



FACULTY OF ECONOMICS AND MANAGEMENT

MASTER IN BUSINESS ADMINISTRATION

## **MASTER THESIS**

### **The Architect Impasse**

WHY ARCHITECTS ARE SWITCHING TO WORK  
CLIENT/CONTRACTOR-SIDE THAN IN AN ARCHITECTURAL FIRM

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MAY, 2018

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## Περίληψη

Λόγω της έλλειψης έρευνας, εφαρμοσμένης, θεωρητικής και τυπωμένης, το επάγγελμα του αρχιτέκτονα στο κατασκευαστικό κλάδο έχει μειώσει την πρόοδο της παραγωγής αρχιτεκτόνων. Πολλοί από αυτούς επιλέγουν να αλλάξουν πλήρως τη σταδιοδρομία τους. Αυτό μπορεί να οφείλεται στην έλλειψη γνώσεων ή συγκεκριμένων θέσεων που θεωρούνται δεδομένες ως τα απαραίτητα βήματα που απαιτούνται για να μπορέσει ο ιδιώτης να προχωρήσει προς την κατεύθυνση της καριέρας του, ένα κοινό παράδειγμα είναι ο μεταπτυχιακός υπάλληλος του Μέρους Ι με δεδομένο το ψευδώνυμο στον κλάδο ως ο πίθηκος CAD. Ο στόχος αυτής της εργασίας είναι να διαδώσει τις περιπλοκές που υπάρχουν για να γίνει κάποιος αρχιτέκτονας στο Ηνωμένο Βασίλειο, ενώ εξετάζει τις μεθόδους που εφαρμόζονται επί του παρόντος μεταξύ μιας αρχιτεκτονικής επιχείρησης και ενός εργολάβου για τη διατήρηση και κατανόηση του εργατικού τους δυναμικού. Ανεξάρτητα από τη διαδρομή που ακολουθούν οι επιχειρήσεις για να καθορίσουν τις συμφωνίες τους με το προσωπικό τους είτε με τυποποιημένο βρετανικό καταστατικό είτε με μια πιο προσωπική προσέγγιση ανά άτομο, το τελικό αποτέλεσμα φαίνεται να προκαλεί αδιέξοδο στην πρόοδο της αρχιτεκτονικής εξέλιξης. Με τον οποίο ένας ιδιώτης παρατηρεί μια έντονη διαφοροποίηση μιας κατασκευαστικής κοινότητας στην πλευρά του εργολάβου ή εξισορροπεί ευγενικά τη χρησιμότητά τους μέσα σε μια αρχιτεκτονική επιχείρηση, χωρίς να υπερβεί την εξειδίκευση σε ένα μόνο μέρος για να προχωρήσει στο επόμενο βήμα της σταδιοδρομίας τους.

## Summary

Due to a lack of research, applied, theoretical and printed, the architectural profession within the construction industry has seen a decline in the advancement of producing architects. Many of who choose to change careers completely. This may be due to lack of knowledge or specific positions taken for granted as the necessary steps required for an individual to take to move his or her career forward, a common example being the post-bachelor Part I employee given the pseudonym in the industry as the CAD monkey. The goal of this thesis is to disseminate the intricacies of becoming an architect in the UK whilst exploring the methods currently being put in place between an architecture firm and a contractor in retaining and understanding their workforce. Regardless of the route taken by the firms of setting out their agreements with their personnel, either through a standardised UK statute or a more personal approach per individual, the end result appears to produce an impasse in the advancement of architectural progression. Whereby an individual notices a stark differentiation of a construction driven community within the contractor side or delicately balancing their helpfulness within an architectural firm whilst not overspecialising in one area alone in order to move forward to the next step in their career.

## **Acknowledgments**

First and foremost, it is an honour for me to thank my supervisor, Mrs. Alexia Panayiotou, in this thesis for her invaluable guidance, advice and unbelievable amounts of patience until its culmination. She has been a source of inspiration on a very difficult yet intriguing topic, constantly motivating me from the very beginning.

I would also wish to show my gratitude to NEPOMAK UK and OUC who have given me the opportunity two years ago in, what I'm sure would have been a very difficult selection process, to earn a scholarship which would give me the opportunity to better myself and my career. I am eternally in their debt for the that chance.

Furthermore, I would like to thank all the OUC lecturers and personnel to date that have aided me in understanding the complex modules and requirements as well as any queries I have had regarding examination dates, locations and everything in between. Without their guidance and amazing feats of help and understanding I do not think I would have been able to comprehend the demanding modules, even outside of working hours.

Lastly, I would wish to thank my parents, my future fiancé Phani, as well as a dear close friend Yiannis, of whom asides from sharing the same profession and goals, have had long discussions on career progression, mentality and behaviour. They have all taught me the meaning of hard work, perseverance, dedication and gratefulness.

## **Dedication Page**

This thesis is dedicated to my supervisor, Mrs. Alexia Panayiotou, who despite a last-minute change towards Building Information Modelling, which I'm certain must have given her numerous questions as to the sudden change in direction, has instilled within me a love of the written language.

Also to my family and Phani who have supported me through many a difficult decision during these past years, either financially or with regards to my career.

Whilst lastly, to my long-departed grandmother who taught me at a very young age that no-matter how difficult the path you may choose in life, as long as you persevere and work hard to reach your goal, never forget to enjoy the journey of learning and the friends you make along the way.

## **Nondisclosure Agreement**

Due to the confidential and proprietary information regarding both businesses, non-disclosure agreements were put in place. The reasons stated regarding these agreements are to protect the company names, specific work locations, clients currently working with, current project locations as well as personnel names. The reasons behind these agreements, as allowed to explain, is due to high profile clientele and the large projects currently being constructed. It is still appreciative that both firms were willing to cooperate however in order to research further into their organizational management strategies and methodologies for the purpose of this thesis.

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# Chapter 1

## Introduction

### **Description of Problem**

During the past ten years within the UK, there has been a steady drop in numbers of individuals becoming architects. A number of which have changed professions entirely where notable examples such moving to the banking/finance sector solely due to the large increases in salary for less experience. The issue at hand is that a number of firms within the AEC do not have access to organizational management material relevant to the sector. There is quite a lot of material on numerous other sectors, yet on how to manage an architect who is an individual with high cognitive abilities due to the intricacies of their profession, current research is lacking. Thus, resulting in numerous individuals who become adept in very specific elements of construction the construction process or even doing nothing related to it within the firm, a good example of this is video production and programming. This ultimately leading to employee turnover due to a lack of understanding of the needs and requirements of the individual within the firm with regards towards their career progression.

### **Relevant International Experience towards the approach and resolution of the issue**

To date the majority of academic research rarely encompass organizational management within the Architecture, Engineering and Construction (AEC) Industry. With such articles as presented by Peter Lansley's "Analysing construction organizations" all the way back from 1994, being one of the first primarily directed towards the Construction Industry. Whilst more recent research within 2016 by Debby, Bambang and Vaughan begin to delve within the corresponding industry with their "Organisational culture and quality management system implementation in Indonesian construction companies" article. These large time lapses within the academic and professional frameworks show that

although there is some research being performed, there is not enough to sustain and improve the sector as it currently stands. This ultimately leads to management learning methodologies from outdated sources or applicable to other sectors which may not be applicable to the construction sector due to first and foremost dealing with individuals with high cognitive and intellectual abilities.

## **Purpose of Thesis**

The purpose of the thesis is to disseminate how architectural firms and construction firms deal with the organizational management of architects given the complexity of current building construction. Despite the creation of new role types within AEC firms for architects, which then place them in various categories and subsequently have differing needs and requirements. The essence of it being that architects want to see buildings being built and find solutions towards problems that arise during these processes beginning with the initial designs up to and inclusive of the building being completed and the keys as well as the Operation and Maintenance Manuals (O&M) to the owner. Therefore, researching between two specific companies, an architecture firm and a contracting firm and analysing cases of organisational culture, motivation in the workplace, organizational conflict, and organizational change management, this thesis will provide a cornerstone towards even further research within the construction sector as well as one of its key personnel types. The architect, who as an individual dealing with a plethora of elements, from construction knowledge, to people managing skills within the office and on a construction site, as well as meandering through a maze of planning requirements and building regulations as well as the requirements that a client wants, whilst simultaneously balancing construction costs. A highly-undervalued individual with a very wide knowledgebase. To reach a pinnacle of providing plausible solutions which can aid the firms within the construction industry towards the effective handling and management of such individuals.

## **Thesis Position on Subject**

The position this thesis stands given the organizational management of architects within architectural firms are highly misunderstood by management who not able to view what

the individual actually needs. All while working in a highly stressful environment whilst being underpaid for the work being performed. As of recent, the rise of a new type of construction contract, the Design and Build Contract (D&B), relinquishes an architect's control over a construction project to the Contractor. What this means is the contractor is now in control of the design as well as building the project for the client. In doing so a contractor asks for greater payment, due to the increase in risk. The architect however is currently novated to work for the contractor accepting lesser pay, unless they are working directly for them. Therefore, the management of an architectural firm must learn how to deal and interact with the needs and requirements of architects within the Architectural sector prior to these individuals make the jump to a construction firm for better work conditions and better pay.

## **Thesis Limitations**

The limitations that have been brought forth regarding the research of the thesis are primarily time based as due to the nature of the profession, the construction sector works under a high stress load which not only involves financial matters and time allocation but also with individuals on construction sites and human error dealt with in construction. Therefore, the methodology applied remains between an architectural firm and construction firm. Subsequently current research within the area of organizational management in the construction sector is not as expansive as other sectors. Whilst lastly the theory and research specifically towards the organizational management of architects within the industry is almost non-existent, bar the few articles which shall be used within this thesis. That is also further reason that this thesis will be able to provide the beginning of further research within this sector in order to provide greater and more role specific information on successfully managing architects.

## **Description of General Methodology**

For this thesis, the general methodology involves practical research of organizational management, behaviour and practice between an architectural firm and construction firm of similar size and scale. Followed by researching current implementation of organizational management techniques as being performed currently by the architectural firm involving employee retention, cross-referenced with current research. Whilst further

researching the current implementation of organizational management within a construction firm, cross-referenced with current available research. This means the methodology involves a mixture of practical research and observational analysis cross-referenced with current research books and articles, to lead to a solution proposition for both parties regarding the management techniques.

## **Synoptical Presentation of Chapters**

The chapters are divided into three parts prior to the thesis conclusion.

Chapter 2 involves describing how one becomes an architect in the UK. It also describes the company being researched and its current managerial structure. Whilst following a comparative analysis of the four key areas of organizational management with current research. The areas being (1) Organizational Culture, (2) Motivation in the Workplace, (3) Organizational Conflict and (4) Organizational Change Management.

Chapter 3 subsequently describes the requirements of being a contractor in the UK, while also giving relevant information about the company and its managerial structure. Following that, the same key four areas are also comparatively analysed with current research.

Chapter 4 now brings together the analysis in comparison and contradiction of the four key areas between the architectural firm and the construction firm.

While the Conclusion now leads from the comparison and contradictive analysis in providing plausible solutions for either party, in order to improve their organisational management techniques towards architects as employees.

# Chapter 2

## The Architecture Firm

### 2.1 How to become an architect in the UK

Studying architecture within the UK is a very long process. Almost akin to become a doctor in terms of length of study. Qualifying to become an architect involves synoptically five years at a RIBA (Royal Institute of British Architects) validated university and completing a minimum of two years' practical experience prior to attempting to qualify as an architect.

The first three years to attain RIBA Part 1 qualification, involve studying a university undergraduate degree. The undergraduate degree involves developing core architectural skills and understanding. The RIBA classify the requirements under eight key points.

1. The ability to create architectural designs that satisfy both aesthetic and technical requirements
2. Adequate knowledge of histories and theories of architecture and the related arts, technologies and human sciences
3. Knowledge of the fine arts as an influence on the quality of architectural design
4. Adequate knowledge of urban design, planning and the skills involved in the planning process
5. Understanding of the methods of investigation and preparation of the brief for a design project
6. Adequate knowledge of physical problems and technologies and the function of buildings so as to provide them with internal conditions of comfort and protection against the climate
7. The necessary design skills to meet building users' requirements within the constraints imposed by cost factors and building regulations
8. Adequate knowledge of the industries, organisations, regulations and procedures involved in translating design concepts into buildings and integrating plans into overall planning

Following that, the Stage 1 practical experience or year out is recommended, whereby students work in professional environment. In doing so their employment mentor as well as their university Professional Studies Advisor guide the Part 1 through completing the first twelve months of their Professional Experience and Development Record (PEDR).

The PEDR counts towards the registration requirements set out by the Architects Registration Board (ARB) towards attaining the final qualification as a licenced architect. After the twelve-month work experience placement, students go back to a RIBA validated university to attain their Part 2 qualification as a post-graduate degree. The degree now aims to enhance the students' architectural knowledge and project complexity over the course of another two years under the following eight points. Some of which overlap with the previous. The RIBA classify the requirements as follows.

1. Ability to create architectural design that satisfy both aesthetic and technical requirements
2. Adequate knowledge of the histories and theories of architecture and the related arts, technologies and human sciences
3. Knowledge of the fine arts as an influence on the quality of architectural design
4. Understanding of the relationship between people and buildings, and between buildings and their environment, and the need to relate buildings and the spaces between them to human needs and scale
5. Understanding the profession of architecture and the role of the architect in society, in particular in preparing briefs that account social factors
6. Understanding the methods of investigation and preparation of the brief for a design project
7. The necessary design skills to meet building users' requirements within the constraints imposed by cost factors and building regulations
8. Adequate knowledge of the industries, organisations, regulations and procedures involved in translating design concepts into buildings and integrating plans into overall planning

After completing their Part 2 studies, students are required to maintain another twelve months of practical experience, for a total of twenty-four months, under the direct supervision of a registered architect to be eligible to take the Part 3 examination. Part 2 architectural assistants gain more responsibility on projects while maintaining their PEDR's.

Lastly, to attain the final qualification in order to register as a qualified architect, individuals must partake the final Part 3 examination. Examination requirements are assessed by having a minimum of 24 months of practical experience recorded on the PEDR website, a professional CV and career evaluation, a case study, two written examinations and a final oral examination. The RIBA further classify the requirements as follows.

1. Professionalism
2. Clients, users, and delivery of services
3. Legal framework and processes
4. Practice and management

Lastly, having gained Parts 1, 2 and 3 qualifications the individual can register as an architect with the Architects Registration Board (ARB) and be entitled to use the title 'architect' as it is protected by law.

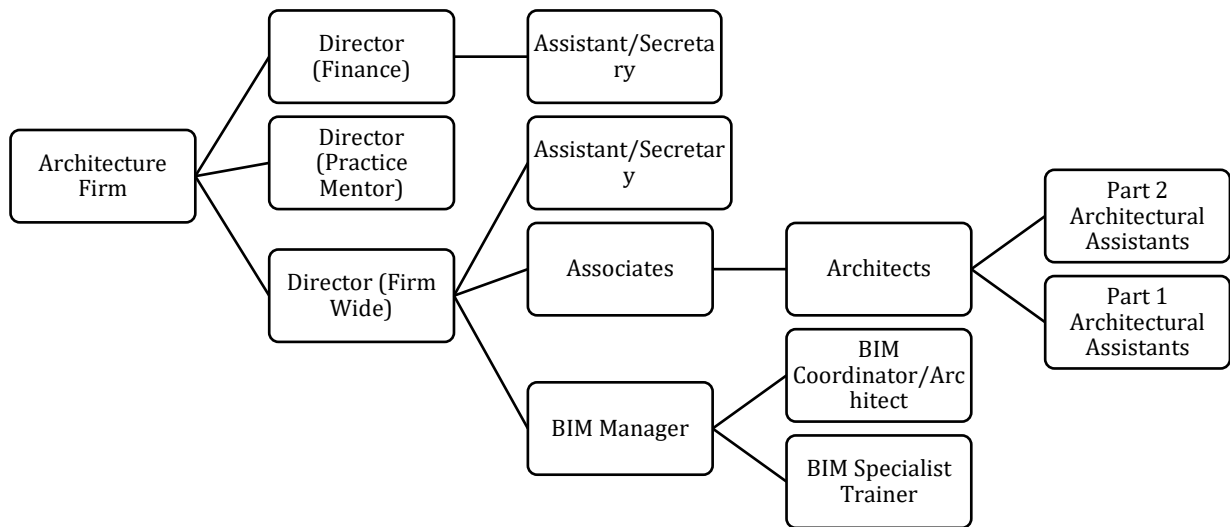
At this point it also worth mentioning via the RIBA validated school board reports, the declining trend of individuals leaving the architectural profession becomes apparent between each stage. Throughout all their reports, on average there is a decline of two-thirds in number between each stage.



Figure 1: The stages of becoming an architect

## 2.2 Company Information and Structure

The architecture firm to be researched upon is based within Central London. Currently it comprises of twenty-four individuals. This comprises of three directors, six associates, five architects, with the rest comprising of part 1 and part 2 architectural assistants. The company structure is shown below with a tree diagram.



*Figure 2: Architecture Firm Company Structure*

Despite appearing to have a strict hierarchical structure, due to the length and breadth of the projects within the office, part 1's may be working closely with directors as their sole point of contact or architects working with an associate, or even sole associates working individually upon schemes. Therefore, the communication between the various positions is very flexible, although there is an inherent knowledge from the part 1 and part 2 architectural assistants that they have to be direct and to the point so that solutions can be found swiftly with projects. The reason behind this is that one associate may be balancing four or five various schemes simultaneously, so time is of the essence. The studio prides in having strong leadership, and an approach to design underpinned by the experience of the whole practice. As a practice, they have been awarded the Architectural Practice of the Year award by Building magazine. The firm wide director takes pride in knowing that each individual he personally interviews, has a strong pedigree in specific areas which can

further push to practice to a greater extent. With their main headquarters in London, they have an additional office in Portugal. Whilst their projects range from cultural, commercial, conservation, education, health, master planning, retrofit and residential. Further to this the practice endeavours to maintain healthy research and development voluntary to all members who wish to gain additional experience as the company will also gain from reduced corporate tax. As a relatively new firm, project-wise the firm has experience in handling projects up to ninety million sterling (£90m).

## 2.3 Organizational Culture

As Cohen, et al. (2005:776) have researched, architects have *“remained relatively neglected within the literature of professions, yet (their) diversity in terms of organizational context, its role within the construction industry (as well as their) vulnerability to changes in the political, economic and social climate make (them) a highly appropriate research focus”*. It was only until recent years that the RIBA publications have produced more criteria regarding people management, specifically recognising that the most important asset of any practice is its people (Ostime 2013:131). With various degrees of attempts pursued to keep a happy and motivational workforce in conjunction to adhering to the various plethora of legislations necessary to comply between an employer and employee within the UK.

Within the architectural firm there is a specific understanding from the beginning that there are a set of values and assumptions that are shared amongst all individuals. From the very beginning the notion that architecture students learn in university, *“to leave the place better than you find it”* is emphatically clear throughout. There is a belief that because of the complexity of the nature of being an architect, there needs to be a certain amount of agility towards the handling of increasingly complicated construction projects while allowing everyone to have a voice within the firm. Regardless of position, the directors and associates will discuss ideas and designs for progression with Part 1’s and Part 2’s so they too can give be involved and bring a *“fresh pair of eyes”* to the project as one director emphasizes, otherwise *“we stagnate as professionals and do not grow as professionals or individuals”*. Within the firm, they are proudly showing to employees, clients and consultants they liaise with a centrepiece artefact which speaks about the firm and its employees as a whole. This artefact is called the *“The Progression Wall”*. This expands the coverage of an entire ten metre span of wall which outlines where they were

when the firm started, lays out all the stories, legends and architectural language they have developed throughout the years, where they are now, as well as a visible action plan for the immediate (weeks, months, years) and long term (decades) future goals. In doing so, the directors have managed to visually show past, present and future employees the visible and invisible elements of the organizational culture assumptions, values and artefacts of the firm.

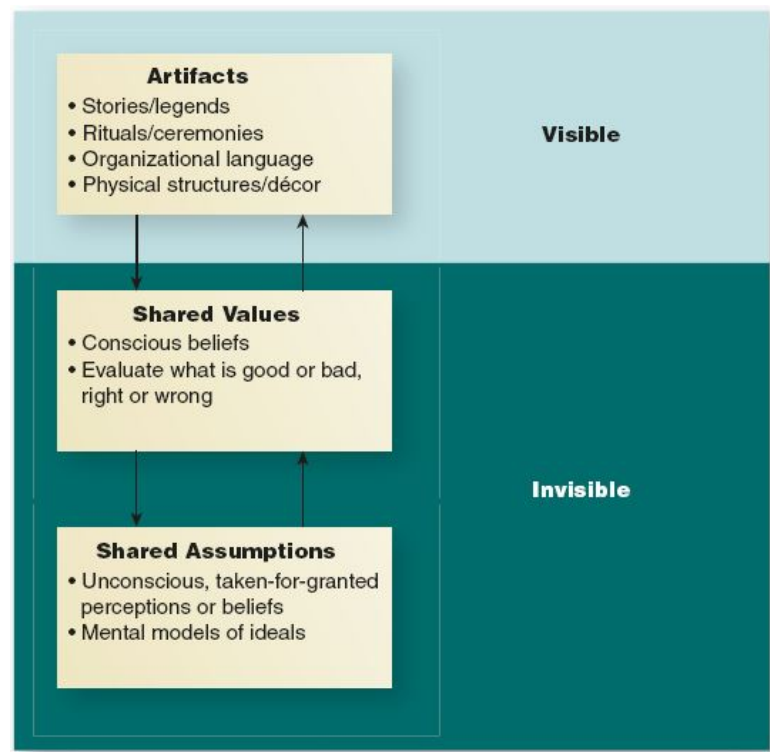


Figure 3: McShane (2008:461) Organizational Culture Assumptions, Values and Artefacts

One of the main factors which has helped aid in bringing a unifying organizational culture within the office is the passion of the Firm Wide Director. It is worth highlighting at this stage that management are within their late forties which is perceived very young within the architectural industry. Yet it is because of this that the directors both speak with an extraordinary amount of passion which can motivate employees, and associates alike towards the practice's unified goal of leaving the place better than when they found it. In doing so, setting the standard unconsciously for a set of predefined perceptions, beliefs and ideals of excellence as well as "pushing the boundary of what currently is possible" Despite Critchley (1993: i) being adamant that the very notion of 'managing culture' is akin to being "as absurd as a sailor proclaiming that he (can) must manage the sea", where the architecture firm manages succinctly to embrace and create an organizational culture where "(they understood that it is) both a source of resistance and energy... ...(whereby) the

sailor understands the prevailing wind systems, tides and currents... (and) use them to his advantage.”

Despite Ankrah et al. (2005:595) explaining that little research has performed in this area due to its recognized intricacy, being far easier to investigate the corporate culture of a general contractor, despite the limited research. The overall understanding that architects form parts of informal organisations/firms where their way of working together is achieved through empathic direct personal contact and “*decentralisation of decision making*” whilst appropriate tasks are organized around a per individual basis with administrative tasks being considered of lesser importance. Graphically portrayed as below.

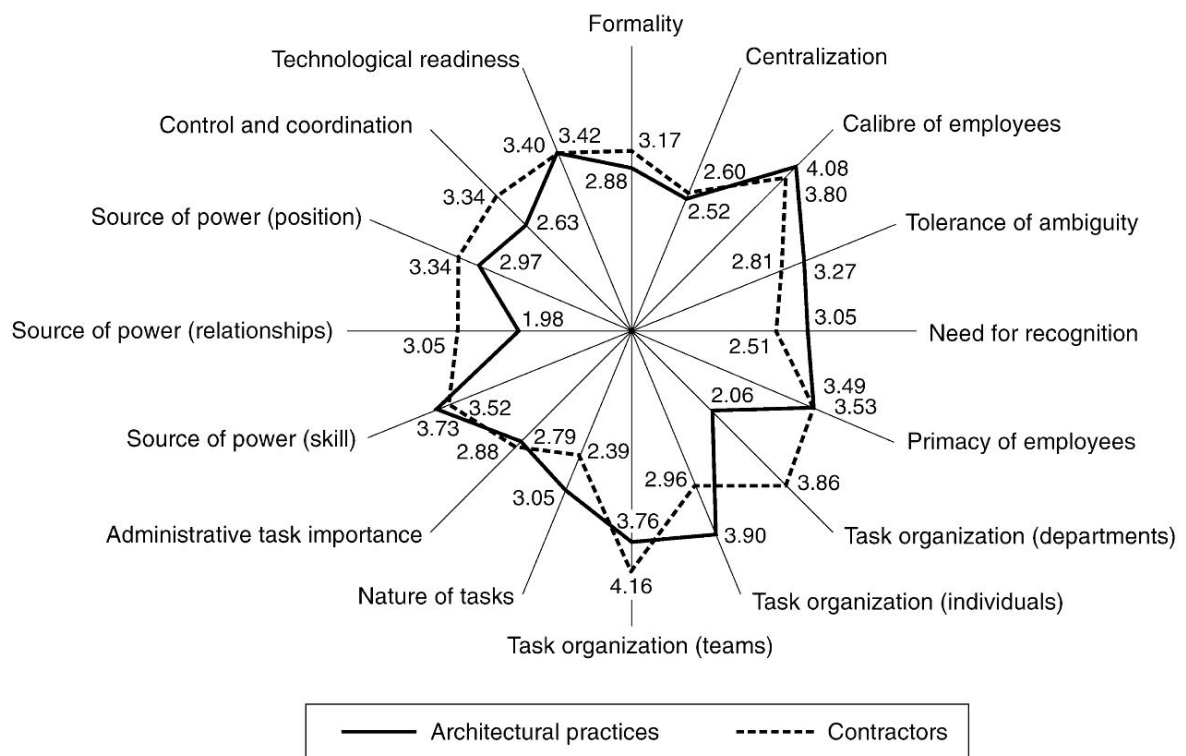


Figure 4: Ankrah et al. Organizational Culture Comparison of orientations between architects and contractors

In doing so, there are two specific stories which emanate through the office which explain this subculture. The first being when an associate was fooled into clicking a spam email for a social website in which a virus had infected and began encrypting the entire server with all the work of the office. Where the virus was asking for ransom money in order to stop the process. Upon notifying the IT, who have promptly resolved the issue, after a stressful twenty-four office down-time period, the associate in question was remorseful

to what had happened. As well as being a wakeup call to the safety one should have on the internet. The story in particular hits employees due to the associate in question being perceived as infallible, with all the right answers to any and all questions imaginable. Often seen as the go-to person regarding queries of any nature on projects, legislations, building regulations, and ways to resolve them.

The second story delves into a BIM project file becoming corrupted, where the architect in charge of that particular project asked for the help of a colleague where BIM was their area of expertise. The colleague promptly took charge of reviving the corrupt file after working on the three computers the team used as well as the server as well as creating the necessary backups of the project. The finance director being updated of the whole situation was kept up to date throughout the whole procedure by the BIM Manager. The second story in particular may not be exciting in the totality of its length but for the practice in question, this particular project was the first that endeavoured to utilise BIM technology on a modular unit housing scheme for a particular high profile client in conjunction with the one of London's borough councils. So, every effort was made to show them the positive attributes of working in this manner. The architect followed up after the ordeal finished and was able to continue working by buying his colleague lunch as an informal thank you, which further enhanced the bonding process between colleagues as this ordeal was visible throughout the office.

Lastly, while a new phrase coined after Alharbi et al. (2015:162) research was produced, aptly named Architectural Management. Despite its definition: "*AM (being) the strategic management of the architectural firm that assures the effective integration between the business aspects of the office with its individual projects in order to design and deliver the best value to all stakeholders*". Due to the size of the practice, circa twenty-five people in total, management still keeps a family orientated vibe visibly noticeable with members who have fatherly or motherly responsibilities, as well as the common office lunches being organized to bring all members of the practice in the UK and abroad, as well as members who are on paternity and maternity leave to comingle in a neutral environment. Within this neutral environment, management does make an effort of being humble in thanking its members for their hard work and dedication as they "*ividly remember how long it takes to get work done*".

## **2.4 Motivation in the Workplace**

It is widely understood that architects may work up to fifty hours per week in their offices, and as such it is commonly acknowledged that architects do indeed work excessively long and unsociable hours for the sake of the construction projects. Conducively, Courtney et al. (2013;52) go further to explain that *“architects work the most [unpaid] overtime... [where]... employees [need to] be the most productive in the least possible timeframe”*. Through conversation with Part I’s and Part II’s the motivation predominantly for an architect is intrinsic mostly, akin to an inverted Maslow’s hierarchy of needs. Where upon later stages of the development of an architect, towards middle management and onwards a balance is struck between extrinsic and intrinsic motivation for the job they are doing, aligning more to Maslow’s hierarchy of needs. There is a maturing of character that what they are doing must get paid as well in some shape or form in order to move forward whilst still ensuring they have their intrinsic motivation for producing a stunning design. Additionally, only in recent architectural publications by the RIBA has the subject of workforce motivation been encompassed where Chappell et al (2000;313) appear to begin to scrape the surface of motivation within the workplace by establishing in Plain Language Prose (PLP) and Plain Language Questions (PLQ) that *“motivation [comes] in two parts: motivation of self and motivation of others”*. Whereby motivating others has been summarised as three points. (1) Find out what they want, (2) Show them how to get it by doing what you want, and (3) Ensure they are not disappointed due to your fault.

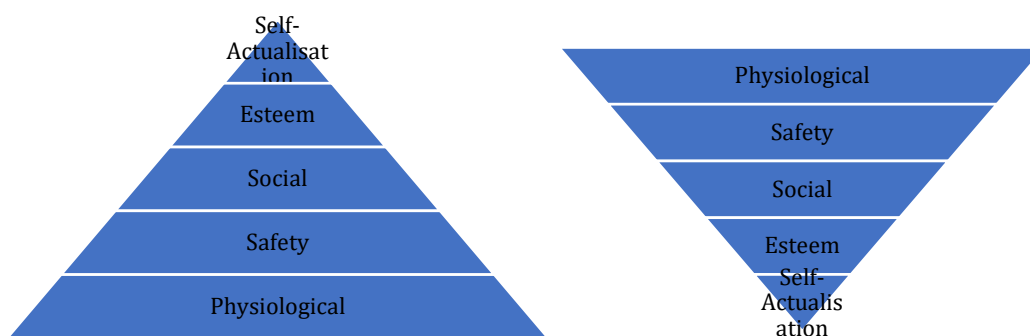


Figure 5: Maslow's hierarchy of needs compared to the inversion depicted by Part I's & II's

It has been noticed within the firm that only when applying all theories simultaneously depicted within McShane et al (2008:139) from Maslow’s Needs of Hierarchy, to ERG Theory (Expectance-Relatedness-Growth), to Four Drive Theory, as well as Theory of Learned Needs, the lines of motivation for each employee type become slightly clearer despite their ambiguity.

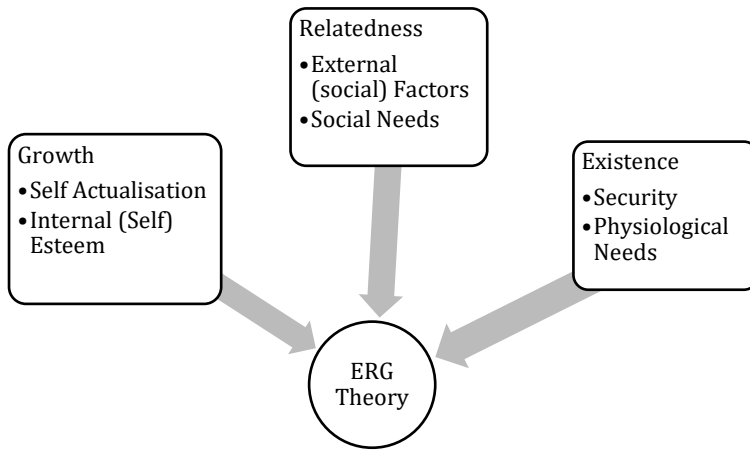


Figure 6: Aldersfer's ERG Theory

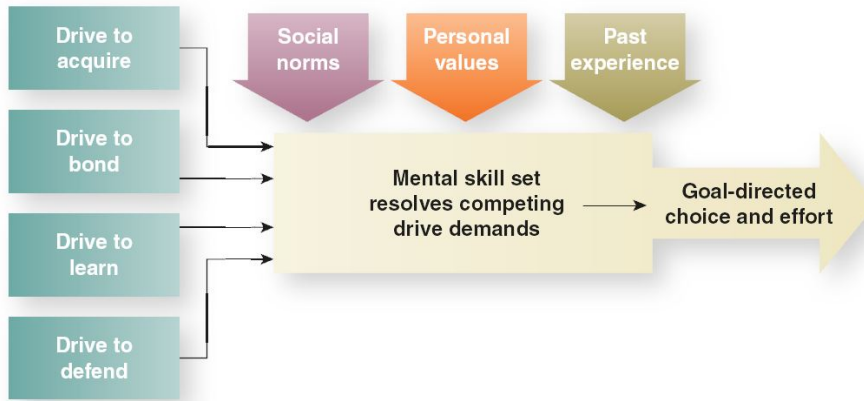


Figure 7: Lorence and Nohria's Four Drive Theory

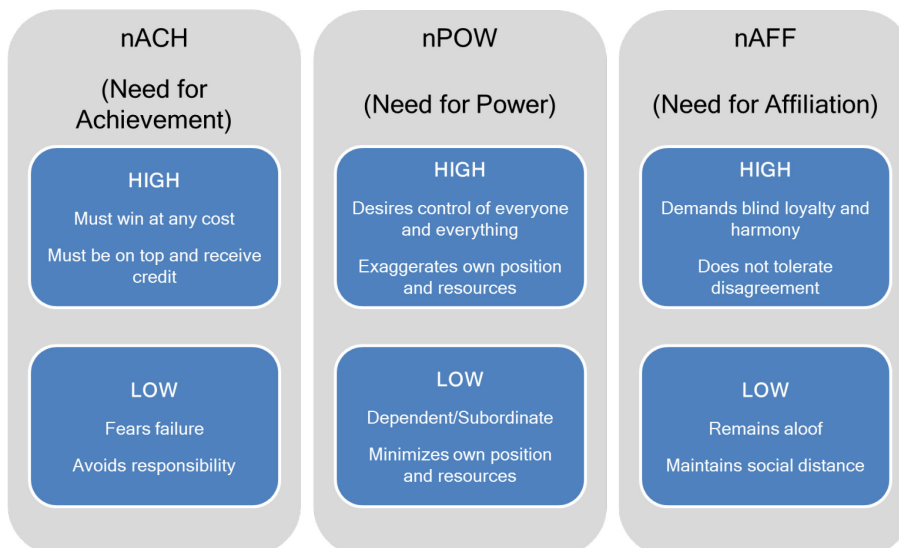


Figure 8: McClelland's Theory of Learned Needs

Cohen et al (2005:791) succinctly describe an architect's drive as "offering a service [where in order to] get it right... ..can in some instances waive the fee... ..to ensure the building is right [where the] primary motivation is the service". An area where the financial director is visibly seen to remind all employees to update their weekly timetables on which projects they are working on in order to properly know and allocate resources within the firm.

TS Code	Proj. No.	Proj. Name	Workstage	Description	Task	Mon 26-Feb	Tue 27-Feb	Wed 28-Feb	Thur 1-Mar	Fri 2-Mar	Sat 3-Mar	Sun 4-Mar	Total
Core	00051	Meetings	n/a			2.50	0.00	0.00	2.00	0.00	0.00	0.00	4.50
Core	00063	BIM/CAD	n/a			0.00	0.00	0.00	0.00	4.00	0.00	0.00	4.00
Core	00064	Research & Develop...	n/a			0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
Core	13046	[REDACTED]	Stage 2 Stage 2			5.50	7.00	8.00	6.00	4.00	0.00	0.00	30.50
<b>Core Hour Totals :</b>						8.00	8.00	8.00	8.00	8.00	0.00	0.00	40.00
<b>O T Hour Totals :</b>						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Grand Hour Totals :</b>						8.00	8.00	8.00	8.00	8.00	0.00	0.00	40.00

Figure 9: Example Time sheet with Working Hours (Project name removed as per NDA)

Despite this, from all employees, certain traits become distinctly visible. The friendly working environment, the maximum allocated working hours, and the minimum allocated annual leave to name a few. In the certain cases regarding Part I's, Part II's and architects, their drive to progress to the next level as well as personal betterment in the software the company wishes to progress with on future projects.

Since there is a noticeable "gap in [motivational] knowledge [in] identifying factors influencing architects" Oyedele (2010:181), as well as upon observational research, there is no one solution to motivate an architect, there appears a need to take a macro as well as a micro view within the firm. The main macro issues posed of the maximum forty hour work week as well as the minimum twenty days annual leave as suggested by the government have been seen as sacrosanct within architectural firms, whilst few to date have implemented macro changes such as flexible or reduced working hours, despite architects working overtime regularly within the office, in some cases through the night in order to accomplish upcoming project deadlines. This also means within the office the

where attainable, personnel will attempt to adhere to the strict nine-to-six workday regime as best as they possible can.

Yet in two specific scenarios, motivation was visibly seen.

The first being a Part II upon private out-of-the-office conversation had explained that she previously worked in the same office for her Part I placement year and when she wanted to come back, explained to management that she wished to gain more experience throughout all stages of a project (as per the RIBA Plan of Work) in order to gain enough competency to move forward with her Part III studies. Upon further conversation, she had exclaimed a certain dissatisfaction to date that she only worked upon schemes which were in Stage 2 involving great amounts of conceptual design. Despite having quite a few private meetings with management (without disclosing a specific number) she has yet to be put on a project which is at later stages of the construction process. Querying further throughout the conversation there was a point of clarification and understanding from the Part II where due to the weekly Monday morning firm-wide meetings, she understands that there are not a lot of projects which are at later stages. As well as having direct contact with associates and the Firm-Wide Director, there was a clear understanding of the lengths all management go to, inclusive working and meeting potential clients during the weekends to secure potential jobs for the office which need to be worked through at initial design concept stages to apply for planning permission in order to progress further. Despite Oyedele's (2010:184) findings of thirty-three factors which influence an architectural employee's motivation, a certain level of empathy is noted throughout all positions remains visible.

The second which compounds with positive organizational behaviour was a combination of the passion the firm-wide director is able to give towards each employee or within groups towards the direction he wishes to take the designs of the firm, to which he hired an architect who specialised using such innovative software in order to place in one of the leading largest projects of the firm. Despite all the employees being fascinated by the new direction and having some interest, none have actually expressed any motivation. Until a specific presentation regarding the schemes residential and office tower cores, lifts and uniquely designed scissor stairs, was presented to Arup's consultants and the client. Towards the end the end of the presentation where congratulations where said towards all members of the architecture firm responsible for working on the project, the consultants and client upon their exit were discussing about the uniqueness and innovativeness in resolving construction issues prior to tender stages. That alone has

caused the remaining office members to look at all the presentation boards that have been prepared as it has peaked their interest. To which, the next morning at firm-wide update meeting, all members vocalised their interest in further learning towards the visionary goal the firm-wide director wishes to implement and lead. This also leads to the understanding that the “*recognition for creative ideas [with] clearly defined project goals [as well as] constructive feedback [regarding] work [has provided] important information [to the team] on how to improve... ..by emphasizing teamwork [and creativity]*” (Gupta 2014:13) which also led to further team engagement within the firm.

## 2.5 Organizational Conflict

Within any architectural organisation firm, due to the nature of the profession, architects work under constant stress throughout the entirety of their careers. This stress, regardless on the nature or timeline scale of the construction scheme, can induce and escalate conflict within the design team. This conflict within architectural firms can be a double-edged weapon however dependant on two possible scenarios. In the case of competition design proposals, where design ingenuity and brevity is of utmost importance and adrenaline running at all-time highs, everyone within the team is providing solutions in order to accomplish the time constrained deadlines. However, the majority of conflict, due to the archaic management methods within the industry arise when strict deadlines, due to time constrained necessary information required on site, have to be adhered. Conflict management procedures within the architectural industry have not been fully developed as it is seen as part of the profession, yet due to the empathic nature of working with peers there is a slight ease to discussion with or without management if there are issues, as well as the occasional outbursts. It is only of late that within RIBA's recent publications that conflict has begun to be mentioned yet the primary focus being for the architect not to be in a position of “*conflict of interest*” (Ostime 2013:44,58,121) in order to upkeep an architect's code of conduct throughout their career, yet amongst peers seldom anything has been written.

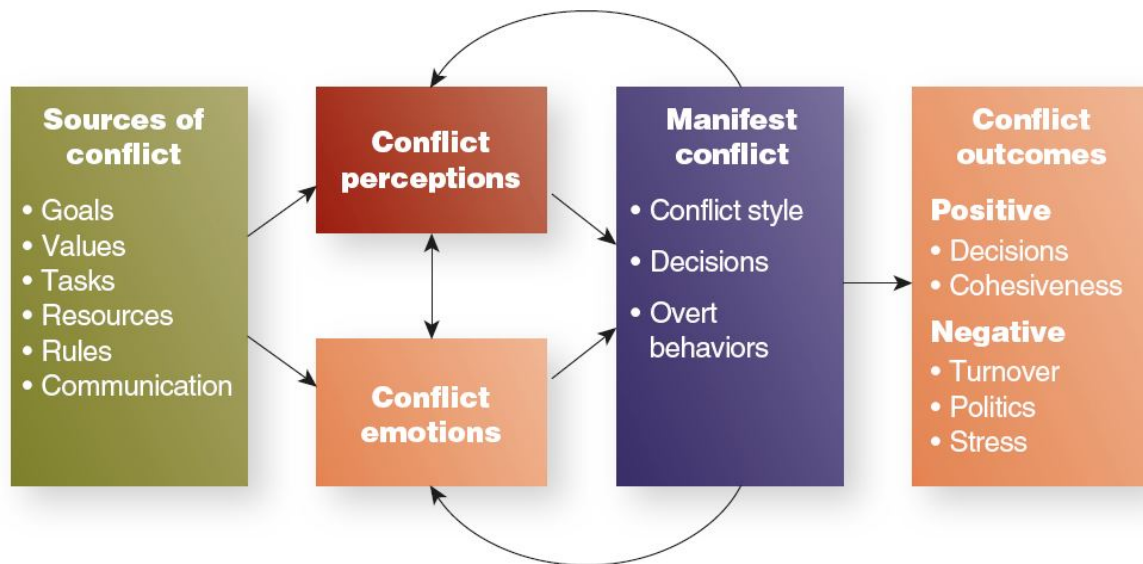


Figure 10 McShane et al, *The Conflict Process*

Despite “group orientated work environments [being] the norm and being a team player considered an asset” (Griffith et al 2014:148), architects with their unique styles and strong personalities have always at some point have had conflict within their organization. The primary reasoning behind this is due to their “personal [investment] in the outcome of a project” (Griffith et al 2014:148) yet simultaneously when architects move up the management ladder, towards Project Architect, Associate, Director levels, due to the profession maturity that comes with the position then through their emotional intelligence, “[they adopt various] conflict management styles... ...[dependant] on the [situational] strategy” (Zhang et al 2015:451). The majority of which, architects having a high level of assertiveness and cooperativeness always endeavour to problem solve situations and provide innovative solutions whilst building a trust relationship with personnel across the all ranges of qualifications.

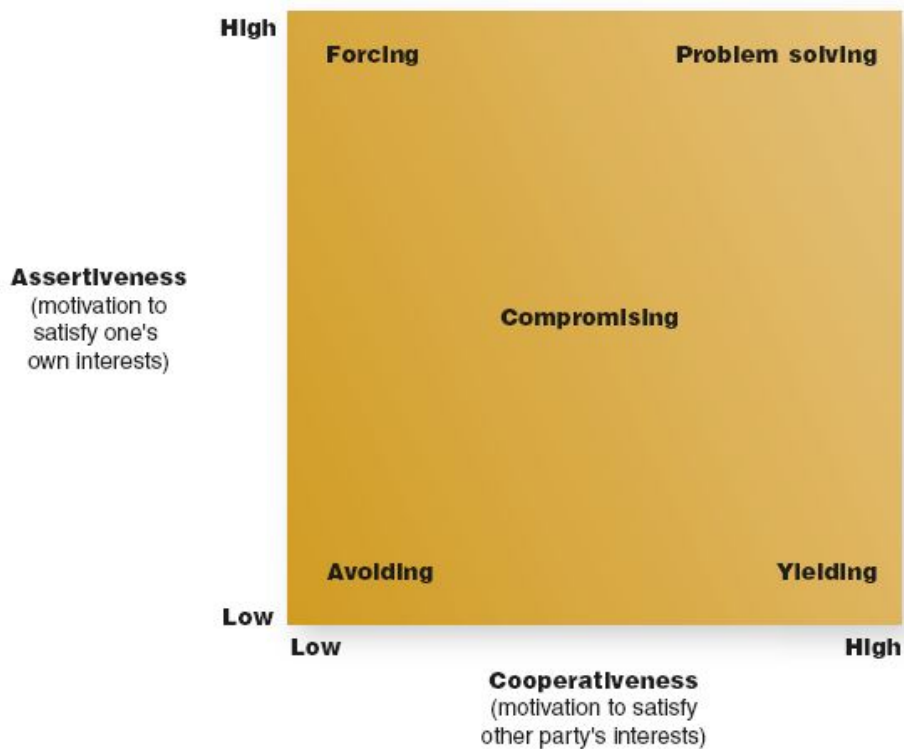


Figure 11 McShane et al, Conflict Management Styles

Through discrete discussions with personnel, specific scenarios were also explained regarding conflict within the office environment and how it was dealt in a positive and negative manner as well as even comparing with certain individuals their methodologies of dealing with conflict.

One such conflict occurred when an architect along with a Part I, were working collaboratively on one of the schemes of the firm. In particular, the architect managing the overall scheme, whilst given the responsibility to the Part I to allocate accordingly the furniture within all the proposed flats according to Part M of the Building Regulations. In order to do so, the architect has a selection of predefined furniture which adhere to the standards of the Part M requirements, as well as a predefined set of floor layouts to help the Part I achieve what is required. It has been noticed amongst the office that the Part I would question the Architect throughout the day towards each particular room or particular shortcuts that they may take to finish the job faster, or even to share the desktop screen to the architect to check constantly their work or even in one scenario asking if it was alright to straighten an external Party wall in order to make the drawing process easier. The architect throughout the process, was noticed to range his assertiveness and cooperativeness with the part I, ranging from understanding the trepidation involved when the Part I was putting the furniture layouts together and would explain calmly the reasons why certain layouts must be fixed as according to regulations.

As well as go over specific parts of the regulations in order for the Part I to understand and broaden their knowledge. Where in other cases, always in calm manner the architect would explain to the part I, that he wants them to learn the proper way of doing a task without needing to search for a shortcut just to save some time. Always between a half joking and seriousness the architect would firmly explain that the job in its current state going towards tender must be properly performed and if he found that shortcuts were made that would impede the flow of work further down the line then they would be deleted and done again, thus giving a decision of choice of to the Part I which option they can take. Throughout the conversations overheard and the discussions taken, peers have come to the understanding that with the particular Part I assistant in question, it has been noticed that they have a very high level of assertiveness with fluctuating levels of cooperativeness dependant on the situation. This particularly has been commented upon when the Part I was working on another project with Part II architectural assistants and newly registered Part III Architects, where they have come to the architect who had worked previously with the Part I and explained "*now we understand what you went through and why you were explaining everything in a firm yet half joking manner*", which leads to the practical implication of a unique style where "*...using high collaboration when dealing with [any form] of conflict*" (Way et al 2016:43) yet simultaneously implementing a low yield and gentle force towards the explanations to the Part I involved. One of which, which appeared unusual to the colleagues involving straightening one of the Party Walls adjoining the building to its neighbour, where the architect, firmly explained that that is not possible and then followed by sitting down with the Part I to explain the reasons why that is not possible. Encompassing the pros and cons of said decision, involving increased cost of construction separating the walls completely, reduction of material usage, reduction of building time scale, reduction of overall floor area, impact of floor area to net rent values and profits as well as impact of reduced area to possible tenant requirements, therefore explaining to the Part I that something as simple as what was proposed, can have a huge impact in certain scenarios.

In another scenario where conflict was unavoidable, "*the manner in which [the architect can] resolve [the] day-to-day conflicts... ..not only has significant implications for interpersonal relationships especially at work but also has major implications on [an] employees' wellbeing*" (Ayoko 2016:1). None more so when unforeseen deadlines appear on a construction project on site. Amongst group discussions, there has been some bitterness towards another architect within the practice, as they are leading another

scheme on-site and has been viewed as “*constantly leaving deadlines to the last minute*”. In the discussions taken place, a specific example was given amongst the individuals where the architect in question after coming back from a site visit late in the afternoon, two hours before work is finished for the day, has explained to her team that a large set of drawings need to be updated and sent out that very same day. Due to the amount of drawings that was required, both the Part I and Part II were willing to put in the hours to accomplish the feat but it wasn’t until a certain point, that an emotional outburst was brought where the whole team was working very late at night. Specifically, when the architect in question mentioned to the team that they cannot leave until all the drawings were finished. Both the architectural assistants’ “[*willingness and*] *cooperation ... ..to the successful completion of the tasks and willingness to work with [the architect] ... lead to the disruption of the relationship*” (Ayoko 2016:2). There was a complete outburst that they both felt the architect could have evaded the illogical and ill-timed task, since it required many hours of work and not please the contractor with the unrealistic deadline which they agreed on-site. Ultimately this has led to both having expressed an unwillingness to work with the architect in question on that particular project to senior management.

## **2.6 Organizational Change Management**

Within the construction industry, architectural firms regardless of size have remained notoriously stable. Due to the nature of the profession and the rigid internal hierarchy of a practice, organizational changes appear to be enforced when the time is deemed necessary. Dependant on the employee generation, as well as the type of organizational change, it may be met with a certain degree of “*restraining force*” (McShane et al,2008:488), subtle forms of passive non-compliance in order to save face, or even complete surrender to the change due to minimal employee involvement. Currently, due to the nature of the industry’s rapidly evolving methods of construction, the majority of these organizational changes have been via additional construction contracts such as the Intermediate, Minor Works, Major Project, Management and Design and Build contract (Jctltd.co.uk, 2018), or computer program advancements where architectural practices have been ‘forced’ to use, dependant on client needs and requirements. Unfortunately, within architectural practices these decisions take place within a top-tier managerial level with minimal employee communication and predominantly enforced, despite management’s apprehension to adapt, mostly due to efficiency comparisons.

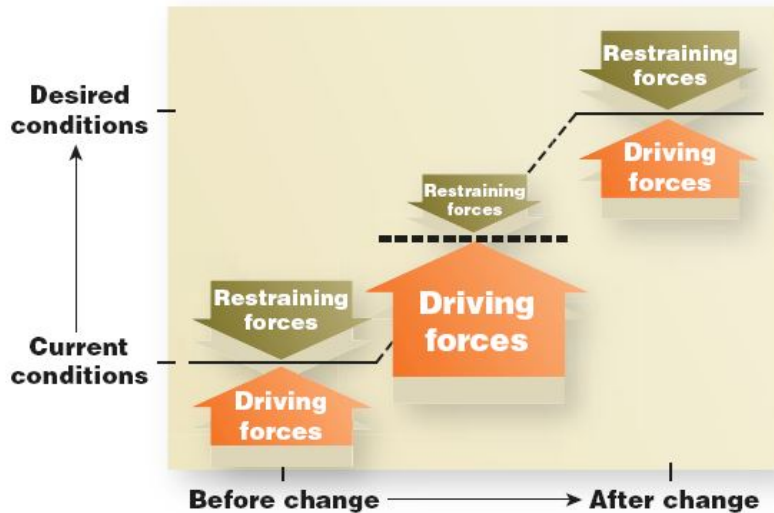


Figure 12 Lewin's Force Field Analysis Model showing how the change process works

Currently in the architectural firm there has been a desire from management to move towards BIM related software so as to “[give way] ... for a new vision and new perspective... [which is] more client and quality driven... and relate ...more strongly to market requirements” (Pries et al,2004:8). In order to do so, upper and middle management saw the benefit of switching software platforms and have even invested in acquiring new personnel who have substantial experience.

Despite “a positive attitude [from all personnel; which is] ... vital in achieving organizational goals and in succeeding [with] change” (Vakola et al 2005:162), there is certain amount of stress that all architects associate as being job-related towards the change. Through conversation, this stress is specific to the amount of work to be produced in a fast pace, especially within the initial RIBA Stages until Tender. Although the recently acquired personnel have proven what is attainable with speed and efficiency, even more so when client presentations are involved, and have also made the remaining employees wanting to be trained towards that there have been instances where the management backtracked in using the prior methodologies as it was already used to their implementation on similar procedures.



Figure 13 Forces Resisting Organizational Change

Throughout the movement as a whole, there were particular elements that were noticed throughout the conversations. One of which being the cost of implementation of the change as the finance director was calculating the figures necessary to implement the change as well as if possible in what stages. Asides from that, the more experience personnel have explained that to a certain extent they downplay their experience with the current BIM Manager so as not bring any friction towards how the implementation is performed but gently ask if other more manageable solutions can be used. This also meant from them that they are careful in the amount of information which they have gained through their experience and asked to divulge to their colleagues so as they do not feel they become obsolete and unnecessary to the firm. Further enhancing this issue of *“trust [within the firm] are also the concepts of scepticism and cynicism”* (Erwin et al. 2010:48) where amongst all personnel, particularly between architect, Part II and Part I architectural assistants, the implementation process is felt to be exceedingly slow despite the number of project being at early design stages. This was felt from a majority as a beneficial starting point of implementation where a more complete picture could be portrayed of the strategies necessary, as well as given examples of a specific modular housing scheme which was implemented upon with the aid of one of the more experienced personnel and how the team in question has performed advantageously to all required deadlines. To further complicate the issue of change, *“the effort made to plan the change in advance”* (Lattuch et al, 2011:608) has also been noticed by all employees to increase in a steady fashion. Where initially it was felt that it was a mere ‘motto’, all employees are in a position now to see when they will be trained accordingly with the requirements of the analogous project placements as well as how the more experienced

personnel are now further enhancing the required documentation and files necessary to make the workflows more seamless throughout design, tender and construction stages of a scheme. Saying that, many have voiced a concern when it was noticed that a number of the newer specialised employees were observed using the older software with perseverance despite their difficulty as management has requested of them to do so.

# Chapter 3

## The Contractor

### 3.1 How to become a contractor in the UK

To become a contractor in the UK, a company must be registered with the government Construction Industry Scheme (CIS). This system was put in place by the UK government to aid contractors' payment systems with subcontractors, due to the complex contracts currently available within the market. The Joint Contracts Tribunal (JCT) Contracts range from the Traditional/Standard, Intermediate Building, Minor Work, Major Project Construction, Design and Build, Management Building, Construction Management, and Repair and Maintenance contracts, to name a few. By far the most common to date has become the Design and Build (D&B) contract procurement route in which the main contractor is appointed to design and construct the works, as opposed to the traditional contract where the client appoints an architect, the architect appoints consultants (with the approval of the client) and then a contractor to construct the works. Asides from the CIS which explains what it deems as construction work. There is not a legislative framework on how to become a building contractor. An individual can form a company as long as they have adequate experience in the sector, adhere to construction safety and health regulations, follow building regulations as well as keep International Organization Standards (ISO) up to date. This may sound simple yet for a contractor, due to the complex nature of building construction to date, there is an array of specialist subcontractors who they may need to appoint during the process of construction in order to get the job done. For them the term "time is money" becomes more apparent as they understand that the faster they get appointed on a contract, the faster they get to build, the sooner they get to finish the project, therefore the sooner they get to be paid. Despite flaws with the ideology, the contractor who agreed to take part in the research towards this thesis, due to their high-profile clients, and the time constraints for their projects, are not afraid to tear down and rebuild elements in order to 'get it right'. For them, this means that their 'blue chip' clients give return business as this means more stable business for them on the long run. More often than not this also means that whoever sent out a construction drawing on-site

get chastised immediately, leading to some dramatic changes in management and how they handle their employees.

### 3.2 Company Information and Structure

The General Contractor firm to be researched is based in London so that it is able to serve their clients' projects within London as well as outside of it. Currently it comprises of twenty-four individuals within its offices, not including their numerous building staff. This comprises of two directors, one architecture manager overseeing all projects, one design manager, one human resource manager, one senior site manager, one tendering and procurement manager, one office manager, two accountants, one site manager, one site general foreman, and the rest concluding with architects, architectural assistant, civil and structural engineers. The tree diagram below shows the company the company structure.

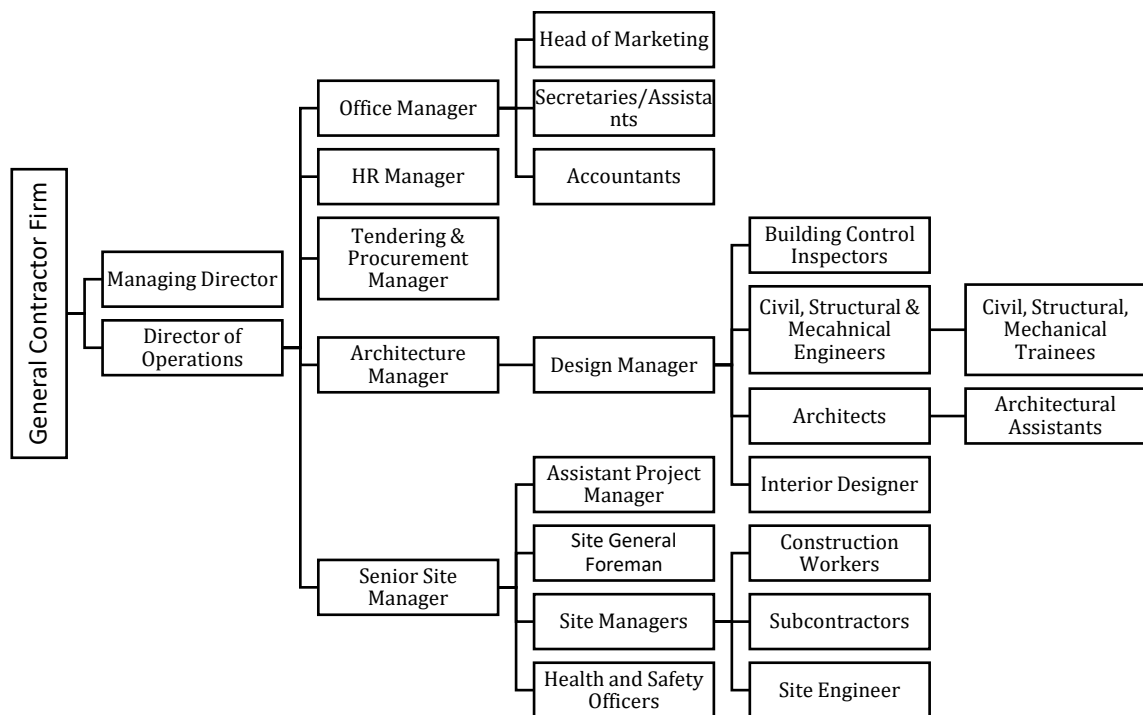


Figure 14: General Contractor Firm Company Structure

Despite what appears to be a complex structure, it is necessary for the smooth communication between all members of the firm. This is especially crucial as all construction drawings prior to going to any construction site need to be approved by the Design Manager followed by the Architecture Manager as they will get built regardless. Therefore, if any construction errors are found which a contractor always wishes to avoid,

they must be rectified on site as swift as possible, but that means time wasted and money spent on errors that could have been avoided. This General Contractor firm in particular, despite being relatively new has fixed itself securely with numerous clients as they base their construction on four specific values. Integrity, Teamwork, Excellence/Quality and Respect. In doing so they managed to steer clear of the general idea currently known from a plethora of contractors that wish to finish the project as soon as possible with the cheapest possible way to maximise profits and move on to the next job. The directors have been adamant in placing trust and reputation above all else when it comes to the construction of any scheme and despite initial hiccups they have encountered from inexperienced individuals, they have noticed a dramatic improvement upon hiring an Architecture Manager to oversee all projects and teams as he has become an integral part of communication between the offices and on-site construction. As a relatively new firm, the projects at the moment being handled are up to ninety million sterling (£90m).

### 3.3 Organizational Culture

Due to the more corporate styling of a contracting firm and the simplicity of their delivery, i.e. they are delivering an end product, in this case a building, then their behaviour becomes simpler within the industry, akin to the simplicity of a factory production line. For the contractor, they have to balance their contractual obligations of delivering the building within time constraints, of adequate quality, within the scope of services as well as within the cost allocated.

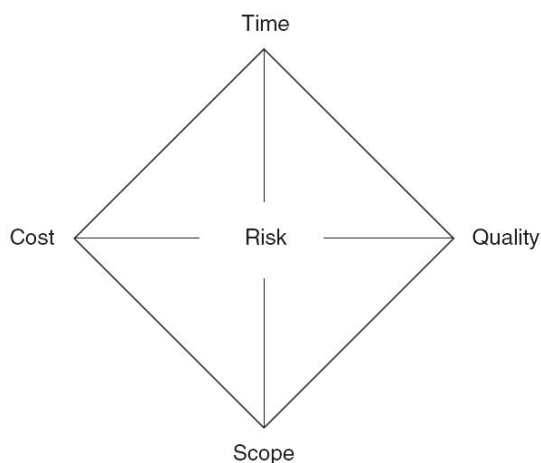


Figure 15: Cartlidge (2005) - Project Constraints

Due to all factors carry a certain risk for the contractor, the JCT D&B contract has been formulated which gives the contractor more control over the project delivery, from tender until handover/completion with added factor of being able to charge extra in doing so. By taking this additional risk, the contractor gains more control over what is delivered at the end of the day but simultaneously gives rise to further organizational culture promotion as all the drawings produced in-house sent to the construction site are being built as per the drawing. Thus, gives rise to the needs of a more robust organisational culture system to be put in place for its employees. Cheung et al. (2011: 41) depicts that organizational culture factors for a contractor within the construction industry fall under seven specific factors. Goal setting, Team orientation, Coordination and integration, Performance emphasis, Innovation orientation, Members' participation, and Reward orientation. Each one can be broken down further into a set of artefacts which can be categorised with further ease.

No.	Organizational culture factors	OC artifacts
1.	Goal settings and accomplishment	<ul style="list-style-type: none"> <li>● Clear goals</li> <li>● Clear approach to succeed</li> <li>● Actions are matched with organization's goals</li> </ul>
2.	Team orientation	<ul style="list-style-type: none"> <li>● Emphasize team contributions</li> <li>● Amicable opinions and ideas exchange</li> <li>● Members' commitment to team</li> </ul>
3.	Coordination and integration	<ul style="list-style-type: none"> <li>● Resolve internal problems effectively</li> <li>● Encourage inter-departmental collaboration</li> <li>● Encourage information sharing</li> </ul>
4.	Performance emphasis	<ul style="list-style-type: none"> <li>● Guidance for performance improvement</li> <li>● Emphasize good performance</li> <li>● Explicit set of performance standards</li> </ul>
5.	Innovation orientation	<ul style="list-style-type: none"> <li>● Accept adventurous ideas for sustaining competitiveness</li> <li>● Welcome alternative solutions</li> <li>● Encourage creative and innovative ideas</li> <li>● Allocate resources for implementing innovative ideas</li> </ul>
6.	Members' participation	<ul style="list-style-type: none"> <li>● Value employees' ideas</li> <li>● Employees' input on major decisions</li> <li>● Employees' participation in decision-making process</li> </ul>
7.	Reward orientation	<ul style="list-style-type: none"> <li>● Emphasize team accountability</li> <li>● Emphasize on reward instead of punishment</li> <li>● Trust atmosphere</li> <li>● Performance-based rewards</li> <li>● Accept criticism and negative feedback</li> <li>● Recognize and reward members' performance</li> <li>● Equitable reward</li> </ul>

Figure 16: Cheung et al (2011) - Seven factors for organizational culture for contractors

Despite the contracting firm being relatively new to the UK market due to its affiliating itself with blue chip clients, it has managed to affix itself with a steady stream of work “for at least the next decade” as explained by the Architecture Manager. Thus, giving a steady stream of income to grow rapidly as a company and acquire the necessary employees to be able to progress. One of the latest employee acquisitions being the Architecture Manager himself, being a qualified architect who now oversees all the construction projects of the firm. Despite contradictory remarks portrayed by Cheung et al. (2011;42) as well as through conversation with the Architecture Manager, as well as having a comparison of workplaces between his previous jobs within architectural practices and the contracting firm a few commonalities are put into place regarding the organizational culture between each entity. The commonalities are as follows, both work excessively long hours under tight time deadlines to achieve a mutual goal. The difference highlighted by the Architecture Manager is the way staff is treated and payed due the higher salaries, as long as you are able to perform otherwise it is noticeable that the employee turnover is very high within contracting firms. Meaning it is more result and performance based than within an architecture firm.

The firm’s management i.e. the directors, know well the stress and hours involved until a project is completed therefore take firm but fair measures to keep staff engaged and happy in the workplace, as well as preparing the next generation of individuals with the adequate knowledge to become their successors. Some engaging factors of team orientation, integration and reward observed to date have been the following, the firm has created a monthly company tab with a neighbouring restaurant offering healthy cuisine for all employee lunches and dinners. Not just for the employers and employees but for their families as well if they so wish to take home food. Additionally, despite the firm being in London, management is aware of all the various locations that their employees currently reside, some of which travel over one and a half hours by public transport to reach the premises. Managements’ solution to this is giving the employees the option of having their travel fully paid yearly or for certain individuals who are required to go back and forth from the office to construction sites, to rent a car for them. In one known circumstance, for a new employee that needed aid in relocating, management stepped in and helped pay the employee’s rent deposit as well as three months upfront rent, resulting in one of the most productive and highly valuable employees to date within the firm. By employing these simple gestures, management has

visibly seen improvement of work production but not communication between the office employees and the construction site employees.

Further improvements with regards to the organisational culture norms and beliefs came into play when the Architectural Manager set up routines within the firm. Prior to this, all drawings were being sent to the construction site managers for construction without prior checking that they are indeed satisfactory under the UK Building Regulations. This led to having building elements being taken down and reconstructed, which also meant time and money being wasted under a very tight schedule. In order to minimise this, all work produced would be checked by the Design Manager, followed by the Architecture Manager in a one to one setting or team based setting, dependant on the work being produced. In doing so, as Wei et al (2017;578) succinctly researched, construction knowledge was systematically managed, transferred and leveraged which subsequently made enormous contributions to project performance. This subsequently created a working ethos for the contracting firm, Wei et al (2017;578), that mentoring is equally important as the same level of work from one of their project architects or civil, structural engineers cannot be produced by a Part 1 or similar understudy. In doing so, this further minimised construction errors and miscommunication on their building sites, which further embraced their firm's organizational culture.

Lastly, an innovative move from management, the Architecture Manager would go on site to each and every construction site, monitoring every element being installed or constructed, whilst where snags or issues arose, would stay as long as it took until the issue would be resolved. Having constant communication with the office personnel as well as a laptop with internet connectivity to the office servers to access specific construction drawings, this has led to resolving site construction hindrances much more rapidly by taking this initiative. The Architecture Manager explained "(that) it is only when you go to the construction site and see things being built that you are able to provide solutions, instead of waiting in the office behind a desk to be explained about the issue over the phone or an email." This move explained by Matinaro et al. (2017;3190) means that bringing innovation within the organisational culture of a construction firm then "*(through this) implementation (brings forth) profound collaboration and communication through the whole organisation*". This radical move brought forth has led to increased collaboration and communication between the office personnel as well the on-site personnel which mutually benefited the construction firm in reducing costly construction errors as well as decrease their construction times on their projects.

### 3.4 Motivation in the Workplace

Despite the construction firm having recently been created, the founding members have gone to great lengths to ensure work “*at the very least or the next ten years*”. Their reasoning behind this, as well as due to their cumulative knowledge concerning the construction sector was that “*unlike architectural offices who offer a service and design, a contractor has only one objective – the final product, the building they have to deliver*”. Therefore, everything else according to them falls with regards to what needs to be done and performed by individuals in the company. All coming down to “*every single drawing that leaves the office premises to go the relevant construction site will get built verbatim, and if there is a mistake, it costs money and time to rectify, and if the client is visiting to ensure we are on track with delivering, it also means we need to save face until we do rectify the issue (unless it is unavoidable like the landslide into a triple basement due to the compounded rain cumulating unforeseen pressures on the temporary basement walls)*”. Management has understood clearly that the goal remains singular, regardless of how many buildings they have to deliver, the goal still remains the same. A mantra of the building must be delivered is unilaterally agreed. For that reason, it was visible with management that there is a clear understanding of the stress involved during construction and have found innovative solutions to motivate their employees. Giving employees flexible working hours as long as the work gets completed, above par salaries, arranging for healthy lunches and dinners for employees and their families being paid for at a nearby restaurant, stating unlimited annual leave as long as the work gets done, paying for all employee travel expenses to-and-fro the office and construction sites, as well as in the case of exceptional employees, paying for relocating them inclusive of three months’ rent and deposit to their tenancy without asking for repayment. Fairly radical solutions for the construction industry which were brought forth from managements prior experiences as “*it is important for contractors to establish a satisfactory working environment... ..as well as implementing practical training... ..leading to improvements in teamwork and efficiency in performing [their] tasks.*” (Cardoso et al. 2015:1202-3).

Managements’ Human Resources Model has recognised effectively, with the combined construction experiences how difficult it can be to succeed in the construction sector and advocate a “the company takes care of you and you take care of the company” mentality in order to further their success with motivating their workforce. Whereby upon querying

upon taking on newcomers, the Architecture Manager explained “simply put we want construction experience, so it proves we can trust you when you go to a construction site and are bombarded by a plethora of queries which haven’t been passed up to the office yet. Therefore, if you do your work well you are secured and you move up the ladder, it’s as simple as that. We are all in this aiming towards one goal, giving a final product to our client, that’s what they are paying us for at the end of the day”. Barg et al (2014:6) as well as the directors of the firm understand that “*[having] more profitable projects and improve [our] management style [can] reduce worker stress and increase motivation... ...[although] fatigue may also be a catalyst for demotivation*”.

To further motivation within the workplace, management has explained that despite the hectic and strenuous environment, efforts are made in training the next generation of Part I’s and II’s as well as M&E trainees under qualified and experienced architects and engineers as a means of Human Resource Development. In other words, “*[since] the construction sector [is] the most dynamic, active and complex [of] industrial environments, ...[and] construction firms [already] face many difficulties in the training and development of their labour and staff, [in order] to help [current and future] employees gain proper knowledge and skills... [and] motivate employees in finding proper ways to satisfy their needs and desires, as each individual has different needs, wants and desires.*” (Tabassi et al. 2009:126-128).

In doing so the Architecture Manager, having given examples of varying employee benefits, he himself has added two additional examples which motivated himself as an employee within the firm which also on a conscious level committed himself within the firm. Firstly being, upon his earlier days when he has started employment, he noticed that the Directors were working past seven in the evening when everyone else had gone home. Upon idle chat in the office the directors simply explained that they want to ensure that they have a multitude of different blue-chip clients from which work is coming in so that to ensure the business is stable long term. The Architecture Manager was impressed by the work ethos the Directors have to which he further commented that on previous jobs the Director would be seen in the open-plan office “to arrive late, play on his iPad until early afternoon then leave for the day”. Secondly, on a more personal note, the Architecture Manager having recently becoming a father had a private discussion with the Directors that he wishes to move back to his home country to raise his family. The Directors on the other hand proposed, as he has shown his effectiveness and productivity in the office that it would be unnecessary as he has a laptop and direct access to all emails

and drawings and programs necessary, and to “just schedule any number of flights necessary back and forth” which the company shall pay, whilst all necessary meetings will be rescheduled when he is in the UK. Both Directors having been impressed by his innovative professionalism and how procedures within the firm have become and continue to streamline alongside their efficiency that are willing to keep a highly-valued member of staff with them. *“The successful implementation of new services and process has become a critical challenge for construction... .. where motivation [being] a multifaceted phenomenon... [has become] the main force through which [an individual can] allocate effort”* (Hartman 2006:169), where it can be observed by the radical solutions proposed by the company directors.

### **3.5 Organizational Conflict**

In contrast with an architectural firm, the contractor with his subcontractors, builders and various other specialised personnel all have one aim. Finish the product to move on to the next product. The product in question being a finalised building. Despite the clarity of purpose within the organisation, conflict is practically a given due to the time-constraints and budget-constraints involved with any construction project as well as the numerous personnel of varying disciplines on a construction site trying to perform their work. In most cases within the contractor firm, the Architectural Manager has noticed that conflict is unavoidable but can be drastically reduced by catching early signs. In certain scenarios where it is unavoidable, when they are visiting construction sites, an impression is given that not all site issues are relayed back to the main offices in order to be handled as the site managers do not wish to speak to any junior personnel any longer and only to management as they are viewed to have the adequate experience to get the proper answers. Upon site visits, there is a form of *“task-focused conflict [about how a task should be completed] ... ..[although] highly stressful and evoking strong responses that lower productive efforts”* (Ellis et al 2008:8).

In more than one circumstance, the Architecture Manager would be seated round a table on one of the on-site container units with all the various parties currently on-site with tempers flaring regarding what does not work at that particular instance, whether it be internal door installations or partitioning or even particular groundworks. Within such heated instances, it was noticed that the methodology of resolving the conflicts remained the same. Allowing the individuals to vent at that given instance to which upon finishing,

the Architecture Manager would resolutely explain, “Now that we’ve let our anger out, let’s resolve this so we move on” and remain on site regardless of the length of time in order to resolve any and all issues. This procedure would repeat itself throughout all construction sites, thus clear communication back to the main offices was also sent across so that all necessary documents and drawings were received promptly on-site after resolving every possible issue thus negating any further escalation of conflict. By doing so, Site Managers and other personnel on site have shown a greater respect and appreciation to the Architecture Manager involving himself within this process. As per the Construction Conflict Management Model (Ellis et al 2008:10) there is a clear recognition between the pre-conflict factors as well as the conflict process itself yet to actually manage conflict within the construction industry through a process of resolution rather than management or prevention or even containment.

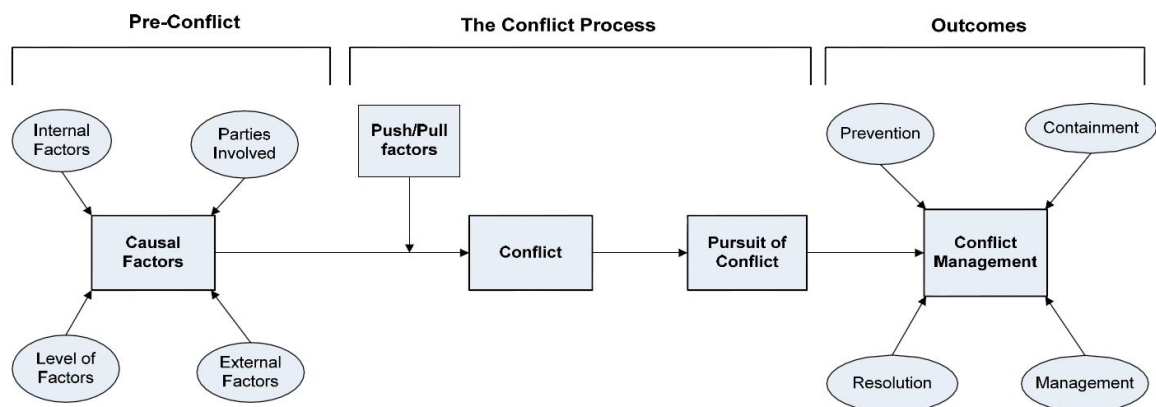


Figure 17 Ellis et al: Construction Conflict Model

Due to “the nature of construction projects, such as complexity and uncertainty... [there will always be] ... human errors” (Wu et al 2017:696) and it is also a facet which brings conflict through various sources and processes inter-organizationally. Yet Task Conflict which “describes disagreements among team members related to the content of their decisions and differences in viewpoints, ideas and opinions about the task” (Wu et al 2017:698) on the basis of trust within a contracting firm is paramount. The singular purpose when hiring personnel is to keep “a well-oiled running machine working as smoothly as possible, with everyone having a particular purpose based on what they are experienced in, that is why they are being hired – to bring in the necessary experience in things” as portrayed by the Architecture Manager. Through this however there was one particular incident where a certain hiring of an experienced architect from abroad – which was already felt as a

gamble, did not perform as was expected. In the particular instance, for a large residential scheme just outside of London, a section 106 agreement is usually created with the local borough. Specifically, this is a contact type agreement between a developer or contractor and a local planning authority about specific measures that must be undertaken in order to reduce the impact of the construction site on the neighbouring community, these are also known as planning obligations in which a contractor may negotiate and discuss their plausibility or even be modified to be more favourable towards developments. In construction despite being thought of as a hindrance, still favoured within all parties as it allows construction to move ahead as planned despite needing to provide additional documentation or schematic drawings to the local council. In the current observed circumstance, the architect in mention had come back from a meeting with the planning council of the local authority with a Section 106. As customary, management must be made aware of these as it requires additional resources to provide the required documentation to the council. The Architecture Manager asked directly, if the architect is able to complete the task as well as all other required elements for the project, to which he was told *“not to worry and everything is under control”* with a cheerful disposition. Under normal circumstances within the construction industry, this is perceived as a sign that the individual has everything under control and should the need arise they will ask for more help in order to accomplish what is required, due to the amount of experience within the field. Just over a month later, upon another visit, upon querying the subject (as these can be onerous to complete) it was explained that they had to *“let her go”*. The reasons behind this was due to the fact that nothing from the section 106 agreement was completed and handed to the council as per their requirements despite the employee's objections that the work was done. In due course upon asking where the relevant work is situated upon the server so they may view that it has indeed been completed and sent, the employee was unable to show anything. To which the employee began to explain that she wasn't sure what it was required to give to the council. This appeared to be a difficult situation for both management and colleagues which had to rush to give the required paperwork and documents to the council so that construction would proceed as normally planned for the site, yet simultaneously amongst all positions it was felt that trust is very important to reduce the amount of unnecessary conflict that may be created. Due to this, currently within the firm a single question/answer basis has been implemented, *“Do you know how to do it? If not then we need to find someone else so we can continue with work”* in a simple yes or no fashion. Having implemented this simple procedure management

and employees have found that it alleviated many conflicts that may have arisen if the work would have previously been asked to be performed by an individual deemed as knowledgeable. However, this has been noticed that certain individuals with more knowledge are performing at far greater lengths than others. Another area which management has noticed and additionally compensated accordingly due to their efforts.

### **3.6 Organizational Change Management**

In comparative retrospect, the contracting firm despite being newly created, has found that a certain amount of change as a form of calculated risk would be necessary for them. For that reason, the directors of the firm, despite having qualified personnel, not all had the analogous site experience. Therefore, to begin implementing their strategy, a person with that particular experience was deemed necessary to bring about a level of change into the firm as effectively as possible, and for that reason an architect was sought. The Architecture Manager comparatively, divulged that change within the firm is not easy within a building contracting firm. Despite his young age, due to the nature of the UK construction industry, it is fairly easy to collate vast amounts of experience quickly, yet when taking up the role of the AM within the firm, the majority of current employees did not initially recognise the management position, until a companywide email from upper management was sent to introduce the new AM. As a *“young employee with more years of work experience... [and] being at a higher position within the organizational hierarchy [he had to] to be involved [more heavily] in the actual planning of change efforts”* (Lattuch et al, 2011:619). However, what has been observed in practice is change to be of more radical nature due to on-site found errors which needed to be rectified, which meant that additional money was going to be spent for rectification. Where the AM was not recognised for his position within the firm initially, it was not until a site visit with a client to a large mixed use development scheme where it was noticed that all the stairs for one of the apartment complex cores were not of appropriate building standard regulations. More specifically as per Part K (Gov.co.uk, 2018:Part K) the design was of a private stair and not a general access stair. Being with the client at that instance, the AM assured that the measurements were due to the materials of the stair not being in place to acquire exact measurements, however upon coming back to the office it was later found that all drawings to date were being sent to the construction site without prior checking of compliance with building regulations. As a radical change, due to a ‘sense of urgency’, all drawings were required to

be sent through the Design Manager for cross-checking and through the Architecture Manager for final approval before being sent to the construction sites.

- Step 1. Establishing a sense of urgency
- Step 2. Creating a guiding coalition
- Step 3. Developing a vision and strategy
- Step 4. Communicating the change vision
- Step 5. Empowering broad-based action
- Step 6. Generating short-term wins
- Step 7. Consolidating gains and producing more change
- Step 8. Anchoring new approaches in the culture

*Figure 18 Kotter's Eight Steps to successful change*

Through this 'adventure' as the AM politely describes, he further went "*to identifying the causes of [the firm's] failures... ..and attempted to identify factors or steps [which could] be taken to bring about [additional] successful change*" (Burnes, 2003:631). One such recommendation he brought forward to management to minimise costly construction errors was to implement software that he himself knew, a variant of BIM software. His reasons as well as the presentation which was put together for the Directors was that by using such software they would be able to reduce costly mistakes on site as they would be easily identified within the office and rectified. In tandem, the production of necessary drawings for the projects would be much faster due to using such software which would improve the overall company's performance in the short and long term. However, the Directors explained to him, "things work just fine for now, maybe in the future it can reviewed again". The AM later explained to me, as this was a private meeting, that it wasn't a case of direct cost regarding the change. Rather a case of complacency as it would mean that it would break routine that the majority are familiar with as well there was no reason for the change to be brought forth at the current period. It is worth stating as well, upon further observation, the relationship between the AM and the directors, despite superiority, have a an additional friendly out-of-the-office demeanour between all three where they can discuss more openly without prohibition on numerous of their office matters. Confiding however the AM, did explain "the way the Directors work is, if it works then it's fine, if it hasn't been asked for then we don't need to do extra work than we already have, thus only when something really bad happens with regard to these issues will the begin considering the alternative solutions that have been provided".

# Chapter 4

## Comparative Analysis

### 4.1 Comparative Analysis of Organizational Culture

Despite the differences in hierarchy and corporate styling between the architectural and contracting firm, as well as the difference between what they deliver, one of a type of service and consultation while the latter purely concerned with the product, striking differences have been observed.

In the more empathic work environment of the architectural office, there is a clear distinction between the visible spectrum of their organizational culture which the firm-wide director makes clear as a starting point, with their 'Future's' wall. This provides the basis of the organizational language the office uses, the motto "We are architects that leave the place better than we found it" resounding throughout all projects regardless of stages as the daily or weekly rituals or 'design reviews performed allow younger personnel to portray their design intent to the architects, associates and directors who can guide them with the intricacies of building regulations and construction in providing an architectural design fit for purpose for the project. Within this informal manner the daily, weekly, monthly rituals of having a beer on a Friday afternoon or office lunch that goes for more than an hour or even the everyday problem solving conversations of "I don't know how to do this, can you help me?" to brain storm the best methods of showing what is necessary and required on drawings brings together the office as a whole.

Whilst the product-focused orientation of the contractor emphasizes through their culture that we deliver a product to the client takes different measures in attempting to create their culture. Where similarity begins and ends is the manner of imbuing a sense of visible artefacts within the firm which follows in producing the invisible shared values and assumptions for their employees. Through their simplistic directness of goal setting (provide a building to the client), team orientation for that goal, as well as performance and reward goals in their hectically stressful environment. Allowing full flexible work hours, flexible days annual leave and above average pay as well as payed lunch and dinner

for all personnel and their families, combined with the teamwork ethos of problem solving a construction element appears to bring together their company culture.

In a strikingly different manner both firms aim to provide a culture within them. Where in one scenario the architecture firm brings more intellectual stimulus due to the broad scope of the services able to provide to clients whilst in the other. The contractor having a singular aim provides rewards which can bring together the employees of the firm as a family working towards the one singular purpose of providing 'that' building to the client

## **4.2 Comparative Analysis of Motivation in the Workplace**

Both firms take interesting actions towards motivation. Most notably observed is the difference between an intrinsic model of motivation and an extrinsic model.

What this means is where the architectural firm takes upon itself to adhere strictly to government guidelines regarding working hours, annual leave, salary guides as per standards provisioned by the RIBA, but through their empathic nature within the office, aim to bring an internal motivation from each employee for their work. A sense of pride where the employee feels as if they take ownership of the drawings and designs they produce with guidance from upper management towards building standards and regulations which they may not be aware of yet. This does not mean however that all is well. As per the examples provided however, despite the above being an almost constant area of discussion, there still remains an empathy towards understanding the current range of projects in the office to date and how management are pursuing further clientele for the office. Not to mention the same curiousness, despite the later stage projects using the older software, how they as employees can improve with regards to how drawing can be produced to further enhance their own capabilities.

Within the contracting firm, their extrinsic approach to motivating their workforce also proves to be an effective means for them as they recognise that they are working towards one goal. Therefore, with that one goal in mind, without hindrances of uncertainty of design changes or consultant advice at design stages prior to planning or tendering, it makes their way of working much simpler. All personnel know what they will be working until further notified by management or project completion. Thus giving emphasis to external rewards towards the employees knowing that the work is stressful and providing

some means of reducing that level of stress with a what appears to be a reasoning of “our work is already difficult as it is, we need to make our lives easier on other areas where possible.

The one element between the two which may also be a factor affecting the responses of the personnel, would be particularly in the architecture office, the majority of personnel, with the exception of the managerial levels, are of Portuguese, Italian or Spanish descent, who have either recently moved to London for work due to their home country’s conditions.

### **4.3 Comparative Analysis of Organizational Conflict**

It is recognisable that in both the architecture and contracting realm, conflict is unavoidable in the sense that is almost a part of the construction process, due to the amount of people of various disciplines and professions working on any project at any given moment. The area of difference however is where the amount of risk has been ‘moved’ from the architect, who by contract law must remain as an impartial party, towards the contractor as per the Design and Build Contracts currently produced within the industry. In doing so the contractor having this additional risk also has additional responsibilities to perform as per clients’ expectations.

In doing so that architect side of conflict gives the impression that time management with the personnel handling is more of concern which brings rise to internal conflict, as in the demands of the late working deadlines, yet simultaneously a clear discussion with management would seem to more appropriate. Where in other cases, the method of handling potential conflict also appears to depend on the level of experience of the personnel involved and being in a position to explain to individuals’ methods of resolving issues practically, albeit in a manner giving the employee a direction for deciding for themselves.

The contractor however, understandably being under stress as well also appears to facilitate time in the totality of the conflict but appears more task focused as the only thought being the finalisation of construction. In doing so, having the various disciplines of plumbers, bricklayers, scaffolders, to name a few, on site, on time, on budget, to install within the given time frames of their contract, dependant if another person has finished the specific portion of work to be able to proceed is a recipe for conflict. Solely due to the ‘time is money’ mantra, therefore the current methodology of handling conflict by the AM,

although very new would not have been able to succeed unless a person had enough experience as well as an adequately senior level in order to accomplish this.

In both cases, time is a factor which compensates conflict yet one further factor also distinguishes. The level of communication also differs vastly, where the contractor needs a solution when a problem is found and voices it to all parties involved and the architect who communicates work without the thought of time allocation to resources.

## **4.4 Comparative Analysis of Organizational Change Management**

Intriguingly in both cases, the architecture firm appears to have taken more initiative in proceeding with change than the contractor, certain changes are viewed beneficial to the work environment as a whole.

Where discrepancies lie within the whole organisational change management begin when the architecture firm gave the impression to the newly acquired personnel that they must divulge all their experience towards their colleagues and are in a state of what appears to be the minimum possible amount of information given so as to assure themselves they keep their jobs. Despite this, again there is an air of empathy and acceptance, that all personnel will moving forward with change and are willing to the change implemented when the next project arrives so it begins with cleanly and succinctly. Although, the issue of the experienced personnel, with relation to the BIM Manager still remains to be resolved, despite their effectiveness in their job duties.

In the case of the contractor however, it appears to be more a case of the saying 'if it isn't broke, why fix it' scenario. Where immediate rectification issues have been observed as in the case of the improperly designed stairs, having been able to rectify the issue in sufficient time whilst implementing a precautionary measure prior to drawings being sent to a construction site was deemed suitable enough. However, in the case of changing software for reducing construction times and costs and increasing efficiency, at the moment was not deemed beneficial as all systems appear to run smoothly. A further case in point where both upper management and employees appear not to bother with progress as long as the work is able to get done and change will be of immediate effect if and when a calamity happens.

# Chapter 5

## Conclusion

### 5.1 Culmination of findings

What is discernibly visible between both the architectural firm and the contractor firm boils down to one specific element. On the one hand, the architecture firm which provides a service and the other where the contractor provides a product. In cases such as this, it is easier to discern fees when it comes down to pricing a product as it is a tangible, visible, physical element, with cost figures aligned to it. However, in both firms, there is an impression of an organizational management strategy, albeit very different between the two.

What becomes visible throughout is that empathy will only last a specific time frame before the person, regardless of position moves on to the next job, where there is always a case of increasing salary, additional benefits and annual leave. To date between the two firms, it appears that the contracting firm, being able to provide better salaries, and additional benefits to their employees has been able to produce greater results through their work output. On the other hand, the architectural firm, as it appears to keep to stringent government standards as well as an RIBA guide to salaries, has personnel which give the impression, to date, to be motivated enough to do an adequate amount of work but no more or less.

	Low / per annum	Middle / per annum	Upper / per annum
Architectural Assistant (Part 1)	£18,000.00	£20,000.00	£22,000.00
Architectural Assistant (Part 2)	£24,000.00	£30,000.00	£36,000.00
Part 3 Architect / 1-2 years experience	£30,000.00	£35,000.00	£40,000.00
Part 3 Architect / 3-5 years experience	£38,000.00	£42,000.00	£48,000.00
Part 3 Architect / 6-10 years experience	£48,000.00	£50,000.00	£55,000.00
Technician / 1-3 years experience	£23,000.00	£27,500.00	£32,000.00
Technician / 4-6 years experience	£28,000.00	£34,000.00	£40,000.00
Technician / 6-10 years experience	£38,000.00	£42,500.00	£50,000.00
Associate	£55,000.00	£60,000.00	£70,000.00
Project Director	£50,000.00	£55,000.00	£75,000.00
Director	£55,000.00	£75,000.00	£95,000.00
Partner	£70,000.00	£90,000.00	£120,000.00
Technologist / 1-2 years experience	£26,000.00	£30,000.00	£35,000.00
Technologist / 3-5 years experience	£30,000.00	£35,000.00	£45,000.00
Technologist / 6-10 years experience	£38,000.00	£48,000.00	£60,000.00

*Figure 19 RIBA Appointments Salary Guide*

There almost appears to be a catch-22 situation whereby the it appears that the younger personnel wanting to move up and gain further experience to move forward are on a slower track, in tandem to the reduced salaries as per current research portrayed in the annex, and the contractors who seek younger personnel with more drive yet the analogous experience. In order to move forward however, employees which are not of ay management level have to partake in numerous years of various projects to gain that experience and by the end, they have reached a dilemma where they may begin as an associate within an architectural firm and concrete themselves in a position until moving further up or being in a position to catch opportunities inside and outside the firms they work with to progress and gain their experience to be able to make the next step. Most notably throughout the conversations which leads to the two specific areas of salary and annual leave, is the acquisition of their own property. More succinctly the employees themselves expressing and comparing their positions with a known acquaintance of similar age being in the financial sector, who have managed to save and buy a property of their own, yet they are unable to rent a property on their own but in actual fact rent a room with other co-renters.

Despite the 'moaning' of the employees within the architecture practice, they are however happy with their work because they feel they have that freedom of expression and understanding that once they get past the initial design stage and acquire planning permission, then slowly they begin to add on their experience with technical design as

well as site experience. All of which gives them an amount of pleasure seeing a design which was on paper initially slowly progressing into a constructed building.

## **5.2 Further research**

Despite the culminations and findings so far between the current two companies, there are remaining quite a few areas of research that could be further emphasized and analysed.

Each independent area of culture, motivation, conflict and change management could be further research independently to produce substantially more findings as well as including a wider scope of architectural practices within the UK.

In addition to that, further beneficial areas that could aid the research into 'now-called' Architecture Management could be on stress and stress management on an individual level.

Where upon a team level, it would be research on team dynamics and high performance teams, communication within teams as well as the power and influence within the workplace.

On another note, despite the wide range of racial ethnicities current in the architecture office, it must be noted that in confidential conversations with members of other practices that they are more open to discussing about salaries and how their managers and directors perform towards their personnel, thus bringing reason to believe that due to the large number of Italian, Spanish and Portuguese personnel who have emigrated to the UK for, possibly, better working conditions that there is a sense of pleasing management despite a lower salary as they are not aware of their current worth within the market.

So that would mean a further study between the different racial ethnicities is also a possibility on how all the above factors are viewed upon.

While lastly, given the only access to a single contracting firm who have acquired personnel from architectural practices, it would also be worth additional research into the personnel themselves after they have made the jump to contractor-client side, after a certain time period of six months, a year, two years and five years. In order to also achieve a baseline standard and average of the psychology and methodological thinking after architects have spent certain periods of time in the client-contractor side.

## 5.3 Solution Proposition

Throughout all this, a proposed solution for the architectural industry would be divided into two areas. The first area being of salary and the second of overall Architectural Management behaviour in terms of benefits towards their employees.

In terms of salaries, as stipulated throughout the few journals available to date, which have researched architects, as well as through architectural journals, it has shown that from the UK's recession, architects have dropped their fees and salaries to accommodate the change, yet as the recession ended they have remained at a low state and have not been brought up again gradually. Management should endeavour to, at its current stage, after a certain allocated time frame, to provide increases in salary not because they can. Contrarily because if they wish to keep to date the highly trained and specialised staff they have recently acquired, as well as training all staff towards a better direction, that means they would also be in a stronger position to place higher fees towards bidding for work under the conditions that due to the specified software that the market currently requires as a golden standard, that means that they can assure clients that the work would be cheaper in the total life cycle of the project as well as faster to construct with a large reduction of costly mistakes on site. In doing so, then the firm has set itself firmly within the market as a strong contender who can provide a sense of trust and respect towards what is required from them instead.

In tandem, while it is considerate safe to adopt the Government minimum standards at which it can provide a safety net for a firm providing these. To date from the current articles researched within this thesis, it has been suggested that firms need to be able to provide a more fluid approach to the benefits that they can provide to their employees. Whereby twenty years ago, a company lunch would suffice and then everybody would continue work, the economy of today's market needs to provide a better approach. This is where the examples of how the contractor can deal with such scenarios becomes effective. Whereby, even reducing the amount of work hours per day to seven instead of eight, an architectural employee would still probably work that much regardless due to the amount of work necessary to do on a project at any given moment. Whilst providing an employee with a greater range of benefits that the company can provide such as paid yearly travel or an increase from the minimum twenty day to thirty-day annual leave, then these elements would compound the performance that the employee would provide back to the firm. That being due to the positive psychological effect that it can create

Overall, there is an understanding that Architectural Management in its current state cannot progress by passion alone. It would require to pick up multiple components such as salaries, annual leave, and benefits in order to begin retaining talented staff and regaining control from the shift in the construction industry towards a contractor led environment which aims on a more standardised focus of building for profits sake and to be able to provide something more than just the required. Something better for the not just the people using the building but also the surrounding environment in the present as well as the future.

To do that unfortunately, it seems that architecture companies need to be able to retain their staff before they make the jump to client-contractor side purely based on economical reasons.

## 1.1.1 Example of PEDR Record

**RIBA** Royal Institute of British Architects  
66 Portland Place, London, W1B 1AD

### Professional Experience and Development Overview

## Nicholas Theodorou

#### Academic Record (Draft Copy)

Part 1 School: London South Bank  
Date of commencing architectural course: 25/09/2007  
Date of passing Part 1: 17/06/2009  
School where part 2 exam taken: London South Bank University  
Date of passing Part 2: 17/07/2012

#### Summary of Work Stages (Draft Copy)

#### Hours recorded against Work Stages in post-August 2011 Quarterly Records

##### 2007 RIBA Plan of Work

Work Stages	Stage 1 hours			Stage 2 hours		
	UK	EEA/loM/CI	Overseas	UK	EEA/loM/CI	Overseas
A-B Preparation	0	0	0	117.5	0	0
C-E Design	0	0	0	717.35	0	0
F-H Pre-Construction	0	0	0	62.5	0	0
J-K Construction	0	0	0	911.5	0	0
L Use	0	0	0	33	0	0
Additional project work stages	0	0	0	0	0	0
<b>Totals (in hours):</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1841.85</b>	<b>0</b>	<b>0</b>

##### 2013 RIBA Plan of Work

Work Stages	Stage 1 hours			Stage 2 hours		
	UK	EEA/loM/CI	Overseas	UK	EEA/loM/CI	Overseas
0 Strategic Definition	0	0	0	7	0	0
1 Preparation and Brief	0	0	0	85	0	0
2 Concept Design	0	0	0	823.75	0	0
3 Developed Design	0	0	0	494	0	0
4 Technical Design	0	0	0	299.75	0	0
5 Construction	0	0	0	594.25	0	0
6 Handover and Close Out	0	0	0	73.5	0	0
7 In Use	0	0	0	29	0	0
Additional project work stages	0	0	0	0	0	0
<b>Totals (in hours):</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2406.25</b>	<b>0</b>	<b>0</b>

#### Activities

	Stage 1 hours			Stage 2 hours		
	UK	EEA/loM/CI	Overseas	UK	EEA/loM/CI	Overseas
Office Management	0	0	0	497.25	0	0
General Activities	0	0	0	345.95	0	0

**Total Stage 1 hours: 0**

Nicholas Theodorou's Overview

---

Total Stage 2 hours: 5091.3

## Nicholas Theodorou's Overview

---

### ***Summary of Professional Experience (Draft Copy)***

**Experience Category:** i Experience of architectural practice in the UK, EEA, Channel Islands or Isle of Man, under the direct supervision of an architect either registered with the Architects Registration Board or registered within the territory where the experience is being undertaken

**Placement Provider:** Farrell and Clark LLP

**Placement Address:** Tudor House 35 Gresse Street London W1T 1QY

**Dates:** 01/01/2013 - 31/12/2014

**Duration:** 24 months

**Total duration of stage 1 professional experience:** 0 months

**Total duration of stage 2 professional experience:** 24 months

## 1.1.2 The Architects Code: Standards of Professional Conduct and Practice

### The Architects Code: Standards of Professional Conduct and Practice

As an architect you are expected to:

1. Be honest and act with integrity
2. Be competent
3. Promote your services honestly and responsibly
4. Manage your business competently
5. Consider the wider impact of your work
6. Carry out your work faithfully and conscientiously
7. Be trustworthy and look after your clients' money properly
8. Have appropriate insurance arrangements
9. Maintain the reputation of architects
10. Deal with disputes or complaints appropriately
11. Co-operate with regulatory requirements and investigations
12. Have respect for others

## 1.1.3 RIBA Code of Professional Conduct

### The Royal Institute's Values

Honesty, integrity and competency, as well as concern for others and for the environment, are the foundations of the Royal Institute's three principles of professional conduct set out below. All members of the Royal Institute are required to comply.

#### The Three Principles

##### Principle 1: Integrity

*Members shall act with honesty and integrity at all times.*

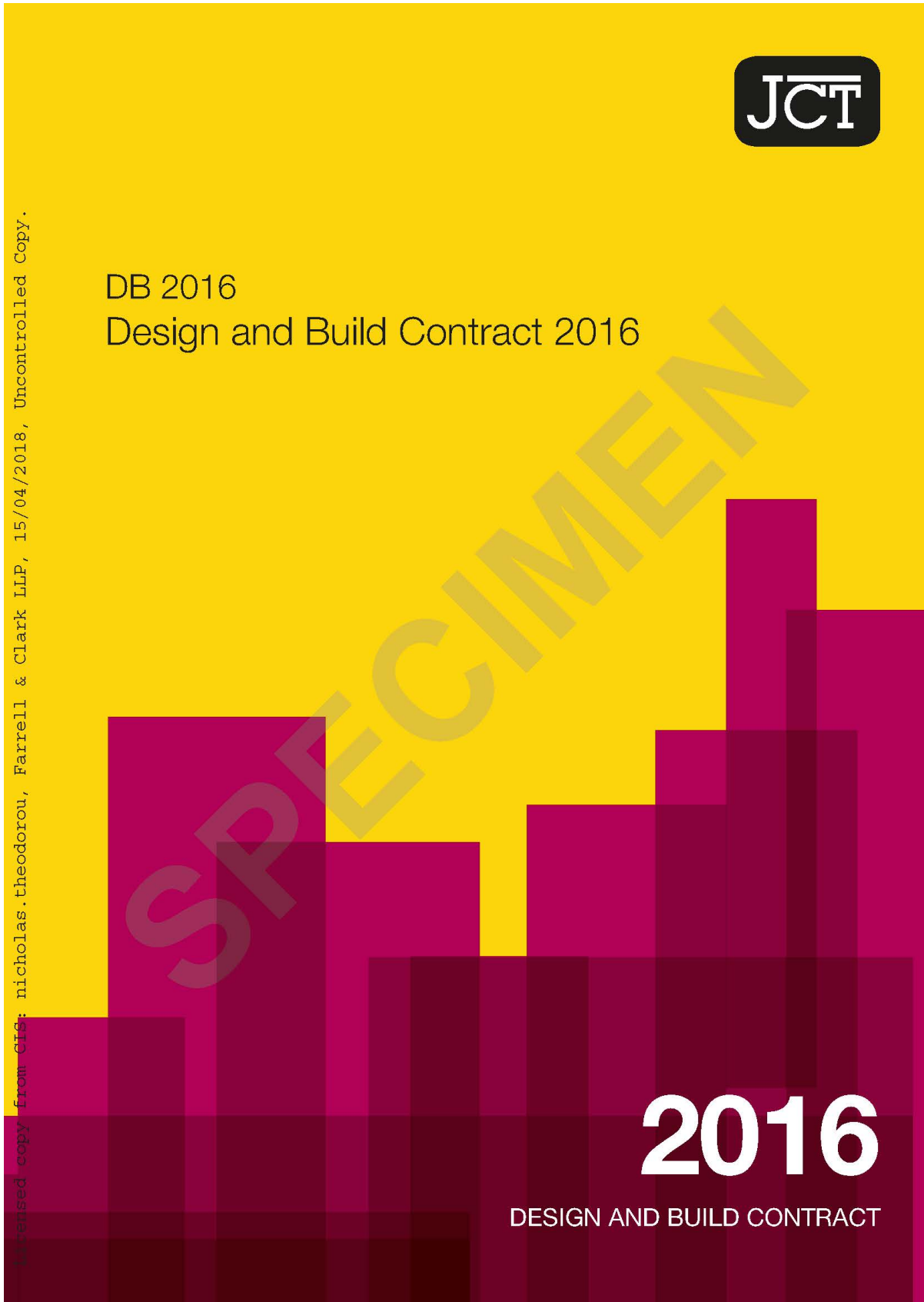
##### Principle 2: Competence

*In the performance of their work Members shall act competently, conscientiously and responsibly. Members must be able to provide the knowledge, the ability and the financial and technical resources appropriate for their work.*

##### Principle 3: Relationships

*Members shall respect the relevant rights and interests of others.*

### 1.1.4 JCT Design and Build Contract Example



### **Design and Build Contract (DB)**

Appropriate:

- where detailed contract provisions are necessary and Employer's Requirements have been prepared and provided to the Contractor;
- where the Contractor is not only to carry out and complete the works, but also to complete the design; and
- where the Employer employs an agent (who may be an external consultant or employee) to administer the conditions.

Can be used:

- where the works are to be carried out in sections;
- by both private and local authority employers.

Where the Contractor's design responsibility is restricted to discrete parts of the works and he is not responsible for completing the design for the whole works, consideration should be given to using one of the JCT contracts that provide for the employment of an Architect/Contract Administrator and limited design input by the Contractor.

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For details of 2016 Edition changes, see the Design and Build Contract Guide (DB/G) and the Tracked Change Document.

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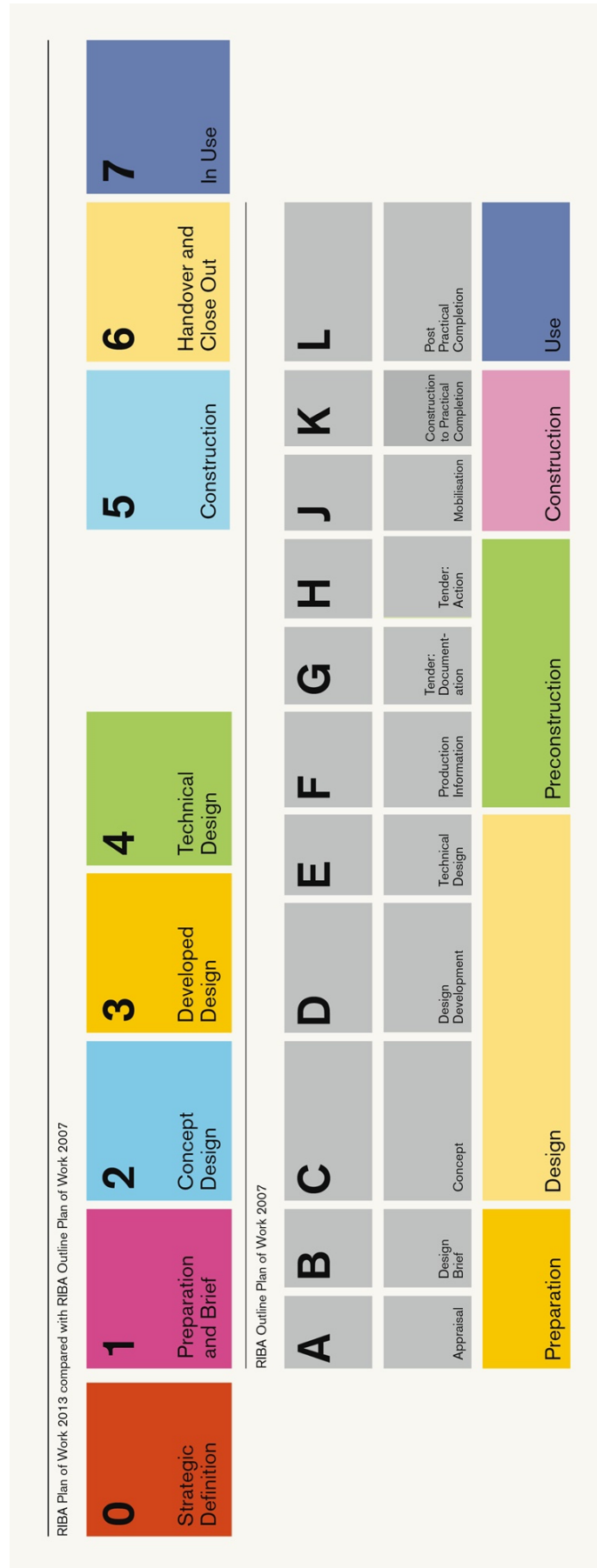
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4.16	Rules on treatment of Retention				



## 1.1.5 RIBA Plan of Work 2013



## 1.1.6 Oyedele's Architectural Motivation Attributes

MA	Motivational attributes	Motivational theories
MA1	Realistic project time	Locke and Latham, Adams Equity Theories
MA2	Low workload and pressure	Adams Equity Theory
MA3*	Realistic project goals and expectations from organisation	Locke and Latham Theory
MA4*	Minimal design changes or variation	Adams Equity, Herzberg's Motivation-hygiene
MA5	Project efforts/contributions as opportunity for career development	Vroom's Expectancy, All Content Theories
MA6*	Adequate resources for completion of project (software, computers etc.)	All Content Theories
MA7*	Adequate freedom and tolerance in completing project work	All Content Theories
MA8	Little or no distractions in completing project work	All Content Theories
MA9*	Appropriate evaluation and feedback mechanisms on project	Adams Equity Theory
MA10	Good physical working environment for completion of project	All Content Theories
MA11*	Project tasks and duties matched individual skills and interests	All Content Theories
MA12*	Project provides a challenging atmosphere	Herzberg's Motivation-Hygiene Theory
MA13	Good co-ordination within design team	All Content Theories
MA14*	Good communication within design team	All Content Theories
MA15*	Harmonious working relationship within design team and co-workers	All Content Theories
MA16*	Effective organisational structure for project tasks	Herzberg's Motivation-Hygiene Theory
MA17	Good project commitment from design team members	Herzberg's Motivation-Hygiene Theory
MA18*	Clear project planning and definition	Herzberg's Motivation-Hygiene, Locke and Latham
MA19*	Recognition of individual contributions and efforts	Adams Equity, All Content Theories
MA20*	Open interaction between superiors and subordinates	All Content Theories
MA21	Adequate supervisory support and encouragement on project	Herzberg's Motivation-Hygiene Theory
MA22*	Adequate competencies within design team	Herzberg's Motivation-Hygiene Theory
MA23*	Realistic project demands and expectations from client	Locke and Latham Theory
MA24	Adequate involvement in project decision making	Adams Equity, All Content Theories
MA25*	Appropriate incentives and rewards for project efforts/contribution	Adams Equity, All Content and Vroom Expectancy
MA26*	Compatibility of design decisions with project objectives	Herzberg's Motivation-Hygiene Theory
MA27*	Liveliness of office environment	All Content Theories

(continued)

MA	Motivational attributes	Motivational theories
MA28*	Satisfactory organisational concern about employees' safety and welfare	All Content Theories
MA29*	Satisfactory organisational commitment to employees' career development	All Content Theories
MA30*	Organisation's equity in management of all employees	Adams Equity Theory
MA31*	Project efforts/contributions lead to employees' retention and firm's survival	Vroom's Expectancy theory
MA32	High valence by employees on organisation's rewards and incentives	Vroom's Expectancy theory
MA33	Good organisational policies for effective project completion	Herzberg's Motivation-Hygiene Theory

### 1.1.7 Barg et al. (2014:5) Prioritised Motivational Factors in the AEC Industry

	Motivational factors	Applicable theory
1	Bonus or rewards	ET, HT, RT
2	Amount of salary	ET, EQT, RT
3	Friendliness and helpfulness of the coworkers	ET, HT, MT, AT
4	Amount of freedom in your work	ET, MT, AT
5	Chance for getting a promotion	ET, RT, HT
6	Chances to learn new things	ET, HT
7	Respect receive from the coworkers & supervisors	ET, MT, AT
8	Opportunity for challenging work	ET, EQT, HT
9	Tools and equipment	ET, EQT
10	Chances to accomplish something worth	ET, MT, RT, HT, AT
11	Chances to do the things which you do best and like most	ET, RT, HT
12	Type of physical surroundings (washrooms, lunch rooms, etc.)	ET, EQT, HT
13	Team to work with	ET, MT, EQT, AT
14	Supervisor's understanding of the quality and technical details	ET, EQT, HT
15	Supervisor's direction and support	ET, EQT, HT
16	Safety procedures in site	ET, MT, EQT, HT, AT
17	Chances to take part in decision making	ET, MT, HT, AT
18	Opportunities to develop skills and abilities	ET, HT
19	Job security	ET, MT, EQT, HT, AT
20	Opportunity to work entire period in site before moving to a new one	ET, EQT, RT
21	Seeing the ultimate results of work	ET, MT, HT, AT
22	Supervisor's positive feedback after successfully completing a task	ET, MT, RT, HT, AT
23	Holidays and free time (lunch and coffee breaks) during work	ET, RT, HT, EQT

Where Maslow Theory (MT), Alderfer's Theory (AT), Ex-pectancy Theory (ET), Reinforcement Theory (RT), Equity Theory (EQT), Herzberg's Theory (HT).

## 1.1.8 Section 106 Example Documentation

**DATED**

**2014**

---

**THE GREATER LONDON AUTHORITY**

**- and -**

**THE MAYOR AND BURGESSES OF THE  
LONDON BOROUGH OF ISLINGTON**

**- and -**

**BH (CITY FORUM) LIMITED**

---

**PLANNING OBLIGATION BY DEED UNDER  
SECTION 106 OF THE TOWN AND COUNTRY  
PLANNING ACT 1990**

**in respect of**

**CITY FORUM SITE  
250 CITY ROAD  
ISLINGTON  
EC1V 2PU**

**LBI PLANNING APPLICATION REFERENCE  
P2013/1089/FUL**

**GLA PLANNING APPLICATION REFERENCE  
D&P/2234a**

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## 1.1.9 Architects' Journal – Want to earn more? Go Client-Side

5/17/2018

Want to earn more? Go client-side | News | Architects Journal



### Want to earn more? Go client-side

27 October, 2016 By Colin Marrs, [Richard Waite](#)



**NEWS ANALYSIS:** A shocking new survey reveals just how depressed salaries in private practice are – and which sectors command the highest pay packets

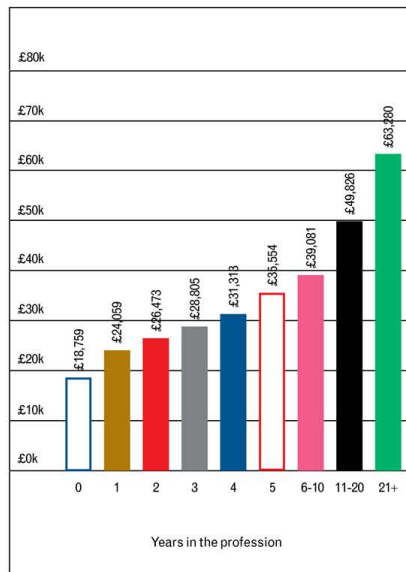
The AJ can exclusively reveal the findings of a major new survey into architects' salaries, showing how poorly the profession is paid – particularly outside London.

The research, which was carried out by recruitment firm [9B Careers](#), suggests that architects in search of higher pay packets – especially those employed at senior levels – should look beyond traditional architectural practice.

Those in the profession who remain in private practice for more than 11 years can expect their salaries to peak, on average, at £53,000.

Such an architect can earn roughly £20,000 more working for a developer and a staggering £30,000 extra if employed client-side.

Architects with this level of experience working in government hit an even lower pay ceiling than those in private practice, earning an average of £49,833 – scant reward compared with the £84,800 architects earned in-house with clients.



### Salary survey graphs salaries by years of experience

#### Salaries by years of experience

##### [zoom in](#) [zoom out](#)

Matthew Turner, founder of careers advisory service [buildingonarchitecture.com](#) and the AJ's career coach says: 'It makes sense that the range of career options for architects has expanded beyond working in a small business run by other architects, given the changes in how the construction industry commissions design work over the past decades.'

'The salary difference is perhaps explained by the level at which architects slot into the pay grades of other types of organisation. Working client-side takes a certain kind of architect, but these figures show that this can be a canny choice financially.'

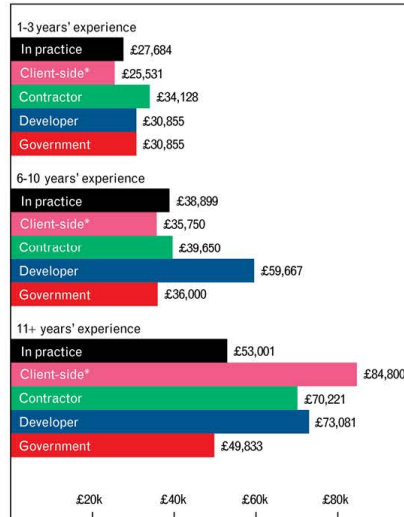
Since the recession, architects have dropped their fees and did not ramp up when they got busier

Property and architectural business consultant Lucy Mori says the findings make for 'depressing reading' and 'added weight' to the concerns of the future of the profession.

She also believes the underwhelming pay packets for those in practice are a result, in part, of the failure of architects' fees to bounce back to the levels seen before the economic crash.

Mori says: 'Since the recession, architects have dropped their fees and did not ramp up when they got busier and the economy picked up.'

'Developers and contractors think architects are "cheap as chips" and now expect no more than 10-13 per cent construction contract value on all consultant fees. This means architects are getting on average 3-4 per cent on large commercial projects.'



\* Client-side includes hotel groups, banks, airports, university estates and retail groups

## Salary survey graphs salaries by sector and experience

### Salaries by sector and experience

#### [zoom in](#) [zoom out](#)

The survey, she concludes, shows a profession that is struggling to adapt to a changing world, and calls for architects to add new skills and a fuller service, including valuation, costing, investment appraisals and project management. 'While architects focus on offering design services whose value cannot be quantified easily, I fear their fees and salaries will continue to stagnate,' she says.

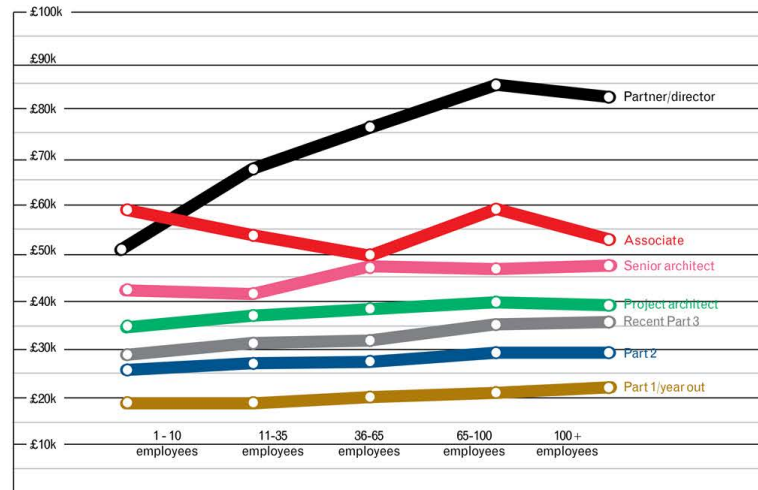
Robert Firth, business coach and president of the Royal Society of Architects in Wales agrees that the report, which garnered responses from 1,200 architects, students and architectural technicians, poses some hard questions for the profession.

'When will the majority of architects value their real worth?' he asks. 'When will business be taught to young architects? When will architects cease undercutting each other on fees? Is the profession of architecture transforming itself into a subcontractor service?'

Compared with other professions requiring equivalent amounts of training, architects seemingly get a raw deal. According to the respected Robert Half salary survey, newly qualified accountants working in financial services can expect to receive between £48,500 and £78,000 a year. NHS consultants on contracts introduced in 2003 start on £76,001 and can expect to receive £102,465 after 19 years' service.

The Lawyer's 2016 salary survey found that even newly qualified legal professionals earn between £39,000 and £124,000. Firth adds: 'How sad that the evidence of these figures points towards architecture being one of the lowest rewarded in terms of earnings of all the professions.'

To make the most money in practice, the advice is to head towards the bigger firms as there is also a strong relationship between the size of practice and average salary levels.



### Salary survey graphs salaries by size of practice and position

#### Salaries by size of practice and position

##### [zoom in](#) [zoom out](#)

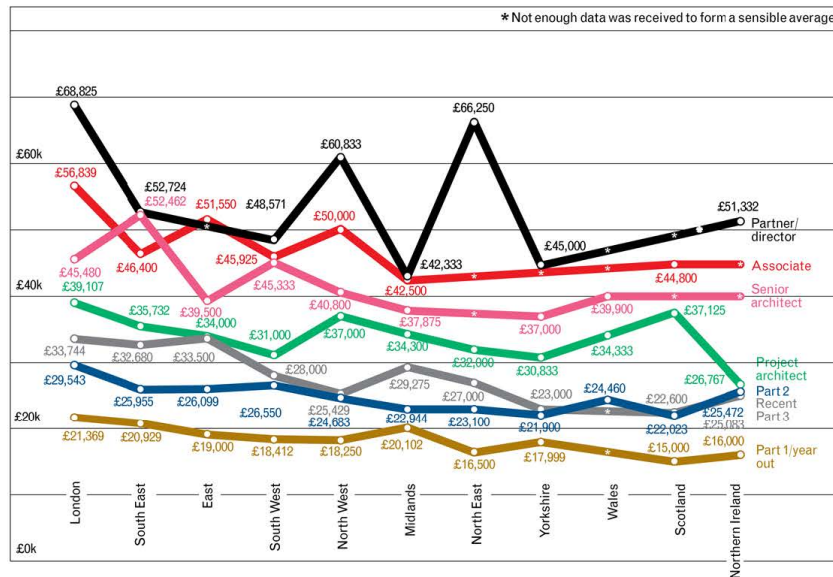
Firms with below 10 staff pay 7.3 per cent less than the average, while those with a head count of more than 100 are top of the pay charts, at 6.9 per cent above the average. Interestingly, however, at partner and associate level, those very biggest firms pay less than firms of 66-100 staff. What is more, the wages reported at these firms either correspond or surpass the pay set out in the recent [AJ100 median salary data](#).

One apparent anomaly is the revelation that firms of between one and 10 staff pay their associates more than directors and partners – an average of £59,000 compared with £50,239.

Caroline Cole, founder of architectural consultant Colander says these figures may not fully reflect take home pay 'once dividends and profit share are added to the mix'. She adds: 'Sole traders and the partners in some of the smaller practices tend to balance salary and dividends to maximise tax advantages.'

As in many professions, there are also big regional differences in pay. According to the survey, architects in Northern Ireland and Yorkshire are paid around 20 per cent less than the average wage for architects. The figures are not much better for those in Yorkshire (-19.8 per cent), Scotland (-17.7 per cent), and the North East (-16.2 per cent). Only those working in London and the South East get more than the average: 3.8 per cent and 2.9 per cent higher than the average respectively.

This is probably not a new trend, however. 'There is nothing unexpected here,' Cole says. 'Across the board, architects in London and the South East have always been paid more and those in Northern Ireland and the more northerly regions (with the exception of the North West) have always tended to be paid less.'



Salary survey graphs salaries by region and position

Salaries by region and position

[zoom in](#) [zoom out](#)

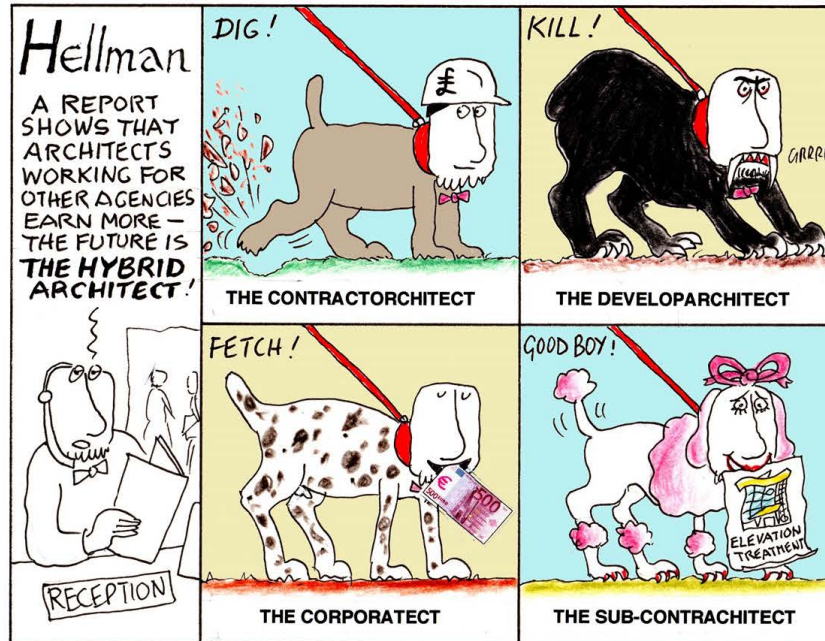
Paul Chappell, 9B Careers' founder, who commissioned the data, adds: 'Although the report showed a big salary divide between London and the rest of the country, when these are compared to living costs, some of the regional practices are offering quite attractive salaries.'

'In many areas there is also a shortage of architects around five years post-Part 3 and practices are competing to employ the best staff.'

The survey does provide interesting food for thought for Part 2-qualified architects who are wondering whether it is worth progressing to Part 3. On average, Part 3s were paid around £3,850 more than Part 2s with the same number of years' experience in practice. Turner says: 'Rather than bemoaning the fact that the fees architectural practices can achieve – and, consequently, the salaries they pay – feel like a downward trend, these figures hint at ways in which architects can upgrade their earnings.'

However, Chappell sounds a note of caution, warning that academic progress alone is not enough to earn more. He says: 'I imagine the vast majority of these salary increases arose from moving jobs, rather than as a direct consequence of gaining their qualification.'

In terms of the future trajectory of salaries, the uncertainty of Brexit makes predictions difficult.



Hellman aj hybrid architect.jpeg

The Hybrid architects by Hellman

[zoom in](#) [zoom out](#)

But Chappell thinks the referendum result has already changed things. He says: 'Before the referendum, the architectural jobs market was particularly busy and salaries appeared to be rising at their fastest pace for a number of years. Following the result, however, the jobs market has seen a dramatic split. As a number of practices continue to rapidly expand, at the same time a growing percentage are seeing projects put on hold and recruitment cut.'

Whether or not the Brexit vote has played its part, [architects' fees have flatlined during 2016](#). The Fees Bureau's 2017 fees index calculates an index level using the year 2000 as a baseline of 100. While fees jumped from 101 to 109.3 last year, this year's figure is only slightly up, at 109.7.

According to Fees Bureau director Aziz Mirza, falling building cost inflation has masked a drop in average fees for architects 'led by downward fee pressures from private housing new build and office clients'.

Assael Architecture founder John Assael calls the situation 'depressing'. 'Rises in fees on private housing have averaged a fraction over a 1 per cent increase over 15 years which is less than inflation,' he says. 'Other private work and public sector fees show less than a 0.3 per cent increase over 15 years so fees are actually on a steady downward trajectory.'

Assael sums up the gloomy mood among many architects caused by the salary and fees situation. He says: 'The average hourly rates are so low that I can't understand how many architects survive. If I were a solicitor like my twin brother the rates would be at least double and, in some London firms, treble. Architects need to get much tougher ... or give up.'

**READ NEXT: [Architects' fees stagnating again, according to new research](#)**

#### Comment on salaries

##### Adrian Dobson, RIBA executive director members

RIBA architects' earnings data broadly confirms these trends. For example, the *RIBA Business Benchmarking survey 2015* provides very comprehensive regional salary data, and shows very similar levels of regional variation.

Salaried architects with 5+ years post-registration experience earned on average £41,000 in London compared with £35,000 in NW England, and there were similar differentials for associates and directors. The RIBA Fees Bureau *Architects Annual Earnings and Employment Survey 2016* found that median earnings for all architects was £45,000, whereas central Government architects received £56,000 and in-house architects £69,000, but relatively few architects are employed in these sectors.

#### Readers' comments (6)

- [Robert Guy](#) 28 October, 2016 1:26 pm  
I'd be intrigued to know how many architects work client side. I suspect not many and that they are mostly senior roles which is why the average is high.

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- [Paul Chappell](#) 28 October, 2016 2:22 pm  
Certainly there are far fewer Architects working client side and the best salaries generally only occur after a number of years experience. Although salaries are sadly still lower in practice, the one encouraging thing to come out was the benefits firms are trying to offer staff now. I think there have been some big improvements in this area compared to 10 years ago.

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- [Paul Chappell](#) 28 October, 2016 3:48 pm  
It will however be interesting to see how many people start working on contract over the next few months. There has been a noticeable change in this regard and employers are preferring to limit their commitment until things become clearer.

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- [MacKenzie Architects](#) 30 January, 2017 12:34 pm

London distorts the figures, as ever. That's not to criticise London, architectural management there is much more refined because they are working with high-paid lawyers, specialist consultants, financial people and developers, so learn how to demand better remuneration -or (in reality) better payment for additional or abortive work. They also get paid better for unbuilt projects. The profit is effectively all in the planning approval.

For the rest of the country, most architects would be terrified to ask their clients for the correct fee for the service. It brings great shame on the Institute that nothing is done about that to maintain standards and protect these artists in their garrets. In another century, they would have formed a closed-shop union to look after each other if things got completely out of kilter.

This is a continuing problem for the RIBA. Are they looking out for Architects' interests, or not.

They should be pushing the architectural schools into basic skills for running a business for a living, not as a charity. They should be pushing for CPD to ensure anyone wanting to start up a business, has the competence to do so.

Traditionally in this country, it is not a major simplification to say that the most profitable practices do the least and worst designs.

Architects make more money for other people, than any other sector apart from the few bankers who are capable of approving business loans.

I have lost count of the millions my office has made for people; that's why I'll eventually leave the profession (when my wife finds out), and just do it for ourselves.

- 
- [Elaine Anderson](#) 19 October, 2017 10:20 am

Certainly there has been some move to encourage architects to take up other related training in project management and other related fields. However, architecture is a very important activity, and we should not lose sight of the amount of hard work and training which goes into producing architects. There needs to be more joined up thinking from allied professions. RICS tends to shadow a lot of what we do, and they have their own preferred systems, so trying to do everyone else's job does not necessarily produce good architecture, and the profession must stand up and be counted.

- 
- [Elaine Anderson](#) 19 October, 2017 10:33 am

When local authorities engaged architectural directorates, and employed people in house, it appeared that the remuneration was better and younger graduate entry people got trained properly in the running of jobs and technical detailing, as time was set aside for this purpose. Since the private sector has dominated matters, we now live in a different age and yet many of the problems which we face now, are cyclical and require solutions which traditionally, architects made important contributions to.

Housing for example, is a topic which is very current, and important, but we worked through an era where housing was largely done by architects, who ran with the job through to completion. Now we have developer housing, where the architect does not seem to be involved in the technical process but that schemes are produced for planning applications and there appears to be very little follow through. I am sure that architects would do better than this if they were the market leaders.

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5/17/2018

Site workers earn more than architects | Construction Enquirer

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## News

Contractor services

# Site workers earn more than architects

Grant Prior

2 months ago

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Construction apprentices will earn thousands of pounds more than many university graduates.

Latest research by the Federation of Master Builders (FMB) quizzed small contractors on how much they pay tradespeople.

The highest reported annual salary for a London bricklayer was £90,000.

The average annual salaries were:

- Site managers earn £51,266
- Plumbers earn £48,675

<http://www.constructionenquirer.com/2018/03/05/site-workers-earn-more-than-architects/>

1/14

- Supervisors earn £48,407
- Electricians earn £47,265
- Civil engineering operatives earn £44,253
- Steel fixers earn £44,174
- Roofers earn £42,303
- Bricklayers earn £42,034
- Carpenters and joiners earn £41,413
- Plasterers earn £41,045
- Scaffolders earn £40,942
- Floorers earn £39,131
- Plant operatives earn £38,409
- Painters and decorators earn £34,587
- General construction operatives earn £32,392

In comparison government figures show the UK's university graduates earn the following average annual salaries:

- Pharmacists earn £42,252
- Dental practitioners earn £40,268
- Architects earn £38,228
- Teachers earn £37,805
- Chartered and certified accountants earn £37,748
- Midwives earn £36,188
- Veterinarians earn £36,446
- Physiotherapists earn £32,065
- Nurses earn £31,867

FMB Chief Executive Brian Berry said: “Money talks and when it comes to annual salaries, a career in construction trumps many university graduate roles.

“The average university graduate in England earns £32,000 a year whereas our latest research shows that your average brickie or roofer is earning £42,000 a year across the UK. In London, a bricklayer is commanding wages of up to £90,000 a year.

“Pursuing a career in construction is therefore becoming an increasingly savvy move. University students in England will graduate with an average £50,800 of debt, according to The Institute for Fiscal Studies, while apprentices pass the finish line completely debt-free.

“Not only that, apprentices earn while they learn, taking home around £17,000 a year.

“We are therefore calling on all parents, teachers and young people, who too-often favour academic education, to give a career in construction serious consideration.”



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Written by Grant Prior  
2 months ago

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## 1.1.11 Architects' Journal – Brickies earn more than architects

5/17/2018

Brickies 'earn more than architects' | News | Architects Journal



### Brickies 'earn more than architects'

6 March, 2018 By Greg Pitcher



The average bricklayer earns 10 per cent more than the typical architect, according to new research

A poll of 320 members by the [Federation of Master Builders](#) (FMB) found that small builders across the UK were paying an average annual salary of £42,034 to brickies.

This compared with a median annual pay of £38,228 for architects across the UK stated by the Office for National Statistics in its [draft 2017 earnings figures](#).

Floorers, scaffolders and plasterers all earn more than architects, according to the FMB report. One firm was paying London bricklayers £90,000 a year.

FMB chief executive Brian Berry said: 'Money talks and, when it comes to annual salaries, a career in construction trumps many university graduate roles.

'The average university graduate in England earns £32,000 a year, whereas our latest research shows that your average bricky or roofer is earning £42,000 a year across the UK.

'In London, a bricklayer is commanding wages of up to £90,000 a year. Pursuing a career in construction is therefore becoming an increasingly savvy move.'

**Average annual salaries:**

<https://www.architectsjournal.co.uk/news/brickies-earn-more-than-architects/10028791.article>

1/4

- Plumbers £48,675
- Electricians earn £47,265
- Civil engineering operatives £44,253
- Steel fixers £44,174
- Roofers £42,303
- Bricklayers £42,034
- Carpenters and joiners £41,413
- Plasterers £41,045
- Scaffolders £40,942
- Floorers £39,131
- Plant operatives £38,409
- **Architects £38,228\*\***
- Painters and decorators £34,587
- General construction operatives £32,392.

Source: FMB poll of 320 members

\*\*Median annual pay in latest (draft) ONS earnings figures

### Readers' comments (14)

- [David Berridge](#) 6 March, 2018 10:21 am

Taking into account the length of architectural training, the rewards seem even less appropriate.

On the other hand, construction work can be tough, working outside, heavy lifting. Not many are still working at retirement age. Although they may have been able to retire early with the pay figures quoted.

- [Andrew Budd](#) 6 March, 2018 10:27 am

Now there's a campaign worth fighting for, terrible fees equalling terrible salaries.

The RIBA actually seems to be promoting working for nothing judging by recent emails we've received which is surely counter to the code of conduct.

It doesn't really stack up when you put this against promoting architecture as a career choice for those who don't have private incomes to sustain them or would simply like to be properly paid for all the effort we are expected to put in.

- [Matt Williams](#) 6 March, 2018 10:33 am

Good to see that our hunch is finally being recognised as a reality.

Sadly, what the study doesn't seem to take into account is the vast amounts of 'extra hours' that the typical architect works - which would undoubtedly make these figures seem even more bleak.

- [MacKenzie Architects](#) 6 March, 2018 11:16 am

Well, that's what the construction industry values us at, so it must be right.

It is pretty much undeniable that many architects create huge value for their clients, finding sites, working out what's possible, getting the planning approvals. -and then not getting paid appropriately if at all.

However it is also undeniable that many contemporary 'master-builders' couldn't draw an efficient plan to save themselves, wouldn't know the cost of some pretty funky looking detail, and couldn't keep the rain out. Some people should just stop at the CGI stage and leave the building construction to others. That is a failure of training, both in the office and in the Architecture School, but it is also a failure of the feescales and creative artist's naivety.

The RIBA should be actively involved in splitting the profession into two. Concepts and Buildings, and only a few firms should try and do both.

The smaller, regional practices who are usually highly competent, should keep doing what they are doing and should form a union to protect themselves. The should know by now that the Institute won't help them.

- 
- [Heathcliff Huxtable](#) 6 March, 2018 11:19 am

This is not an accurate reflection of remuneration. It takes 7-9 years to qualify with crushing debts. Then you are expected to work 10-25 extra hours per week. How often do brickies and electricians work past midnight? If they took that into account we'd be earning £15,000 / year.

And yeah, working outside is tough. But sitting in a chair for 14 hours a day every day will kill you 10 years sooner.

Forget the RIBA, join a union. This is NOT going to change until architects organize.

- 
- [Ian Cadell](#) 6 March, 2018 1:59 pm

We live in a mature capitalist society and the poor pay can only mean there are far too many architects and not enough work.

- 
- [Patrick Irwin](#) 6 March, 2018 2:12 pm

Yeah, but brickies go home about 4pm, and don't normally get to work weekends without overtime. When did you ever see a brickie working till 7 or 8pm in winter? I know a gyprocker who is so dyslexic he is illiterate and he retired a millionaire in his early thirties. Great bloke.

And a shearer, similar except he was literate and became an architect after retirement, had a successful partnership which sucked up his fortune and he retired broke.

- 
- [Nick](#) 6 March, 2018 2:34 pm

So after working hard at school, spending 7 years in higher education and a masters...I'm getting paid less than Bradley Web who left school without ever attending and his only achievement was removing his super-glued hand from his face.

Who's the idiot now.

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- [Christopher Jackson](#) 6 March, 2018 6:28 pm

There is a wider debate to be had here, without it degenerating into general complaining about our life decisions. We are architects because frankly, it is a great way to spend your working career, if you don't feel the same, do something else.

Architects have to want to change the situation, stop working for nothing, stop working extra hours without pay, stop working for clients that simply don't value what we do, walk away from clients who just want the cheapest price, so on and so forth. We are highly trained, talented professionals, we need to act together as a community to effect change. We also need to demonstrate why we're charging the fees we do and the associated value, instead of just deciding that we're more valuable than other professionals in the construction industry.

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- [Stephen Parnell](#) 6 March, 2018 11:10 pm

Let's face it, architecture considers itself a third sector profession.

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# Glossary

AEC: Architecture, Engineering and Construction

AM: Architectural Management

ARB: Architects Registration Board

ARUP: Multidisciplinary AEC firm of designers, planners, engineers, consultants and technical specialists

BIM: Building Information Modelling/Building Information Management

CIS: Construction Industry Scheme

CV: Curriculum Vitae

D&B: Design and Build

ERG: Expectance, Relatedness and Growth Theory

IT: Information Technology

M&E or MEP: Mechanical, Electrical, Plumbing Engineers

PEDR: Professional Experience and Development Record

PLP: Plain Language Prose

PLQ: Plain Language Question

O&M: Operations and Maintenance

RIBA: Royal Institute of British Architects

UK: United Kingdom

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