THE REINVENTED ACCOUNTING FIRM OFFICE: IMPRESSION MANAGEMENT FOR EFFICIENCY, CLIENT RELATIONS AND COST CONTROL

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Abstract

The office has become a large scale organisational phenomenon accommodating large numbers of organisational employees most often housed in open plan and Activity Based Working settings that arguably resemble the new factory. This study examines contemporary Big 4 accounting firm office design innovations and their representation with a view to eliciting their claimed rationales, reflections of historical office design and management thinking, and apparent strategic agendas with respect to office efficiency, client relations and cost control involved in their offering of professional services. In doing so, it also explores the implications that public practice firms' office design may have for auditor independence and audit quality. Informed by Goffman's theories of impression management, the study employs historical and website analysis, finding a predominant firm focus on office efficiency and client relations with an undercurrent of cost reduction and revenue enhancement aspirations. While represented as innovative current office design and work pattern developments, public practice accounting firm office innovations and intentions are found to significantly reflect historical office design and management thinking, with dramaturgical circumspection of floor designs and props oriented towards creating front stage performances predesigned for clients' impression management. Where backstage redesign and frame breaking does not produce desired employee performance changes, some signs of retreating to more traditional floor redesign and territorial marker usage are evident. The study also signals the potential for innovative accounting firm office designs to carry some significant impacts upon audit independence and audit quality.

Introduction

The office has a lengthy history, having grown from its small manual recording manifestations to its pervasive large scale design and dominance of today's commercial city buildings. It has become the centre of organisational accountability, management control and strategising (Jeacle & Parker, 2013; Parker & Jeacle, 2019). Focussing on workspace efficiency, a global trend has emerged in workplace design from private offices for individual employees to the provision of more shared workspace (Hills & Levy, 2014; Rasila & Rothe, 2012; Warren, 2003; Parker, 2016). According to Sundstrom (1985, p. 174) workplace design encompasses the "layout and appearance of buildings, the arrangement and properties of rooms, characteristics of equipment and furniture, and the associated ambient conditions (…)". Today's office design and functioning increasingly reflects a large scale open plan world, with open-plan office, hot-desking and Activity Based Working (ABW) being major contemporary office innovations that have emerged (Dukes, 2016; Fitzsimmons, 2017; Lohr, 2017; Moulton, 2016; Sterkenberg, 2017). These terms are often used interchangeably.

Organisations that transform their traditional office design into an open-plan layout, remove internal walls and partitions so that all employees, from clerk to manager are placed in the same open space, every employee being allocated to an individual desk (Hedge, 1982; Oldham & Brass, 1979). In contrast, hot-desking leaves employees without fixed, allocated workspace, instead encouraging them to use available desks as needed (Hirst, 2011). Employees are, as Duncan (2005/1983) puts it, without property. In this regard Allen et al. (2005, p. 23) claimed the "full non-territorial environment" to be the pinnacle of the evolutionary development in workspace design. Similarly the originally Dutch concept of ABW eschews dedicating desks for each individual employee in favour of diverse activity areas suited for different tasks (Warren, 2003; Stone & Luchetti, 1985). According to Elsbach and Bechky (2007, p. 87) the core idea is to "allow workers to change their work environment – from one of vivid colors and open workspaces to those of muted colors and cocoon-like privacy – in a matter of minutes". In ABW work environments, employees can work at seated or standing individual desks, team desk spaces, conference areas, quiet zones, phone areas or lounges (Warren, 2003). ABW differs from hot-desking by offering a more customisable working environment.

These innovations in office design and functioning are also being taken up by public practice accounting firms, particularly the larger national and international practices (Warren, 2003). They form part of the burgeoning service industries which in western developed economies have arguably supplanted the former dominance of manufacturing and resources, and now constitute between 50 per cent and 80 per cent of economic activity (Worstall, 2016; Office for National Statistics, 2017; Office of the Chief Economist, 2016). The accounting services sector itself is also significant in such economies, for example in Australia employing more than 139,000 employees and generating $20 billion revenue in 2018-19 (IbisWorld, 2019) and in the UK employing over 150,000 accountants in public practice while contributing £17.2 billion to GDP in 2016 (CCAB, 2017).

In our now emerged world of the Covid-19 pandemic, the issue of office design, location and working practices, both generally and for the accounting profession in particular, has been drawn into sharp focus. As Parker (2020) has identified, this onset has brought with it an ongoing rate of change in teleworking, office redesign, re-engineered office working processes, satellite office hubs and hybrid office working. The ABW office is faced with multiple challenges including density of redesigned floor space occupancy; the redesign of office layouts, furnishings, and movement zones; staggered staff occupancy rotations, cleaning regimes, area access controls and more. With the evident movement towards hybrid office working between home and professional premises also has brought with it a range of issues including working and communication routines, new concepts of using technological space in addition to physical space, and potentially expanded notions of exercising control and accountability.

In the light of both past and present office design and function developments, this study sets out to critically evaluate the public representations of public practice accounting firm office innovations and their accompanying strategic agendas with respect to their delivery of professional services. This will include Big 4 accounting firm and observer representations concerning their innovations, rationales and intentions. Those firms' innovative office redesigns have gained parliamentary attention in 2019, when the Parliamentary Joint Committee (PJC) on Corporations and Financial Services undertook an inquiry into the regulation of auditing in Australia. Among several matters the PJC inquiry investigated, was the relationship between the provision of auditing and non-assurance services (NAS) and potential conflicts of interests deriving from the provision of both services by the one firm to the same client (Parliament of Australia, 2019). In one of the various public hearings that followed the formal PJC consultation process the Chair of the PJC highlighted the potentially inappropriate office design at EY (Melbourne):

> "It has come to my knowledge from a range of sources that there are significant risks associated with EY's own workplace arrangements, including the fact that the assurance team – including external audit – and the advisory team occupy the same floor in EY's Melbourne office. (…) it's foolhardy to believe that so-called Chinese walls at the offices of EY are effective. It's not known to any external body if that situation is replicated across the entire company or indeed the sector. There is no regulation about this; there is only the articulation of policies which are not subject to inspection, report or disciplinary action. EY has a hot-desking arrangement with no physical or logical segregation of duties, allowing officers and partners to roam freely between and across floors, thus increasing the risk of insider trading through interactions with the transaction services team. There are meeting rooms that are not soundproof and conversations that can clearly be overheard. Partners move between

audit and assurance engagements freely, in and out of work environments. Failures of this type, culturally, make a mockery of the consultancy businesses of EY and activities where it gets paid to advise clients on the risk controls that they should take."

Considering this recent criticism, the authors undertake a first attempt to contribute to the accounting literature by exploring the implications that public practice firms' office design may have for auditor independence and audit quality. For this purpose, the researchers draw on a selection of studies on public practice firms' provision of audit and NAS services that apply to the area under research in this study. The potential impacts of public practice firms' office designs on auditor independence and audit quality appear to be an under-researched phenomenon.

In pursuit of the central aim, the paper addresses four key research questions which are developed in the following section on contemporary literature on office design innovation. By addressing these research questions this paper facilitates a deeper understanding and critique of the public representations and implicit motivations employed by Big 4 accounting firms and media commentators to justify changes in public practice accounting office design, management and functions.

This study builds upon and moves beyond the foundational research of Jeacle and Parker (2013), Parker (2016), and Parker and Jeacle (2019). In their historical study of scientific management and the office, Jeacle and Parker (2013) investigated the application of scientific administrative routines and the factors that influence organisational strategising. Parker (2016) specifically researched the ABW office, finding that despite an overt rhetoric of employee satisfaction and empowerment, ABW's dominant agenda is overhead cost reduction and operating cost management, reflecting early 20th century scientific management principles. Finally, Parker and Jeacle (2019) examined historical accountability and control processes in the scientifically managed North American office, finding surveillance of both the organisation and the office being practised through disciplinary records maintenance and knowledge-based governance performed by increasingly deskilled, mechanised and gradually feminising office employees operating as adjuncts to the accounting record. This paper's aim and research questions now move beyond these earlier studies to focus on public representations of contemporary public practice accounting firm office innovations, critiquing these developments in the light of historical office design and management literature, and unpacking Big 4 accounting firms' declared or implicit customer relations, management control and cost efficiency agendas.

This study is theoretically informed by Erving Goffman's (1959, 1963, 1967, 1971, 1974) theories of individual and organisational presentation and performance, both in public and in private, extending to his ideas on impression management, public place behaviour, framing and dramatisation, front stage and backstage performance. Its research methods employ a thematic analysis of two primary sets of empirical data: office design and management texts published over a 100 year period, and Big 4 accounting firm websites, public statements and related media coverage regarding their office innovations.

This study offers a number of significant contributions to the accounting literature with respect to public practice accounting and the role of the office. In its evaluation of firm office design, strategising and management, it identifies potential risks involving the intersection between auditor independence, audit quality and the provision of NAS. A further contribution lies in its identification of the persistence of historical efficiency, client relations and cost control agendas in contemporary accounting firm office design and management. Methodologically, the study contributes a valuable approach to inducing relevant themes from historical office literature that then contributes to the interpretation of contemporary office design innovation agendas. The study also offers a contribution to theoretical framing through its augmentation of some of Goffman's concepts that then deliver insights into the accounting practice management agendas and philosophies that can underpin changing professional work locations, roles and practices.

The paper commences with a brief overview of office focussed research studies from the contemporary accounting, management, and property management literatures. It then moves on to provide an outline of Goffman concepts employed in the study design, data collection, analysis and interpretation, followed by an analysis of major historical office design and management texts for themes relevant to contemporary public practice accounting office representations. From both the Goffman and historical office literature perspectives, contemporary representations of public practice accounting office innovation will then be examined and critiqued. This will be followed by the assessment of the representations of Big 4 accounting firms' approaches to office innovation. The paper then concludes with a discussion and conclusion regarding the project's aim and associated research questions.

Contemporary office design and accounting firm services

Contemporary corporate office design changes have arguably responded to increasing leasing, maintenance and other overhead costs of corporate workspace (Appel-Meulenbroek, 2010). They have also been argued to respond to the changes in employee workplace engagement as they have undertaken more agile, creative and collaborative tasks (Stallworth & Kleiner, 1996). Some researchers have argued that the reasons behind companies' implementation of novel workplace designs have been of primarily financial nature (Hills & Levy, 2014; Kupritz, 2002; Jeacle & Parker, 2013; Parker, 2016). Nonetheless others have claimed that better knowledge sharing and collaboration among employees, greater personal accountability of employees, increased satisfaction, creativity and teamwork are also among the main drivers for companies' shift to shared workplace solutions (Rasila & Rothe, 2012; Hedge, 1982; Allen & Gerstberger, 1973; Ives & Ferdinands, 1974; Zahn, 1991).

Despite such claimed advantages of shared workspace environments, when compared to traditional office spaces, the former can be distracting (Smith, 2008; Joy & Haynes, 2011). Joy and Haynes (2011) found that employees who undertake work for which deeper levels of concentration are necessary, require workspace that is free from distraction and noise interference. In their examination of how the youngest generation of workers, Generation Y (those born in the 1980s and early 1990s) have identified problems. Rasila and Rothe (2012) identified distraction through noise, overcrowding, problems in human relationships, missing privacy, inefficiency and increased workload, as issues that employees faced within their shared workspace environment. However, the authors also found that although Generation Y employees acknowledge most of the drawbacks of shared workspace offices that the literature suggests, they enjoy the shared workspace environment and are not necessarily dissatisfied. In fact, Generation Y employees perceived identified issues to be "fair trade offs for some greater good" (Rasila & Rothe, 2012, p. 362).

Appel-Meulenbroek (2010) concluded that with regards to office design, co-presence of employees is the most crucial factor for facilitating knowledge sharing. She claims that people working in close proximity interact more and encounter each other more often when moving around their workspace. Joy and Haynes (2011) add that office design supporting more proximity among employees provides an ideal work environment for knowledge sharing. According to the authors, this is mainly because one employee can observe what another employee is doing, which "makes it easier to provide unquestioned help" (Appel-Meulenbroek, 2010, p. 201). Such work environments have benefits particularly for junior people who seek advice from more experienced colleagues in senior positions who are always busy (Vickers, 2005). Particularly coffee areas and other community spaces function as interaction nodes that bring employees together coincidentally and foster knowledge sharing, often across departments, work units or groups (Peponis et al., 2007; Appel-Meulenbroek, 2010). To enhance interaction, cooperation, and ultimately knowledge sharing between employees, while minimising the risk of distraction, attention needs to be paid to the layout of the office (Haynes, 2008; Joy & Haynes, 2011).

While authors like Appel-Meulenbroek (2010) and Peponis et al. (2007) perceive working in close proximity, employees' frequent encounters and knowledge sharing across departments or work units as advantageous, in certain professions including the accounting profession, such work environments have received criticism. As noted earlier, the PJC inquiry raised concerns about the potential impairment of auditor independence due to the interaction between auditors and consultants, which is encouraged by the design of the EY Melbourne office. In this regard, Demarkar and Hazgui (2020) note that the organisational work environment within which auditors perform tasks and evolve their careers, impact their professional values and behaviour. With the shift from accountants primarily offering accounting and auditing services to becoming multidisciplinary experts providing a wide range of services, including consulting, Picard et al., (2014) and Demarkar and Hazgui (2020) argue that the identity of large accounting firms has shifted from disciplined professionals to entrepreneurially-minded firms with ever-increasing hunger for commercialism. Accounting firms' cultural shift towards commercialism, as Picard et al. (2014) note, is often expressed through marketing material such as brochures containing strong messages and images.

While being a member of a profession requires the adoption of certain behaviour and acquisition and application of particular knowledge, the commercialistic orientation towards external parties including clients, redefines accountanting professionals' behaviour, communication and values (Grey, 1998; Demarkar and Hazgui, 2020). Demarkar and Hazgui (2020) found that commercialisation blurs the distinction between auditors' commercial and professional commitments to the extent that auditors' notion of a fundamental conflict between their commercialist endeavors and their public interest mission becomes vague. Arguably, this notion is further blurred as clients are perceived by auditors as not seeing added value in audit services. For this reason, auditors often feel pressured to convince clients of the value of audit services through offering NAS including management consulting and taxation services, and not through the audit itself.

Several studies suggest that the provision of NAS does not compromise auditor independence or impair audit quality (see e.g. Ruddock et al., 2010; Ashbaugh et al., 2003; Francis, 2006). Indeed, research suggests an increase in audit quality which is often due to "learning" and "bonding". Svanstroem (2013), and Kinney et al. (2004) argue that if the type of NAS provided is closely related to the audit, spillover effects are created as it allows for greater use of the same information and requires similar client-specific knowledge. In other words, the auditor "learns" from the information obtained through the provision of NAS to the same client.

In the context of risks to auditor independence associated with the provision of NAS to audit clients, Svanstroem (2013) emphasises the risk of social bonding, which is referred to as knowledge-based trust developed between auditors and clients from their repeated interaction. Although the social bonding risk is inherent and already present when the auditor is appointed, it is often further enhanced when NAS are provided to the same client (Svanstroem, 2013). Social bonding is recognised in the International Federation of Accountants's (IFAC) Code of Ethics as the familiarity threat. More precisely, social bonding can prompt auditees (clients) to purchase NAS from their auditors. Accounting scholars present divided views on whether the cross-selling of NAS to audit clients generally presents an independence risk (Ruddock et al., 2006). Ye et al. (2011), discussing a number of arguments both for and against the provision of NAS to the audit client, argued that the auditor-client relationship is found to be a contributing factor that prompts auditees to award NAS to their current auditors. Regarding the auditor-client relationship, Ye at al. (2011) highlight that feelings of familiarity, trust, and support emerge from repeated interactions between parties. The bonding with clients and building of interpersonal relationships between auditors and clients can have the potential to facilitate not only the auditing process, but also the cross-selling of NAS (Ye at al., 2011; Svanstroem, 2013). Bennet and

Hatfield (2018) found that the quality of the audit process depends on the relationship between auditors and clients and the nature of their interaction (see also Gibbins et al 2001; Shaub, 2004). Svanberg and Oehman (2015) have criticised close auditor-client relationships arguing that if the auditor-client relationship becomes too close, auditors' client identification may impair auditor objectivity. In other words, the authors claim that auditors who identify relatively more with their clients are more likely to acquiesce to the client-preferred treatment of material accounting issues.

Whilst this research study does not seek to extend the audit literature on whether the provision of NAS impairs auditor independence and audit quality or not, it draws on this literature to explore public accounting firms' perceived advantages of contemporary office innovations, their objectives of redesigning their offices, and the potential effects contemporary office designs may have on auditor independence, audit quality and the accounting profession in general.

In evaluating public representations of Big 4 accounting firm office design innovations, it is instructive to consider the objectives and advantages claimed, as well as their presentation and justifications. Hence the first research question asks what major objectives and advantages are claimed for contemporary office innovations? This sets out to penetrate the apparent claims regarding Big 4 accounting firm intentions and perceived benefits. In addition, the second research question asks how the Big 4 accounting firms present and justify their new office design and usage? This is undertaken through an evaluation of Big 4 accounting firm presentation and advocacy of their office innovations through a web-based analysis of media articles and the Big 4 firm websites.

Multiple drivers have been argued to motivate companies to implement shared workplace designs (Jeacle & Parker, 2013; Parker, 2016). As argued by Berg and Kreiner (1990) and van Marrewijk (2009), firms invest in office space design in order to convey the image to their clients of being innovative. In pursuing profitability in the competitive corporate world (Langston & Lauge-Kristensen, 2002; Parker, 2016), close client relationships are one important strategy (Vos & van der Voordt, 2001). Hence, companies introduce shared office designs with open, welcoming lounges and cafés where employees can be more accessible to clients, invite them into their work environment and build closer relationships (Vos & van der Voordt, 2001). With regards to open-plan and shared workspaces, Stallworth and Kleiner (1996) suggest that corporate image be communicated at the front stage (e.g. areas such as cafeterias, lobbies and other spaces frequently accessed by non-employees), while backstage areas where employees spend most of their time performing daily tasks, should be designed for the needs of the employees only.

Corporate headquarters as aesthetic and symbolic representations of the company brand are often targeted first when redesigning office space (van Marrewijk, 2009). Gustafsson (2006) adds that changes in corporate culture and workplace design generally take place simultaneously and are often due to relocations. Van Marrewijk (2009), Dale and Burrell (2008) and Duffy (1997) explored office redesign from an organisational change perspective concluding that buildings function as agents of change. By referring to the redesigned corporate headquarter buildings of the National Australia Bank (NAB) in Melbourne (National@Docklands) and the Dutch insurance company Intrapolis in Tilburg, Netherlands, van Marrewijk (2009) argues that management of both companies deliberately used the redesigning process to induce (and by implication, control) cultural change. While Intrapolis initiated the redesign of its office space in order to introduce the new corporate culture of flexibility, transparency and employee responsibility, NAB claimed to have introduced the new design as part of its strategic and cultural change program (Veldhoen, 2005; van Marrewijk, 2009). Both companies adopted innovative workspace designs. Intrapolis, for instance, implemented an open-office design stretching over 12 floors that enables employees to choose a workplace depending on specific tasks. The new design further allowed employees to relax in the bar and lounge areas furnished with comfortable sofas to support the new corporate culture.

In his case study of the Dutch telecom operator KPN undergoing organisational change with regards to spatial design and corporate culture, van Marrewijk (2003, 2009) outlined how change programs were implemented by the company in order to make the organisations more transparent, efficient, cost effective, international and entrepreneurial. He concludes that those change programs did not result in desired outcomes since the introduction of flexible workspace was primarily directed at saving costs and did not incorporate the new workspace design into the corporate culture of the company. Nevertheless the fact that the modern workplace design can have significant impact on companies' profitability is not only related to cost-savings as a consequence of more efficient use of workspace, but also to greater employee productivity (Hills & Levy, 2014; Boje, 1971; Pile, 1978). It has been hypothesised that workplace design improvements can result in a 5 per cent to 10 per cent employee productivity increase (Brill, 1992; Stallworth & Kleiner, 1996).

The cost of office space is one of the main drivers of shared-desk work arrangements such as open-plan offices, hotdesking or ABW (Appel-Meulenbroek, 2010; Jeacle & Parker, 2013; Parker, 2016), with cost-reductions sought through more efficient office space utilisation (Duffy, 1997; Hirst, 2011). Shared workspace allows for reductions in the total number of workplaces and the number of floors occupied (Vos & van der Voordt, 2001). In his comparative study of workplace design and office space density in Australia and the UK, Warren (2003) concludes that increased density of office space occupation reduces companies' operating costs. Previous studies have found that reductions in floor space through shared office designs can reduce floor space by up to 50 per cent (Vos & van der Voordt, 2001; Veldhoen, 1998).

The above corporate interests in office design impacts on client relations, cultural and arguably management control, and cost efficiency, raises questions about the main underlying strategic agendas that Big 4 accounting firms may have pursued in the uptake of innovative office designs. Hence this study addresses a third research question that asks what apparent underlying strategic agendas with respect to client relations, management control and cost efficiency are revealed by public practice accounting office innovation discourses? As for the first and second research questions, this third question is investigated by means of assessing public practice accounting firm presentation and media commentaries on their office innovations via media articles and the Big 4 accounting firm websites.

Finally, it is evident from the historical research into the office as conducted by Jeacle and Parker (2013) and Parker and Jeacle (2019), that office design innovations have not been the exclusive province of the 21st century. Indeed they reveal both shared and dedicated workspaces in evidence throught the late 19th and then 20th centuries. Through those designs, management's strategic pursuit of efficiency, governmentality and control over employees are revealed. Lurking within such agendas was a concern to scientifically manage time and money, and the studies cited immediately above, reveal the role of historical office designs in aiding and abetting such agendas. These included control of office staff through surveillance, records, meachanisation and office space. This raises the question of to what extent agendas evident in contemporary Big 4 acccounting firm office design innovations reflect historical thinking regarding office design and its intentions. Accordingly this study addresses a fourth research question which is to what extent do contemporary articulated developments reflect or diverge from the history of office design and management? This facilitates the review of a longstanding published textual literature on office design, administration and management, to identify the extent to which contemporary practice may reflect historical precedent.

Office design innovation can be viewed from a perspective of setting the scene for and presenting professional accounting performances by public practitioners. Big 4 accounting firms typically occupy large scale commercial premises, house sizeable workforces, and interact with large numbers of clients who comprise the fee paying audience for the work that their employees undertake. When examining public practice accounting firm office design innovations and their strategic intentions and agendas, we must essentially observe the actors' and critics' discourse, the actors' visual presentations, and their intended interactions with their audience. Such office innovations as the highly visible ABW office, can be viewed as a stage upon which professional performances are mounted. Preparation work is conducted backstage and performance for client appreciation is presented frontstage. Erving Goffman's theories regarding people's impression management behaviours and the staging of their performances to others, particularly through his explanation of the concepts of backstage and front stage performance, provide a potentially insightful lens through which contemporary Big 4 accounting firm design innovations can be interpreted. To this end, a brief outline of his concepts as relevant to and applied in this study, is now provided.

Goffmanesque perspectives on managing impressions

Goffman's concepts relating to impression management, dramaturgical front stage and backstage performances, framing and idealisation are all highly pertinent to this study's focus on evaluating Big 4 accounting firms' and their observers' public presentations and explanations concerning their office innovations, intentions and rationales. Such concepts offer the possibility of interpreting and critiquing not only the claimed organisational agendas for such developments, but also for penetrating the implicit or latent ambitions which public advocacy may render at least partially opaque. Accordingly, this study's design and interpretation is framed by Goffman's (1959, 1963, 1967, 1971, 1974) theories relating to organisational and individual self-presentation and performance. Employment of Goffman's impression management ideas date back to Tomkins and Groves' (1983) recognition of his dramaturgical perspective, and are found in empirical studies of accounting subjects ranging across trust, accountants' professionalism and time management, manager communication, corporate culture, accounting controls, and public sector reporting (Preston, 1986; Mouritsen, 1989; Dent, 1991; Neu, 1991; Grey, 1998; Jönsson, 1998; Anderson-Gough, Grey, & Robson, 2001; Christensen & Skaerbaek, 2007; Kornberger, Justesen, & Mouritsen, 2011; Jeacle & Carter, 2012; Vinnari & Skaerbaek, 2014; Parker & Warren, 2017).

Goffman's dramaturgical model focusses on the performances that actors present in their efforts to convey an impression to others of who they are, what they are doing and why they are doing it (Johansson, 2007). Interacting parties perform to maintain their mutual social setting in some equilibrium, each respecting the impression the other seeks to convey (Goffman, 1959; Jeacle & Carter, 2012). Their performances include impression management, regional behaviour and discrepant roles (Jacobsen & Kristiansen, 2015: Jacobsen, 2015). Participants can exhibit dramaturgical loyalty through maintaining the 'party line' of acceptable behaviours the audience would normally expect, through dramaturgical discipline in not mistaking the image they are presenting for reality, and through dramaturgical circumspection through actors pre-planing their performances (Goffman, 1959; Parker & Warren, 2017). When public practice accounting offices present their inner workings in full client/public view, such performance staging techniques become particularly relevant in terms of the social front presented and its reflecting and conditioning of audience expectations (Goffman, 1959; Parker, 2016).

Also relevant to the office scenario is the use of props as part of the dramaturgical predesign to augment and influence how other parties interpret their encounters there (Jacobsen & Kristiansen, 2015; Peponis et al., 2007). Those props can include physical layout, décor, furniture, soft furnishings, symbolic artefacts, and physical stimuli. These all can provide cues to public practice accounting office employees, clients and other visitors regarding organisational symbols, myths, policies and strategies that the firm wishes to project and secure acceptance (Goffman, 1959; Gardner & Martinko, 1988). Thus, a public practice accounting firm can potentially condition human interactions and convey nonverbal signals that manage the impressions it wishes clients, potential clients and other stakeholders to form (Morrow & McElroy, 1981; Kornberger & Clegg, 2004).

Contemporary innovations in public practice accounting office design can be understood in terms of an organisation framing activities to persuade its target stakeholders of its attractiveness, expertise, and relevant services that meet their socialisation and outcome preferences (Goffman, 1959, 1974). The office, its portrayed philosophy and interactive activities become the framed context in which a mutual understanding of its modus operandi and participants' interactions is built between the firm and its clients (Kornberger et al., 2011; Solomon, Solomon, Joseph, & Norton, 2013; Jacobsen & Kristiansen, 2015). When radical changes are made to the design, functioning and marketing of the public practice accounting office, the earlier accepted frame is broken, and a new reality is negotiated between the stakeholders involved in encounters in that office setting (Solomon et al., 2013) so that participants can decode each other's expectations and adjust their behaviour (Goffman, 1974; Jacobsen & Kristiansen, 2015). Johansson (2007) for example has identified the importance of framing for an organisation establishing effective public relations: attempting to contextualise information that will be evaluated, interpreted and acted upon by target audiences. The intention is to match the organisation's professional performance with its audience's definition and understanding of the workplace situation (Goffman, 1959; Gardner & Martinko, 1988).

In its projection of office innovation, the public practice accounting firm articulates a public self-image that reinforces its self-perceived image and attempts to persuade its audience that this image is both acceptable and consistent with the image that audience holds of the firm (Goffman, 1967; Elsbach, 2003; Jacobsen & Kristiansen, 2015). Goffman (1959) refers to this as idealisation whereby the actor presents an image which may be an illusion that conforms to socially accepted values and expectations (Jeacle & Carter, 2012; Parker & Warren, 2017). Central to this image projection is Goffman's (1959) concept of front stage and backstage (Kornberger & Clegg, 2004). On the front stage, the actor presents performances that project for audience consumption how they would like to be seen, while backstage the actors withdraw to rehearse, recharge, and prepare for the next performance (Solomon et al., 2013; Jacobsen & Kristiansen, 2015). Important to the front staged performance are contextualisation of actors' desired image through such signifiers as stage structure, props, actors' appearance and behaviour (Goffman, 1959; Parker & Warren, 2017). Just as studies of accountants' projection of professionalism have revealed their perceptions of appropriate conduct in front of clients while adopting more relaxed behaviours backstage beyond the view of clients, so office innovation faces similar front stage versus backstage issues of dramaturgical circumspection (Goffman, 1959; Anderson-Gough et al., 2001). Goffman (1959) asserts that transitions actors make between front stage and backstage provide opportunities to observe actors assuming and then discarding a character or role (Jacobsen & Kristiansen, 2015).

Innovations in public practice accounting firm office design and functioning that are the focus of this study present possibilities for even the same space providing front stage *and* backstage performance venues. For example this has been observed by Phillips (2014) in his study of probation offices. In the changing configuration of the office, there may well be changes in the forms and emphasis accorded to Goffman's (1971) 'central markers' that signal territorial claims, and 'boundary markers' that depict the line between adjacent territories. Compared to the traditional modular, closed office configuration, the open plan or ABW office may employ less or different markers, while the use of personal employee effects as traditional markers signalling territorial occupation by the person (i.e. their body) may be delimited. This change in office configuration and processes can also impact access and professional relationships between professional and client via significant change signals (Goffman, 1971).

Goffman's theories therefore offer a rich reservoir of concepts that can assist in penetrating the public discourse surrounding public practice accounting firm office innovations and in interpreting their agendas. With such offices forming the sites for staged performances of the professional accounting role and impression management of public practice accounting imagery, Goffman's dramaturgical concepts, notions of framing, front stage and backstage performances, as well as actors' accessibility, involvement and concealment may all be found operating in the open design office innovations being introduced into the accounting profession.

Methodology

This study has employed a combination of two research methods applied to three data sets: historical analysis of office administration and management texts, and thematic analysis of Big 4 accounting firm websites and media coverage discussing Big 4 accounting firms' office design. With respect to our analysis of historical texts, we identified and selected 21 office texts spanning the period 1906-2017. Of these texts, 10 were published in the UK, 9 in the USA, 1 in Australia and 1 in India. This afforded the opportunity to identify historical contexts and thinking that may underpin today's public practice accounting firm office configuration and management (Napier, 2001; Parker, 1999), assist in our contemporary interpretation of contemporary practices and their rationales, and identify any historical aspects that may still be present in today's contemporary public practice accounting office environment (Hamerow, 1987; Parker, 1997; Thomson, 1969; Tosh & Lang, 2006). Our approach thereby considers philosophies and practices that have endured over time and may still relate to contemporary beliefs and practices (Tholfsen, 1967; Budd, 2008). This reflects an instrumentalist-constructionist interest in explaining contemporary conditions through reflecting on historical evidence in developing a history of the present (Hurst, 1981; Previts, Parker, & Coffman, 1990; Carnegie & Napier, 2017).

The year of publication, authors, and location of publisher for the 21 texts examined, are listed in the Appendix[1]. These were identified through internet and library searches using key words including office administration, office design, and office management. The process employed was one of purposiveidentification and selection of texts that appeared relevant to the study aims and informative about key issues, philosophies and practices that could have potential ongoing relevance to public practice accounting office configuration and management today. As Parker and Northcott (2016) explain, in the qualitative methodology tradition, this purposive approach involves selecting evidential sources that directly relate to the central research objective being investigated. This aims to extract detailed qualitative data rather than simplified numerical data and proxies often sought by random sampling in the quantitative tradition that largely seeks statistically generalised findings across large populations (Merchant and van der Stede, 2006; Parker, 2012). It is also important to recognise that the population of potentially relevant texts that might exist in institutional libraries, private collections, bookshops and web retailers is not ascertainable. Hence in this study, internet and library catalogue searches focussed on identifying texts that appeared best positioned to offer qualitative information and understandings regarding office design characteristics and intentions most relevant to this paper's research questions (Fossey et al., 2002; Silverman, 2006). This follows in the tradition of Patton's (2002) purposeful selection of evidence offering in depth information that provides insights into the issues on which a study is focussed. With respect to the historical texts selected, maximum variation selection involved selecting a range of texts from different authors, across several countries, and spanning a time period of more than 100 years. Initial text selection commenced with the beginning of the 20th century since this heralded the emergence of texts partly focussed on or wholly addressing issues of office administration and management. To meet the study's concern to evaluate the extent to which contemporary public practice accounting office innovations reflect office administration and design literature over 100 years, the text selection period extended to some texts published post-2000.

Thematic analysis of text contents was employed to aggregate major relevant themes which were iteratively compared and developed in relation to themes emerging from the website and related media analysis. Historical text content themes potentially relevant to contemporary public practice accounting office website portrayals were identified and categorised, with summary memo notes made with respect to text material on each category. Across the texts examined, memos were incrementally aggregated for each category to develop its characteristics (Denzin, 1978; Ahrens & Dent, 1998; Ryan & Bernard, 2000). Core categories were produced through comparisons of originally produced categories (and their supporting memos) which were then aggregated into the core categories (Strauss & Corbin, 1990; Huberman & Miles, 1994; Silverman, 2000). From this analytical process emerged the key themes that

[1] Full bibliographic details are provided in the article's bibliography.

informed the historical comparisons with dominant themes elicited in the contemporary website representations of office innovations.

Given their leadership as global public practice accounting firms, and their offering the most detailed articulations of public practice accounting firm office innovations currently available on the internet, Big 4 accounting firms were selected as the subject of the web-based analysis employed in this study. Big 4 accounting firms' websites addressing office innovations and press coverage debating those office designs were subject to qualitative thematic analysis of relevant categories and related narratives and imagery (Campbell, 2017). The Big 4 website data and third party web commentaries were focussed on the office design innovations employed by these Big 4 firms within their own organisations. From the analysis of Big 4 accounting firms' websites and related media articles on Big 4 accounting firm office innovations, we seek to identify and interpret the underlying motivations driving those innovations and to expand our theoretical understandings of public practice accounting firm office philosophy, design and operation, both revealing unique features as well as inducing wider implications for contemporary public practice accounting office developments generally (Berry & Otley, 2004; Hartley, 2004; Lee & Humphrey, 2017). In the tradition of interpretive analysis, this web-based data investigation focussed particularly on analysing website text and media coverage for what was said, how it was communicated, apparent intentionality, and related implicit messages and inducible meanings (Neuendorf, 2002; Guthrie, Petty, Yongvanich, & Ricceri, 2004; White & Marsh, 2006; Campbell, 2017). As such, the analysis offers holistic interpretation of both narrative and visual website text as well as media content with respect to both the historical literatures and contemporary office context (Krippendorff, 2004).

Purposive sampling of websites and media coverage was employed in identifying materials most pertinent to addressing the research questions upon which this study is focussed (White & Marsh, 2006; Kim & Kuljis, 2010). Furthermore, rather than undertaking a large scale superficial assessment of multiple websites and press coverage as cautioned against by Unerman (2000), a small focussed sample of web-based material was investigated with a view to exploring and developing key conceptual themes with a view to theorising the public representations and underlying strategic agendas of contemporary public practice accounting office innovation (Kim & Kuljis, 2010). To identify relevant websites, the authors conducted a google-based website search using pre-definded keywords. The terms "Big 4 accounting firm" and "office innovation" were searched for in combination with other keywords such as "workspace design", "open plan office", "hotdesking", "flexible workspace", and "Activity Based Working". After adjusting the Google advanced search settings to "English language only", restricting the advanced search findings to "search terms appearing in the text of the page"[2], filtering out shopping

[2] In its "advanced settings", Google search engine allows to choose between key search terms "appearing in the text on the page" and key search terms appearing "anywhere", "in the title", "in the URL" or "in links" to the page. Applying the search to the "appearing in the text on the page" helped the authors to filter out those articles of which the content contained the relevant key search terms. Thereby, the authors were able to significantly narrow down the number of search findings from millions to thousands.

websites and illegitimate sources, the initial google search results amounted to 6,832 articles in total. After screening those search engine results for content addressing efficiency, client relationships and cost control/efficiencies, the numer of articles was narrowed down to a total of 1899. Assessing the reliability and relevance of the identified websites, the authors eliminated blog posts and social media posts made by unidentified sources, Big 4 firms' office redesign consulting services targeted at (potential) clients, as well as advertising campaigns published by design firms. Post-elimination search results amounted to 152 articles in total, which were assessed by both authors. The selected web material was examined across its narrative text and visual images such as pictures, photographs, graphical displays, and video inserts (Unerman, 2000; Neuendorf, 2002; White & Marsh, 2006). Again, in the interpretive tradition, these were examined for both their manifest and latent content (Neuendorf, 2002). Coding and related thematic development were iteratively developed between the historical text coding analysis outlined above, and the coding of major themes relevant to this study's research questions as evident in the contemporary web-based materials examined (Guthrie et al., 2004; Jose & Lee, 2007). This was an inductive process involving both coding and memoing by the researchers, producing and developing relevant codes from both the historical and contemporary sources examined (White & Marsh, 2006; Jose & Lee, 2007). This involved both researchers in the coding, memoing and reflection process across the three sets of sources (Campbell, 2017).

The research design facilitated an in-depth examination of global public practice accounting firms' representations of their own office design innovations, intentions, and claimed advantages within the context of contemporary office design and management practice as well as historical office design and management traditions (Stake, 2005; Yin, 2009). Together with supplementary contemporary website discourses by Big 4 accounting firms and media commentators, this research strategy provided a rich canvass of purposively selected data sources (Patton, 1990; Parker, 2012). Overall, the analysis of historical texts and contemporary Big 4 accounting firm websites and media coverage provide a multi-method approach to data collection and analysis (Covaleski, Dirsmith, & Samuel, 2017; Lukka & Modell, 2017) that offer a robust basis for addressing and drawing conclusions with respect to the study's main aim and its supporting research questions.

Historical themes in office design and administration

This section presents an analysis of major themes relevant to this study that emerged from the empirical examination of office texts spanning the period 1906-2017, as outlined in the methodology section of this paper. Three major themes emerged as potentially relevant to contemporary public practice accounting firm office innovations. These were: client relations, cost control and office efficiency. The essential observations and arguments drawn from our sample of historical office design and administration texts will be summarised for each theme in turn.

Client relations

Client relations in the office context were essentially discussed in terms of imagery and ambience, client interaction and visibility. The image of the office has historically been portrayed in literature, theatre, art and popular culture – from H.G. Wells novels to Batman comics – as a drab, dreary, melancholic bureaucracy: an image that persists to this day (Duffy, 1997). Conscious of office organisation and presentation, early office administration writers counselled against disorganised untidy offices that for example Dicksee and Blain (1906, p. 17) saw as "the outward and visible sign of the inward frame of mind". Reflecting Goffman's concept of impression management, later writers such as Terry (1966) maintained this concern to design office space not only for employees' comfort but to favourably impress customers and visitors. This theme carried through into contemporary office administration texts that argued for office design and furnishing to support employees' work, avoid disorganised appearance, and thereby "signal to staff and visitors that they are valued" and "held in esteem" (Marmot & Eley, 2000, pp. 71-72). This indicates a deliberate advocacy of presenting a front stage idealisation in what might have been traditionally regarded as a backstage area which may nonetheless be open to the view of clients and employees from other areas of the organisation. Thus, Duffy (1997) has argued that office design and image today are crucial signals to employees *and* customers – reducing barriers and de-emphasising hierarchies.

With respect to Goffman's identification of props as part of any dramaturgical predesign, early office writers paid great attention to office lighting, ventilation, heating, sanitation and noise (Leffingwell, 1917; Childs, 1919; Gourlay, 1935; Benge, 1948). With some subsequent additions such as colour, décor and background music, such characteristics continued to attract contemporary office writer recommendations regarding office ambience and its claimed impact on employee satisfaction and productivity (Cemach, 1961; Terry, 1966; Odgers & Keeling, 2000; Marmot & Eley, 2000; Kumar & Mittal, 2001; Quible, 2014). In this sense, props were being advocated as creating a performance setting that could not only project a desired impression to clients and customers externally, but also to the actors (office employees) themselves. Some more recent office design and management writers have envisaged office designs that vary from the hive (routine work at workstations), to the cell (individual short term concentrated work), to the den (small group meeting areas), to the club (interactive open plan work areas) (Duffy, 1997; Marmot & Eley, 2000). As Marmot and Eley (2000, p.18) observed "the next step is to make work look like a holiday", suggesting an office design strategy aimed at idealising a public image that becomes a self-perceived image amongst office employees themselves. That carries the risk of employees losing their dramaturgical discipline in potentially taking on the image they and their environment stage, as being their own reality.

For office management texts, concerns with client interaction arguably evolved from an earlier focus on design for employee interaction. That focus included prescriptions for performance design and props such as desk layouts and spacing, aisle configuration, corridor specifications, positioning of washrooms and cloakrooms, office machine positioning, and filing storage design and placement (Gourlay, 1935; Leffingwell & Robinson, 1950; Terry, 1966). Later texts began to pay attention to designs and layouts that facilitated employee interaction and formal as well as informal sites of employee communication (Duffy, 1997; Marmot & Eley, 2000). Despite the occasional earlier office text references to clients (Dolby, 1938), this later office text discourse was accompanied by a growing acknowledgement of the importance of the internal and external customer and their satisfaction levels (Keeling & Kallaus, 1996; Odgers & Keeling, 2000; Lareau, 2003). In so doing, these writers were anticipating the transformation of backstage office areas and work into front stage performances through which office employees presented desired images to other employees within the same organisation. Office design for client interaction addressed office reception areas and client waiting rooms, aiming to design for customer goodwill, proximity for ease of employee access, avoidance of employee movement disturbing clients, and preventing clients being visible to each other (on the grounds of not distracting general office employees and not causing clients to feel under office employee scrutiny) (Cope & Robins, 1925; Leffingwell & Robinson, 1950; Terry, 1966; Quible, 2014). In earlier office texts, the focus on customer proximity was more often expressed in terms of locating corporate or professional offices close to banks and businesses with which the firm dealt with most frequently (Dicksee & Blain, 1906; Childs, 1919; Gourlay, 1935; Terry, 1966).

Almost as background context, some office text writers alluded to the invisibility of office work and its outputs (Cemach, 1961; Duffy, 1997). Reflecting a traditional backstage conception of the office, the private office was seen as facilitating concentrated work without distraction, confidentiality, and signifying hierarchical rank, but at some costs compared with open plan (Gourlay, 1935; Leffingwell & Robinson, 1950; Terry, 1966; Eisenberg, 1968). Over the 90 year period of this historical office literature, the ‘open plan’ or ‘open’ office was directly defined by some authors and indirectly defined as the alternative to the ‘private’ office by others. Denyer (1969, p. 35) defined it as ‘one large office wherein several departments or sections of a department work together, instead of in separate rooms.’ Gourlay (1935, p. 52) observed that the ‘modern tendency is to eliminate private rooms and place the whole of the staff in one large office’. Odgers and Keeling (2000, p. 374) described open plan as ‘characterized by the lack of interior walls and the freestanding placement of desks, partitions and other office furnishings.’ As Quible (2014, p. 64) elaborated, ‘open offices use only a minimum number of permanent walls’ and advocated the design of large open areas of approximately 10,000 square feet. Decades earlier, Benge (1948, p. 272) recommended that ‘if there were 5,000 square feet of net office space available for clerical desks, it is generally practical to get 100 employees into such an area.’ Such prescriptions extended to large rectangular areas of up to 40,000 square feet (Leffingwell and Robinson (1950).

With respect to visibility, with the occasional exception, very few texts appeared to recognise potential customer visibility and access advantages of general offices (e.g. Childs, 1919). Open plan office advantages for visibility with respect to facilitating interaction and supervision began to be increasingly canvassed, but again with a predominant focus on employees rather than customers (Denyer, 1969; Keeling & Kallaus, 1996; Marmot & Eley, 2000; Quible, 2014). Such a focus therefore tended to remain upon the actors (employees) involved in an internal office performance, with the open plan office requiring employees to be continually on show and subject to easy supervision.

Cost control

Office text writers from Duffy (1997) to Marmot and Eley (2000) to Quible (2014) have argued that the annual cost of employee accommodation is often second only to labour cost. Employee accommodation and furnishing were thus props for office work performance that attracted attention from a design and cost control perspective. As early as 1950, Leffingwell and Robinson (1950) contended that desk space was an important cost factor, citing as an example, in a floor area rented at $5 per square foot, a desk measuring 36 by 72 inches took up 33 square feet of floor space for desk and occupant. They compared this with a desk measuring 30 by 72 inches, requiring only 20 square feet, and concluded that the larger desk cost $65 per year more floor space rental than the smaller desk. Marmot and Eley (2000) labelled an office as a capital asset enhancing productivity, employee well-being and customer service, but costing 10 per cent to 20 per cent of company revenue annually in depreciation, operation, repairs and maintenance. Accordingly Quible (2014) advocated charting space needs analysis of present and future office space, filing cabinets, storage space and aisles/corridors, based on the number of employees in each office functional area, square feet per employee, and related costs including rent, utilities, maintenance, insurance, taxes, licenses, permits etc. Similarly, workstation analysis of each employee's needs has been advocated by Keeling and Kallaus (1996) with respect to the cost of office furniture, particularly noting that "[c]ost is an important factor in the selection of office desks" (Keeling & Kallaus, 1996, p. 385). Interestingly, they conducted a similar cost comparison example of floor rental space cost saved by a smaller compared to larger desk, to that offered by Leffingwell and Robinson (1950) above. They also then compared traditional desk space costs with those of modular furniture in an open plan workstation environment, providing examples accommodating 40 per cent more employees in the same space as a conventional desk layout, and claiming significant annual savings in space cost. Denyer (1969) also cited modular furniture as a floor space saver, claiming it could simultaneously provide 25 per cent greater desktop area along with up to 33 per cent reduction in floor space occupied.

Observably then, office management texts paid considerable attention to space costs. Duffy (1997) went as far as to propose evaluating the cost of accommodating each employee per year against the income generated by that employee. As early as 1919, Childs (1919) was recommending costs savings through the abolition of private offices in favour of open plan layout, citing savings in furniture, lighting, secretaries, office boys (as then termed), and office rental. Thus even the early signs of open plan office advocacy reflected not only a concern with dramaturgical circumspection with respect to performance staging, but also a cost management approach to how the office performance context should be framed. Other text writers to associate space planning and reduction) with cost savings were Terry (1966), Keeling and Kallaus (1996), and Lareau (2003). Their attitude was typified by Leffingwell and Robinson's (1950, pp. 259-60) declaration that:

> "Office work should be done in as small a space as is consistent with freedom of movement, for space itself not only costs money but is the medium through which all work and workers must move; moving any object through space costs money also."

With respect to the cost efficiency of space usage, Marmot and Eley (2000) detailed various concepts of area within an office building, including net internal area being the gross internal area less structural and core components, and net usable area as net internal area less primary circulation (being corridors, fire escapes etc.). They argued that space inefficiency occurred when structural or wasted space usage such as poorly positioned columns of structural walls, irregular floor layouts, and intermittent wall fixtures resulted in the fixed building floor rent being paid for a reduced net usable area. Added to this, they recommended spaces be tailored so that following reorganisation or employee changes, less partition and other structural changes would be needed, thereby reducing churn cost[3] (Marmot & Eley, 2000). This reflects the potential removal of Goffman's central markers whereby traditionally static partitions and other objects marking territorial claims between different groups and individuals become mobile, facilitating changes in actors, their positioning, and their performances. Churn costs include all costs of moving a person or group (e.g. costs of moving people, furniture, files, partitions, walls, doorways, computers, and storage facilities). In some cases, the cost saving concept of temporary moveable partitions was anticipated early last century, the open plan office being seen as a means of avoiding the time wastage in communications between private offices (Childs, 1919). In more recent times, office texts began to recognise the potential for standardised modular office furniture and partitions as well as mobile IT systems to dramatically reduce churn costs (Duffy, 1997).

Light and power cost was also a consideration for office texts. Leffingwell and Robinson (1950) argued that employee inefficiency from poor office lighting would cost more than the rental cost of the best lit office space. With respect to energy usage, they also contended that the private office compounded the problems of space usage cost with the associated negative impact on lighting, heating and ventilation costs. In later years' texts, this developed into a discourse about energy efficiency (waste reduction), conservation and cost reduction. Duffy (1997) quoted building energy costs as consuming approximately 45 per cent of the UK energy load at that time. He saw energy-efficienct building designs and office regimes as capable of reducing annual occupancy costs by 40 per cent. Office text authors also enunciated various methods of reducing light, heat and power consumption by offices, supported

[3] Churn rate is the number of times employees move location per year as a percentage of total employees. If employees move more than once in a year, the rate can exceed 100 per cent (Marmout & Eley, 2000)

by energy conservation committees, energy efficiency studies and energy conservation goals (Keeling & Kallaus, 1996; Quible, 2014).

Office efficiency

From both office cost control and office efficiency perspectives, efficiency has been historically considered by the literature in multiple respects. A major concern has been that of achieving efficiency of office floor space utilisation through maximising design of usable areas, minimising space wasteage, and maximising physical usage of space. This was also expressed in terms of increasing the density of floor occupancy. Energy usage has also been a periodic concern in terms of trying to reduce energy wasteage. With an implied agenda of increasing volume of task processing and output, employee productivity has been regularly a focus of office literature's efficiency agenda, for example exemplified in its discussions of designing to minimise employee time wasting.

So, reflecting attention to dramaturgical circumspection, office texts over time addressed designing and equipping offices for enhancing work performance. As writers from Benge (1948) to Duffy (1997) recognised, unlike the early claims of Elton Mayo's Hawthorne studies, not one element of design could be causally attributed to driving employee performance. Nonetheless, they advocated the positive effect on performance attributable to a *combination* of design factors through the employment of props such as lighting, ventilation, heating, employee facilities, space, colour, furniture, equipment etc. (Benge, 1948; Keeling & Kallaus, 1996; Bird, 1927). Cemach (1961, p. 163) stated an underlying agenda quite clearly:

> "'We like you to have the best conditions to get from you the best work' is not only a realistic approach but one that breeds confidence."

The notion of designing facilities and their layout to avoid employees wasting time through overcrowding or conversation (Childs, 1919) persisted right through the 20th century, latterly being articulated in more subtle terms such as space guidelines for efficient work (Keeling & Kallaus, 1996). This involved detailed framing of office workers' physical contexts to define and influence their modus operandi and interactions. Duffy (1997) expressed office design efficiency as one that reduces occupancy costs, while office design effectiveness targets quality of employees' work and productivity improvement.

Occasional allusions to office design for workflow mimicking that of the factory floor were also made (Gourlay, 1935; Leffingwell & Robinson, 1950). Denyer (1969, p. 49) expressed it as making the flow of paper and associated tasks as regular as possible so that "[t]his restricts the movement of people and of papers to a minimum and gives the maximum control". In the 1960s, Eisenberg (1968, p. 200) advised "[m]ake the records travel, not the workers." Scientific management's representation of workflow design sought claimed advantages of increased speed, reduction in lost papers, less need for messengers, electric conveyer systems, and keeping office workers seated at their desks (Leffingwell & Robinson, 1950). Even in later cluster and star designed modular furnished office layouts, text writers maintained a focus on information workflow design. This continued through office computerisation and its associated innovations in workflow automation (Odgers & Keeling, 2000; Quible, 2014). Thus, repeatedly over the past 100 years of office design and management texts, the framing of internal office layout, props, and central markers was broken, reformulated and reinstalled with a view to changing office actors' self-conception, interactions, and general work patterns and behaviours.

With respect to employee mobility and visibility concerns extended to open plan offices visible to the public as an impression management strategy risking distraction to office employees (Gourlay, 1935). Employee visibility to their supervisors was on the other hand seen to be a distinct advantage of the large open plan office (Cemach, 1961; Terry, 1966; Quible, 2014). This highlighted conflicting concerns with customer relations and office efficiency. From Goffman's dramaturgical perspective, the performance being staged by office management and enacted by the office employees was intended for the consumption of an external audience of customers and clients, as well as for an internal audience of other office employees. In this sense then, when for an external audience, the office performance became a front stage performance, it also invariably became a front stage performance for an internal audience of other organisational members.

From the efficiency perspective, density of office floor space occupancy was also a recurring theme in office texts. This included prescriptions for minimum floor space associated with each functional type of desk to avoid overcrowding and unnecessary distractions to office employees and promote a healthy working environment (Cemach, 1961; Denyer, 1969). This was expressed early in the 20th century by Childs (1919), as balancing the principle of compactness with the principle of roominess for both efficient and healthy office employees working. Over time, texts referred to a conventional wisdom of 50 square feet per desk as the generally acceptable standard (Benge, 1948; Cemach, 1961; Denyer, 1969). Texts such as Marmot and Eley (2000) examined space standards per person in considerable detail, discussing attempts to associate hierarchical level of employees with space occupied by each and related cost, approaches to calculating lettable floor area per person, the variation in space per person standards between different organisations, approaches to avoiding excessive space allocation costs, and the application of space audits.

In more recent periods, office texts began to address the issue of time and space in terms of attempting to map the proportion of time during which office workspaces are occupied, temporarily unoccupied or empty, and peak periods of occupancy (Duffy, 1997). For example, Marmot and Eley (2000, p. 31) declared "in well-managed companies, the aim is now to make the best use of time as well as space in a building." Reflecting a concern with the empty performance stage, they further observed that

> "careful examination of whether and when people use their desks and offices can show startling results. Detailed observation may indicate that for as much as 80 percent of the working day, no use is made of the workplace provided" (Marmot & Eley 2000, pp. 31-32).

They likened the tools used to assess space usage as being similar to the early scientific management time-and-motion studies. From such evaluations these texts have recognised office innovations such as pooling of desks between multiple employees, hot-desking, hoteling and virtual offices (Marmot & Eley, 2000; Odgers & Keeling, 2000; Quible, 2014).

An Historical Perspective

The above thematic analyses of office text themes over a 100 year period, reveal a consistent attention to these major thematic concerns with client relations, cost control and office efficiency over time. In their articulation, we see expressions of Goffman's theoretical concepts that assist in our understanding of the conventional wisdom and agendas of office designers and administrators. While these thematic concerns may at first sight appear to be inconsistent in what they aim to implement and achieve, nonetheless they are often interlinked and mutually contributing. For this study, they form primary historical evidence of organisational design and management philosophies that have arguably underpinned more recent contemporary developments in office design and management. As such, along with Goffman's theoretical framing, they provide an historical platform from which we can now move forward to critically assess the depictions of contemporary public practice accounting office innovation

Depicting contemporary public practice accounting firm office innovation

PricewaterhouseCoopers (PwC), Deloitte Touche Tohmatsu (Deloitte), Ernst & Young (EY) and Klynveld Peat Marwick Goerdeler (KPMG) as the Big 4, are the largest international accounting and auditing firms, providing an extensive range of audit, assurance, advisory, management consulting, risk assessment, tax and legal services (PwC 2018a; Jerums, 2014; Deloitte 2019; HCA, 2015). Over the past decade, several Big 4 accounting firm offices around the world have embraced ABW, open office, hotdesking and hybrids of those three design concepts (PwC 2017; Office Snapshots, 2017; Pash, 2016). In doing so, they drew inspiration from the retail, technology, airline, hotel and hospitality industries (PwC, 2017; Deloitte, 2017; EY, 2018b; Jerums, 2014; Bleby, 2016). Such inspiration is reflected by some offices' hotel-like lobbies, airline-like lounge areas, usage of newest technologies such as apps and motion-sensitive self-check-in welcome walls (Muuto, 2017; PwC, 2017; Bleby, 2016; Waber, Magnolfi, & Lindsay, 2014).

> "It's not a straightforward office layout. It's a hospitality project, it's a major hotel project, it's a major technology project and it's a major workplace project. It's all these things combined into one." (PwC, 2017, p. 6)

Rationales provided by the Big 4 firms for the shift to ABW, open-plan office and hotdesking workspaces relate to client-orientation, cost control, office efficiency and employee satisfaction. However, the relevance and value they attributed to these rationales varies.

Office efficiency

The Big 4 accounting firms' discourse relating to office efficiency included the term as an often repeated mantra, and discussed this from a range of different related definitional perspectives. As reflected in the historical office literature, space efficiency in terms of floor space usage and wasteage was referred to in terms of new designs facilitating space sharing, increasing space occupancy rates and bringing staff of all different hierarchical levels together in the same areas with a view to improving collaboration and knowledge sharing. Efficiency was also referred to repeatedly in terms of staff productivity and the optimisation of the quality of their outputs. The firms also associated their new office designs with facilitating efficiency in terms of faster networking, communication, knowledge transfer and knowledge sharing and faster associated decision-making and problem solving. These approaches to the pursuit of efficiency through office design will become further apparent in the evidence outlined below.

Arguing that "[l]ife isn't one size fits all, so why should the workplace be?", EY (2018b) made considerable changes to the companies' work spaces in order to create an efficient work environment that caters to employees' needs. Similarly, some PwC offices (e.g. Houston) emphasise that PwC's new office design was based on employees' feedback (PwC US, 2014). The PwC Houston office claims that 70 per cent of the new office space was designed to enhance employee collaboration (PwC US, 2014). Also, the Basel (Switzerland) office announced in the press that employees' well-being is one of PwC's priority business objectives and that the office "has been specifically designed with employee well-being in mind" (Retail Design Blog, 2017). The Basel office emphasises the connection between employees' well-being and productivity as rationale for the implementation of the ABW concept (Masi, 2018). By creating an environment of collaboration and co-creation PwC aims to increase employees' well-being and productivity (PwC, 2017):

> "[A]ll across our Australian offices, we've invested in technologies and purpose-built spaces designed for collaborative thinking – environments where our people (and our clients) can do their best work, together. Our new offices are at the cutting edge of modern, sustainable design, and equipped with the latest technologies. It's a design that breaks down unintentional barriers to success – private offices, cramped work stations and the like – and re-centres the work experience on what really works: flexibility, openness, collaboration, well-being (PwC, 2018b)."

These stated ambitions of employee consultation and collaborative encouragement appear to reflect what Goffman terms the firms' effort to maintain an interactive social setting in equilibrium, whereby dramaturgical loyalty in the form of mutually consistent employer and employee expectations of acceptable behaviour are maintained.

Given the variety of routine tasks Big 4 employees manage, KPMG emphasised the need for more flexible and open work spaces, arguing that employees do not perform at their best when forced to work in partitioned cubicles or cramped offices (Jerums, 2014). Hence, one of the drivers of Big 4 accounting firms' establishment of ABW spaces was to create an environment that allows employees to choose different workspaces for different problems. This reflects the firm's significant office restructuring investments in providing a front stage performance rationale for a backstage structure and changing employee performance, requiring them to discard former individualistic and private working routines and assuming more group oriented and visible routines. KPMG's Adelaide office, for instance, reportedly spent AUS$7 million on restructuring and redesigning its workspace. On KMPG's working floors, internal walls, private offices and fixed desks have been replaced by an agile shared-desk approach, a kitchen for employees and refurnished work zones (Evans, 2015). This speaks to the importance of physical prop changes providing cues to employees regarding expected behaviour pattern changes and signalling to them the new organisational philosophy. In the Adelaide office, employees at all levels – juniors, managers, directors and partners as well as their personal assistants – use the ABW work space (Edwards, 2015). Following KPMG, the claimed advantage of the new office space is that managers, directors and partners change desks and spend more time with employees to share information and knowledge. At PwC the change to an ABW-inspired workspace resulted in the removal of private offices for employees at the director and partner levels (Veldhoen + Company, 2018).[4] As a result of the ABW implementation, in most PwC offices, no employee has an allocated desk, rather each has the opportunity to choose from different working environments (Tauriello, 2014; PwC, 2017). This represents a major frame breaking exercise in which office relationships and interactions are forcibly restructured with employees required to decode such changes and adjust their interactions. While neither KPMG, nor PwC clarify whether the new ABW office space encourages employees across teams (audit, tax, consulting) to freely move around and share knowledge and client information, this knowledge-sharing exercise can enhance employees' ambitions to cross-sell NAS (see e.g. Svanstroem, 2013; Kinney et al., 2004).

As an example of restructuring central markers, in those PwC and EY offices that implemented ABW, workspace is zoned into areas according to activity, giving employees the opportunity to choose the space based on their tasks: high-focus areas where mobile phones are banned so that employees can concentrate (Anderson, 2014; EY, 2018b; Tauriello, 2014; Bleby, 2016), areas for formal or casual meetings, relaxation areas including napping pods that encourage employees to take a "power nap"

[4] Some PwC offices around the world, however, have not completely eliminated the office structure for partners, but instead, reduced partners' offices in size (Ross, 2012; see also **Cost Control** section).

(Bratcher, 2017), areas for events and seminars, and meeting spaces (Davenport Campbell, 2015; EY, 2018a). Temperature-controlled and sound-minimising phone pods provide privacy to make phone calls without disturbing colleagues. Conference phone calls or video calls can be made in EY's virtual collaboration rooms (EY, 2018a). These zones represent totally new forms of central marker that signal albeit flexible territorial claims, and indeed involve boundary markers that depict borders between adjacent zones and their differing activities. Improving employees' productivity is a declared intention. By offering standing desks, comfortable lounge areas equipped with sofas, and soundproof "cocoon" chairs, EY introduced a range of office furniture suited to different work habits (EY, 2018a). Once again, these exhibit props used to influence employees' interpretations of working environment and interactions.

Another example of central marker redesign can be found in Deloitte and KPMG strategically breaking down office space into three modes (Deloitte, 2017, 2019; Edwards, 2015). KPMG refers to its zones as "dubbed focus", "spark" and "collaborate" zones (Edwards, 2015), with each zone supporting a different work behaviour (Pash, 2016). With regards to the three modes of work areas, Deloitte (2017, 2019) expects the new workplace design to increase employees' productivity levels: (1) work settings supporting individual work, including "do not disturb" areas and quiet zones for telephone calls, (2) work settings for more routine-type tasks, and (3) work settings that encourage employees to socialise and network. Thus, in these instances, the central markers not only signal territorial claims, but reinforce dramaturgical loyalty within those areas with respect to acceptable behaviours within each.

Apart from the different zones in which to work, employees at the EY London office and several PwC offices can further choose between high-tech environments offering interactive audio-visual workspaces, and low-tech areas equipped with the conventional whiteboard, pen and paper (Consultancy.uk, 2015; PwC, 2017). As they prefer, PwC employees can either use the workstations in the various different areas or bring their own devices. To increase employees' satisfaction and well-being and to optimise the quality of their work, many PwC, EY and Deloitte offices, with the restructuring of the office design, have invested in latest user-friendly technologies, offering their employees a range of devices that allow for faster, more efficient communication, exchange of information and knowledge sharing (PwC, 2018b; Deloitte, 2019; EY, 2017). EY, for instance, invested in video conferencing, interactive room booking systems and video chat and touchscreen technology (EY, 2017, 2018b). To contribute to a more dynamic workspace, in their ABW offices, all Big 4 firms further installed artificial skylights to maximise and mimic natural light, and lighting offering different colour choices (EY, 2018a; Deloitte, 2017, 2019; Pash, 2016; PwC, 2017). These technologically-based strategies arguably form part of a reframing exercise in which employees are to be persuaded of not only the firm's desired outcomes, but its attractiveness and compatibility with professionals' and community technology habits in a desirable workplace socialisation environment.

The restructuring of EY's London office, turning it into an open space environment, reportedly led to creative collaboration between employees and made a positive contribution to their way of working and their productivity levels (Consultancy.uk, 2015). The redesign's claimed benefits include enhanced team building and collaboration, the mixing of employee skills and enhanced knowledge transfer (Waber et al., 2014). For Deloitte (2019), the main contribution of an ABW structure centres around employee collaboration. The close interaction between juniors, senior managers and partners is claimed to produce faster problem-solving and decision-making, hence increasing employee productivity (Deloitte, 2019). Evidence for ABW offices fostering employees' collaboration and communication with others has also been provided by several PwC offices, including the PwC Adelaide office, and the PwC Canberra office (reporting a 50 per cent increase in employee satisfaction) (Davenport Campbell, 2015). These collaborative experiments represent major changes to backstage performance routines. The major structural changes in office design and props has been an exercise in dramaturgical circumspection, reflecting changing employer expectations of appropriate employee behaviour patterns.

PwC's Rotterdam office reported increased employee occupancy rates resulting from increased employee satisfaction after the implementation of ABW. Real-time sensors have reported that the employee occupancy rate has risen from 40 per cent to over 55 per cent, nonetheless failing to reach the desired target rate of 70 per cent (Veldhoen + Company, 2018). This suggests the potential effect of employee efforts to retain some levels of autonomy and control over their working practices, through maintaining some forms of regional behaviour and possibly alternative subtle forms of boundary marking. As a consequence of increased employee occupancy rates, Deloitte and PwC offices have recognised that team members can be forced to sit in different areas when desk occupancy rates are high, suggesting the inadequacy of redesigned office structure and props to maintain the employer's desired cues and to maintain agreed dramaturgical loyalty between employers and employees. To allow employees to sit together when working on projects (O'Connor, 2018), some PwC offices (e.g. London) provide a digital desk booking service that allocates common area desks to employees on the same project (Ross, 2012; Johanson, 2017). Thus, new central markers are resorted to, in the form of time controls. As another strategy to overcome this problem, after office redesign, Deloitte placed functional teams such as tax professionals on the same floor to increase their efficiency. According to Deloitte, placing all tax professionals on the same floor after the redesign of the Detroit office, helped them to build and maintain their networks, and made it easier for them to approach each other face-to-face to discuss tax-related issues (Deloitte, 2019). This reflects an alternative approach of redesigning physical boundary markers and arguably represents a retreat towards more historical and conventional functional office layouts. The audit team, however, when not working from clients' premises, is encouraged to use the flexible workspaces in Deloitte's Detroit office. Deloitte claims that auditors' ability to choose between formal or informal, quiet or group meeting spaces, is the key to auditors productivity. Deloitte consultants require interaction regularly and hence use the redesigned office's team rooms or large conference rooms. In the New York office, these redesigned spaces can comfortably handle a group of five to eight people, and the technology offered provides convenience and the ability to engage virtually with other Deloitte consulting teams around the world (Deloitte, 2019). Those team and conference rooms are equipped with the required technology such as telephonic devices and wireless internet access that help ensure clarity on conference calls and seamless access to information and other professionals located overseas. According to Deloitte (2019), this enables networking, and digital problem solving. Such strategies can also enhance employee collaboration and reduce employee email traffic (Edwards, 2015; see also Waber et al., 2014).

Different teams appear to use the different workspaces differently. While tax professionals allocated to the same floor, continue working in a traditional office setting, auditors seem to roam around using certain workspaces according to their needs, and consultants move around in teams, occupying workspace designed for team projects and activities. Whilst employees' efficiency is paramount, different teams appear to work differently in order to increase their productivity. Thus while firm management may introduce ABW designs with a view to conditioning how accounting, tax and audit staff operate, there appears to be a gradual process of both staff adaptation as well as office design adjustments. This suggests a degree of compromise being reached between office design that envourages staff to work differently, and office design that responds to staff's different ways of working.

When asked about their perceived productivity and efficiency levels in the new ABW office space, 80 per cent of the PwC Canberra employees reported greater efficiency and effectiveness and 75 per cent perceived improvements in collaboration and communication. Furthermore, 60 per cent felt they deliver more value to clients (Davenport Campbell, 2015), while in KPMG, 75 per cent of employees perceive their productivity to have increased or to have remained consistent (Jerums, 2014).

However, Deloitte acknowledge several potential drawbacks associated with the new office configurations (Williams, 2017; Sander, 2017) such as less employee privacy and some distractions due to noise. In response, Deloitte (2019) again resorted to innovations in central markers in the form of team rooms, conference rooms as well as so-called "60-minute places" serving as quiet zones for employees to have confidential conversations and to make private phone calls (Deloitte, 2019). Again, this arguably signals a degree of retreat to traditional functional office spaces.

Moreover, Deloitte acknowledged that the close proximity between employees in the ABW office space does not necessarily lead to effective collaboration but instead increase non-productive "chatting" (Deloitte, 2017, 2019). This concern is downplayed by the company by arguing that "embracing and accepting that chatting with a colleague over a coffee can be just as productive as churning out a report" (Deloitte, 2017). EY is also aware of the noise creation and resulting distraction that open-offices produce. To mitigate these unwanted negative side-effects, the Big 4 accounting firm paid attention to acoustics in the new office space and installed sound-absorbing soffits and desk partitions that allow employees to concentrate (EY, 2018a; Williams, 2017). In this way, the firm has installed new props to allow employees to maintain regional behaviours that were formerly available before the reframing of office design and interaction expectations.

Another issue faced by the Big 4 accounting firms, given the increasing occupation rates in the newly redesigned offices, is that employees may occasionally not find available desks. Hence, to be guaranteed a workspace for the day, employees, as a subtle tactic to install territorial markers, tend to occupy desks when arriving at the office although they may not use them for the entire day. Even though KPMG does not consider high desk occupation rates as a serious problem assuming that "a third of people will almost always work in a collaboration zone; a third will always work in a focus zone; and a third will switch between zones depending on the nature of their work at the time" (Jerums, 2014), it took measures to counter this form of employee territorial marking. Accordingly it established the rule that employees must remove all belongings and work-related documents from desks if they are going to be away from it for more than four hours (the four hour limit being a replacement form of *employer* territorial marker). In the same vein, some PwC offices (e.g. Minnesota) introduced a 'hoteling system' (equivalent to hotdesking) through which employees can reserve desks online (Nelson, 2016). This represents a subtle form of technological props that enforce an employer-designed central marker. Hence, it is not possible for employees to reserve a work space for an entire day if not physically present (Edwards, 2015). As employees do not have their own offices or desks in which to store belongings, EY and KPMG introduced locker systems where bags and documents can be kept safely throughout the day (EY, 2018a; Edwards, 2015). Thus, the locker emerged as a compensatory central marker offered to employees.

With regards to employees' proximity, it was also reported by a PwC Rotterdam representative that particularly young employees found it intimidating to sit next to and interact with senior employees such as directors and partners (Veldhoen + Company, 2018). Thus, despite rearrangements of office structure and props, some expectations of relationships and interactions between junior and senior employees appear to have remained unchanged. The reframing of activities and expectations has not changed employee expectations and related behaviour patterns. According to PwC representatives, this will take time (Veldhoen + Company, 2018). In the long term, PwC expects the benefits of ABW offices, such as knowledge sharing, enhanced productivity, and increased collaboration and communication between clients and employees to outweigh the drawbacks of this type of office design (Leesman, 2017). The intended beneficiaries of PwC's new workspace setting, work attitude and the "collective knowledge bank" (Leesman, 2017) are the clients (PwC, 2017).

Client relationships

Nine of Deloitte's US-based offices, including the New York, San Francisco and Detroit offices, have transitioned to an ABW-oriented office design that encourages employees and clients to work in an open, flexible and collaborative environment (Deloitte, 2019). This represents a major effort to redesign the firm's front stage performance by dramaturgical circumspection involving an incorporation of and transition between backstage performance into front stage performance. Deloitte considers the office redesign to be a valuable contribution to the collaboration between employees and clients and contends that the ABW workspace supports the company in delivering high value services to clients (Deloitte, 2019). This reflects their attempt to reframe the firm's appearance and client interaction in an effort to persuade clients of the firm's attractiveness and ability to deliver expertise and valuable outcomes. For Deloitte (2019), driving the "best deliverables for our clients" was one of the main rationales for implementing ABW. Similarly to Deloitte, PwC appears to take pride in offering an office environment to clients that diverges from traditional forms of workplaces:

> "Whereas offices are traditionally designed with staff needs in mind, PwC's vision recognises that the value of the work our people produce is entirely dependent upon how well it serves our clients' needs and preferences." (PwC, 2017, p. 16)

Assertions that PwC's office redesign centres around employees' well-being and satisfaction (Bratcher, 2017), are often overshadowed by statements such as "we created something that supports the variety and diversity of our clients" (Needham, 2017), "we're inviting our clients into our home […] enshrining the client experience at our philosophical core" (PwC, 2017, p. 2), and "the client experience is right at the middle of what we're aspiring to do" (PwC, 2017, p. 14). In fact, PwC stated that several years of extensive client experience research have culminated in a global campaign to redesign the firm's workspace (Unispace, 2018). Such claims clearly put the client into the focus of PwC's office modernisations and ABW implementation. KPMG "encompassed the design and fitting out of the open plan office space, client meeting rooms, video conferencing facilities, [and] a bespoke catering facility for large client functions […]," indicating that the client is be the focus of the redesigned office (Paramount, 2020). Further, whilst it was industry tradition for KPMG to convene the majority of meetings at clients' premises, after the office redesign, KPMG clients requested using KPMG office space (O'Keefe, 2016): "Now clients not only insist on having meetings here, many of them ask if they can use the space for their own engagements, as well." KPMG is not the only Big 4 accounting firm that invites clients and hosts them in their offices. Deloitte (2018) invites clients to use its redesigned workspaces as "touch down spots, informal workspaces or meeting areas". More precisely, for clients, Deloitte's workspaces:

> "[…] stretch our clients' thinking and bring new perspectives. These areas can also transform into indoor or outdoor event spaces, providing stimulating settings to network or introduce novel concepts at larger gatherings." (Deloitte, 2018)

In Melbourne, PwC (2017) has focused on creating spaces that are conducive to co-creation and collaboration, moving away from "a transactional mindset" to a more relational approach with clients.

In PwC's Melbourne office, clients are not only invited to "have a bite to eat" but also to "introduce them to other clients and other people in the firm." Thus our evidence reveals Big 4 accounting firms as not only "telling" their clients about their innovative, efficient office design but also directly 'showing' them through clients' physical access and engagement in the office premises.

In the redesigned office, this can now be done in "a way that is far more relaxed and casual than sitting behind four closed walls with a white-linen service" (PwC, 2017). Thus, while considerable firm rhetoric has been paid to employee centred office redesign with an efficiency focus, this appears to be linked to a strong client appeal and satisfaction orientation. This suggests that the clients remain as the primary audience for front stage performance. More precisely, the building of trustful client relationships through inviting and hosting the client, allowing clients to use redesigned public accounting firm offices for their own purposes and introducing clients to other clients and other business units within the firm, gives an impression of intending to socially bond with clients (Ye et al., 2011). As noted by Svanstroem (2013) social bonding may impair auditor objectivitiy due to auditors' client identification, thereby affecting auditor independence and have implications for audit quality. Further, the act of introducing (audit) clients to other parts of the firms (e.g. management consulting), may be perceived as attempts to cross-sell NAS (Svanberg and Oehman, 2015). How such potential risks are prevented has not been outlined by Big 4 accounting firms. Moreover, if auditors are those introducing clients to other business units within the accounting firm, this exercise could be interpreted as a step towards further intended commercialisation of Big 4 accounting firms (see e.g. Demarkar et al., 2020).

Big 4 accounting firm office design for the client, clearly employs somewhat traditional central and boundary markers (floors) for employee-client interaction. PwC's Brisbane, Sydney and Melbourne offices adopted the ABW design, highlighting the need to create a range of spaces, settings and environments that cater to the needs of a variety of clients (PwC, 2017). While in Brisbane, two of the four open plan ABW floors are devoted to the client experience, in the Sydney office's twelve floors, four are structured according to clients' needs. Over those four floors, all client interactions, including meetings and entertainment takes place (Nott, 2017). Moreover, the staircase connecting floors has been designed to foster more communication, information exchange and collaboration between employees and clients (PwC, 2017). Five of the Melbourne office's twelve floors are devoted to working and collaborating with clients. This was a primary goal of that office's transformation (PwC, 2017). By way of further example, EY spread its Malta office over three newly designed open-office floors (EY, 2018a), while KPMG's Sydney office occupies 12 floors, of which 10 are employee work areas, one is a hospitality floor with reception desks, meeting and event venues, and one (called *Connect floor*), serves as client collaboration floor. The *Connect floor* which includes a coffee shop and open-office meeting areas, offers informal meeting space for KPMG employees and their clients (Pash, 2016; Williams, 2017). Such props clearly result from the firms' dramaturgical circumspection through which the presentation of socially attractive settings attempts to persuade the client of a professional environment which also incorporates an informal social setting.

Notably, these firms reporting their spatial allocations to client access are disclosing a *proportion* of total floors available for client access. While firm websites declare their intentions to be those of improving service to clients, enhancing the client experience and associated satisfaction levels, and creating an impression of collaboration and communication with clients, the issue of client confidentiality is not mentioned. Yet this can arguably emerge as an issue in several respects. The preservation of some floors as accessible backstage only to staff does preserve client confidentiality in terms of client data and discussions that are expected to be professionally confidential and held within the firm inaccessible to outside parties, including other visiting clients. On the other hand the client accessible floors are the frontstage performance areas where physically, staff and clients and their conversations are potentially visible and audible to other staff and clients uninvolved and unauthorised to access those meetings, relationships and information/advice exchanges. Such visible frontsage performances by both firm staff and their clients mean that all are visible and under surveillance with some of their formerly backstage routines potentially becoming visible on the front stage to others (Goffman, 1959). When all are thus on show, confidentiality breaches may even occur unwittingly through onlookers (uninvolved staff and clients) observing staff/client behaviours and discussions that are divorced from reality, and uncover confidential knowledge that threatens professional privilege and client interests (Jacobsen and Kristiansen, 2015). When aware of this front stage possibility on client access floors, staff and clients may distort their behaviours and communications to conceal information or impressions from onlookers, producing interactions and mutual impressions quite at odds with firm partners' and designers' ABW design and associated props intentions (Goffman, 1959; Morrow and McElroy, 1981; Kornberger and Clegg, 2004).

Arguably, while workspaces are traditionally designed according to employees' requirements, PwC asserts that the value of the services employees deliver, depends on how well these services serve the clients' needs (PwC, 2017). From PwC's perspective, to continue to remain a leader in its field, it had to rethink how to engage with clients (PwC, 2017). That the restructuring of its offices was a useful approach has been demonstrated by client visits that increased by 30 per cent in number (Johanson, 2017). This again suggests a strong dramaturgical and framing focus on client outcomes. Similarly, one of EY's main intentions behind the new office design has been employee delivery of better services to clients, while acknowledging that this goal can only be achieved if employees are offered more choices regarding where, when and how to work (EY, 2018b).

Cost control

Traditional workplace designs are said to no longer meet the requirements of highly mobile and flexible workers such as auditors and consultants who spend a considerable amount of time at clients' offices

(Unispace, 2018; Cranston & Tadros, 2018). Before redesigning the company's office spaces, Deloitte (2019) conducted research into employees' office occupancy rates, finding significant underutilisation with on average, only 30 per cent of the assigned headcount working from Deloitte office premises daily. This suggests a strong linkage between firm efficiency agendas and cost control agendas. Similar reasons were provided by PwC which claims to employ highly mobile and flexible employees. It considered offering one desk for every two employees given the oftentimes low employee occupation rates (Parker, 2018). Emphasising that cost saving on office space has never been the main intention of PwC's adoption of ABW, it was acknowledged that reduced costs resulting from the reduction in desk numbers and workspace were a positive byproduct for the Rotterdam office (Veldhoen + Company, 2018). The Dublin office placed the focus on – amongst others – the efficiency of space utilisation and the reduction of associated costs (Unispace, 2018). These representations give cause to suspect backstage office redesign motives for cost control that may be concealed at least to some degree by front stage declarations and public performances.

Again, apparently concealing any direct public reference to cost reduction due to the implementation of ABW (King, 2013), KPMG reports that it has been able to reduce office space required per employees by up to 35 per cent (Jerums, 2014). In 2018, EY reduced its office space by 25 per cent while increasing employee numbers by 50 per cent (Cranston & Tadros, 2018). The re-evaluation of employees' ways of working and their space requirements triggered EY to reconsider how much costly office space the company requires. As a consequence, bringing cost control motivations to the front stage, EY in Sydney moved to another corporate office building in order to save 15 per cent of office space and related costs.

> "Data and analytics give us greater insight and ability to increase space utilisation by identifying 'dead zones' – why have meeting rooms that are used only 60 per cent of the time?" (Cranston & Tadros, 2018)

In addition, EY decided to replace personal desks and meeting rooms that were barely used by introducing hot-desking areas and an open-office café with various different zones (Cranston & Tadros, 2018). In this way, as emphasised by EY, a considerable amount of space could be saved. Particularly those areas EY refers to as 'dead zones' could be removed with the introduction of the open-office space (Sander, 2017). EY claims that its new ways of working led to an increase in the firm's global revenue by 11 per cent in the financial year 2015, and to an 8 per cent increase in fee income in EY's UK branches in 2015 (Consultancy.uk, 2015). Here we see public declarations of both cost control and revenue enhancement motivations underpinning Big 4 accounting firm office redesign.

Penetrating a big 4 public agenda

Overall, Big 4 accounting firms emphasised a range of ABW's positive effects on their office efficiency; employees' productivity, satisfaction and collaboration; relationships with clients and cost control. For example, KPMG Australia's national head of people, performance and culture stated that the transition to an ABW environment enables the firm to:

> "house a growing number of people cost-effectively, operate with much greater efficiency and flexibility, and provide a competitive edge to meet the changing needs of our people, clients and communities into the future." (Jerums, 2014)

The above analysis of a wide variety of representations of contemporary global Big 4 accounting firm office redesign and management approaches reveals an arguably predominant focus on enhancing office and employee efficiency through zoned workspaces, technology applications, and fostering collaboration. However, such agendas appear to be strongly linked to client relations management, with cost control less referenced but lurking in the background.

Commercial configurations reflecting past trends

In many respects the above Big 4 contemporary office design innovations can be seen to strongly reflect prior office design literature principles developed over the past 100 years. From the mid-20th century, design for fostering client relations was being discussed in terms of aiming to impress clients and other visitors, making them feel valued and esteemed, reducing barriers between them and the firm (Terry, 1966; Duffy, 1997; Marmot & Eley, 2000). The aim was to engender client goodwill while controlling both employee and client access and visibility (Cope & Robins, 1925; Leffingwell & Robinson, 1950; Terry, 1966; Quible, 2014). In examining the websites of Big 4 accounting firms today, we see similar agendas aiming to persuade clients of the firms' attractiveness and value proposition, supporting their diverse profile, and now to a greater than previous degree, prioritising office design serving clients' needs (Deloitte, 2019; Needham, 2017; PwC, 2017).

Historically, concepts of office design for collaboration and communication were primarily oriented towards staff. These included designs and props to facilitate interaction, formal and informal communication, visibility and supervision (Childs, 1919; Gourlay, 1935; Leffingwell & Robinson, 1950; Terry, 1966; Keeling & Kallaus, 1996; Duffy, 1997; Laureau, 2003). Such concerns for employee collaboration (and claimed productivity) continued to be espoused by Big 4 accounting firms with respect to their contemporary office designs (PwC US, 2014; PwC, 2018b). This contemporary agenda extended to employee collaboration and communication that could combine employee skills and enhance knowledge transfer (Deloitte, 2019; Davenport Campbell, 2015).

While the open plan office was a phenomenon dating back into the 19th century and certainly popularised in the early part of the 20th century, office design and administration texts largely discussed its advantages with respect to employees rather than clients. The major points of contrast were drawn between private and open plan offices, and open plan advantages were discussed in terms of employee mobility and visibility, although some attention was paid to the risks of employee visibility to clients posing a distraction to employee work and efficiency (Cemach, 1961; Denyer, 1969; Quible, 2014; Duffy, 1997). With respect to staff mobility, throughout the 20th century, design literature focussed on trying to control staff mobility in a scientific management tradition of designing the office for information and data flow while minimising staff movement (Eisenberg, 1968; Leffingwell & Robinson, 1950; Odgers & Keeling, 2000; Quible, 2014). The redesigned ABW open plan offices presented by Big 4 accounting firms today similarly exhibit an historical concern with enhancing employee performance, de-emphasising private individual work and promoting more group oriented functioning. Again, the buzzwords repeatedly employed in this context are collaboration, communication, efficiency and productivity (Jerums, 2014; Evans, 2015; Davenport Campbell, 2015; PwC, 2017). While contemporary Big 4 office design discourse places greater emphasis on facilitating staff mobility, it nonetheless has evidenced some retention of and retreat to functionalist designated working areas. Further, the phenomenon of staff reserving spaces for longer term use appears to reflect some recourse towards earlier philosophies espoused in the office design literature (Jerums, 2014; Nelson, 2016; Deloitte, 2019).

Both the historical design literature and contemporary Big 4 office design agendas have seen props as important tools for influencing the staff and client attitudes and behaviours that firm management desires. Right through the 20th century, the use of props to manage impressions included decluttering offices, lighting, ventilation, noise control, colour, furnishings, equipment etc. (Dicksee and Blain, 1906; Leffingwell, 1917; Bird, 1927; Gourlay, 1935; Benge, 1948; Cemach, 1961; Keeling & Kallaus, 1996). These same strategies are essentially reflected in the props employed within contemporary Big 4 ABW style offices, including removal of all files, paperwork and personal belongings, temperature and sound control, mimicking natural light, furniture, kitchens, and user friendly technologies (Evans, 2015; EY, 2017, 2018a; PwC, 2018b; Deloitte, 2017, 2019).

The cost efficient use of space has similarly been a prime concern of both historical design literature and contemporary Big 4 accounting firms. Across the 20th century close attention was paid to miminum space requirements for space cost minimisation, staff well-being and efficient working. This included analyses of occupied and unoccupied space, floorplan layouts, desk footprint size, standard space per staff member, and churn cost (Childs, 1919; Benge, 1948; Leffingwell & Robinson, 1950; Terry, 1966; Denyer, 1969; Duffy, 1997; Marmot & Eley, 2000; Lareau, 2003). These same space and associated cost saving agendas are evident in Big 4 accounting firm office designs and state rationales. They include the identification and management of high and low office area and desk occupancy rates, investigation of staff working efficiency and effectiveness levels associated with specific designs, efficiency and costs of space utilisation, total floor space reduction and associated cost savings (Jerums, 2014; Davenport Campbell, 2015; EY, 2018a; Unispace, 2018; Cranston & Tadros, 2018; Deloitte, 2019).

Thus while Big 4 accounting firm websites and commentators may present innovative office design as pathbreaking contemporary approaches to staff efficiency management, cost control and client relations, they largely reflect the focus of and approaches to such issues that have continued across the past 100 years. The open plan orientation, employment of props, reduction of floor space, densification of space occupancy, management of staff and client movement and visibility, and underlying agendas of cost control are common themes historically and in today's Big 4 accounting firm.

One further comparison between past office design literature and today's apparent innovative Big 4 accounting firm office designs can be drawn. Most of the Big 4 accounting firms have emphasised a client/staff hospitality dimension to their office innovations, citing influences of hotel lobbies, airport airline lounges, and retail floors. These include functional areas for relaxation, conversation, meetings, individual concentrated work and so on. While this in one sense appears to be a new innovation, it arguably still reflects historical precedents. First, the office design literature over the past 100 years has addressed design issues and approaches to offices across many industries, professions and types of organisations. Thus the reflection of hospitality, travel and retail organisation customer area designs reflects a continuity of reflection of the historical design literature that included those types of organisations and settings. Second, the office design literature of more recent decades had already embraced such design innovations that transmitted hospitality principles into its discourse relating to staff working areas and staff-customer interface areas. Nonetheless the Big 4 accounting firms' adoption of these general design trends does provide a clear indication of the self-image held by and transmitted to clients by Big 4 firms. In contrast to the early 20th century emphasis on public practitioner professional image and imperatives, a more general commercial orientation has been deliberately adopted by these now large and effectively corporate Big 4 public practice firms. This points to the growing commercialisation of the Big 4 (Picard et al., 2014; Demarkar et al., 2020).

Initially observed in the 1990s (Hopwood,1998), the now normalised coexistence of public accounting and audit practice commercialism with professionalism has been recorded by Picard et al (2014) and Demarkar and Hazgui (2020). That might be explained by Grey's (1998) earlier observation that large accounting firm staff may see professionalism as a matter of compliance with firm behavioural expectations rather than technical competence or professional accreditation. The large firm expectations environment appears to be a central manifestation of public practice accounting commercialisation (Fogarty, 2014) and in one respect is confirmed by Broberg et al. (2018). They found that in working for these globally corporatised accounting firms, Big 4 staff prioritise their allegiance to and identification with their employing organisation and its now deeply ingrained commercial orientation and culture. This is arguably expoited by Big 4 management's redesigning their corporatised offices to manage staff behaviour and performance. That agenda is often expressed as allegedly fitting millennial staff's preferences but nonetheless designed to meet management's promotion of infrastructure cost reduction and staff efficiency and productivity improvement. Thus radical repositioning of all staff, including partners, onto common working areas is ostensibly aimed at fostering knowledge sharing and productivity but in fact further reinforces accounting commercialisation as staff of all hierarchical levels are housed exactly as in an ABW office of any industry or commercial organisation. Big firm partners become simply senior members of a limited liability corporate team. Researchers have observed these firms' commercial logics reflected in their employment of marketing strategies and language, and in their website communications (Picard et al., 2014; Edgley et al., 2016; Picard, 2016). As Picard (2016) puts it, the development of accounting firm marketing practices has produced a change in public practice mindset to embrace a commercial logic and focus. In this commercialised Big 4 environment then, we can see further evidence of commercialisation as these firms redesign their corporate offices and market them via their websites, ostensibly targeting both clients and present and future employees. The underlying design agenda of targeting client relations, staff efficiency and cost control are both reflections and drivers of firms' commercialisation (Grey, 1998; Picard et al., 2014).

The commercialised large public practice firm is most readily evident in its movement over recent decades towards a major focus on revenue generating consulting clientele in comparison with the independent audit or focus of earlier times (Lampe & Garcia, 2013; Lampe et al., 2016; Gardner & Bryson, 2020). As Picard et al. (2014) observe, accounting firm advertising increasingly portrays it as a business consultant offering dynamic and versatile consulting expertise (Guo, 2016). This in turn can lead to a Big 4 philosophy that the client is king, privileging its attention to client relationship development and risking inappropriately close relationships with them (Fogarty, 2014; Dermarkar & Hazgui, 2020; Gardner & Bryson, 2020). Once again, we see this commercial client focus being expressed both in the design of client accessible floors and in the firms' public web-based discourse advocating the strategic priority of client-staff engagement, and ensuing favourable client impressions. Responding to Big 4 senior partners' philosophy and intentions, designers' innovative office configurations aim to condition staff and firm focus on the primacy of the client (Picard et al., 2020).

The office designs inspired by the high-tech, retail, hospitality and aviation industries allow public practice firms to manage their client impression management and to shift the client relationship from a relationship of transactional nature to one built on comfort and long-term engagement. Big 4 accounting firms present themselves as reimagined corporate destinations by emphasising the value of genuine collaboration and "co-existence" with clients, rather than selling services. It is almost as if those firms are looking outside of their industry to create a new benchmark in client experience. Similarly to the "bond" developed between hotel employee and guest over the duration of the stay, "social bonding" and the forming of personal relationships between employees and clients appear to be intentional. The message of inviting clients into "home" (PwC, 2017) is reflected in the variety of thematic designs, ranging from open to more intimate, vibrant to subdued, relaxed to formal, hi-tech to hi-touch (PwC, 2017). Through the provision of different workspaces, Big 4 firms attempt to meet the diverse needs of clients across the spectrum, ranging from large businesses to start-ups. In the same way that hotels attempt to meet the expectations of the different clientele, Big 4 accounting firms appear to express through their new office designs a desire to ensure that their clients' expectations are catered for. The Big 4 accounting firms' motivation is to put the client first in a way the client wants to work.

Discussion and conclusion

Consistent with the historical office design and management literature examined in this study, efficiency emerges as a major strategic focus of Big 4 accounting firm office redesign and innovation. This has been pursued via a number of strategies: office and associated routines' reorganisation to facilitate employee collaboration, employee knowledge sharing, faster problem-solving, and employee satisfaction. Design and process innovations instituted with these ends in view have included zoning of workspaces, application of mobile technologies, and spatial structuring for mutual employee visibility and interaction. This reflects radical changes to dramaturgical circumspection of backstage performances between employees, particularly through significant restructuring of props to reframe office working conventions and expectations among employees. While former traditional physical central and boundary markers may have been erased, other forms of such markers have been introduced to signal new territorial claims and adjacent territory relationships such as functional workspace zoning. All this is presented front stage by the firms as resulting from employee consultation and acceptance. Yet these front stage claims appear to conceal a transitional motivation between front stage and backstage performance, where the firms appear to link employee satisfaction and wellbeing to employee efficiency, which is then assumed to improve client relations and by implication enhance firm revenues and profits. However, the front stage performance representations by the firms are at times belied by revelations of some ABW limitations that have led to adjustment strategies seemingly aimed at maintaining employer control of the reframing agenda. These include some redesigned central and boundary markers that have the appearance of reversing towards more traditional spatial floor and work-type area demarcations typical of earlier functional office designs.

Such efficiency-oriented office innovations both reflect and diverge from the historical technical literature on office design and management investigated in this study. The historical literature on office efficiency paid particular attention to designing space and layout to avoid employees wasting time: a major scientific management concern. This involved detailed planning of employee locations, movements, and interactions. While the Big 4 ABW designs appear to liberate employees from the more overtly scientific management functional positioning, they nonetheless maintain a scientific management pursuit of time and space efficiency, rendering employees more visible, less physically resourced and less autonomous in working space. This appears to risk similar employee reactions, in terms of informal communications and movements, to the worker soldiering observed in scientifically managed factories of the late 1800s and early 1900s. Big 4 ABW attention to props design such as furnishings and equipment are also reminiscent of the historical office design literature advocating attention to desk and workbench design and workflow positioning for efficiency. The actual contemporary office and furnishing designs may differ from historical design and practice, but the intention and planned outcomes appear to be the same. The contemporary reframing strategies disclosed by Big 4 accounting firms therefore appear to reflect a process of continual office design reframing over the past 100 years, as office layouts, props and central markers have been broken, reformulated and reinstalled, all in pursuit of office efficiency. Similarly, contemporary ABW design for employee visibility reflects the historical office design literature's advocacy of its advantages in terms of surveillance, workflow, and workplace efficiency. Thus, the backstage becomes a front stage performance venue for observation by other employees and management. While not often disclosed by contemporary Big 4 accounting firms, density of floorspace occupancy by organisational employees appears to form part of the strategic agenda for reframing office space, design and work practices, with gradually increasing density of occupancy often being implemented. This again reflects traditionally detailed attention paid to floor space usage, desk space design, and desk occupancy that is evident in the historical office design literature.

Client relations also emerged as an important strategic priority for office design in both the historical office design and management literature as well as Big 4 accounting firm's contemporary innovations. Both can be seen paying considerable attention to central markers signalling which areas are devoted to employees versus clients, and in careful dramaturgical circumspection in their pre-designing layout and props for the client areas of the office. In both the historical literature and contemporary practice, firms can be seen aiming towards client impression management to persuade them of the firm's attractiveness, expertise, and delivery of desired outcomes for the client. However, a significant difference takes the form of historical office literature's focus on front stage locations such as client meeting rooms, reception and waiting areas. These were historically seen as important public areas of performance for visibility to outsiders, while backstage office functions were largely to be screened from external client view. In contemporary Big 4 ABW designs, a compromise appears to be struck, whereby a proportion of office floors are screened off in traditional mode for backstage employee work, while a significant proportion of floors and floor space are designed for greater employee-client interaction and for clients to use the space for their own purposes. These spaces become territories that are allocated, prop designed, and access managed to project an impression of greater engagement with and involvement of clients in information exchange, evaluation and decision-making process. This reflects a deliberate agenda of projecting symbols of professional-client collaboration (being extended from the same agenda applied to and between employees, backstage). It reflects a major frame breaking and reframing of the office role. The client is invited to change their expectations of the client-professional relationship and to see themselves as a proactive participant in the professional decision-making process.

However, it is important to note that the firm controls this repositioning of the client relationship in that while allowing professional employees to transition from backstage to front stage collaborative performance *with* clients, nonetheless a definite backstage performance area obscured from client view, where professionals can prepare for and pre-plan their front stage performance with clients, is preserved. The apparent intention is one of building client satisfaction and goodwill, as advocated in historical office literature's discussion of client relations. As already indicated with reference to office efficiency agendas, in both historical office literature and Big 4 office redesign representations there appears to be a detectable linkage between office efficiency, interpreted in terms of employee efficiency, and the delivery of better outcomes to clients. While appearing to frame concern for employees in terms of employee satisfaction, Big 4 accounting firm representations imply an assumed link between satisfaction and employee productivity with flow-on impacts on client outcomes delivery. While not overtly stated, the collaborative working of professional employees with clients in the front stage client collaboration performance floors of the Big 4 accounting firms imply the directness of the perceived linkage between employee efficiency and client satisfaction. While collaborative performance floors may enhance client satisfaction, consideration should be given to the potential adverse implications. For example, social bonding between employees and clients can negatively impact auditor independence and may imply attempts to cross-sell NAS (Svanstroem, 2013; Ye et al., 2011). Particularly the latter appears to be encouraged by Big 4 accounting firms that invite clients to their redesigned offices with the intention to introduce those clients to other business units. Moreover, it cannot be ruled out that the relationships built between auditors and employees on collaborative performance floors will not become too close thereby posing a threat to auditor objectivity and audit quality (Svanberg & Oehman, 2015). In their media releases however, Big 4 accounting firms neither address such potential risks, nor do they outline preventive measures to avoid such risks. The opposite is the case: they appear to ecourage clients and employess, including employees from different business units, to engage with each other. These research findings show that the critique of EY's Melbourne office design expressed by the Chair of the PJC in the context of its parliamentary inquiry into the regulation of auditing, may not be unjustified and that Big 4 firms' intent behind redesigning offices may be to further commercialise the profession.

Cost control is an office innovation motivation that is directly addressed in the historical office design and management literature, and in contemporary press and commentators' reviews of Big 4 office redesigns. However, it is little mentioned in Big 4 accounting firm representations. Yet the latter *do* indirectly address this in terms of their discussions of monitoring office and desk occupancy rates, seeking to increase these, and reducing associated space used through redesign of floor layouts, furnishings, props, and central and boundary markers. Hence they report significant savings in space, and by inference associated costs. This conforms with contemporary ABW design literature that prioritises space and associated cost reduction as one of its major benefits. It also reflects historical office design literature concerns with saving costs, though more often historically discussed in terms of desk design, desk space and desk layout. Once again, the issue of cost control was largely represented historically in terms of space reduction, though with more overt and detailed references to associated costs than appears in contemporary Big 4 accounting firm ABW representations. Further contemporary references reflecting similar historical concerns, relate to office personnel reductions in terms of technology-based client self-service within the office environment. Thus, today we see a backstage concern with office space and its cost still prevalent but somewhat concealed by a public projection of employee satisfaction and client relations as the claimed firm motivations for office innovation. These latter motivations represent an attempt at reframing office design and functioning to persuade both employees and clients that their interests are best served by such design and work practice changes. In effect, a front stage performance is offered to these two stakeholder groups, while firm management's backstage agenda conforms with historical precedent in maintaining a firm focus on cost control, revenue and margin enhancement.

In this study's critical evaluation of public representations of Big 4 accounting firm office innovations and strategic agendas with respect to their delivery of professional services , four key research questions have been addressed. The claimed objectives and advantages for contemporary office design and practice innovations have largely focussed upon office efficiency and client relations, arguing an intention of increasing both employee and client satisfaction. Big 4 firm presentation and justification of their office innovations are couched in terms of physical front stage and backstage office performance areas, but in themselves present a front stage performance of ideas and symbols and rationales predesigned for the impression management of outside parties, particularly clients. Backstage strategic agendas that underpin the firms' front stage performance remain largely hidden, or only indirectly referenced. Nonetheless both front stage and backstage strategic agendas of contemporary Big 4 accounting firms with respect to traditional historical concerns with office efficiency, client relations and cost control have been revealed in the foregoing analysis and discussion. While the physical contemporary office designs may exhibit many features different from their historical predecessors, nonetheless much of their dramaturgical characteristics and intents reflect a hundred years of prior office design and management thinking.

While this study has been framed by Goffman's theories regarding individual and organisational performance and presentation, from its empirical findings, it also offers further augmentation to several conceptual dimensions of Goffman's theorising. In a Big 4 ABW office setting, the task of individuals selecting a front to encompass the routine they are executing (Goffman, 1959) becomes quite complex. Routines can involve firm staff interacting with clients, staff of similar hierarchical levels interacting with each other, partners interacting with subordinates, and staff undertaking solo work. In many circumstances, more than one of these interactive relationships in an ABW office setting may be occurring simultaneously or within observable sight of each other. This complicates an individual staff's task of selecting an appropriate front and may require them to try to accommodate presenting more than one front at a point in time. Such a combination could be termed a "conjunctive front". As Goffman has argued, particular fronts may become predetermined norms from which organisational members may select. Thus over time, a number of conjunctive fronts may prove generally accepted within the firm and become the menu from which firm partners and staff select.

The ABW office environment can also complicate Goffman's (1959) concept of dramatic realisation whereby the staff and the Big 4 accounting firm may attempt to infuse their activities and work with signs that dramatise their work and confirm their expertise and reliability, particularly to the client. The open plan, informal meeting and café area layouts represent a form of dramatised front setting that can attempt to project a contemporary client-inclusive and staff collaborative impression. However through their complete visibility and delimitation of any personalised individual staff space and symbols, they may diminish staff and partner abilities to dramatise their own roles, expertise and work. This tension between corporate and individual impression management may best be termed "dramatic exposure" whereby both corporate firm and individual professional are on show, attempting to dramatise their presentation to clients, but managing differential abilities to create and project signs and signals that serve both agendas.

Finally, and somewhat related to dramatic exposure, is the challenge of managing firm and staff backstage and frontstage performances in front of clients. As Goffman (1959) has argued, the backstage area is an important setting for preparation of or respite from front stage performances, often being facilitated by physical barriers that hide backstage areas and activities from audience access or view. Where this is not possible, the performers are said to lose backstage control. In an ABW setting, there is no retreat from front stage to backstage, so that partners and staff may be left entirely exposed to client view, and indeed partners are left exposed entirely to subordinates' view. That some firms show evidence of having restored some backstage functional work areas, suggests the staff pressures that can be experienced from being totally exposed in frontstage performance areas. Whereas Goffman has recognised that at times regions may switch between being areas of front stage and backstage performance, a Big 4 firm's ABW floor configuration may create what can effectively be termed a "performing backstage" whereby staff and partners are continuously performing in front of each other, and both are continuously performing in front of clients or with clients.

This study offers a significant contribution to our currently limited stock of knowledge with respect to public practice accounting and the role of the office in delivering professional accounting services. It offers a foundational evaluation of professional public practice accounting firm office design, strategising and management, both in terms of its representation and apparent underlying agendas with respect to the offering of professional services and the management of staff and clients. A further contribution lies in its drawing on the prior research literatures with respect to auditor independence, audit quality and the provision of NAS. Having used those prior studies as a platform, this study contributes some foundational understandings of the potential audit practice and relationship implications of professional accounting firm office designs such as ABW. From a methodological perspective, this study also offers a contribution in terms of its application of historical contextualisation in eliciting themes that facilitate our investigation and understanding of contemporary office design and associated professional working processes and relationships. This has not only assisted in sensiting researchers to the underlying agendas and implications present in contemporary professional firm office design, but allows recognition of both continuity and present day revisiting of historical precedents in what otherwise may appear to be entirely new forms of public practice accounting firm office configuration and management. So methodologically this approach has facilitated our explaining contemporary conditions from an historical perspective, in a sense thereby offering a history of the present. A further contribution of this study lies in its theoretical framing of changing office designs and their associated work roles and practice. Along with this study's professional office related augmentation of some of Goffman's concepts, the Goffmanesque framing affords an insight into the motivating agendas, underlying philosophies and changing professional work roles and practices that appear to emerge from the detail of public practice accounting office redesign.

Such first steps in professional public practice accounting office design implementation research presents opportunities for further investigation. For instance, as this study analysed Big 4 accounting firms' office efficiency levels post-ABW implementation that were mostly self-assessed by those firms, there is a significant research need for independent studies to examine whether the ABW office space effectively leads to increased professional firm employee productivity and office efficiency and whether those enhancements are worth the ABW investment. Further, while this study sheds light on Big 4 firms' implementation of ABW workspaces in general, future studies could add perspectives on how the work and roles of different departments or units (e.g. audit, tax, financial services, management accounting etc.) within public practice accounting firms are impacted by ABW. For example, researchers might investigate whether open-plan offices and ABW spaces without spatial separation between teams providing non-assurance service and teams performing audits, has unintentional effects on auditor independence and/or audit quality. Furthermore, with regard to the work and roles of different departments and units, further research is needed into the questions of to what extent office layout changes are a response to different methods of working, and to what extent such changes reflect management's efforts to condition staff towards working differently. Another research area that cuts across the accounting policy space is whether social bonding between auditor and client is encouraged in ABW offices even though it may facilitate the cross-selling of NAS or may pose the risk of impairing auditor independence, thereby affecting audit quality. Research methods that should be employed when addressing these potential research questions can vary. However, behavioural and experimental research methods may also be useful to address some of these research topics and to make a significant contribution to the accounting academe and practice.

In a more macro setting, researchers may also consider whether the ABW housing of accounting firm staff in the commercial corporate style carries any implications for the traditional boundaries created by professions seeking to build and protect their knowledge exclusivity and professional territorial control, as has been observed in the accounting professionalisation research literature. Somewhat relatedly, in its revelation of 100 years of office layout, props and markers change, this study reveals management intentions of changing staff self-conceptions, interactions, and behaviours. This raises further research questions regarding how accounting firms and professional accountants manage workspaces in changing or preserving their image and branding. A further research issue has been particularly signalled by the onset of the Covid-19 era in which questions of the design and management of office space and boundaries are not limited to physical space but increasingly extend to digital space. The latter is arguably becoming increasingly a location for both frontstage and backstage office working, interactions with clients, staff communications, management surveillance of staff, and the movement of the digital office to multiple physical locations ranging from the home, to regional hubs, to cafes and other locations. This raises further research questions involving the implications of the digital office for client relations, management control, efficiency and cost.

Appendix

Year of Publication	Author(s)	Country of Publisher
1906	Dicksee and Blain	UK
1917	Leffingwell	USA
1918	Dicksee	UK
1919	Childs	UK
1925	Cope and Robins	UK
1927	Bird	UK
1935	Gourlay	Australia
1938	Dolby	UK
1948	Benge	USA
1950	Leffingwell and Robinson	USA
1961	Cemach	UK
1966	Terry	USA
1968	Eisenberg	USA
1969	Denyer	UK
1996	Keeling and Kallaus	USA
1997	Duffy	UK
2000	Marmot and Eley	USA
2000	Odgers and Keeling	USA
2001	Kumar and Mittal	India
2003	Lareau	USA
2014	Quible	UK

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