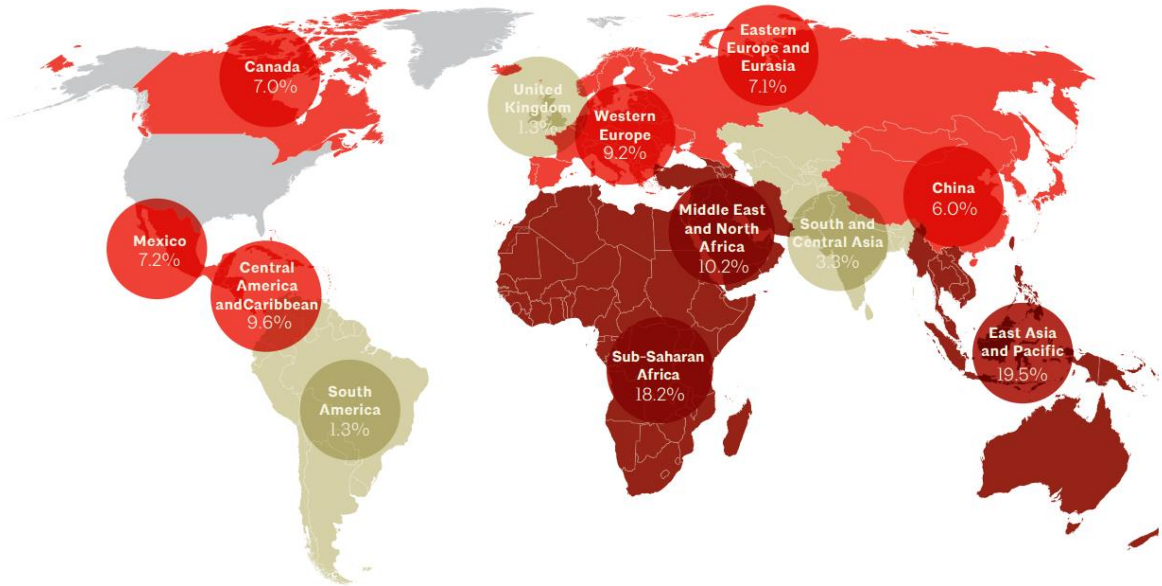

Figure 11: The Percentage of 2019 US Gross Billings from International Projects Outside the US, by Region

International projects of US offices are largely placed in distant continents – Africa and Pacific.

(Baker, et al. 2020, p. 36)

Low participation in the international market indicated by the data is a missed opportunity for practices. As shown in previous categories of the research, the market varies greatly – between the continents as well as individual countries, and locations. For example, in the question of development, the average EU investment in new stock is 41%, but in Poland, the value is more than double – 86%.[66] In this case, Poland can give a greater chance for executing the office's ideas than other markets in other countries. Also, when talking about influence, practices need to spread the word worldwide, and a project in a concrete location may serve as a marketing tool. More projects spread in different contexts help to reach and address a greater variety and number of people.

Branch Offices

In the EU, branching out a brand doesn't attract much attention in correlation with the low interest in larger companies. Only 6 % of practices report having a branch office of any kind out of which 91% state that it is located in the same country. There are some exceptions like the UK with 15% or Sweden with 16%, but overall, this trend is stable since 2010 when it lowered from the previous 12%.[67] Considering the higher amount of corporates in the US, also the branching is greater and has a rising tendency since 2015 – from 12% to 16%. The report provides data also for individual businesses' scale showing a transition

[65] (Baker, et al. 2020, p. 34, 36)
[66] (Mirza & Nacey Research Ltd. 2019, p. 26)
[67] (Mirza & Nacey Research Ltd. 2019, p. 44)

mark being 50 employees – above this value, the vast majority of companies have already a branch office.[68]

"Opening a branch company can offer visibility and brand exposure which can positively influence company's profits," according to Euro Company Formations.[69] Adding to that, architecture works highly contextually, thus having staff physically present in the locality can help to better address clients' needs and spread the office's visions. While below a certain scale of an office, it may not be economically feasible to establish a branch, the practice can still consider collaboration over greater distances online with a smaller staff. This could provide the advantage of addressing local needs and desires even with limited resources.

Associations

After several opposing statistics, markets share about the same proportion of association with another practice. The EU states 15% in 2018 and throughout the years, this value fluctuates up and down close to the same level.[70] Similar data can be found in the US report where approximately 11 to 13% of practices collaborated with another one – sometimes jointly, sometimes as a subcontractor.[71] Overall, it is a common operation within the field for both markets.

In correlation with the importance of diversity mentioned in the section "Profile of Architects", an association of any kind can extend the total knowledge useful for the project. The final result can therefore be stronger in its vision and execution having a greater possible influence on the field. What Granet also mentions is that it's crucial for a design office to create a community around itself as part of marketing strategies: "The purpose for becoming part of a community is simple: it allows for your vision to be shared and for others to care about your success. A community allows for others to take an active role in the growth and success of your firm."[72] Associations can expand a company's knowledge and expose its vision as well as bring new commissions or employees without a direct effort.

Type of Service

About two-thirds of architecture service is in general design services. This dominant typology is the same for both the US and the EU with no significant difference throughout the years.[73,74] The only greater fluctuation is between the proportion of building design versus interior design shown in the EU report. In 2012, interior designing suddenly increased by 6% from the previous 8% while building design dropped by almost 20%. A smaller increase was also occurring in feasibility studies, project management, and planning.[75] This is likely related to the lack of larger commissions during the financial crisis when investors are less active in construction and require more thorough planning.

This relation between the type of service provided and economic cycles is important for practices to realize and take advantage of. The increase in interior design for instance is no simple coincidence, but a result of the bare necessity to find profitable projects at the

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[68] (Baker, et al. 2020, p. 49)
[69] (Takoordyal 2019)
[70] (Mirza & Nacey Research Ltd. 2019, p. 43-44)
[71] (Baker, et al. 2020, p. 65)
[72] (Granet 2011, p. 93)
[73] (Baker, et al. 2020, p. 27, 43)
[74] (Mirza & Nacey Research Ltd. 2019, p. 29)
[75] (Mirza & Nacey Research Ltd. 2019, p. 29)

time. Interiors are perceived as a luxurious service in society with mostly higher-class clients. And even though the luxury market is not fully "recession-proof", it performs better than many other sectors. According to Vogue Business magazine, the Great Recession decreased the size of the personal luxury goods market by 9% while, as shown before, the whole construction market decreased by one-third in the US, and 15% in the EU.[76,77,78] Also, interiors are in general lower budget investments than a whole building, and thus it's more easily achievable with limited funding. For these reasons, it is easier for practices to find interior projects during a recession and deliver them for gaining influence.

Charging for the Service

Great differences in the ways of charging are visible between the continents. Even though they both share the same three major methods – fixed stipulated sum, hourly charge, and percentage of construction cost, the proportions of usage of these categories highly vary. The EU is for the whole measured period interested the most in the percentage of contract value with an average of 45% of commissions derived this way. This number can go as high as 66% in France, but as low as 3% in Sweden too. On the other hand, the US shows very little interest in this method with 10% of projects only. It gets substituted, however, by overwhelming two-thirds of all commissions charged under the stipulated sum or professional fee. And another 20% approximately are charged through the number of work hours which is particularly common for smaller practices – about 41% of their billings. Whereas the EU even with the highest-scoring country cannot reach the two-thirds level of the stipulated sum (ending with a Greek maximum of 48% and the average being at 28%). The hourly-charge method is also not as high as in the US, but countries like Sweden with low interest in the stipulated sum show a major application of this method – over half of their commissions.[79,80] In a summary, the US works dominantly on the fixed fee basis whereas the EU on the combination of the percentage of the contract value and the fixed fee.

None of the listed charging methods are perfect and the variety of them across the market proves their uneven suitability for practices. The fixed fee strategy allows determining a fair fee for both client and the practice disregarding a possible lower total price of the building. However, it requires a good process set up in the office and knowledge of the project typology, otherwise, it may not be enough to cover actual work hours. Also, it is less flexible when adjustments are needed and less transparent for the client. The percentage of the construction value has the advantage of an immediate increase in earnings if the project scales up. However, it doesn't have to properly reflect the actual work done. A smaller building can require the same amount of attention, or on the contrary, the choice of expensive materials by an architect unjustifiably raises the price of his service for the client. The hourly charge can fairly reflect the actual time spent on the project, being a very transparent method for the client. Nevertheless, design is a creative business and ideas come unevenly during the process. Thus, at the moment of great inspiration, a very good project with a high value for the client can be less profitable because of fewer hours spent.[81]

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[76] (Arnett 2019)
[77] (Baker, et al. 2020, p. 4)
[78] (Mirza & Nacey Research Ltd. 2019, p. 21)
[79] (Mirza & Nacey Research Ltd. 2019, p. 38)
[80] (Baker, et al. 2020, p. 18)
[81] (Granet 2011, p. 67-72)

In the end, the value is what matters and should be paid for. The actual value that the design brings to the client no matter the time spent. And as Granet points out, "the true negotiator knows how to express his value to clients in a way that they understand what it is that they're paying for." [82] It is about communication between the architect and the client, explaining the work process, and building trust together. So that the client can see the design proposal to its full potential and appreciate the work done.

Type of Clients

Clients' typology shows a clear division of interests between markets – one working with larger institutions, companies, and developers, the other focused on individuals. In 2018, almost 90% of EU's practices reported being involved in commissions for individual clients making over half of their total revenues. One half on one continent, but only 12% on the other. Furthermore, this value tends to even decrease throughout the years in the United States. Of course, for smaller practices with up to five people it is more common to work with individuals making about 40% of their billings, however, over 10 employees it drops to 12%, and over 50 employees to 4%. On the other hand, the EU reports half of the US's revenues in local governments including public schools. Interestingly, the cooperation with governmental institutions in the US tends to get higher not for small or big practices, but middle-size around 10-20 employees. It makes up 43% of their billings, and the trend for such commissions increases since 2015. [83,84]

Another double value comparably to the EU is in collaboration with developers. Even though both markets share a similar interest in working for commercial companies, developers represent only 10% of the EU market share whereas in the US it's a stable client for practices of all sizes close to 20%. The least interest is, however, the same for both markets – the work for a state-level government (in the case of the US, a federal) making only about 5% of architects' work. [85,86]

per cent	per cent of market	per cent of practices involved
individuals	51	87
developer	10	30
limited company / PLC	15	38
central government	3	8
local government	10	27
other public	4	12
other private	8	22

involved = have worked for at least one of these clients in year

Figure 12: A Market Share and Involvement by Client Type in the EU

The majority of EU offices focus on individual private clients.

(Mirza & Nacey Research Ltd. 2019, p. 28)

While the data do not necessarily say whether working for a certain type of client is more profitable, it matters in the question of influence via public outreach. And public outreach is considered by Granet as one of the key features of becoming a successful practice. It's essentially about opportunities to communicate the message of the practice, its visions, and ideas. Talking about a project publicly connects the practice to a larger number of people from the field as well as other professionals or possible clients. A practice must try

[82] (Granet 2011, p. 67)
[83] (Mirza & Nacey Research Ltd. 2019, p. 28)
[84] (Baker, et al. 2020, p. 67)
[85] (Mirza & Nacey Research Ltd. 2019, p. 28)
[86] (Baker, et al. 2020, p. 67)

to create a community of followers around its work and this networking is naturally harder to do with a private commission.[87] A great private project with a willing client can get published in the media, however, it will always be one step behind comparably to a public project. Because a public commission is "published" and seen by larger numbers instantly plus the architect can directly connect with more people during the project.

The US report additionally provides data about an important category of new vs repeat clients. Overall, about 70% of American practices' billings come from repeat clients clearly showing the value of architect-client relationships.[88] Granet often emphasizes the importance of nurturing clients for multiple reasons and all the interviewed successful architects relate to it too. Arthur Gensler even counts it as a single most critical lesson he has learned over the years – "it's a lot easier to do great work and retain an existing client than to continually search for new clients," he says.[89] No matter the typology or scale of the project, an "understanding of the client's needs and requirements is essential." [90] Working repeatedly with a client helps to better understand each other both ways. The architect can more accurately determine requirements, and the client on the other hand increases his understanding of the practice and its values. In fact, from Granet's experience, at least 85% of practice's work should be repeat business. The reason is simple, it builds up the trust essential for delivering more ambitious and expensive projects. It builds up the understanding of the architect's work and the will of the client to pay for it. For these reasons, a trustworthy long-term relationship with a client becomes one of the most important features of a successful influential office.[91]

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[87] (Granet 2011, p. 88-91)
[88] (Baker, et al. 2020, p. 19, 68)
[89] (Granet 2011, p. 10)
[90] (Granet 2011, p. 10)
[91] (Granet 2011, p. 91-92)

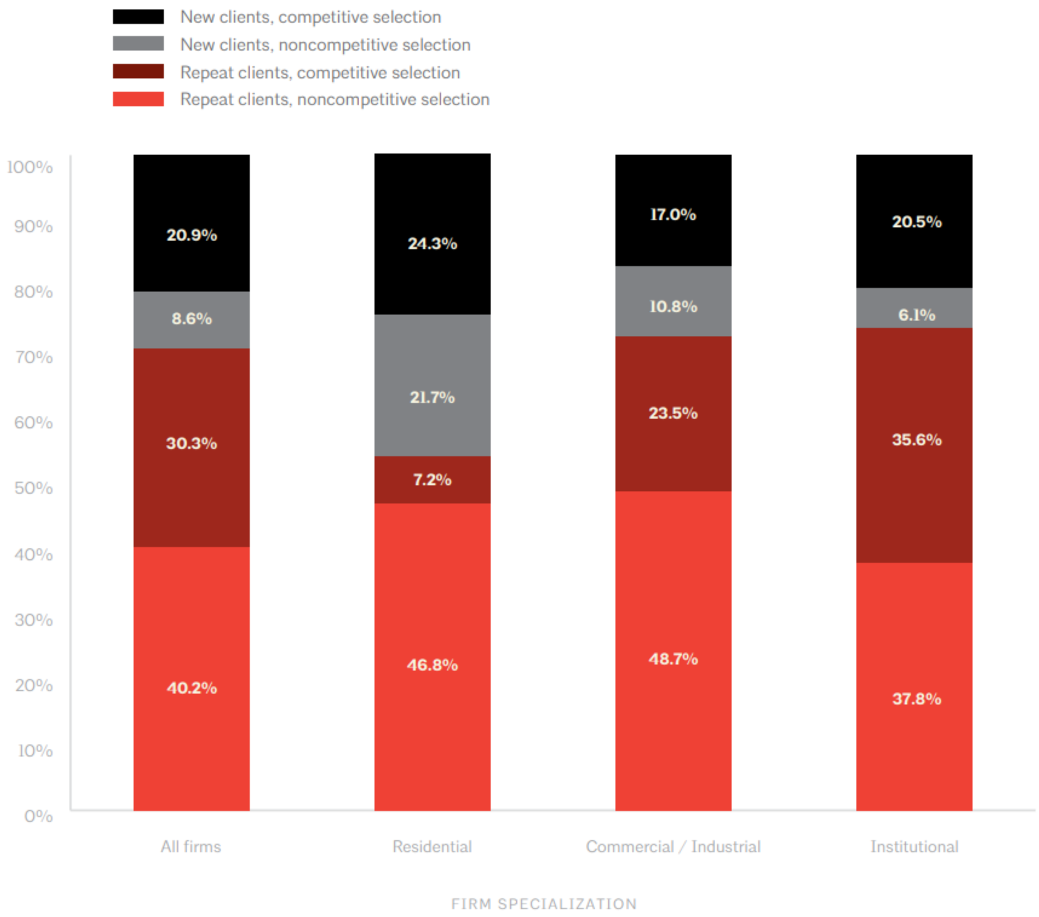

Figure 13: A Percentage of US Firm Billings by Work Source, 2019

Repeat clients bring significantly more revenue to offices underlining the importance for architects of keeping long-term relationships.

(Baker, et al. 2020, p. 19)

Mitigating the Climate Change

General interest in the topic of climate change is rising for several decades and the building industry is not left behind. Architects react to this trend by focusing more on the design performance represented by, for instance, LEED certificates - Leadership in Energy and Environmental Design.[92] These certificates are granted based on a professional evaluation of certain criteria in performance, sustainability, or health rating. In 2019, about 25% of residential projects in the US met or exceeded the standards of such certificates. And more than a third of residential projects were designed with qualities of resilience above the code minimum.[93]

Contradictory to the seemingly increasing interest in performance certification, the EU shows decreasing trend in building to nearly zero energy standards. A survey for this was first conducted in 2010 when about 42% of architects reported having at least one out of ten projects within the standard. By 2018, this value dropped to only 28% which suggests decreasing interest in such commissions.[94] However, another possible explanation is

[92] (Tech Target Contributor 2010)
[93] (Baker, et al. 2020, 25, 84)
[94] (Mirza & Nacey Research Ltd. 2019, p. 66)

increasing governmental standards for this net-zero category which are simply harder to fulfill.

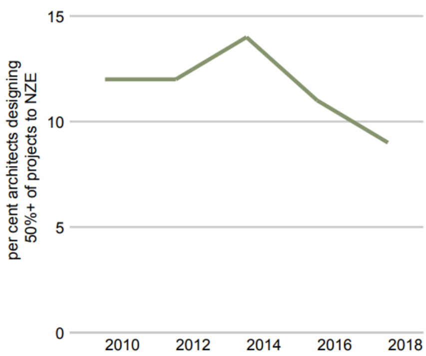

Figure 14: The Proportion of EU Architects Who Are Designing to Nearly Zero Energy Standards More Than 50% of the Time

The decrease in zero-energy projects may indicate less interest in such design or tougher standards to fulfill.

(Mirza & Nacey Research Ltd. 2019, p. 66)

Architects can also assess their design performance after a certain span of years in so-called post-occupancy evaluation (POE). This may be done on several levels such as energy or fabric performance, indoor environment quality, occupant satisfaction, life cycle costs, and social value.[95] However, both markets show a rather smaller application of this process in offices so far with both being around 14% on average. It starts to be standard though for offices of bigger scales above 50 employees where around 45% of them report conducting POEs. Typical feedback is in that case through surveying occupants' satisfaction and measuring energy performance whereas social value and life cycle costs are left behind.[96,97] Conducting such evaluation may not only help studios to design more efficiently, but also strengthen their relationships with customers turning them into repeat clients valuable for practices' revenues.

Also, the data indicate a possible change in clients' interest in a positive way towards less consumption. According to the AIA's report, the percentage of architects' new housing commissions is stagnating or even decreasing whereas the number of renovations increased by 3% between 2015 and 2019. In addition to that, if there is a new house project, the square footage tends to be smaller throughout the years, especially for multifamily housing – 51% of projects with less than 110 m^2.[98] It is not possible to say based on the data provided, if the reasoning of clients is more economical or environmental, nevertheless, reduction of needs is certainly a positive step towards mitigating climate change.

The topic of climate is not only an environmental issue that society needs to face, but it has also become a "pop culture" trend. The general public starts to ask for climate solutions and requires from companies to contribute. "A recent report from Aflac said that 77% of consumers are more willing to purchase from a company with a CSR [99] pledge — 73% of investors agreed," mentions Forbes in its article about leading companies using

[95] (Mirza & Nacey Research Ltd. 2019, p. 50)
[96] (Mirza & Nacey Research Ltd. 2019, p. 50)
[97] (Baker, et al. 2020, p. 25, 87)
[98] (Baker, et al. 2020, p. 25, 82)
[99] Corporate Social Responsibility

sustainability as a market differentiator.[100] Many big tech firms like Apple, Dell, and Google have made a pledge to reduce their carbon footprint, but "even if it's on a smaller scale, the research shows that these goals make a difference in CX [101] and brand loyalty." [102] It is not only the social responsibility of architects to deliver sustainable projects, but also a powerful tool for marketing.

Digitalization

Within a modernization of the field, digital tools such as CAD software are gaining a major influence on the way how practices operate. In recent years, Building Information Modeling (BIM) has especially become the field's standard. It allows architects to model a virtual representation of a building via components such as walls, floors, and windows which includes data valuable for evaluation of the design's performance. Not only architects, but also civil engineers, structural engineers, and other specialists can contribute to this common model by creating a precise representation of the actual building. This allows for the reduction of possible flaws before the construction even begins making it economically and materially more efficient.[103]

In the European Union, implementation of this process is still on the way with only 19% of practices reporting using BIM on approximately 37% of their projects. However, great variances between countries even of a similar economic level are occurrent. For instance, in Denmark over half of the practices use BIM, and in Norway even 68%. On the other hand, Germany has only 12% even though the awareness of this method is way above the average in the EU.[104] This suggests uneven belief in this methodology among individual countries. However, the US shows for many years a steady strong rise in the usage of the system with all large firms actively using it and 58% of companies in total. That is almost triple the value in the EU. Even small practices under 10 employees are way higher than the EU's standard with 37% in 2019. And to illustrate the trends' progression, midsize companies' usage increased from 35% in 2008 to 88% in 2019.[105] America sends a clear signal in setting up BIM as an industry standard.

[100] (Newman 2020)
[101] Customer experience
[102] (Newman 2020)
[103] (Autodesk n.d.)
[104] (Mirza & Nacey Research Ltd. 2019, p. 49)
[105] (Baker, et al. 2020, p. 30-31)

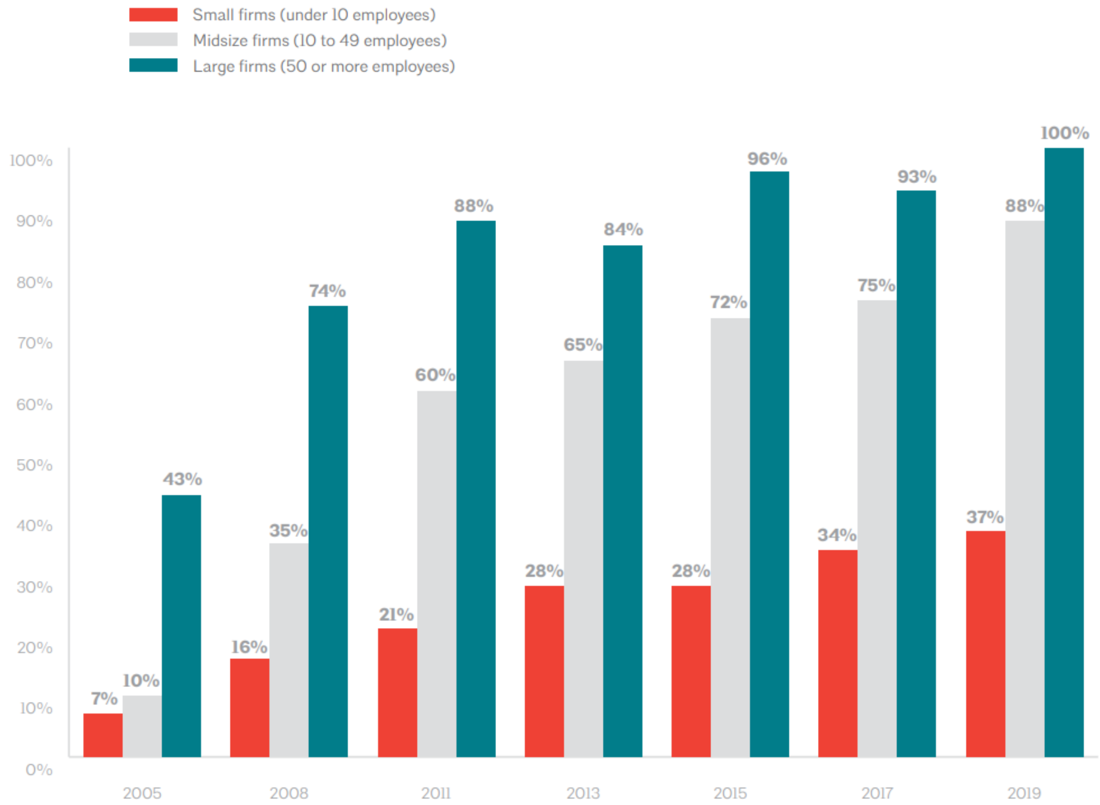

Figure 15: The Percentage of US Firms Using BIM

The share of practices using BIM in the US increases with all large companies now using it.

(Baker, et al. 2020, p. 30)

Besides the discussion of BIM becoming a standard, other digital tools are more and more common among architects. It is also worth mentioning that the data shows the great ability and willingness of architects to learn new technologies. According to the EU study, the vast majority self-taught these technologies, and only a minority was motivated to do so by the client or regulatory requirement. They do it mostly out of their own choice. 3D modeling or rendering is already acquired by a majority, but more recent trends in parametric design, augmented/virtual reality (AR/VR) or 3D printing are rising too with about one to ten architects using it in the EU.[106] The US report shows an even faster implementation of VR with one to five small practices and an overwhelming 85% of big offices. Very common in the US is also cloud computing (of renders for instance) with a majority using it even among small practices.[107]

[106] (Mirza & Nacey Research Ltd. 2021, p. 69)
[107] (Baker, et al. 2020, p. 32)

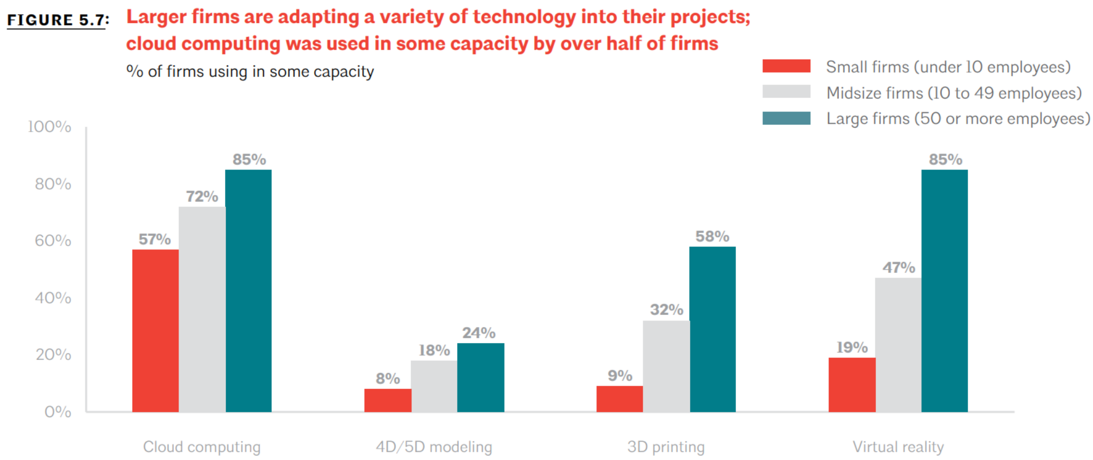

Figure 17: The Percentage of US Firms Using a Concrete Technology

Large companies are on the frontier of new technology usage within the industry.

(Baker, et al. 2020, p. 32)

per cent respondents	how architects learned to use these tools		
	self learning	formal training	informal training
3D modelling tools	71	32	38
Rendering tools	75	25	32
BIM (3D modelling + information inside the model)	59	34	48
Common data environment	63	11	50
Parametric design tool	71	30	31
Building performance simulation and analysis tool	63	35	30
Design coordination tools (eg clash detection)	58	22	48
Laser scanning survey tool	62	21	34
Augmented/virtual reality tool	70	14	34
3D printing tool	66	17	31

Figure 16: How Architects in the EU Learned to Use Recent Technology Tools

The majority of EU architects self-taught new technologies indicating a great will to constantly learn about emerging inventions and possibilities.

(Mirza & Nacey Research Ltd. 2021, p. 69)

This willingness to learn sends a positive signal about the flexibility and progressiveness of architects in the otherwise rigid and conservative industry within the whole market.

The design profession has changed significantly over the last decades and technology played a big role in this process. Successful interior designer Victoria Hagan shares her experience in an interview with Keith Granet saying: “The industry as a whole has become more professional. A lot is expected of me and I expect a lot of others.” [108] The digital tools became not just an advantage in the design process, but also a necessity expected by clients. “Technology has totally transformed the way we operate. Everything’s digital – it’s quicker. It’s much quicker, and it’s much more visual,” continues Hagan.[109]

Besides all the advantages that the tools can bring to the process, Granet underlines the importance of efficient management of these technologies within the office. It requires major capital investment, and not only once, but regularly since inventions within the field come very quickly. Thus, determination of what is truly needed for a particular

[108] (Granet 2011, p. 138)
[109] (Granet 2011, p. 138)

practice is crucial – "overcomplicating your needs can lead to a system that ultimately may fail for your company." [110] A piece of simple advice is also to give the fastest equipment to the fastest people. If a highly CAD-competent junior struggles with a slow computer, and, on the contrary, a senior manager mainly using his device for email, has a powerful machine, it's simply an inefficient waste of resources. "We tend to utilize technology to a fraction of its capabilities," says Granet and the same applies to the "utilization" of employees. [111]

Architectural Competitions

Competitions are making a great part of the industry's practice largely influencing the office's visibility and thus also attractivity. However, because of the reason of unsure outcome and a fairly high initial investment with a risk of not getting anything back makes it unreachable for some. According to the US report, only about one out of four commissions of practices with up to 4 employees came from the competitive selection. For the whole market, however, it makes about half of the entire firm's billings. These numbers are getting even higher with the rising number of employees.[112] This is probably due to greater possibilities of business management with more staff when part of the team can work on a risky competition while others on direct commissions with certain income.

The EU report also shows data that over 60% of competitions taken by practices are public, however, in private ones, the practices tend to be more successful with the rate close to 60%.[113] The probable reasoning for taking the risky choice is the attractivity and visibility of public commissions which may help the practice to get noticed. However, offices four times more participate in competitions with pre-selection procedures than fully open ones which at least helps to lower the risk of not getting paid for hours spent on the project.[114] Because according to the statistic, the total expenditures for the competition are about the same value as the winning prize, and the total fees for a successful project are even fifteen times bigger. For that reason, it is essential to winning the competition to at least cover expenses even if the project is not going to be realized in the end. [115]

Granet points out that the greatest value in being awarded in competitions is the acknowledgment afterward. Acknowledgment of friends, employees, other industry professionals, and most importantly clients, the general public. "It's another form of outreach that puts your name on the marquee," he says.[116] Clients want their architects to be recognized, to be valued within the industry, to be successful. It builds trust in the practice's work, and that the service provided is worth the money.[117] Influential practices certainly use this ground to express their ideas and gain recognition.

Additionally, when trying to add a new project type into an office's portfolio of services, competition is the right place to start. It allows the practice to learn, explore, and set itself as a known provider of such service for possible future clients.[118] "We submitted to a competition to design a stadium for the Texas Rangers baseball team, knowing that we

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[110] (Granet 2011, p. 167)
[111] (Granet 2011, p. 166-167)
[112] (Baker, et al. 2020, p. 19)
[113] (Mirza & Nacey Research Ltd. 2019, p. 46)
[114] (Mirza & Nacey Research Ltd. 2019, p. 45)
[115] (Mirza & Nacey Research Ltd. 2019, p. 47)
[116] (Granet 2011, p. 104)
[117] (Granet 2011, p. 104)
[118] (Granet 2011, p. 104)

didn't have much hope of getting the commission but that it would help establish credibility for going after other major stadiums," shares Michael Graves his early on experience with the practice.[119]

Research Within

The ever-changing cultural environment, as well as fast-developing technologies, push studios to conduct practice-relevant research. With the complexity of the field of architecture working on questions about society, sustainability, aesthetics, structural behavior, and material behavior, … it is a necessity to catch recent inventions in order to be a competitive practice on the market. While there are no data about the topic in the EU's report, the US shows that 72% of offices in 2019 conducted research rising 6 percentage points since the previous survey in 2017. For the more basic typologies of research like literature reviews on an ad hoc basis depending on the project, or an analysis of own past projects, about 45% of all practices of all sizes conducted it. In general, however, the amount of research rises with the number of employees. For instance, in the question of usage of evidence-based design, about one-third of large firms with 50+ employees answered yes compared to only 6% of small firms. The reasoning for the scale difference is in the budgeting. The research itself doesn't generate much revenue if any, and for small companies with a lack of staff is hard to conduct it in a more thorough personal way. The data shows that 17% of large firms have an annual budget for research studies or investigations whereas only 4% of midsize and 2% of small companies.[120] It is thus clear that there is a high interest and importance of research for the practice, but it's limited to the budget and staff of an individual office.

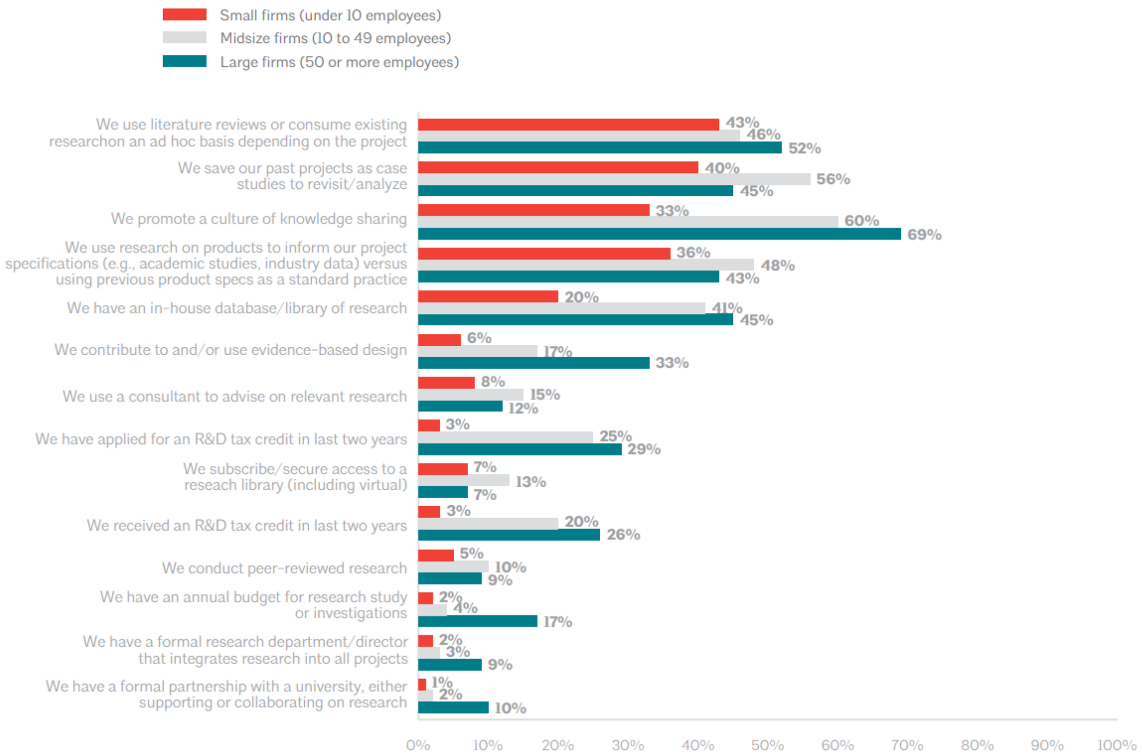

Figure 18: The Percentage of Firms Integrating Concrete Typology of Research

The scale and complexity of research vary greatly between the sizes of firms – larger can afford more sophisticated studies.

(Baker, et al. 2020, p. 29)

[119] (Granet 2011, p. 40)
[120] (Baker, et al. 2020, p. 29, 95)

Conclusion – Keys to success and what stands against them

The question of becoming an influential practice covers an extensive cluster of parameters as this paper reveals. From the generic economical fluctuation of the market to individual countries' contextual issues to actual individual architects and their business abilities. But why is it even important to bring up such topics as influence, success, and profit in a field that is much more focused on social values than finance?

The reason is simple – average architects are hardly well-off. Financing is what is lacking in the profession. In fact, it is a job of high complexity, connected to a culture of constant over-times and seriously underpaid. "Architects are members of one of the most highly trained professions, yet, unlike their counterparts, they are paid much less on average," says a property expert and journalist Kunle Barker from the Architect's Journal.[121] He follows with an example from the field by an unnamed prominent architect. This architect's office was asked to create a design review for a polyfunctional building for a client with a pre-agreed fixed fee of a couple of thousands of pounds. During this review, however, the office managed to find significant inefficiencies related to general circulation within the floorplans and suggested a proposal on how to fix it. The client was delighted because the proposal resulted in an increased gross development value of over £15 million. And the architect? The fee was pre-agreed and was not updated – less than £3,000.[122]

The constant over-times are another issue. According to the data in the ACE's report about the European Union, all staff groups of architects no matter the importance and number of responsibilities in the office, work more than 40 hours per week. Out of all the categories, the sole principal works the most with over 48 hours per week on average. And since this is the most common form of employment in the EU, this means that the vast majority of EU architects work more than 48 hours. And in Germany, Belgium, and Austria it goes even higher – over 50 hours per week same as Partners & Directors in Germany, Malta, Cyprus, and the Czech Republic.[123]

Within this context, why does anyone want to work in such a field? Why are we even having an increasing density of architects in the Euro-American context when the career is so complicated and so little awarded? Probably the best most simple way to summarize it is what Granet calls the "starving artist syndrome". "Most designers love their profession more than just about anything and see it as such a labor of love that they'd even do it without getting paid if they could afford to," he says.[124] While passion is certainly valuable for being successful in basically any kind of field, here it goes over a line of personal financial (and sometimes even health) sustainability. And there is no direct difference between a smaller or a bigger practice, both can struggle the same way. Because as Kunle Barker says: "Fees are a problem throughout the industry. Smaller firms either undercut each other to win work or are badgered by clients to reduce fees. Larger firms often have the carrot of more lucrative work dangled in front of them as an incentive to reduce fees." [125]

Higher interest in the profession is a good thing for the industry, but unfortunately, it doesn't meet the demand – the client, the public doesn't see the value. In all the interviews

[121] (Barker 2021)
[122] (Barker 2021)
[123] (Mirza & Nacey Research Ltd. 2019, p. 63)
[124] (Granet 2011, p. 15)
[125] (Barker 2021)

of all the successful architects that Granet surveyed no matter if it was an interior or a building architect, the client was a major topic of importance for them. Here are examples of their answers to the question "How would you identify the ideal client":

> "A client who pays attention. (...) He is present, and he cares about details, dimensions, and the character. Not just about money, timing, or design, but all of the facets that he – or we could say ideal clients – should care about." [126]
>
> – Michael Graves | Michael Graves Architecture & Design

> "One of the best corporate clients I've ever had – I won't mention his name – had a major company with which he had strong family ties. (...) We were talking about a new concept of interior layout. He went to Germany to look at all the places that had that layout. When he came back, there was a lot of resistance among his senior management, because this was a new idea. He sold them on it. He was totally involved all the way through.
>
> (...)
>
> I think important qualities are an awareness of what is good architecture, somewhat of an understanding that the process is about understanding that you need to pay your architect to get firm there to there, and being reasonable and fair." [127]
>
> – John Merrill | Skidmore, Owings & Merrill (SOM)

> "The ideal would be someone who has the ability to financially give us the time we need to investigate, which we do a lot. One of our best clients is this elegant family man, somebody you would be honored to have as a friend and as a business associate. Decisive, honorable, has the money to pay you and will pay you, and does pay you. He has good taste if he says they're going to do it, they do it. (...) Our best clients pay us; I keep stressing this because a lot of clients don't." [128]
>
> – A. Eugene Kohn | Kohn Pedersen Fox Associates (KPF)

> "Trusting. And with a sense of humor, because the process should be fun. I think that the perfect client is looking for something that makes you a better designer. The perfect client challenges you to be better than who you think you are." [129]
>
> – Victoria Hagan | Victoria Hagan Interiors

> "Generally, the most ideal client is an individual who may represent a group but who is involved and is as committed to the project as the architect. An individual who is there all the way through and wants to make something significant." [130]
>
> – Richard Meier | Richard Meier and Partners Architects

A client is an essential part of a successful project. Without his or her will and competence, no matter how great the project idea may be, it won't be realized and thus largely recognized. However, as these quotes prove, good financially secured clients with

[126] (Granet 2011, p. 41)
[127] (Granet 2011, p. 79)
[128] (Granet 2011, p. 107)
[129] (Granet 2011, p. 138)
[130] (Granet 2011, p. 170)

an understanding of the architect's work are a scarce resource. If someone, as established as Eugene Kohn from KPF, says that "our best clients pay us (...) because a lot of clients don't," it is an alarming situation for the field.[131] But where do these issues come from?

Firstly, it is a problem with the context of the practice in general, the perception of the public. The average people's opinion is that "designers and architects are simply the hired help. You hire a lawyer because you need legal advice, and you see a doctor because you want to be healthy, but you don't absolutely need a design professional to build or design your project. Hiring a designer is considered a luxury," according to Granet.[132] However, as he also points out, it's a luxury profession that is not as respected and valued as other businesses in different fields (like fashion design for instance).[133] On that note, Eugene Kohn has a direct explanation: "You go to doctors and lawyers out of fear. You're afraid for your life; you're afraid of being in jail; you go to your accountants because you're afraid of the taxes. Those professions help you to protect yourself. They are perceived as helping to solve problems. In contrast, people are afraid of the architect. They're afraid that their money is going to go broke. We are viewed as somebody they can't truly rely on or trust."[134]

Trust and understanding are major problems. While other professions within the building industry have a fee standard, when architects tried to establish something similar in the US context, they got accused of price-fixing. It's because the seemingly same kind of service for the customer is charged differently at each office. And if there is no scale of pricing, the client cannot know if he's being treated fairly.[135] He could know based on the quality of the design or the service in general, but the truth is, he is often not able to assess it. "Many people don't have the experience of working with architects, and they don't know how to do it. I meet people all the time at various gatherings, who say, 'Well, we wanted the kind of building you would do, but we knew we couldn't afford you. So we went with Joe Smith, our neighbor, and asked him to look at your work and do something like that.' They never took the time to call up and ask what we charge. They really don't know," shares Michael Graves his experience with the general public.[136]

But it wasn't used to be like that. Architecture is a profession that has been around for thousands of years, and its practitioners were highly respected personas. They served royal families and wealthy citizens with a great appreciation for the craft.[137] However, here lies the issue. Society has changed dramatically in the last centuries, and the client is no more a royal family, but an average middle-class family with a desire to indulge in this luxurious service. According to Nasdaq, some forecasts talk about a considerable growth of a new middle class in this decade reaching 5.3 billion people by 2030 – "The growing middle-class points to the enhancement of life standards and an increase in purchasing power by consumers. (...) In a market-driven economy, the middle-class consumer segment is considered the backbone of both the market and the economy."[138] This suggests that more and more people will be able to afford architects, but these possible clients have no experience or knowledge in the field. Where royal families had architects as members of their court for centuries passing their experience over generations, the current typical client typology was first established with the political and societal changes

[131] (Granet 2011, p. 107)
[132] (Granet 2011, p. 20)
[133] (Granet 2011, p. 20)
[134] (Granet 2011, p. 107)
[135] (Granet 2011, p. 20)
[136] (Granet 2011, p. 41)
[137] (Granet 2011, p. 20)
[138] (Versace, Hawkins and Abssy 2021)

in the 18th century.[139] For this reason, architects first need to be able to explain, teach, and sell the meaning of their work, so it can become valued accordingly.

But besides these extensive contextual problems, the selling part is the second biggest issue. Architects are, generally said, not the best marketers nor businessmen with a little interest to change it. According to the AIA's report, over half of US practices spent less than 2% of their net billings on direct marketing and business development and the total average decreased from 6% in 2015 to 4% in 2019.[140] The financial issues of the practice don't seem to attract much attention. “In this profession, many designers are guilty of loving their work so much that getting paid for it simply is not a priority,” says Granet, and no one actually taught them to do otherwise.[141]

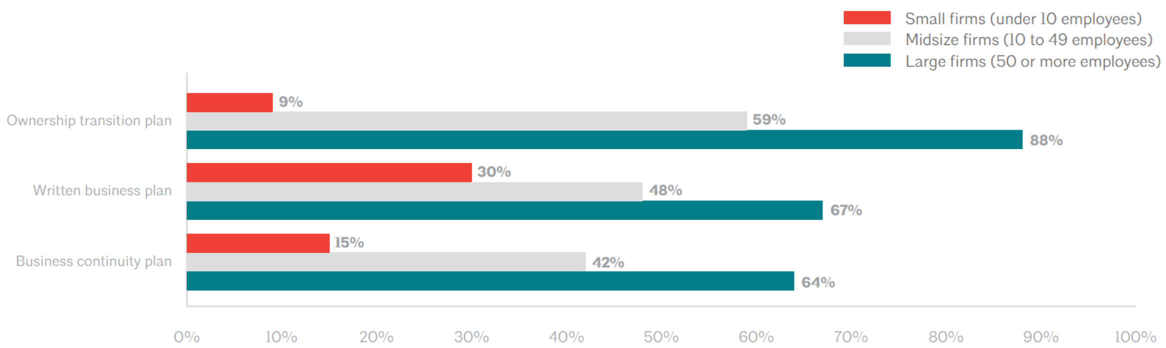

Figure 19: The Percentage of Firms with Types of Plans in Place

Architecture firms in the US show a small interest in direct marketing and business development investing only 4% of their revenues into these categories.

(Baker, et al. 2020, p. 12)

Architectural education is a very complex study system with lots of expertise involved, however, the business knowledge is largely lacking.[142] Furthermore, even though students are challenged to present and “sell” their ideas constantly during their courses – to their fellow peers, and to their tutors, it's mostly architects who they're selling to. People that essentially care about the profession and have the knowledge to assess the quality of the design. The extensive graphical output that students produce is evaluated by again the same people with the same education and mindset with no direct checking if such selling methods work on the general public. With no education, and no motivation to do business and marketing, young architects are being thrown “naked” to the market that doesn't see their value.

But it can be different. There are many practices of all scales that are economically successful in the profession, “and it's because they understand the value of their work and how to charge for it.”[143] With a thorough understanding of business and marketing principles, a practice gets the possibility to showcase its talents on projects that can become influential. “I've never felt that I had to compromise my design approach in order to respond to a business requirement presented by a client. Actually, it's the other way around – understanding the business side will make you both a better designer and a better professional. It becomes a win-win situation,” shares Arthur Gensler his experience.

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139 (Cengage 2022)
140 (Baker, et al. 2020, p. 72)
141 (Granet 2011, p. 45)
142 (Granet 2011, p. 21)
143 (Granet 2011, p. 15)

Architects should increase their knowledge of such strategies as well as the overall market behavior in other to become influential. And here are some of the keys coming from the research that could help them to build or sustain a successful architectural practice:

1. TALENT – No matter all the emphasis that this paper gives on data research, business, and marketing strategies, the design abilities are an undoubtful part of the success. A practice has to find a way how to stand out from the market. However, it's important to realize that a practice leader doesn't have to rely fully on his or her abilities. The truth is, generally more successful are the practices that simply know how to attract other talented people and keep them in the office. As Arthur Gensler points out, "When you look for the best in your hiring practices, the return on investment will be far greater, and you'll have fewer problems along the way." [144]
2. NURTURING RELATIONSHIPS – with everyone – clients, employees, contractors, media representatives, … architecture is primarily a service to people, so it's also the people that matter the most in the process. A client can become a key support for ambitious projects, or it may be also the main reason for their failure. Architects need to respect their clients and gradually build up trust to encourage future collaborations because repeat client commissions are the most profitable and potentially interesting – "The fact that most Gensler clients are repeat clients is because we've stretched them – as with a rubber band – far enough to reach new levels but not so far that we've broken the relationship," says Arthur Gensler, "if you stretch clients gradually, your relationship will have grown to the point where you've learned their needs and requirements by the time you've completed two or three projects together. You can then continue to do wonderful projects together and build your portfolio." [145]

   Employees are the key motor of the practice. Offices should seek the best talents and be very good at keeping them in the office – this may be done by transparency and motivation. Transparency in budgeting, and transparency in choice-making because more understanding of the management decisions creates a healthier environment and commitment from the staff.[146] Motivation can be financial, but more importantly educational. "The message you want to send to your staff is that you've created a place of growth and advancement," says Granet because as long as they're growing there is a higher chance that they will like to stay.[147] Also, it's more cost-effective to hire from within than look for new people outside because own employees already know the procedure of the office. [148]

   In the end, a practice should aim for creating a large community of followers and collaborators that will support the office in the execution of its ideas.
3. PROMOTE AND SELL ITS VALUE – There are many ways of charging for the service, but the true value matters in the end. Because the time of working on the commission is not the time of figuring it out – it took a lifetime to learn it and this

[144] (Granet 2011, p. 11)
[145] (Granet 2011, p. 11)
[146] (Granet 2011, p. 163)
[147] (Granet 2011, p. 126)
[148] (Granet 2011, p. 126)

knowledge and talent should be accordingly valued.[149] It is thus crucial to explain these values through the firms' community and get publicly recognized. In this sense, architectural competitions can be a great help – the client may not understand the design practice, but he certainly understands a concept of an award. Being acknowledged by other professionals gives the firm credibility that can overcome the initial knowledge gap between a client and an architect. These acknowledgments and the community help to promote the firm without a direct effort.

4. SEEK GLOBALLY, APPLY LOCALLY – In our globalized economy it becomes necessary to keep the office updated in order to get on the top of the market. Current and upcoming trends, positive or negative, should be seen soon enough, so they can be used to the practice's advantage. The data from the reports may be one source of information, showing the trend in refurbishment connected to sustainability and lack of workforce, as well as that the field is becoming female-dominated. This information matters because it can define what will the client expect and desire as well as how the process of the practice may change in the following years. If a practice misses a trend, it may miss an opportunity to stand out.

   Another example from the paper may be the developing market in Poland versus oversupplied market in Italy. The European Union is a collaborative environment and if one country desires a new building development, practices should pursue that opportunity and expand their field of activity, especially when their own market is not suitable. At the same time, the data clearly showed the great differences between individual countries and continents. For that reason, such a transition to a new context may be hard to do, even more for a small office. But in the era of a virtual meeting environment, establishing a branch office or at least an association with a local practice is possible, and should be considered. It is necessary to address local problems, but the opportunity should be pursued globally to overtake an average practitioner and become influential.

5. BUSINESS AND FINANCIAL KNOWLEDGE – the previous 4th point stressed the understanding of new trends which also counts in the economical cycles of expansion and recession. Practices need to have a setup functional business operation as well as a continuity plan in order to survive through inevitable economical depressions. Even better, as Granet mentions, they should take advantage of such downturns because it is hard to stand out when everyone is doing well during a peak.[150] Downturns are the opportunity. For instance, the data showed that there is a higher demand for interiors during a recession thus an office with a knowledge of such commissions can be more successful. With good preparation, the practice can deliver projects when no one else can, and that is an important primacy.

   Also for that reason, one of Granet's top ten business practices is to look for work when it's the busiest time. Because the lead time to bring in new commissions may take several months before they actually generate any profit, and that can be liquidating if the recession hits unprepared.[151]

[149] (Granet 2011, p. 45-46)
[150] (Granet 2011, p. 33)
[151] (Granet 2011, p. 38, 82)

In order to be efficient with such strategies for profitability, the staff needs to understand these processes too. Same as clients need to be introduced to the world of design, architecture staff needs to be introduced to some of the managers' problems. They need to hold accountancy for their choices. Thus Granet suggests assigning direct budgets to everyone for a project, and how many hours does it equal if they want to achieve their desired salaries. Hours alone don't relate to people but received money does.[152] The awareness of the business side needs to be raised in the architectural community, and this is one way to do so.

6. DIVERSITY – Architecture address various issues across many fields and work very closely with cultural behaviors and references. In such a context having a diverse practice, in matters of the staff as well as service typology, can significantly help in more accurate determination of clients' and local societal needs. A great number of studies have proven the positive effect of ethnic and gender diversity as shown by the paper from McKinsey, and for architecture, it can be especially useful considering its way of operation.[153]

   The data in the council's reports have shown that the previously white-male-dominated industry is getting transformed, and we may thus witness significant changes in the approach of individual practices.[154,155] In a globalized world where different cultures confront themselves on a daily basis, mutual cooperation and understanding are essential and are proven to be even fruitful.
7. TECHNOLOGY – As the previously shown quote from Victoria Hagan underlines, technology has totally transformed the architectural practice. It became much quicker and as in other industries, it allowed possibilities never seen before.[156] But because new technologies are emerging every day, a practice needs to be very open, but also careful with their application. It becomes a significant investment – in buying the equipment as well as in the time to implement it. For that reason, it's valuable to seek new talents that can bring the knowledge of these technologies to the firm and support existing staff in their own exploration – giving the best resources to the best people. The data in the ACE report proved that architects are very much willing to learn new technologies, and this should be taken as an advantage by practices managers.[157]

By the study of the market from which these essential points came out, the paper aims to raise the knowledge of how the field truly operates. This was done with the ambition to help the practitioners, theorists as well as the general public to seek new opportunities and gain influence through a better understanding of the industry. In the end, such a process can conclude in the overall elevation of architectural qualities in the environment.

[152] (Granet 2011, p. 156-163)
[153] (Dixon-Fyle, et al. 2019)
[154] (Baker, et al. 2020, p. 5-6)
[155] (Mirza & Nacey Research Ltd. 2019, p. 12)
[156] (Granet 2011, p. 138)
[157] (Mirza & Nacey Research Ltd. 2021, p. 69)

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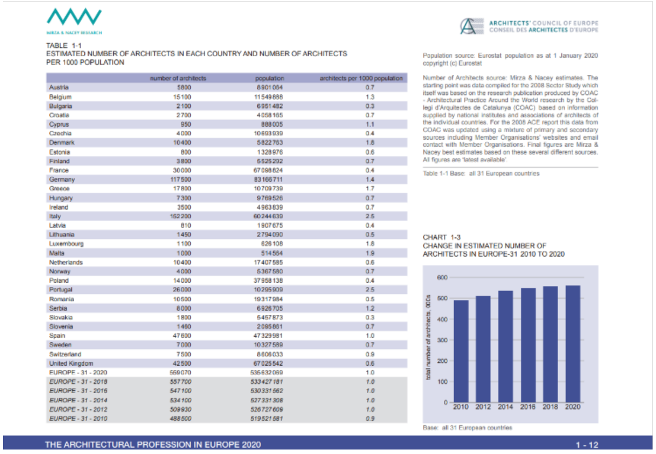


MIRZA & NACEY RESEARCH

ARCHITECTS' COUNCIL OF EUROPE
CONSEIL DES ARCHITECTES D'EUROPE

TABLE 1-1
ESTIMATED NUMBER OF ARCHITECTS IN EACH COUNTRY AND NUMBER OF ARCHITECTS PER 1000 POPULATION

	number of architects	population	architects per 1000 population
Austria	5800	8901064	0.7
Belgium	15100	11549888	1.3
Bulgaria	2100	6951482	0.3
Croatia	2700	4058165	0.7
Cyprus	950	888005	1.1
Czechia	4000	10693939	0.4
Denmark	10400	5822763	1.8
Estonia	800	1328976	0.6
Finland	3800	5525292	0.7
France	30000	67098824	0.4
Germany	117500	83166711	1.4
Greece	17800	10709739	1.7
Hungary	7300	9769526	0.7
Ireland	3500	4963839	0.7
Italy	152200	60244639	2.5
Latvia	810	1907675	0.4
Lithuania	1450	2794090	0.5
Luxembourg	1100	626108	1.8
Malta	1000	514564	1.9
Netherlands	10400	17407585	0.6
Norway	4000	5367580	0.7
Poland	14000	37958138	0.4
Portugal	26000	10295909	2.5
Romania	10500	19317984	0.5
Serbia	8000	6926705	1.2
Slovakia	1800	5457873	0.3
Slovenia	1480	2095861	0.7
Spain	47600	47329981	1.0
Sweden	7000	10327589	0.7
Switzerland	7500	8606033	0.9
United Kingdom	42500	67025542	0.6
EUROPE - 31 - 2020	559070	535632069	1.0
EUROPE - 31 - 2018	*557700*	*533427181*	*1.0*
EUROPE - 31 - 2016	*547100*	*530331562*	*1.0*
EUROPE - 31 - 2014	*534100*	*527331308*	*1.0*
EUROPE - 31 - 2012	*509930*	*526727609*	*1.0*
EUROPE - 31 - 2010	*488500*	*519521581*	*0.9*

Population source: Eurostat population as at 1 January 2020 copyright (c) Eurostat

Number of Architects source: Mirza & Nacey estimates. The starting point was data compiled for the 2008 Sector Study which itself was based on the research publication produced by COAC - Architectural Practice Around the World research by the Col-legi d'Arquitectes de Catalunya (COAC) based on information supplied by national institutes and associations of architects of the individual countries. For the 2008 ACE report this data from COAC was updated using a mixture of primary and secondary sources including Member Organisations' websites and email contact with Member Organisations. Final figures are Mirza & Nacey best estimates based on these several different sources. All figures are 'latest available'.

Table 1-1 Base: all 31 European countries

CHART 1-3
CHANGE IN ESTIMATED NUMBER OF ARCHITECTS IN EUROPE-31 2010 TO 2020

Base: all 31 European countries

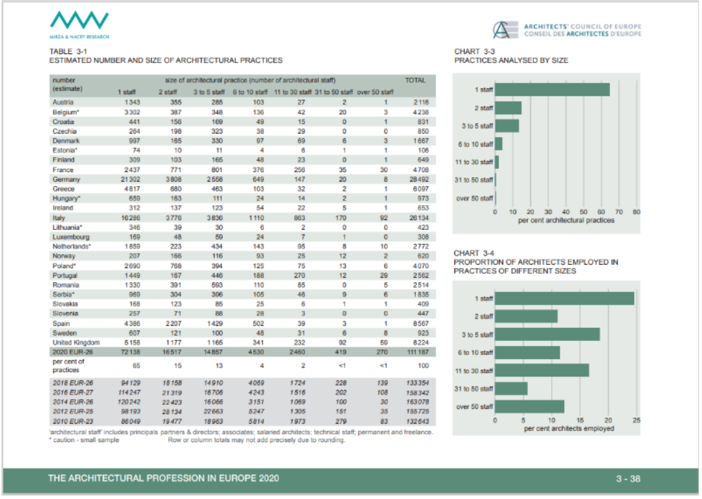
THE ARCHITECTURAL PROFESSION IN EUROPE 2020 1 - 12

Mirza & Nacey Research Ltd. 2019. *Architects' Council of Europe - The Architectural Profession in Europe 2018.* A Sector Study, The Architects' Council of Europe.

The Sector Study provides data about the architecture field in all countries of the European Union from 2008 to 2018. It is divided into five chapters talking about architecture in general, the market, the practice, and an architect as an individual. Measured parameters are also considering current trends and issues such as climate change, digitalization, earnings by gender, or age profile.

The study was commissioned by the Architects’ Council of Europe which is an organization under the EU government. It tries to promote, support, and represent architecture and architects from the whole of Europe. The research itself was executed by Mirza & Nacey Research as a data specialist company creating surveys also for other big organizations in the field such as RIBA.

The work is intended for governmental officials, individual architects, or anyone interested in the research of the data. For the paper, it has a key significance as a major source of data which are being analyzed and confronted with information from interviews and theories.



MIRZA & NACEY RESEARCH

ARCHITECTS' COUNCIL OF EUROPE
CONSEIL DES ARCHITECTES D'EUROPE

TABLE 3-1
ESTIMATED NUMBER AND SIZE OF ARCHITECTURAL PRACTICES

number (estimate)	size of architectural practice (number of architectural staff)							TOTAL
	1 staff	2 staff	3 to 5 staff	6 to 10 staff	11 to 30 staff	31 to 50 staff	over 50 staff	
Austria	1343	355	285	103	27	2	1	2116
Belgium*	3302	387	348	136	42	20	3	4238
Croatia	441	156	169	49	15	0	1	831
Czechia	264	198	323	38	29	0	0	850
Denmark	997	165	330	97	69	6	3	1667
Estonia*	74	10	11	4	6	1	1	106
Finland	309	103	165	48	23	0	1	649
France	2437	771	801	376	256	35	30	4708
Germany	21302	3808	2558	649	147	20	8	28492
Greece	4817	680	463	103	32	2	1	6097
Hungary*	659	163	111	24	14	2	1	973
Ireland	312	137	123	54	22	5	1	653
Italy	16286	3776	3836	1110	863	170	92	26134
Lithuania*	346	39	30	6	2	0	0	423
Luxembourg	169	48	59	24	7	1	0	308
Netherlands*	1859	223	434	143	95	8	10	2772
Norway	207	166	116	93	25	12	2	620
Poland*	2690	768	394	125	75	13	6	4070
Portugal	1449	167	446	188	270	12	29	2562
Romania	1330	391	593	110	85	0	5	2514
Serbia*	969	304	396	105	46	9	6	1835
Slovakia	168	123	85	25	6	1	1	409
Slovenia	257	71	88	28	3	0	0	447
Spain	4386	2207	1429	502	39	3	1	8567
Sweden	607	121	100	48	31	6	8	923
United Kingdom	5158	1177	1165	341	232	92	59	8224
2020 EUR-26	72138	16517	14857	4530	2460	419	270	111187
per cent of practices	65	15	13	4	2	<1	<1	100
2018 EUR-26	*94129*	*18158*	*14910*	*4069*	*1724*	*228*	*139*	*133354*
2016 EUR-27	*114247*	*21319*	*16706*	*4243*	*1516*	*202*	*108*	*158342*
2014 EUR-26	*120242*	*22423*	*16066*	*3151*	*1069*	*100*	*30*	*163078*
2012 EUR-25	*98193*	*28134*	*22663*	*5247*	*1305*	*151*	*35*	*155725*
2010 EUR-23	*86049*	*19477*	*18963*	*5814*	*1973*	*279*	*83*	*132643*

'architectural staff' includes principals partners & directors; associates; salaried architects; technical staff; permanent and freelance.
* caution - small sample Row or column totals may not add precisely due to rounding.

CHART 3-3
PRACTICES ANALYSED BY SIZE

CHART 3-4
PROPORTION OF ARCHITECTS EMPLOYED IN PRACTICES OF DIFFERENT SIZES

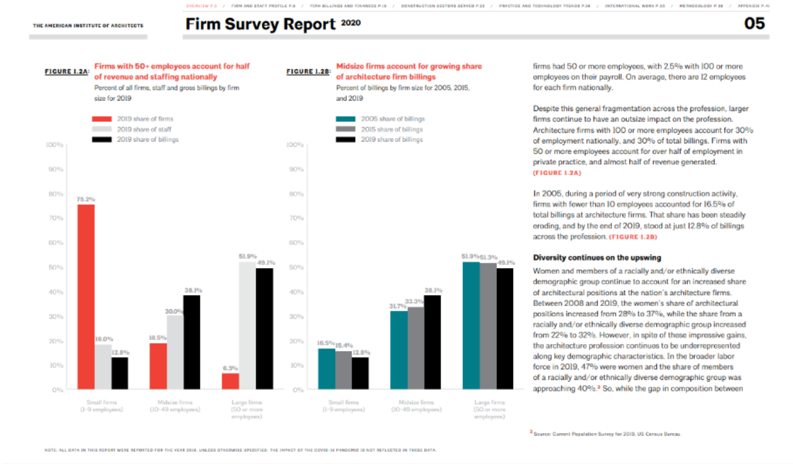
THE ARCHITECTURAL PROFESSION IN EUROPE 2020 3 - 38

Mirza & Nacey Research Ltd. 2021. *Architects' Council of Europe - The Architectural Profession in Europe 2020.* A Sector Study, The Architects' Council of Europe.

The Sector Study provides data about the architecture field in all countries of the European Union from 2010 to 2020. It is divided into five chapters talking about architecture in general, the market, the practice, and an architect as an individual. Measured parameters are also considering current trends and issues such as the covid pandemic, climate change, digitalization, earnings by gender, or age profile.

The study was commissioned by the Architects’ Council of Europe which is an organization under the EU government. It tries to promote, support, and represent architecture and architects from the whole of Europe. The research itself was executed by Mirza & Nacey Research as a data specialist company creating surveys also for other big organizations in the field such as RIBA.

The work is intended for governmental officials, individual architects, or anyone interested in the research of the data. For the paper, it has a key significance as a major source of data which are being analyzed and confronted with information from interviews and theories.


THE AMERICAN INSTITUTE OF ARCHITECTS

Firm Survey Report 2020

05

FIGURE 1.2A: **Firms with 50+ employees account for half of revenue and staffing nationally**

Percent of all firms, staff and gross billings by firm size for 2019

FIGURE 1.2B: **Midsize firms account for growing share of architecture firm billings**

Percent of billings by firm size for 2005, 2015, and 2019

firms had 50 or more employees, with 2.5% with 100 or more employees on their payroll. On average, there are 12 employees for each firm nationally.

Despite this general fragmentation across the profession, larger firms continue to have an outsize impact on the profession. Architecture firms with 100 or more employees account for 30% of employment nationally, and 30% of total billings. Firms with 50 or more employees account for over half of employment in private practice, and almost half of revenue generated. (FIGURE 1.2A)

In 2005, during a period of very strong construction activity, firms with fewer than 10 employees accounted for 16.5% of total billings at architecture firms. That share has been steadily eroding, and by the end of 2019, stood at just 12.8% of billings across the profession. (FIGURE 1.2B)

Diversity continues on the upswing

Women and members of a racially and/or ethnically diverse demographic group continue to account for an increased share of architectural positions at the nation's architecture firms. Between 2008 and 2019, the women's share of architectural positions increased from 28% to 37%, while the share from a racially and/or ethnically diverse demographic group increased from 22% to 32%. However, in spite of these impressive gains, the architecture profession continues to be underrepresented along key demographic characteristics. In the broader labor force in 2019, 47% were women and the share of members of a racially and/or ethnically diverse demographic group was approaching 40%.[3] So, while the gap in composition between

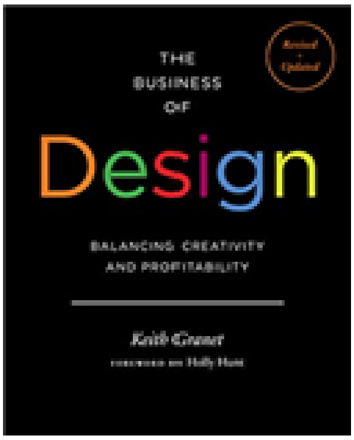
[3] Source: Current Population Survey for 2019, US Census Bureau.

Baker, Kermit, Mentz Jessica, Jennifer Riskus, and Michele Russo. 2020. "The Business of Architecture 2020." *Firm Survey Report.* Washington, DC: The American Institute of Architects, November.

The firm survey report provides data about the architecture field in the USA. It is divided into eight chapters – overview, firm and staff profile, billings and finances, construction sector, practice trends, international work, methodology, and appendix. Measured parameters are also considering current trends and issues such as the covid pandemic, climate change, digitalization (BIM), earnings by gender, or age profile.

The study was commissioned by the American Institute of Architects which works as a council on the US market. The survey was executed by the Farnsworth Group as a flexible organization of designers, engineers, and partners working in the field with branch offices around the whole country.

The work is intended for governmental officials, individual architects, or anyone interested in the research of the data. For the paper, it has a key significance as a major source of data which are being analyzed and confronted with information from interviews and theories.



Granet, K. (2011). *The Business of Design: Balancing Creativity and Profitability*. Princeton Architectural Press.

The book talks about strategies of business in the creative industry. The main focus is to develop a creative environment while generating profit out of the work. Inside is divided into 6 main chapters talking about the foundation of a design business, business management, marketing, HR, project management, and product development. An overall study to grow and run a full-scale company. Additionally to this theoretical knowledge, each chapter also provides interviews with figures like Michael Graves, Richard Meier, and John Merrill – influential successful architects that through their words support the information inside of the book.

The author has 30 years of experience as the president of the management consulting firm Granet & Associates focused on the design industry. He was working with architectural, interior, and landscape firms of such large scale as Gensler. His main career focus has been strengthening the business side of the design profession.

The book is intended for all entrepreneurs in the design industry. For that reason, it has a key significance in the paper since it can provide the know-how that is necessary for analyzing the council's reports.

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