INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES

Vol 16, Issue 11, (2026) E-ISSN: 2222-6990

Deconstructing the Architectural Design Firm's Business Model: A Qualitative Content Analysis of Global Giant Firms

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DOI Link: http://dx.doi.org/10.6007/IJARBSS/v16-i11/29487

Published Date: 25 November 2026

Abstract

This research purpose is to investigates the business models of internationally recognized architectural firms to uncover the strategic mechanisms that support sustained competitiveness, organizational resilience, and long-term growth. It explores how integrating business strategy with design expertise contributes to enduring organizational success. Methodology used in this research is qualitative content analysis was undertaken using publicly available secondary sources, including corporate websites, sustainability reports, social media platforms, and architectural industry publications. The Business Model Canvas provided the analytical structure for coding, categorizing, and comparing business model characteristics across multiple firms. The analysis finding indicates that high-performing architectural firms adopt holistic business models in which every Business Model Canvas element operates as an interconnected system. Competitive advantage is strengthened through distinctive value propositions, sustainability-driven services, strategic partnerships, continuous investment in talent and technology, effective stakeholder engagement, and diversified sources of revenue. The limitation this research is based solely on publicly accessible information from established international firms and therefore cannot examine internal decision-making processes or organizational contexts. The study contributes to architectural management scholarship by demonstrating the applicability of the Business

Model Canvas for examining professional design firms and by reinforcing the importance of aligning creative capabilities with strategic business management. The findings offer practical implication for guidance for architectural practices seeking stronger organizational performance while informing educators and professional bodies developing management capabilities within the profession. This research presents a novel cross-case examination of architectural business models using the Business Model Canvas, connecting perspectives from architecture, strategic management, and business model research.
Keywords: Architectural Design Firm, Architectural Practice, Business Model Canvas, Creative Entrepreneurship, Design Leadership

Introduction

The architectural profession faces persistent challenges in achieving long-term organizational sustainability despite growing global demand for innovative, resilient, and sustainable built environments. Although architectural firms have become increasingly sophisticated in delivering complex design solutions, many continue to experience difficulties in managing the commercial dimensions of their organizations (M. Bos-de Vos et al., 2018; Granet, 2021). Traditionally, architecture has been perceived primarily as a professional vocation rather than a business enterprise, resulting in business management and strategic planning often being viewed as secondary concerns or even incompatible with professional ethics, as reflected in the codes of conduct promoted by professional architectural institutes such as the American Institute of Architects (AIA) and similar organizations worldwide. Consequently, business education, financial management, and organizational strategy remain relatively underemphasized within architectural education and professional development. Many architectural firms therefore struggle to adapt to changing market conditions, maintain financial resilience, diversify revenue streams, and achieve sustainable growth. Addressing these challenges requires a deeper understanding of how globally successful architectural firms systematically design and manage their business models. Accordingly, this study aims to challenge the traditional separation between design excellence and business management by examining the business model structures of internationally recognized architectural firms and developing an empirical framework that integrates commercial strategy with architectural practice.

The primary issue addressed in this research is the widespread underestimation of business capability within architectural practice among practitioners, educators, and professional organizations. This perception stems from the long-standing belief that architecture should remain an idealistic profession in which commercial considerations may compromise professional integrity (Ahuja, 2023; M. Bos-de Vos et al., 2018). In reality, however, architectural firms are complex business organizations operating at the intersection of the construction industry and the creative economy. Unlike many other professional industries that benefit from extensive management education, established business frameworks, and comprehensive institutional support, architectural practice has received comparatively limited attention regarding organizational management and business development. As a result, many firms, particularly small and medium-sized enterprises (SMEs), face operational vulnerabilities that hinder long-term competitiveness and organizational growth. Furthermore, the business dimension of architectural practice remains relatively underexplored within academic literature (Heintz & Aranda-Mena, 2012). This study

addresses this research gap through a systematic examination of the business models employed by internationally recognized, sustainable architectural firms.

This study adopts a qualitative content analysis methodology based on secondary data sources (Creswell, 2014), including official company websites, corporate social media platforms, sustainability reports, and publications from reputable architectural media. The analysis employs Osterwalder and Pigneur's nine-block Business Model Canvas as the coding framework, encompassing Value Proposition, Customer Segments, Channels, Customer Relationships, Revenue Streams, Key Activities, Key Resources, Key Partnerships, and Cost Structure **(Bland & Osterwalder, 2019)**. Data were systematically categorized according to these components and relevant industry-specific themes. Subsequently, the relationships among the nine business model elements were analyzed within each firm before conducting cross-case comparisons to identify recurring strategic configurations associated with sustained organizational success and international competitiveness.

The findings reveal that globally successful architectural firms develop highly integrated business models in which all Business Model Canvas components operate as mutually reinforcing elements of a coherent organizational strategy. Rather than focusing exclusively on design quality, these firms extend their design capabilities to encompass the strategic management of the entire organization, demonstrating comprehensive design leadership (Gemser, Calabretta, et al., 2023; Hsieh et al., 2021). Their value propositions are characterized by strong differentiation, sustainability, and consistently high service quality. Customer relationships and communication channels reinforce these value propositions through credible project portfolios rather than promotional messaging alone. Meanwhile, key resources, partnerships, and cost structures collectively support innovation through investment in advanced technologies, intellectual property, and highly skilled professionals. These integrated capabilities ultimately generate diversified and resilient revenue streams that enable firms to compete successfully within increasingly complex global markets.

In conclusion, this study demonstrates that the long-term resilience and scalability of leading architectural firms depend not solely on exceptional design capability but on the deliberate integration of strategic business management throughout the organization. The Business Model Canvas provides an effective framework for understanding how business strategy and architectural design can function synergistically without compromising professional values **(M. , V. L. , & W. J. W. F. Bos-de Vos, 2021; Rozentale & van Baalen, 2021a)**. The findings contribute to the emerging body of knowledge on architectural management while providing practical guidance for architectural firms seeking sustainable growth. They also offer valuable insights for educators, professional organizations, and policymakers interested in strengthening business capability within the architectural profession and promoting more resilient and competitive architectural practices worldwide.

Literature Review

Business Challenges in Contemporary Architectural Practice

The architectural profession has evolved from a design-oriented discipline into a complex business operating in an increasingly competitive, globalized, and technology-driven environment. Today, architectural firms must address rapid technological change, sustainability requirements, evolving client expectations, and global competition while

maintaining profitability and long-term organizational performance. As a result, firms can no longer rely solely on design excellence but must integrate strategic management with professional expertise to remain competitive. Architecture occupies a unique position at the intersection of the creative industry, professional services, and the construction sector. Firms depend on creativity and innovation to produce distinctive designs, while simultaneously delivering knowledge-intensive professional services that require specialized expertise and client trust. At the same time, they operate within construction projects characterized by regulatory constraints, technical complexity, budgets, contractual obligations, and multiple stakeholders. This hybrid nature creates managerial challenges because firms must balance creativity, technical performance, professional responsibility, and commercial sustainability. Architectural firms also possess characteristics that distinguish them from conventional businesses. Their services are knowledge-intensive, project-based, and largely intangible, making professional reputation and client trust essential organizational assets. Since every project is unique, firms repeatedly assemble temporary project teams while maintaining permanent organizational capabilities. Consequently, they experience fluctuating revenues, uncertain cash flow, and limited economies of scale. These challenges have intensified as clients increasingly demand integrated services, digital collaboration, sustainable design, and measurable project outcomes, requiring continuous investment in technology and human capital (Granet, 2021; Heintz & Aranda-Mena, 2012).

Sustainability has become another major driver of change. Beyond environmental performance, sustainability now encompasses organizational resilience, economic viability, and long-term stakeholder value. Architectural firms are therefore expected to integrate sustainability into both project delivery and business operations, adding further complexity to strategic decision-making (Boeske & Murray, 2022). Despite these business pressures, architecture has traditionally been viewed primarily as a profession rather than a commercial enterprise. Professional values have historically emphasized design quality, ethics, and public responsibility over financial performance (Gosseye & Watson, 2022). Consequently, many architects regard business activities such as marketing, pricing, and strategic management as secondary—or even contradictory—to professional practice (Ahuja, 2023). This distinction has created an enduring tension between professional identity and commercial reality.

Previous studies show that professional norms often prioritize design expertise over managerial capability (Brown, 2021). Architects may perceive business-oriented decisions as threatening their professional identity, discouraging firms from adopting explicit commercial strategies even when these are essential for long-term survival (Ahuja, 2023). Similarly, Bos-de Vos et al. (2018) argue that architectural firms continually negotiate between creative aspirations and business performance, while Bos-de Vos et al. (2016) found that many firms successfully create design value but struggle to capture corresponding economic value. Professional recognition and client satisfaction do not necessarily translate into financial success. To remain competitive, firms must strengthen value capture through strategic pricing, diversified services, organizational learning, and stronger client relationships (Bos -de Vos et al., 2018; M. , V. L. , & W. J. W. F. Bos-de Vos, 2021; M. Bos-de Vos et al., 2016).

Increasing global competition has further reinforced the importance of business capabilities. Architectural firms now compete with multinational practices possessing greater financial resources, technological expertise, and internationally recognized brands. Sustainable

competitive advantage therefore depends on strategic planning, leadership, marketing, financial management, and organizational development rather than technical competence alone (Granet, 2021; Heintz & Aranda-Mena, 2012). Organizational resilience has likewise become essential, requiring firms to continuously adapt their services and strategies in response to technological disruption and changing market conditions. Strategic management literature provides a useful perspective for understanding these challenges. The Resource-Based View argues that sustained competitive advantage arises from valuable, rare, difficult-to-imitate, and well-organized resources (Barney, 1991). while Penrose's Theory of Firm Growth emphasizes that organizational growth depends on developing and effectively deploying internal capabilities (Lau & Michie, 2024; Penrose, 2009). Within architectural firms, these capabilities increasingly include design management, leadership, and organizational innovation, which align creative processes with business strategy and enhance long-term competitiveness (Gemser, Giulia, et al., 2023; Hsieh et al., 2021; Santos et al., 2018)

Overall, the literature indicates that contemporary architectural firms must balance creativity with commercial performance, professional values with strategic management, and innovation with financial resilience. These increasingly complex demands highlight the need for an integrated framework that explains how firms create, deliver, and capture value. Business model theory provides such a perspective by offering a holistic approach to understanding sustainable competitive advantage and long-term organizational success.

Business Model Theory and Business Model Canvas

Business model theory has become a central framework for explaining how organizations create, deliver, and capture value in increasingly competitive and dynamic environments. Rather than focusing on individual functions such as marketing, finance, or operations, business models provide a holistic perspective that integrates organizational activities into a coherent system of value creation (Osterwalder & Pigneur, 2010). Consequently, the business model serves as the link between strategic intent and operational execution, explaining the logic through which an organization generates and sustains competitive advantage. Although the concept gained prominence during the rise of digital businesses in the late 1990s, business model theory is now widely applicable across industries. Every organization operates according to an underlying business logic that determines how it creates customer value, delivers products or services, and captures economic returns. Rather than replacing corporate strategy, the business model complements it by illustrating how strategic objectives are translated into organizational activities

Business model research has evolved from viewing organizations through isolated functional perspectives to understanding them as interconnected value systems. This systems perspective emphasizes the relationships among organizational resources, activities, customers, and partners, enabling firms to identify opportunities for innovation by redesigning the overall business system instead of optimizing individual functions. Moreover, business models are increasingly recognized as dynamic rather than static. Organizations continuously adapt and innovate their business models in response to technological advances, changing customer expectations, market competition, and environmental uncertainty, making business model innovation a critical organizational capability (Osterwalder et al., 2014). Recent studies also highlight that successful business models rely heavily on intellectual capital and organizational capabilities. Dane-Nielsen and Nielsen

(Dane-nielsen & Nielsen, 2019) argue that value creation increasingly depends on integrating human expertise, organizational knowledge, relationships, and intangible resources rather than relying solely on physical assets. Furthermore, business models must balance multiple objectives, including economic performance, professional values, social responsibility, and stakeholder expectations (Rozentale & van Baalen, 2021b). Modern organizations also operate within broader business ecosystems, where competitive advantage depends not only on internal resources but also on effective collaboration with customers, suppliers, and strategic partners.

Among various business model frameworks, the Business Model Canvas (BMC) developed by Osterwalder and Pigneur (2010) is the most widely adopted. Derived from Osterwalder's business model ontology, the BMC provides a practical and visual framework consisting of nine interconnected building blocks that collectively explain how organizations create, deliver, and capture value. Its simplicity, flexibility, and standardized language have made it popular across business practice, entrepreneurship, and academic research. The nine building blocks include Customer Segments, Value Proposition, Channels, Customer Relationships, Revenue Streams, Key Resources, Key Activities, Key Partnerships, and Cost Structure. Together, these components describe the customers an organization serves, the value it offers, the resources and activities required to deliver that value, the partnerships supporting operations, and the financial mechanisms that sustain the business. Rather than functioning independently, the building blocks operate as an integrated system in which changes to one element influence the performance of the others.

The BMC is more than a descriptive framework; it also serves as a strategic tool for business model analysis, innovation, and organizational transformation. By providing a common language for comparing organizational structures and identifying strengths, weaknesses, and opportunities, the framework supports both strategic planning and business model innovation. Its comprehensive yet adaptable structure makes it particularly appropriate for analyzing architectural firms, whose business models integrate creative expertise, professional services, and commercial objectives. Accordingly, the Business Model Canvas provides the analytical framework for this study, enabling systematic comparison of business model characteristics across leading architectural firms.

Previous Business Model Studies in Architecture

Research on architectural firms has traditionally emphasized design quality, project management, and professional practice, while comparatively little attention has been given to business models. Although architecture operates as a knowledge-intensive professional service within both the creative and construction industries, most studies have focused on artistic and technical aspects rather than on how firms create, deliver, and capture value in competitive markets (Heintz & Aranda-Mena, 2012). More recent research, however, recognizes that long-term competitiveness depends not only on design excellence but also on effective business strategies and organizational capabilities. One of the earliest studies addressing this issue was conducted by Heintz and Aranda-Mena (2012), who argued that architectural firms require explicit business strategies to compete successfully. Their findings showed that successful firms distinguish themselves through strategic positioning, organizational capabilities, and client selection, rather than design quality alone. This work marked an important shift toward viewing architectural firms as business organizations.

Subsequent research has focused on the relationship between professional identity and business performance. Bos-de Vos et al. (2016) found that while architects excel at creating design value, they often struggle to capture corresponding economic value. Professional recognition and client satisfaction do not necessarily translate into financial success. Expanding this perspective, Bos-de Vos et al. (2018) introduced the concept of business model strategizing, demonstrating that architectural firms continuously negotiate between creative aspirations and commercial objectives. Rather than adopting standard business models, firms develop context-specific approaches that balance design quality, professional ethics, client expectations, and financial sustainability. Later, Bos-de Vos et al. (2021) argued that firms strengthen competitiveness by developing value-capture capabilities, including strategic pricing, client relationship management, organizational learning, service diversification, and strategic partnerships (M. , V. L. , & W. J. W. F. Bos-de Vos, 2021; M. Bos-de Vos et al., 2016, 2018; Vos, 2014).

Business model research in the broader creative industries supports these findings. Rozentale and van Baalen (2021) argue that creative professional firms must balance multiple objectives, including financial performance, creativity, professional values, and social responsibility. Consequently, successful business models are adaptive systems capable of accommodating competing priorities rather than maximizing financial outcomes alone. Its highlights that architectural firms increasingly operate within broader value ecosystems involving clients, consultants, contractors, regulators, and technology providers. Competitive advantage therefore depends not only on internal resources but also on managing collaborative networks effectively (Rozentale & van Baalen, 2021).

Recent studies also emphasize business model innovation and organizational adaptability. (Pekuri et al., 2015) found that leading design firms continuously transform their business models in response to digital technologies, sustainability requirements, and changing client expectations . This transformation extends beyond new services to include organizational restructuring, partnerships, and digital capabilities. Likewise, (Loots & van Bennekom, 2023) argue that strategic flexibility enables architectural firms to remain resilient by adapting services, organizational structures, and market strategies while maintaining creative performance.

Several studies further identify organizational capabilities that support business success. Milbratz et al. (2020) describe architectural firms as Knowledge-Intensive Business Services (KIBS) (Milbratz et al., 2020), emphasizing that innovation and organizational learning are key drivers of competitiveness. Manzakoğlu and Er (2021) similarly demonstrate that design management is a strategic capability that aligns business objectives with creative processes, improving organizational performance (Manzakoğlu & Er, 2021). In addition, Smyth and Kioussi (2011) highlight branding as a strategic asset that strengthens reputation, market differentiation, client trust, and value capture (Smyth & Kioussi, 2011).

Overall, the literature demonstrates a clear shift from viewing architectural firms solely as professional design practices toward understanding them as integrated business organizations. However, existing studies remain fragmented, typically examining individual aspects such as value capture, innovation, branding, design management, or strategic flexibility in isolation. Empirical applications of the Business Model Canvas (BMC) remain

limited, particularly in comparative analyses of internationally successful architectural firms. This gap provides the basis for the present study, which employs the Business Model Canvas as an integrated framework to examine how leading architectural firms configure their business models to achieve sustained competitive advantage.

Research Gaps

Research on architectural firms has grown substantially over the past two decades in response to increasing technological, environmental, and market challenges. Nevertheless, the literature remains largely focused on design processes, creativity, project management, sustainability, organizational learning, and professional practice, while relatively little attention has been given to understanding architectural firms as business organizations that create, deliver, and capture value in competitive markets (Heintz & Aranda-Mena, 2012; Granet, 2021). Early studies emphasized the importance of business strategy in architectural practice. Heintz and Aranda-Mena (2012) argued that long-term competitiveness depends on strategic positioning, organizational capabilities, and market orientation rather than design excellence alone. Similarly, Granet (2021) highlighted that contemporary architectural firms require competencies in financial management, marketing, leadership, and business development. While these studies recognize the importance of commercial management, they do not provide an integrated framework explaining how these strategic elements interact within an organization's overall business model.

Subsequent research has examined value creation and value capture in architectural firms. Bos-de Vos et al. (2016) found that firms often excel at creating design value but struggle to capture corresponding economic value. Their later studies (Bos-de Vos et al., 2018, 2021) further demonstrated that successful firms balance professional identity with commercial objectives by strengthening client relationships, service diversification, strategic partnerships, and organizational learning. Although these studies advance understanding of business strategy, they focus on individual organizational capabilities rather than examining the complete business model.

Research in the broader creative industries provides additional insights. Rozentale and van Baalen (2021) argue that creative firms must balance economic, professional, social, and creative objectives through adaptive business models, while (M. Bos-de Vos et al., 2018) emphasizes business ecosystems in which value is co-created with customers, partners, and suppliers. More recently, Pekuri et al. (2024) showed that leading design firms continuously transform their business models in response to digitalization, sustainability, and changing client expectations. Likewise, Milbratz et al. (2020) characterized architectural firms as Knowledge-Intensive Business Services (KIBS), highlighting the importance of innovation and organizational learning. However, these studies primarily address business model innovation, organizational change, or knowledge capabilities rather than providing a comprehensive analysis of business model components.

Collectively, the literature reveals three major research gaps. First, architectural management research continues to prioritize design-related issues while giving limited attention to architectural firms as integrated business systems (Heintz & Aranda-Mena, 2012; Bos-de Vos et al., 2018; Granet, 2021). Second, business-oriented studies remain fragmented, investigating isolated topics such as value capture, innovation, strategic flexibility, or

organizational learning without integrating them into a unified business model framework (Bos-de Vos et al., 2016, 2021; Pekuri et al., 2024). Third, despite the widespread adoption of the Business Model Canvas (BMC) across many industries (Osterwalder & Pigneur, 2010), its application in architectural management research remains limited. Few studies have systematically examined the nine BMC building blocks to explain how architectural firms configure value creation, value delivery, and value capture.

Furthermore, comparative research on the business models of internationally successful architectural firms is scarce. Existing studies generally focus on individual firms, specific regions, or selected organizational capabilities, limiting broader understanding of the strategic configurations that underpin sustained global competitiveness.

To address these gaps, this study adopts the Business Model Canvas (Osterwalder & Pigneur, 2010) as an integrated analytical framework to compare the business models of leading global architectural firms. Through systematic cross-case content analysis, it identifies common patterns of value creation, delivery, and capture, thereby contributing to architectural management research by advancing the understanding of architecture as both a creative profession and a strategic business enterprise.

Research Proposition

This study proposes that the long-term success of internationally recognized architectural firms is associated with the adoption of an integrated business model in which the nine components of the Business Model Canvas operate as a mutually reinforcing system rather than as isolated organizational functions. Sustainable competitive advantage is expected to emerge from the strategic alignment of value propositions, customer engagement, key resources, organizational capabilities, partnerships, and revenue mechanisms with the firm's design expertise and professional knowledge. Such integration enables architectural firms to balance creativity with commercial performance, strengthen organizational resilience, and respond effectively to changing market conditions, technological developments, and sustainability demands. By examining leading international architectural firms through the Business Model Canvas framework, this study proposes that superior organizational performance is driven not by exceptional design capability alone, but by the effective coordination of business model components that collectively support value creation, value delivery, and value capture.

Method

This study adopts a qualitative research approach employing qualitative content analysis to examine organizational business strategies using secondary data sources (Woo, 2021). Unlike quantitative content analysis, which primarily emphasizes word frequencies, qualitative content analysis focuses on interpreting textual information by grouping data into meaningful categories that represent shared concepts and patterns (Karyotakis & Antonopoulos, 2021). This interpretive approach enables researchers to identify both explicit and implicit meanings within documents, thereby uncovering recurring themes, relationships, and organizational insights that may not be immediately observable (Karyotakis & Antonopoulos, 2021).

The research utilizes publicly available secondary data, which are recognized as credible and systematic sources of organizational information (Al-Tabbaa et al., 2021). Data were collected

from three primary sources. Corporate websites and social media platforms were examined because they represent official communication channels through which organizations present their strategies, corporate identity, projects, and stakeholder engagement activities. These digital platforms play an important role in strategic communication and organizational visibility (Al-Tabbaa et al., 2021). Sustainability reports and annual reports were also analyzed to identify each firm's strategic priorities, operational performance, and commitments to environmental, social, and governance initiatives. Such reports provide reliable evidence for evaluating organizational engagement with sustainability and broader development goals (Nylund et al., 2022). In addition, architectural industry publications were reviewed to obtain complementary information regarding firm achievements, innovations, awards, and professional contributions to the architectural sector and sustainable development (Nuradhi et al., 2025). The selection criteria for the top 10 architectural firms used data from the WA100 for the past 10 years, from 2015 to 2025. The WA100 is an annual survey and firm size ranking of the largest architectural practices in the world, organized by Building Design Online since 2005, a UK-based professional publication for the architecture and built environment industry using a website as its platform. The ranking on this platform includes data on the firm's name, country of origin, number of architects, and fee income (fee-earning architects). The 10 firms used as objects in this comparison are based on the 10 firms that are most frequently in the top 10. The following table contains the name, frequency, and official website.

Architecture Firm	Frequency in top ten WA100 2015-2025	Official Website
Gensler	12/12	www.gensler.com
AECOM	12/12	www.aecom.com
Arcadis	12/12	www.arcadis.com
Perkins&Will	12/12	www.perkinswill.com
HDR	11–12/12	www.hdrinc.com
Nikken Sekkei	11–12/12	www.nikken.jp/en
HKS	10–11/12	www.hksinc.com
IBI Group	9–10/12	www.arcadis.com
Perkins Eastman	9–10/12	www.perkinseastman.com
CallisonRTKL	8–10/12	www.callisonrtkl.com

The Business Model Canvas (BMC) developed by Osterwalder and Pigneur (2010) served as the principal analytical framework for this study. The framework consists of nine interconnected building blocks that collectively describe how an organization creates, delivers, and captures value. Using these building blocks as predetermined coding categories provides a standardized structure for examining and comparing business model characteristics across multiple architectural firms (Osterwalder & Pigneur, 2010). The coding process involved assigning relevant information extracted from each data source to the corresponding BMC component. This structured procedure enabled systematic comparison of business strategies while highlighting similarities and differences among the selected firms (Osterwalder & Pigneur, 2010). Both manifest and latent content were examined throughout the analysis. Manifest content refers to directly observable information contained in the documents, whereas latent content focuses on identifying underlying meanings, strategic intentions, and implicit organizational characteristics (Woo, 2021; Lu et al., 2023). Following established qualitative content analysis procedures, the analytical process was conducted in three stages: data reduction, explication, and structuring (Nylund et al., 2022). Relevant

information was first extracted from reports, corporate websites, and industry publications before being organized into thematic categories based on the Business Model Canvas. The categories were continuously refined through iterative comparison to ensure consistency and produce a comprehensive representation of each firm's business model (Nylund et al., 2022). To enhance the trustworthiness of the findings, the coding process was independently conducted by multiple researchers. Inter-coder reliability was evaluated through coding agreement, commonly assessed using measures such as Cohen's kappa coefficient (Lu et al., 2023). This systematic coding protocol improves the rigor, transparency, and reproducibility of document and website analysis, thereby strengthening the credibility of organizational business model research (Al-Tabbaa et al., 2021). The triangulation used in this study to ensure that their business model analysis is not solely based on promotional claims is by comparing the consistency between content on their own website and articles on leading design websites such as ArchDaily, Dezeen, Designboom, Architizer, and Architectural Record. For example, content comparisons include statements and built project portfolios. Built project portfolios are also compared using project tracking tools through common browsers.

Furthermore, the UIA (International Union of Architects) has rules adopted by all architectural associations in various countries regarding the prohibition of promotions in the form of overclaims. Special analysis methods are used for the revenue stream and cost structure blocks, which are difficult to find data for on official websites and news outlets. The models of these two blocks can be identified from data from other blocks, as blocks within a business model are causally related; the model used in one block will impact several other blocks (Osterwalder and Pigneur, 2010). To determine the firm's cost structure, it can be traced from the value proposition, customer segment, and key activities blocks. Value propositions that focus on project type specialization, novelty, innovation, sustainability, and risk reduction through reputable senior architects are consistently aligned with their customer segments, which are global enterprises/organizations with large, global projects and project types with very specific requirements. Serving this niche segment requires specialized, high-quality key activities and resources. With these key activities and resources, the cost structure is value-driven, as its structure is rooted in the value they offer to their customers, which demands high costs. Meanwhile, according to their revenue stream data from the WA100, which lists fee income received by all their architects, the architectural fees of these 10 firms are three to four times the average in the US and UK. This aligns with their value-driven cost structure, with high fees and high revenues.

Findings

Overview of Business Model Patterns

The cross-case analysis of ten internationally recognized architectural firms reveals a high degree of consistency in how successful firms configure their business models. Although the firms differ in geographical origin, organizational size, market focus, and service specialization, they demonstrate remarkably similar strategic patterns across the first four components of the Business Model Canvas (BMC): Customer Segments, Value Proposition, Channels, and Customer Relationships. Rather than emphasizing a single source of competitive advantage, these firms integrate multiple business model components into a coherent value creation system, supporting the proposition that business success is achieved through the interaction of complementary organizational elements rather than isolated capabilities (Osterwalder & Pigneur, 2010).

Across all cases, business success is not driven solely by architectural design excellence. Instead, the firms position themselves as multidisciplinary professional service organizations that combine architecture with engineering, planning, sustainability, digital technology, workplace strategy, urban consulting, and research. This diversification enables them to respond to increasingly complex client demands while reducing dependence on traditional architectural commissions. Such findings reinforce previous observations that architectural firms have evolved from design-focused practices into strategic knowledge-intensive organizations operating within highly competitive markets (Heintz & Aranda-Mena, 2012; Granet, 2021).

Another recurring characteristic is the strong alignment between customer needs and organizational capabilities. Rather than offering standardized services, the firms consistently tailor their expertise to different client groups and project contexts. Their business models therefore emphasize long-term value creation through specialized knowledge, innovation, and strategic collaboration instead of competing primarily on price. This finding supports the Business Model Canvas perspective that sustainable competitive advantage emerges when all business model elements reinforce one another to create superior customer value (Osterwalder & Pigneur, 2010).

Customer Segments

The analysis indicates that leading architectural firms serve diverse customer segments spanning both public and private sectors. Despite differences in project portfolios, the firms consistently target institutional clients undertaking complex, high-value, and long-term developments rather than individual residential customers. Corporate organizations, government agencies, healthcare providers, educational institutions, real estate developers, transportation authorities, and hospitality operators represent the dominant customer groups across all ten firms.

Corporate clients constitute one of the most important market segments. Large multinational companies increasingly require integrated workplace strategies, headquarters design, mixed-use developments, and corporate campus planning that combine architecture with organizational consulting and digital innovation. Firms such as Gensler, Perkins&Will, and CallisonRTKL have positioned themselves strongly within this market by offering multidisciplinary design solutions that extend beyond conventional architectural services. Their official communications emphasize workplace transformation, employee experience, and organizational performance, reflecting a shift from designing buildings to creating environments that support business objectives.

Government agencies represent another dominant customer segment, particularly for firms engaged in infrastructure, transportation, urban development, and civic architecture. AECOM, Arcadis, HDR, and Nikken Sekkei demonstrate extensive involvement in public-sector projects, including airports, rail systems, urban regeneration, environmental planning, and public infrastructure. Working with government clients requires firms to integrate architectural expertise with engineering, environmental consulting, regulatory compliance, and stakeholder engagement, thereby reinforcing the multidisciplinary nature of contemporary architectural practice.

Healthcare and educational institutions also emerge as significant customer groups. Perkins&Will, HDR, HKS, and Perkins Eastman have developed specialized expertise in evidence-based healthcare design, educational facilities, and research environments. These sectors demand highly specialized knowledge concerning user behaviour, operational efficiency, sustainability, and long-term performance. Rather than competing through general design capability, these firms differentiate themselves by developing deep sector-specific expertise that can be transferred across multiple projects.

The findings further indicate that customer segmentation is based not only on industry sectors but also on project complexity. Nearly all firms target clients requiring multidisciplinary coordination, innovation, sustainability, and long-term strategic advisory services. This approach demonstrates that customer segmentation extends beyond demographic or industrial classification toward identifying organizations facing complex design and organizational challenges. Consequently, successful architectural firms compete by solving sophisticated client problems rather than simply producing architectural drawings.

Value Proposition

Among the nine Business Model Canvas components, the value proposition demonstrates the strongest consistency across the ten firms. Rather than competing on cost, all firms emphasize the delivery of high-value professional services through design excellence, innovation, sustainability, technological capability, and integrated expertise. Their value propositions consistently position architecture as a strategic service capable of generating social, environmental, economic, and organizational value for clients.

Design quality remains the foundation of every firm's value proposition, yet it is no longer presented as the sole source of differentiation. Instead, architectural design is integrated with broader consulting services, including urban planning, digital transformation, sustainability advisory, workplace strategy, healthcare planning, resilience, and asset optimization. This finding illustrates a significant evolution in architectural practice, where firms increasingly compete through comprehensive professional solutions rather than isolated design services. Sustainability is another dominant element across all cases. Every firm explicitly incorporates environmental responsibility into its corporate positioning, although the emphasis varies according to organizational specialization. Arcadis highlights climate resilience and environmental consulting, Perkins&Will emphasizes healthy materials and evidence-based design, while Gensler promotes sustainable workplaces supported by extensive research initiatives. Sustainability therefore functions not merely as an environmental commitment but as a strategic mechanism for creating long-term client value.

Innovation and research also distinguish the leading firms. Several organizations have established dedicated research institutes, innovation laboratories, or proprietary knowledge platforms that continuously generate new design methods and technical expertise. Gensler's Research Institute, Perkins&Will's Healthy Materials Lab, and HKS's LINE laboratory exemplify investments that transform organizational knowledge into client value. These initiatives demonstrate that innovation has become institutionalized within the firms rather than remaining dependent on individual designers.

Digital capability further strengthens the value proposition. Firms increasingly integrate Building Information Modelling (BIM), digital twins, artificial intelligence, data analytics, and smart-city technologies into project delivery. Arcadis and IBI Group particularly emphasize digital infrastructure and intelligent mobility, illustrating how technology has become an integral component of architectural value creation rather than merely a production tool.

Overall, the analysis demonstrates that successful architectural firms differentiate themselves through multidimensional value propositions combining creative excellence, specialized expertise, sustainability, research, and technological innovation. These integrated offerings create substantial barriers to imitation because they depend upon accumulated organizational knowledge, multidisciplinary collaboration, and continuous capability development rather than individual projects alone.

Channels

The findings reveal that leading architectural firms employ multiple communication and delivery channels to engage clients and stakeholders throughout the project lifecycle. Unlike product-oriented organizations that depend on physical distribution networks, architectural firms primarily utilize relationship-based and knowledge-based channels that facilitate communication, collaboration, and professional engagement.

Corporate websites function as the principal communication channel across all firms. Rather than serving solely as marketing platforms, these websites communicate organizational identity, sector expertise, research outputs, sustainability commitments, and project portfolios. They also demonstrate thought leadership through publications, case studies, design insights, and innovation reports, enabling firms to establish credibility before direct client engagement.

Digital media have become equally important. LinkedIn, Instagram, YouTube, and other professional platforms are widely used to disseminate completed projects, research findings, awards, organizational initiatives, and sustainability achievements. These platforms extend organizational visibility while reinforcing professional reputation among clients, industry partners, and potential employees.

Industry events, conferences, academic collaborations, and professional associations represent another significant channel. Many firms actively participate in architectural exhibitions, research partnerships, educational programs, and public forums that strengthen relationships with professional communities and generate new business opportunities. Such activities position firms not only as service providers but also as contributors to knowledge development within the built environment sector.

Project delivery itself constitutes a critical communication channel. Continuous interaction with clients through workshops, co-design sessions, stakeholder consultations, and multidisciplinary coordination meetings enables firms to refine design solutions while building long-term relationships. Consequently, channels in architectural practice extend far beyond marketing activities and become mechanisms for knowledge exchange, collaboration, and trust development.

Customer Relationships

Customer relationships represent another consistently strong characteristic across the ten firms. The findings indicate that successful architectural firms prioritize long-term partnerships rather than transactional project delivery. Their business models emphasize collaboration, trust, continuous communication, and strategic advisory services throughout the entire project lifecycle.

Relationship management begins during project initiation through intensive client consultation aimed at understanding organizational objectives rather than simply collecting technical requirements. Throughout project execution, firms maintain close interaction via collaborative design workshops, multidisciplinary coordination meetings, digital collaboration platforms, and stakeholder engagement processes. This continuous dialogue enables design solutions to evolve alongside changing client needs.

Many firms also extend relationships beyond project completion by providing post-occupancy evaluation, facility optimization, workplace performance assessment, and long-term advisory services. Such ongoing engagement transforms clients into strategic partners and increases opportunities for repeat commissions.

Another important finding is that trust and reputation function as fundamental relational assets. Since architectural services are intangible and project outcomes cannot be fully evaluated before completion, clients rely heavily on previous experience, professional credibility, research capability, and demonstrated expertise when selecting design consultants. Consequently, customer relationships are reinforced through consistent project performance, thought leadership, sustainability commitments, and organizational reputation rather than through conventional promotional activities.

Overall, the analysis demonstrates that internationally successful architectural firms cultivate enduring client relationships by combining technical competence with continuous collaboration, knowledge sharing, and strategic advisory services. These relationship-oriented practices strengthen customer loyalty while supporting long-term organizational growth and sustained competitive advantage, illustrating that value creation in architecture extends well beyond the completion of individual projects.

Key Resources

The comparative analysis shows that **human capital** is the most critical strategic resource across all ten architectural firms. Unlike manufacturing organizations, where competitive advantage often depends on physical assets or production capacity, architecture firms rely primarily on professional expertise, creativity, technical competence, and accumulated organizational knowledge. Architects, engineers, planners, urban designers, sustainability specialists, digital consultants, and researchers collectively represent the core assets through which firms generate value. This finding reinforces the view that architecture is a **knowledge-intensive professional service**, in which intellectual capital constitutes the principal source of competitive advantage rather than tangible resources (Heintz & Aranda-Mena, 2012).

Beyond professional talent, organizational knowledge emerged as another essential resource. Nearly all firms invest extensively in research programs, proprietary methodologies, design

standards, digital knowledge repositories, and communities of practice that facilitate knowledge sharing across projects and geographic locations. Gensler's Research Institute, Perkins&Will's Healthy Materials Lab, and HKS's LINE research laboratory exemplify how leading firms institutionalize knowledge generation as an organizational capability rather than depending solely on individual expertise.

Digital infrastructure also represents a major strategic resource. Firms consistently highlight investments in Building Information Modelling (BIM), digital collaboration platforms, artificial intelligence, digital twins, computational design, and data analytics. These technologies improve design quality, interdisciplinary coordination, and project efficiency while enabling firms to deliver increasingly sophisticated services. Arcadis and IBI Group, for example, emphasize digital platforms that integrate architecture, mobility, and smart-city solutions, demonstrating that technology has become a strategic organizational capability rather than simply a production tool.

Brand reputation and international recognition likewise constitute valuable intangible resources. Decades of successful project delivery, professional awards, research leadership, and client trust have enabled these firms to establish globally recognized brands that facilitate access to prestigious commissions and long-term client relationships. Such reputational assets are difficult for competitors to replicate because they result from sustained organizational performance over many years.

Overall, the findings indicate that leading architectural firms prioritize intangible assets—including knowledge, expertise, innovation capability, digital infrastructure, and organizational reputation—as their primary strategic resources. These findings support the argument that competitive advantage within architectural practice is increasingly derived from intellectual capital and organizational capabilities rather than physical assets alone.

Key Activities

The analysis demonstrates that the activities undertaken by leading architectural firms extend considerably beyond conventional architectural design. Although design remains the foundation of professional practice, firms increasingly integrate research, innovation, sustainability, digital development, client advisory, and organizational learning into their daily operations. Consequently, value creation depends upon a broad portfolio of interconnected activities rather than the production of design documents alone.

Architectural design and multidisciplinary project delivery remain the firms' principal activities. All firms provide integrated services combining architecture with engineering, urban planning, landscape architecture, environmental consulting, workplace strategy, and project management. This multidisciplinary approach enables organizations to address increasingly complex client requirements through collaborative problem-solving rather than isolated disciplinary expertise.

Research and innovation represent another highly visible activity across the sample. Many firms maintain dedicated research teams investigating topics such as sustainable materials, healthcare environments, workplace transformation, urban resilience, and digital technologies. Rather than treating research as an occasional activity, these organizations

integrate evidence generation directly into design practice, allowing new knowledge to inform future projects and strengthen organizational differentiation.

Digital innovation has likewise become central to organizational activities. Firms invest heavily in BIM implementation, computational design, digital twins, artificial intelligence, and data-driven design processes that improve project coordination and decision-making. These activities not only increase operational efficiency but also enable firms to develop new consulting services related to digital transformation and smart-city development.

Knowledge dissemination further distinguishes leading firms. Publications, research reports, webinars, conferences, professional education, and thought leadership initiatives are consistently highlighted throughout corporate communications. These activities strengthen organizational reputation while facilitating knowledge exchange with clients, universities, industry partners, and the broader professional community.

Collectively, the findings indicate that the key activities of successful architectural firms revolve around creating, integrating, and applying specialized knowledge across multiple practice areas. Their business models therefore position architecture as an ongoing process of organizational learning and innovation rather than merely a project-based design service.

Key Partnerships

Partnerships emerge as one of the strongest and most consistent characteristics among the ten firms. The findings indicate that successful architectural firms rely extensively on collaborative networks that extend organizational expertise beyond internal capabilities. Rather than functioning as conventional supply chains, these partnerships facilitate knowledge exchange, innovation, and integrated project delivery across multiple disciplines. Strategic alliances represent the dominant partnership model. Every firm collaborates with universities, research institutions, technology companies, sustainability organizations, government agencies, healthcare systems, and major property developers. These long-term relationships enable firms to access specialized expertise, emerging technologies, and sector-specific knowledge while strengthening innovation capabilities. Gensler, Arcadis, and Perkins&Will particularly emphasize research partnerships that support continuous organizational learning and evidence-based design.

Buyer–supplier relationships are equally universal across the sample. Structural engineers, MEP consultants, landscape architects, contractors, material manufacturers, lighting specialists, sustainability consultants, and BIM experts contribute complementary technical expertise required for integrated project delivery. Rather than representing purely transactional relationships, these collaborations facilitate the integration of distributed knowledge into cohesive design solutions.

Joint ventures are also common, particularly for large-scale infrastructure, transportation, mixed-use developments, and international public projects. Firms including AECOM, Arcadis, HDR, Gensler, Nikken Sekkei, and CallisonRTKL frequently establish project-specific alliances with other design firms, engineers, and contractors to satisfy procurement requirements and combine complementary expertise. Meanwhile, coopetition occurs less frequently but

remains evident in international design competitions and mega-projects, where firms collaborate with organizations that are competitors in other contexts.

Overall, these findings suggest that partnerships function as strategic knowledge networks rather than simple contractual arrangements. By combining expertise from multiple organizations, firms enhance innovation capacity, multidisciplinary collaboration, and organizational flexibility while reducing the limitations associated with relying solely on internal resources.

Cost Structure

The analysis reveals that all ten firms adopt a value-driven rather than cost-driven cost structure. Their official communications consistently emphasize investments in professional talent, research, sustainability, innovation, digital technology, and organizational learning instead of operational cost minimization. This indicates that leading architectural firms compete by delivering superior value rather than by offering low-cost services (Osterwalder & Pigneur, 2010). Professional expertise constitutes the largest cost component across all firms. Significant investments are directed toward recruiting highly qualified architects, engineers, planners, sustainability specialists, researchers, and digital experts. In addition, firms allocate substantial resources to research laboratories, digital platforms, enterprise BIM systems, artificial intelligence, and organizational knowledge management. These expenditures demonstrate that operating costs are intentionally structured to strengthen innovation capability and long-term competitiveness rather than short-term financial efficiency.

The findings also show that all firms benefit from economies of scope, while larger multinational organizations additionally leverage economies of scale. Economies of scope arise because knowledge developed within one sector can be transferred across multiple practice areas. Research conducted for healthcare projects, for example, subsequently informs educational, workplace, civic, and hospitality design. Similarly, digital technologies developed for transportation projects can support smart-city initiatives and urban planning. This continual recombination of organizational knowledge enables firms to diversify services while avoiding proportional increases in development costs. Larger organizations such as Gensler, AECOM, and Arcadis also achieve economies of scale through global office networks, centralized digital infrastructure, standardized knowledge management systems, and international client portfolios. Nevertheless, the analysis indicates that scale alone does not explain competitive advantage; instead, organizational success depends primarily on how effectively firms invest in and deploy knowledge across their global operations.

Revenue Streams

The final Business Model Canvas component demonstrates how architectural firms convert professional expertise into economic value. The analysis indicates that usage fees constitute the dominant revenue model across all ten firms. Clients primarily pay for architectural design, planning, engineering, consulting, workplace strategy, feasibility studies, master planning, and construction administration rather than purchasing tangible products. Consequently, revenue is generated through the application of specialized knowledge to solve complex client problems rather than through asset sales.

Several pricing mechanisms coexist within the firms. Fixed-fee contracts and percentage-of-construction-cost arrangements remain the most common approaches for architectural commissions, while hourly billing is widely applied to consulting, planning, research, and advisory services. More recently, some firms including Gensler, Arcadis, and CallisonRTKL have increasingly adopted value-based pricing for specialized consulting services related to workplace transformation, sustainability, digital innovation, and smart-city development. Under this approach, clients pay for strategic outcomes rather than simply design hours, reflecting the increasing value of intellectual capital and organizational expertise. Although licensing currently represents only a minor revenue source, several firms have begun commercializing proprietary digital platforms, benchmarking systems, software applications, and research products. This suggests an emerging transition from monetizing professional labour toward generating income from codified organizational knowledge.

Summary of Findings

Overall, the cross-case analysis demonstrates that internationally successful architectural firms employ highly integrated business models in which all nine Business Model Canvas components reinforce one another. Rather than relying exclusively on design excellence, these organizations combine specialized customer segmentation, differentiated value propositions, knowledge-based communication channels, collaborative client relationships, highly skilled human resources, innovation-oriented activities, strategic partnerships, value-driven cost structures, and diversified revenue mechanisms into coherent systems of value creation. The findings indicate that sustained competitiveness in contemporary architectural practice is supported by organizational capabilities that integrate creativity, knowledge, technology, collaboration, and strategic management, thereby extending the role of architecture beyond professional design toward comprehensive business innovation.

Discussion

The findings demonstrate that internationally successful architectural firms achieve design leadership through integrated business models rather than relying solely on design excellence. Across all ten cases, the Business Model Canvas (BMC) components function as an interconnected system in which customer orientation, value proposition, organizational resources, partnerships, cost structure, and revenue mechanisms reinforce one another. This supports the central proposition of Business Model Theory, which argues that design leadership and sustained organizational performance emerge not from isolated organizational elements but from the alignment of the entire value creation system (Osterwalder & Pigneur, 2010). Rather than treating architectural design as an independent professional activity, leading firms integrate design capability with strategic management, enabling them to create, deliver, and capture value more effectively.

One of the most significant findings is the evolution of architectural firms from traditional design consultancies into multidisciplinary professional service organizations. Instead of limiting their services to architectural design, the firms combine architecture with engineering, urban planning, workplace consulting, sustainability advisory, digital technology, research, and strategic planning. This diversification reflects the growing complexity of the built environment sector, where clients increasingly seek integrated solutions rather than stand-alone professional services. These findings support Heintz and Aranda-Mena (2012) and Granet (2021), who argue that architectural firms require broader managerial

capabilities, including strategic planning, marketing, financial management, and organizational leadership. The present study extends this literature by demonstrating that these capabilities are not independent management functions but are systematically integrated within the firm's business model to strengthen design leadership while sustaining organizational growth.

The analysis also highlights the strategic role of customer segmentation and value proposition. The firms consistently target institutional clients undertaking complex, high-value projects, including governments, multinational corporations, healthcare providers, educational institutions, and major property developers. Rather than pursuing broad market coverage, they focus on clients requiring specialized expertise, multidisciplinary collaboration, and long-term advisory relationships. Such specialization enables firms to strengthen design leadership by delivering highly differentiated knowledge and integrated professional services instead of competing primarily through pricing. This finding is consistent with Osterwalder and Pigneur's (2010) proposition that successful business models begin with a clearly defined customer value proposition.

The value propositions identified across the ten firms further illustrate the transformation of architectural practice. While design quality remains fundamental, it no longer represents the sole foundation of design leadership. Instead, leading firms combine design excellence with sustainability, digital innovation, research capability, resilience, workplace performance, and evidence-based design to deliver broader organizational value. These findings are consistent with Bos-de Vos et al. (2021), who argue that successful architectural firms increasingly compete by expanding value creation beyond conventional design services. This study further demonstrates that value creation is reinforced through organizational capabilities such as research institutes, digital laboratories, sustainability expertise, and multidisciplinary collaboration, thereby strengthening design leadership through continuous innovation and organizational learning.

Another important finding concerns the central role of organizational knowledge. Across all Business Model Canvas components, knowledge consistently emerges as the firm's most valuable organizational resource. Human expertise, research capability, digital platforms, organizational learning, and professional reputation collectively underpin the firms' ability to sustain high levels of innovation and service quality. This observation strongly supports the Knowledge-Based View (KBV), which proposes that knowledge constitutes the firm's primary strategic asset (Grant, 1996). Unlike tangible resources that can be readily acquired or replicated, organizational knowledge evolves through accumulated experience, collaborative learning, research investment, and continuous innovation. Consequently, knowledge becomes the foundation upon which both design leadership and sustainable competitive advantage are built.

The findings likewise reinforce Barney's (1991) Resource-Based View (RBV), which argues that long-term competitive advantage depends upon resources that are valuable, rare, difficult to imitate, and organizationally embedded. Rather than investing primarily in physical infrastructure, the firms examined consistently invest in professional talent, research centres, digital technologies, proprietary methodologies, and organizational knowledge systems. These investments generate intangible assets that strengthen innovation capability,

organizational resilience, and long-term competitiveness. While RBV traditionally emphasizes competitive advantage, the present findings suggest that these strategic resources also underpin design leadership, enabling firms to maintain creative excellence while continuously adapting to technological and market changes.

Key partnerships represent another defining characteristic of successful business models. Every firm maintains extensive collaboration with universities, technology companies, engineering consultants, sustainability organizations, contractors, healthcare institutions, and government agencies. Rather than functioning merely as procurement arrangements, these partnerships facilitate access to complementary expertise, accelerate innovation, and expand organizational learning. This finding extends Bos-de Vos et al. (2018), who identified collaboration as an important element of architectural business strategy, by demonstrating that partnerships constitute a core structural component of integrated business models. The findings also support Vos' ecosystem perspective, illustrating that design leadership increasingly depends on collaborative networks that connect firms with broader knowledge ecosystems rather than on internal expertise alone.

The predominance of value-driven cost structures provides additional insight into how leading firms sustain their market position. None of the firms present themselves as low-cost service providers. Instead, they consistently allocate substantial resources to research, sustainability, digital technology, knowledge management, and highly qualified professionals. This strategic orientation corresponds with Osterwalder and Pigneur's (2010) distinction between value-driven and cost-driven business models, indicating that architectural firms pursue design leadership through differentiation instead of operational cost minimization. Furthermore, the widespread presence of economies of scope demonstrates that knowledge developed within one sector can be effectively transferred to multiple practice areas, allowing firms to diversify services while continuously strengthening organizational capabilities.

Revenue generation also reflects the knowledge-intensive nature of contemporary architectural practice. Although traditional pricing methods such as fixed fees and percentage-of-construction-cost contracts remain dominant, several firms increasingly adopt value-based pricing for advisory services related to sustainability, workplace transformation, digital innovation, and smart-city development. This evolution suggests that clients increasingly recognize the strategic value of specialized expertise rather than simply paying for design labour. The emergence of licensing opportunities through proprietary digital platforms, research products, and analytical tools further indicates a gradual shift from commercializing professional services toward monetizing intellectual capital. These developments reinforce design leadership by transforming accumulated organizational knowledge into differentiated, high-value professional services.

Taken together, these findings suggest that internationally successful architectural firms achieve design leadership not solely through creative excellence but through integrated business models that align organizational capabilities, client needs, and strategic business practices. The Business Model Canvas provides an effective analytical framework for explaining these interrelationships because it captures how value is simultaneously created, delivered, and captured across interconnected organizational components. By adopting a comparative cross-case approach, this study extends previous architectural management

research, which has generally examined isolated topics such as design management, innovation, organizational learning, or value capture (Bos-de Vos et al., 2016; Bos-de Vos et al., 2021; Granet, 2021; Pekuri et al., 2024). Instead, the present findings demonstrate that design leadership emerges from the interaction of all nine Business Model Canvas components rather than from any single organizational capability.

This study therefore contributes to both architectural management and business model literature by positioning architecture as both a creative profession and a strategically managed business enterprise. The findings indicate that design leadership is achieved through integrated business models that combine design excellence with organizational knowledge, multidisciplinary collaboration, strategic partnerships, digital innovation, and sustainable value creation. At the same time, these integrated capabilities provide the foundation for sustained competitive advantage by enabling firms to continuously innovate, adapt, and respond to changing market conditions. Consequently, the Business Model Canvas offers a comprehensive framework for understanding how leading architectural firms translate creative capabilities into long-term organizational success while providing a valuable reference for future research on architectural business models in different organizational and geographical contexts.

Conclusion

This study explored the business models of ten internationally recognized architectural firms through the Business Model Canvas to understand how leading practices organize their resources and capabilities to achieve design leadership and long-term organizational success. The cross-case qualitative content analysis revealed that these firms do not rely solely on design excellence as the primary driver of performance. Instead, they employ integrated business models in which the nine Business Model Canvas components function as an interconnected system that collectively supports value creation, value delivery, and value capture. The findings indicate that design leadership is strengthened through the strategic alignment of specialized customer segments, differentiated value propositions, multidisciplinary expertise, knowledge-intensive resources, collaborative partnerships, digital innovation, sustainability, and diversified revenue mechanisms. These components reinforce one another, enabling firms to respond to increasingly complex client demands while sustaining organizational resilience in a dynamic global environment. The study also demonstrates that organizational knowledge, rather than physical assets alone, underpins both business performance and design leadership, highlighting the importance of integrating strategic management with professional design capability.

By applying the Business Model Canvas as an integrated analytical framework, this research contributes to architectural management literature by offering a holistic perspective on how successful architectural firms configure their business models. The findings extend previous studies that have examined isolated aspects of architectural practice and provide empirical evidence that business model integration is an important foundation for design leadership and sustainable organizational performance. Future research may build on these findings by examining internal organizational processes through interviews or comparative case studies involving firms of different sizes, regions, and organizational contexts.

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