https://ijmp.regent.ac.za | Open Access

Strategic Adaptation and Entrepreneurial Resilience in Private
Healthcare: Introducing the Strategic Alliance Practitioner (SAP)
and Consolidated Business Administration Services (CBAS)
Models in an Emerging Market

J.J.S. Lalaram; Co-Author, N. Naranjee

REGENT Business School

ABSTRACT

South Africa's private healthcare sector is experiencing rapid transformation, driven by regulatory reform, digitalisation, and changing patient expectations. Independent medical practitioners must now balance clinical autonomy with financial sustainability amid growing systemic and market pressures. This study investigates how private practices in Cape Town adapt to these challenges through strategic and entrepreneurial innovation. Using a qualitative, interpretivist approach, the research applied the STOF (service, technology, organisation, and finance) business model framework to analyse practitioner experiences and adaptive responses. Seven interrelated domains emerged, highlighting financial fragility, operational inefficiency, and inconsistent technological integration. In response, two context-specific business models, Strategic Alliance Practitioner (SAP) and Consolidated Business Administration Services (CBAS), were conceptualised to strengthen value creation, operational efficiency, and long-term resilience. The findings demonstrate that practitioner-driven business model innovations can transform independent practices into sustainable, patient-centered enterprises. Moreover, the study emphasises the value of integrating policy, education, and professional development to build adaptable, resilient healthcare ecosystems suited to emerging market realities.

Keywords: Healthcare Innovation; Qualitative research; Emerging economies; Digital health; Strategic healthcare models.

J.J.S. Lalaram; N. Naranjee

¹Corresponding author: JJS Lalaram - <u>jarredjsl@gmail.com</u> https://doi.org/10.64287/ijmp.2025.1.1.10

https://ijmp.regent.ac.za | Open Access

1. Introduction

Private medical practices form the backbone of South Africa's healthcare system, employing 80 percent of the professionals nation's clinical (Buswell, 2023). Beyond clinical care, these practices operate as entrepreneurial ecosystems that balance autonomy, innovation, and sustainability. Yet the environment around them is transforming rapidly. Regulatory reform, digital disruption, and shifting patient expectations are redefining how private practice competes and delivers value. NHI reform, post-pandemic recovery, and 4IR technologies expose vulnerability and opportunity. During the pandemic, income losses of up to 86 percent (Juta Medical Brief, 2021) revealed the fragility of traditional models but also catalysed renewal. Private practitioners are now called to act not only as clinicians but also as entrepreneurs shaping a more resilient and responsive healthcare economy.

While business model innovation features prominently in healthcare research, the lived realities of independent practitioners, particularly in emerging markets, remain underexplored. Most studies

emphasise large scale reform or technology-led change (Baum & 2020), overlooking Khan. how individuals navigate regulation, resource limitations, and operational uncertainty. This study addresses that gap through the STOF business model framework (Bouwman et al., 2008), which examines how practitioners adapt and innovate within South Africa's turbulent healthcare landscape. The framework integrates four domains: service, technology, organisation, and finance, to explain how value is created and sustained in complex systems. Its evaluative tools, Critical Design Issues (CDIs) and Critical Success Factors (CSFs), connect theory with practice, linking conceptual insight to lived entrepreneurial experience.

Using this framework, the study interprets South Africa's private healthcare transformation opportunity for strategic renewal. It investigates key challenges faced by Cape Town practitioners and analyses how adaptive strategies build resilience. The aim is to develop a context-specific model that enhances operational strategic agility, effectiveness, and sustainable

https://ijmp.regent.ac.za | Open Access

Ultimately, competitiveness. the research deepens understanding of healthcare how entrepreneurs navigate complexity and create new value in uncertain markets. This conceptual grounding transitions naturally to the literature on business model innovation and healthcare entrepreneurship, which frames the next section.

2. Literature Review

To maintain epistemological integrity and ontological clarity, this literature review comprises two interrelated parts. The first traces the evolution of business models and organisational resilience (Clauss, 2017), while the second synthesises literature aligned with the study's aims, forming a rigorous theoretical foundation for

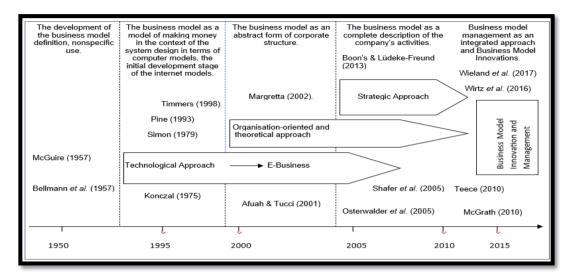
context-driven healthcare business model development.

2.1. Evolution and Theoretical Foundations of Business Models

As shown in Figure 1, the business model has evolved from a descriptive construct into a strategic mechanism for navigating globalisation, technological disruption, and market volatility (Wirtz et al., 2016; Massa et al., 2017). Rooted in early systems design theory, it gained prominence during the digital revolution of the 1990s, when technology reshaped how firms created and captured value (Yang et al., 2017). Osterwalder and Pigneur's (2010) Business Model Canvas advanced this evolution by translating abstract strategy into a visual framework for coordinating resources, partnerships, and customer value.

https://ijmp.regent.ac.za | Open Access

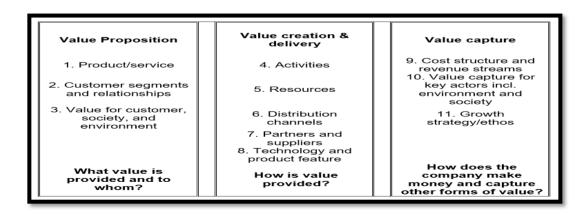
Figure 1. Evolution of Business Model concept



Source: Jabłoński (2019)

Subsequent scholarship reframed the business model as a dynamic architecture connecting operational, strategic, and financial logics (Jabłoński, 2019). Wirtz et al. (2016) describe it as a rational configuration of value generating activities, while Massa et al. (2017) view it as the tangible expression of strategic intent. Despite definitional diversity, scholars converge on three interdependent dimensions: value proposition, value creation and delivery, and value capture, which balance internal capabilities with external demands (Clauss, 2017).

Figure 2. Components of the business model



Source: Bocken, Rana and Short (2015).

https://ijmp.regent.ac.za | Open Access

Figure 2 illustrates Clauss's (2017) triadic model, which remains central to understanding how organisations design and realise value. The value proposition aligns market needs with organisational strengths to build loyalty and differentiation (Vorbach et al., 2019). Value creation and delivery convert inputs into meaningful outputs through co-creation, digital integration, and agile collaboration (Chesbrough et al., 2018; Xu & Koivumäki, 2019). Finally, value capture translates delivered value into sustainable revenue through effective pricing, governance, and stakeholder alignment (Sjödin et al., 2020; Fischer & Sojer, 2015).

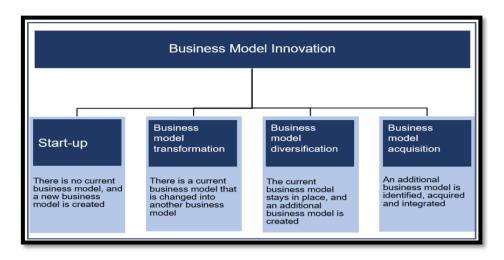
Figure 3. Osterwalders' 9-points and interlinks of a business model

Source: Vekić, Borocki, Fajsi & Morača (2018)

Where Clauss conceptualises structure, Figure 3 (Osterwalder & Pigneur, 2010) operationalises it through nine interlinked components: customer segments, value propositions, channels, relationships, revenue streams, key resources, key activities, partnerships, and cost structures. This modular design aligns internal operations with external markets, reinforcing both efficiency and strategic coherence (Vekić et al., 2018). Integration across these components strengthens adaptability by linking what firms offer, how they deliver it, and how they sustain profitability (Ferri & Ricci, 2021).

https://ijmp.regent.ac.za | Open Access

Figure 4. Phases of business model innovation



Source: Geissdoerfer, Vladimirova and Evans (2018)

Business models are more than static engines designs; they are innovation and renewal that drive learning and adaptation in complex environments (Geissdoerfer et al., 2018). As shown in Figure 4, Business-Model Innovation (BMI) unfolds through four iterative phases—ideation, design, testing, and implementation—ensuring strategic alignment with evolving markets (Geissdoerfer et al., 2018). In volatile contexts, BMI is essential survival, demanding both structural redesign and cultural agility (Foss & Saebi, 2018). Leadership enables this process by promoting openness, risk tolerance, and an innovation mindset (Ramdani et al., 2019; Bashir & Verma. 2018), while digital accelerates infrastructure

transformation through data-driven insights and scalability (van Tonder et al., 2020).

(2017)Clauss extends this perspective, **BMI** showing that reconfigures how organisations connect value proposition, creation, and capture. This dynamic capability integrates strategy and execution, strengthening resilience and longterm sustainability (Yi et al., 2022). Within healthcare, where policy reform technological and advancement converge, the business model lens offers a pathway to innovation, adaptability, and renewal.

By synthesising these theoretical foundations, this study positions business model innovation as both a driver of resilience and a framework

J.J.S. Lalaram; N. Naranjee

https://ijmp.regent.ac.za | Open Access

for reimagining private healthcare practice in South Africa. The next section builds on this conceptual foundation, shifting focus to identifying the challenges that shape innovation and sustainability.

2.2. Business Challenges of Operating a Private Medical Practice

In South Africa's changing healthcare landscape, private practice requires more than clinical expertise. Sustainability now depends strategic foresight, operational agility, and business competence (Ghiasipour, Mosadeghrad, Jaafaripooyan, 2017). The literature identifies interconnected challenges shaping practitioner resilience and growth.

Patient satisfaction anchors reputation and retention, built on trust and empathy as much as outcomes (Setyawan et al., 2020). Poor coordination and impersonal encounters weaken confidence (Tranberg et al., 2018). Relational care models (Grenier & Oiry, 2021) and structured feedback systems (Burgess, 2022) enhance co-created humanised experiences that strengthen loyalty (Steyl, 2020).

Internal engagement and communication further define organisational coherence. Low motivation, limited recognition, and generational gaps reduce inclusion and shared purpose (Bennett, 2020). True engagement involves emotional and behavioural commitment (Dhir & 2018). fostered Shukla. by participatory decision-making and professional growth (Caldwell & 2021). Anderson. Gaps in communication raise risks of error and disengagement (Saeedi et al., 2021), while emotionally intelligent dialogue (McCabe & Healey, 2018) and digital tools like automated reminders (Yakovchenko et al., 2021) enhance clarity.

Financial and structural pressures compound these strains. Malpractice premiums exceeding R1 million annually (JUTA Medical Brief, 2021) and pandemic-driven volatility (Seetharaman, 2020) erode margins. Telemedicine eased access but heightened burnout (Goldenberg, 2021; Ornell et al., 2020), highlighting mental health needs (Barrutia & Echebarria, 2021). Persistent silos hinder collaboration (Tripathy, 2018).

J.J.S. Lalaram; N. Naranjee

https://ijmp.regent.ac.za | Open Access

Technology adoption remains uneven due to cost and regulation (Ravitz, 2020), yet IoT and telehealth improve efficiency (Burgess, 2022). Mentorship gaps (Jassal, 2022), falling reimbursements (Hughes, 2018; Baum & Khan, 2020), and administrative burden (Medical Economics, 2021) threaten viability.

Sustainability now rests on strategic renewal, digital fluency, and recentring practitioner and patient well-being through business model innovation.

2.3. Business Operational Activities That Create Value Propositions

In today's competitive healthcare environment, private practices must evolve from reactive service models into strategically differentiated enterprises. Sustainability depends on aligning operations with stakeholder expectations while embedding innovation and process excellence (Wagner, 2018). Within this context, several interdependent factors drive renewal and professional growth.

Marketing has become pivotal to patient acquisition, reputation, and retention. Data-driven branding and targeted communication enhance alignment with patient values (Elrod & Fortenberry, 2020), while message consistency remains the foundation of trust (Purcarea, 2019). Social media and digital platforms further strengthen visibility and credibility in an increasingly competitive market (Berkowitz, 2017).

Communication and competence reinforce this foundation. Clarity and empathy enhance leadership and patient relations (Moawad, 2021; Burgess, 2022). As medical evolves. knowledge core competencies risk rapid obsolescence (Anshu & Singh, 2017), making lifelong learning essential. Continuous education fosters innovation and improved outcomes al., 2016). (Cook et Digital integration through telemedicine, electronic records, and robotics enhances coordination, accuracy, and efficiency (Burgess, 2022; Zhang & Saltman, 2022).

Financial sustainability and teamwork complete this framework. Alternative payment models and integrated financial systems stabilise revenue and reduce strain (Baum & Khan, 2020; Burgess, 2022). Interdisciplinary collaboration

VOL. 01, NO. 1, JANUARY 2025

J.J.S. Lalaram; N. Naranjee

https://ijmp.regent.ac.za | Open Access

remains vital for holistic, value-based care (Tripathy, 2018; Alderwick et al., 2021). Collectively, these dimensions signal a shift toward adaptive, digitally enabled, and patient-centred practice that defines the future of private healthcare.

3. Methods/Materials and Methods

This study employed a qualitative, interpretivist design grounded in phenomenological principles to explore how private medical practitioners in Cape Town adapt to financial, operational, organisational pressures within a changing healthcare system. of purposive fifteen sample practitioners medical across disciplines diverse captured experiences and perspectives.

Semi-structured interviews, each lasting approximately 30 minutes, were guided by the STOF business model framework to examine how practitioners interpret and respond to systemic challenges. All interviews were recorded, transcribed, and anonymised to ensure confidentiality. Ethical approval was granted by the Regent Business School Research

J.J.S. Lalaram; N. Naranjee

Ethics Committee (Approval No. RBSREC2023/006), and informed consent was obtained from all participants.

Data were analysed using Braun and Clarke's six-phase thematic combining inductive approach, coding with STOF domains to ensure conceptual alignment. Member checking and peer debriefing enhanced credibility, while rigorous coding produced themes reflecting resilience, innovation, and adaptive practice. The next section presents the insights, outlining seven themes that illustrate how independent practitioners redefine value in private healthcare.

4. Findings

The analysis reveals how private practitioners balance ethical care with entrepreneurial innovation. Their accounts demonstrate a commitment to professional integrity while adopting strategic approaches to remain viable in an evolving healthcare market. Collectively, the findings illustrate how adaptability, foresight, and resilience underpin sustainability across South Africa's private healthcare sector.

https://ijmp.regent.ac.za | Open Access

Financial management emerged as a pivotal enabler of stability.

Participants reported rising operational costs, delayed reimbursements, inconsistent and patient payments, echoing widespread fiscal pressures. Administrative inefficiency was a concern: recurring "Delay bureaucracy from medical aids and funders in terms of settling bills and claims" (P13), while patient noncompliance exacerbated instability: "They're in debt... so I think cash flow is probably the major issue that small businesses like medical have" (P7). practitioners practitioners employed innovative solutions such as contracting with medical aids (P3), percentage-based expenses, "All my practice expenses are based on percentages of what I earn" (P6), and digital payment systems (P7). Start-up challenges were met with financial agility through credit facilities and bridging finance (P12), illustrating adaptive fiscal competence.

Business management was widely identified as an area for improvement.

Practitioners noted limited exposure

to marketing, performance monitoring, and referral development. Shifting referral patterns created uncertainty: "We struggle with direct referrals from specialists... they're offering more invasive surgery" (P5). Others described falling patient volumes: "My practice has radically gone down" (P2). Feedback mechanisms varied. some used surveys and follow-ups, while others were dismissive: "Zero. I am not interested in this" (P2). These responses reveal untapped potential for strategic engagement structured evaluation to enhance competitiveness and patient-centred care.

Entrepreneurial agility was evident through specialisation and service diversification tailored to niche needs. Practitioners emphasised creation through administrative assistance, "We go out of our way to assist patients in getting authorisations" (P7), and genderbased positioning: "I offer myself as being a female general surgeon..." (P1). Continuous professional development universally was prioritised, with many pursuing international fellowships and

VOL. 01, NO. 1, JANUARY 2025

J.J.S. Lalaram; N. Naranjee

https://ijmp.regent.ac.za | Open Access

academic affiliations to strengthen credibility (P3, P12).

Technology integration functioned as both an enabler and filter for innovation. Participants adopted tools such as Magseed tumour localisation (P1), robotic-assisted surgery (P6), and precision imaging (P4), while digitising records and consultations: "Our notes are digital, and our images stored on a server..." (P3). Others exercised caution: something doesn't prove to work, I won't bring it into my practice" (P7). This reflects a pragmatic, evidencebased approach to digital transformation aligned with organisational readiness.

Collaboration and communication reinforced adaptability. Shared call schedules. mentorship, partnerships enhanced continuity: "We've got a very good working relationship... we share after-hours and patient care" (P9). Professional alliances with hospitals and group practices supported viability, while inclusive leadership strengthened human capital: "We are planning to fund his MBA... important for advancement" (P5).practice Communication practices remained pivotal for trust and efficiency.

preferred direct **Practitioners** interaction, "I prefer to do in-person communication... they need a lot of personal attention" (P7), while "We incorporating visual tools: review scans together... keeps them engaged" (P12). Concerns around medico-legal risk shaped preferences for secure platforms: "Patients want WhatsApp communication, which another minefield of leads to litigation" (P2). Encrypted email and secure portals (P6, P8) balanced accessibility with compliance.

reflected Marketing diverse expressions of entrepreneurial identity. Growth-oriented practitioners employed digital branding, "We've got a marketing company... a Facebook page and Instagram" (P5), while others relied on trust-based visibility: "I basically decided on word-of-mouth, which is slow" (P6). Established verv practitioners drew on reputation and loyalty: "I don't use any marketing at all... I have an enormous practice" (P2). These contrasting strategies underscore autonomy and contextual defining adaptation in market presence.

J.J.S. Lalaram; N. Naranjee

https://ijmp.regent.ac.za | Open Access

Overall, private practitioners emerge as agile entrepreneurs operating at the intersection of care and commerce. Their capacity innovate. to collaborate, and lead strategically underpins both resilience and patientcentred excellence. These adaptive behaviours provide the conceptual bridge to the next section, which interprets these findings through the STOF framework to explain how business model innovation fosters sustainability in private healthcare.

5. Discussion of Findings

The discussion applies the STOF business model framework to interpret how practitioners convert adaptive behaviour into innovation and stability within a decentralised healthcare system. By linking the findings to theory, it shows how strategic agility and collaboration enable private practitioners to create value and remain competitive in an evolving market.

Financial management emerged as influential driver the most of sustainability. **Practitioners** cited erratic cash flow. delayed reimbursements. and rising overheads—echoing broader

evidence of fiscal volatility in healthcare (Ahmad et al., 2017; Medical Brief, 2018). In response, many adopted revenue-linked budgeting, digital payment platforms, and funder-aligned contracts, reflecting greater financial literacy and digital integration (Hughes, 2018; Burgess, 2022).

Business management surfaced as a recurring gap. Weak referral pipelines, minimal marketing, and performance limited monitoring reduced competitiveness in a crowded market. This aligns with Rittenhouse et al. (2017), who advocate for relationship-driven marketing and structured feedback systems to strategic strengthen control and enhance service quality. Entrepreneurial adaptability was evident in specialisation, service diversification. and continuous development. professional These behaviours improved patient value reinforced competitive and advantage, supporting research linking strategic flexibility and open innovation to long-term success (Chesbrough et al., 2018; Patel et al., 2019). Academic affiliations and networks further enhanced credibility, underscoring value

https://ijmp.regent.ac.za | Open Access

creation as a differentiator in private practice.

Technology served as both enabler and filter for innovation. Participants selectively adopted cloud-based systems, precision imaging, robotic tools, ensuring clinical relevance and cost efficiency. This disciplined approach reflects that digital transformation yields optimal returns when aligned with organisational readiness and purpose (DeLucia et al., 2017).

Collaboration emerged cornerstone of adaptability. Shared call mentorship, rosters. and cooperative partnerships improved workload balance and service Consistent continuity. with Alderwick et al. (2021) and Tripathy (2018), structured staff development and incentive systems illustrated how capital underpins human organisational strength. Communication was both clinical and managerial leverage. Hybrid models combining digital and in-person engagement enhanced efficiency, medico-legal though concerns highlighted the need for encrypted systems to safeguard confidentiality (Vartabedian, 2018).

revealed diverse Marketing entrepreneurial expression, from reputation-led referrals to digital branding and social engagement (Whitler, 2021). Collectively, these domains portray practitioners as agile business leaders operating at the intersection of care and commerce. By transforming structural constraints into opportunities for renewal, the findings reaffirm this study's central resilience in premise: private healthcare stems not only from clinical expertise but also from the ability to innovate, collaborate, and lead strategically within complex systems.

6. Limitations

As Bryman et al. (2016) note, even rigorously designed qualitative studies carry inherent methodological constraints. A purposive sample limited to Cape Town provided rich, context-specific insights but restricts broader generalisability across South Africa's healthcare landscape. The study's qualitative nature introduces interpretive subjectivity, researcher perspectives influence thematic analysis. To reduce bias, interviews were audiorecorded and transcribed to ensure

J.J.S. Lalaram; N. Naranjee

https://ijmp.regent.ac.za | Open Access

accuracy. Consistent with Baldwin's (2018) view, acknowledging such limitations enhances research credibility. Future studies should consider broader, multisite, or mixed method approaches to validate and extend these findings.

7. Recommendations

Drawing on the findings and existing research on healthcare entrepreneurship and organisational innovation, this study offers strategic recommendations to strengthen the resilience of independent private practices.

First, structured business and financial literacy programmes embedded should be medical professional development. As Levien (2021) and Porter (2019) emphasise, weak managerial undermines competence foresight. autonomy and Business education must be recognised as integral, not peripheral, sustainable to practice, approach an supported by global frameworks promoting

- interdisciplinary skills (WHO, 2016).
- adopt business model innovation (BMI) strategies suited to their operational realities. Models such as SAP and CBAS exemplify hybrid, resource-sharing designs that enhance adaptability, differentiation, and strategic alignment (Fjeldstad & Snow, 2018; Ramdani et al., 2019).
- Finally, institutionalising realtime feedback systems is vital. Patient-informed data drives continuous improvement, strengthens reputation, and aligns services with user expectations in increasingly consumer-oriented healthcare markets (Burgess, 2022; Chen et al., 2018).

8. Proposed New Business Models

Two theoretically grounded business model frameworks emerged from the empirical findings. Each reflects contextual practice realities and directly advances the objective of

J.J.S. Lalaram; N. Naranjee

https://ijmp.regent.ac.za | Open Access

constructing sustainable models for independent medical practices.

8.1. Strategic Alliance Practitioner (SAP): A Hybrid Model for Embedded Market Penetration and Decentralised Healthcare Access

The evolution of healthcare in emerging economies necessitates novel spatial and value configurations. Traditional private practice models, while clinically robust, often operate within bounded geographies and siloed systems that limit accessibility and responsiveness. The SAP model reconceptualises private medical practice as a distributed, co-located

service embedded within non-clinical commercial spaces. SAP leverages strategic alliances to achieve decentralised delivery, cross-sectoral synergies, and enhanced value cocreation.

8.1.1. Theoretical Underpinnings and Conceptual Premise

As shown in Figure 5, the SAP model draws on business model hybridisation (Bouncken et al., 2016), non-equity alliances (Said & Korbi, 2017), and institutional embedding (Scott, 2008). It enables practitioners to partner with commercial, academic, and retail entities, aligning healthcare delivery with consumer behaviour and demographic trends.

New clientele

In-house setup

BUSINESS SECTOR

Business alliance

Direct clientele

Figure 5. Theoretical framework of the SAP model

Source: Author

https://ijmp.regent.ac.za | Open Access

8.1.2. Illustrative Application: The case of a paediatrician

A paediatrician forms a strategic alliance with a local kindergarten by establishing an embedded consulting room within the school premises. This co-located service expands market access, enhances community trust, and formalises referral pathways. The alliance, governed by structured commercial agreements, integrates service delivery, billing, and cobranding, demonstrating the SAP model's scalability, embedded accessibility, and mutual value creation.

8.1.2.1. Strategic Value Proposition

The SAP model proposes a triadic value stream: for the practitioner, the host, and the patient. It offers face-toface care in socially familiar settings, lowering psychological and logistical barriers (Arora et al., 2017; Stieler, 2017). Unlike remote-only platforms, SAP preserves its clinical presence while capitalising spatial on convenience and trust through cobranding. For practitioners, SAP delivers low-cost market penetration, brand enhancement, and diversified referral pathways. For commercial hosts, it elevates consumer experience and drives health-conscious footfall. The patient benefits from immediate access, embedded normalcy, and reduced care avoidance.

8.1.2.2. Value Creation and Delivery

SAP creates value through strategic embedding and cross-sector leverage. Core activities include site selection, commercial negotiation, mobile infrastructure deployment, and cobranded promotion. Services are delivered through shared digital platforms, often integrating scheduling through the host's CRM or a linked healthcare portal.

8.1.2.3. Value Capture

Revenue generation varies by partnership: fixed lease fees, revenue share, or hybrid arrangements. Importantly, the practitioner retains intellectual property and clinical autonomy while leveraging the host's distribution power. This mutually reinforcing structure promotes scalable. cost-effective market expansion and builds longitudinal patient engagement (Sjodin et al., 2020).

J.J.S. Lalaram; N. Naranjee

https://ijmp.regent.ac.za | Open Access

8.1.2.4. Comparative Advantages and Implementation Challenges

Table 1 outlines key strategic advantages and limitations inherent in the SAP business model architecture.

Table 1. SAP comparative analysis: Advantages and Limitations

Advantages	Limitations
Embedded presence in high-footfall locations	Potential dilution of clinical control
enhances visibility (Whitler, 2021)	across sites (Porter, 2019)
Diversified market access and community	Scheduling and workload management
integration (Sridhar, 2017)	challenges (Goldenberg, 2021)
Strengthens brand equity through commercial	Requires portable infrastructure and
co-location (Westwood, 2022)	robust coordination systems
Facilitates preventative care in non-clinical	Cultural resistance among traditionally
settings	structured medical practitioners
Enables rapid scale through retail or	
education sector partnerships	

Source: Author

8.1.3. Societal and Systemic Impact

SAP moves beyond commercial purpose to close healthcare access gaps. It supports WHO (2021) goals for decentralised, community-based care. The model engages low-visitation groups, such as youth, students, and professionals, while encouraging business participation in health promotion. By normalising preventive care and easing pressure on tertiary facilities, SAP advances

J.J.S. Lalaram; N. Naranjee

equity through an inclusive, distributed healthcare framework.

8.2. Consolidated BusinessAdministration Services (CBAS)Model: Reconceptualising PrivatePractice Management

South Africa's private healthcare sector is undergoing increasing strain, operational marked by fragmented systems, regulatory intensification, and the erosion of clinician capacity due to

https://ijmp.regent.ac.za | Open Access

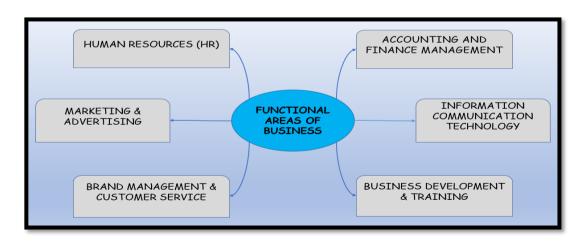
administrative overload. The CBAS model presents a structural innovation that addresses these tensions through the strategic decoupling of clinical administrative and domains. Positioned at the intersection of business model innovation, modularity, organisational collaborative governance (Ramdani et al., 2019; Clauss, 2017), CBAS enables independent medical practices to collectively externalise non-core functions while retaining clinical autonomy.

8.2.1. Theoretical Foundations and Structural Configuration

The CBAS model reimagines healthcare enterprises through value-

chain disaggregation and hybrid organisational design. Participating practices co-own a separate legal entity with private investors to manage centralised, non-clinical services: HR, finance, and marketing, standardisation ensuring and scalability (Sridhar, 2017). As shown in Figure 6, six specialised divisions, Resources, Human Finance, ICT. Marketing, Customer Experience, and **Business** Development, provide expert oversight. This structure balances entrepreneurial autonomy with cohesion. systemic enabling independent practices to innovate, scale efficiently, and align with broader health policy objectives.

Figure 6. Theoretical framework of the CBAS model



Source: Author

https://ijmp.regent.ac.za | Open Access

8.2.2. Illustrative Application: The case of five independent medical practices

In response to operational burnout and limited business capacity, five independent medical practices in Cape Town formed a CBAS, a shared-services entity delivering centralised functions such as ICT, billing, and marketing. Ownership was structured with 60% equity equally divided among the five founding practices (12% each) and 40% allocated to external investors, establishing a revenue-sharing model that aligns operational input with financial return. CBAS collects fixed monthly fees from each practice, enabling lean clinical teams while generating shared wealth through scale efficiencies. This model preserves practice autonomy and brand identity while gaining access to high-grade business infrastructure and deters acquisition by healthcare conglomerates.

8.2.2.1. Strategic Value Proposition

CBAS embodies a tripartite value proposition: serving practitioners (through operational liberation), patients (through enhanced service quality), and the broader healthcare system (by professionalising support functions). It transforms administration from a sunk cost into a strategic enabler. As Kemperman (2017) and Burgess (2022) affirm, effective healthcare business models must articulate who they serve, how they operate, and what they deliver. CBAS responds by offering tailored, high-context services attuned to the regulatory and financial realities of private practice.

8.2.2.2. Value Creation and Delivery

Following Clauss's (2017) model, value creation in CBAS arises from the systematic orchestration of shared infrastructure, cross-entity resource digital pooling, and process automation. Key components include legal formalisation, institutionalised standard operating procedures (SOPs), and data-driven performance environment. Its Business Development division fosters organisational learning through leadership training, skill renewal, and strategic planning 2022). **CBAS** delivers (Jassal, services through a unified digital

platform, allowing real-time reporting, encrypted communication, and remote support capabilities. This

https://ijmp.regent.ac.za | Open Access

architecture enhances operational responsiveness while supporting decentralised clinical operations.

8.2.2.3. Value Capture

CBAS departs from traditional outsourcing by embedding equity-based governance into its operating logic. Revenue is generated through

annuity-style service contracts, while operational surpluses are redistributed as dividends to shareholders. Importantly, the shareholder base includes the very practices it serves, fostering alignment, accountability, and long-term strategic coherence (Caldwell, 2021; Channelnomics, 2017).

8.2.3. Comparative Advantages and Implementation Challenges

Table 2 outlines key strategic advantages and limitations inherent in the CBAS business model architecture.

Table 2. CBAS comparative analysis: Advantages and Limitations

Advantages	Disadvantages
Decouples clinical and admin functions (Sridhar, 2017)	Loss of legacy system customisation (Zhang & Saltman, 2022)
Enables profit redistribution (Ferri & Ricci, 2021)	Risk of staff redundancy
Economies of scale (Smyth, 2019)	Capital-intensive legal setup
Strengthens governance and transparency (Ackerman, 2017)	Resistance to change among legacy practices
Improves patient experience (Patel et al., 2019)	Dependent on central team competence

Source: Author

8.2.4. Societal and Systemic Impact

The CBAS model extends beyond internal optimisation to address practitioner burnout, an escalating

issue in South Africa's healthcare sector (Casalino, 2018). It promotes equity by sustaining independent practices amid corporatisation. With

J.J.S. Lalaram; N. Naranjee

https://ijmp.regent.ac.za | Open Access

modular design and digital infrastructure (Van der Pijl et al., 2020), CBAS enables scalable, adaptable operations, supporting franchising, investor collaboration, AI integration, and clinical autonomy.

8.3. Comparative Analysis of SAP and CBAS Models

As outlined in Table 3, this comparative analysis elucidates the distinct strategic architectures underpinning the SAP and CBAS models. SAP privileges proximity, relational depth, and embedded service delivery, rendering it well-suited to solo practitioners and microenterprises. Conversely, CBAS

embodies a systems-level solution geared toward scalability, operational coherence, and shared governance. Collectively, these models offer a context-responsive blueprint for reconfiguring private practice in alignment with enterprise size, resource capacity, and strategic intent, therefore affirming innovation as both a structural and generative force in healthcare transformation.

Table 3. Summary comparison of SAP and CBAS business models

Dimension	SAP	CBAS
Model Type	Hybrid, decentralised, embedded clinical model	Shared services administrative consolidation model
Core Objective	Expand access through colocated, mobile clinical presence in non-medical environments	Improve operational efficiency and sustainability through centralised business services
Foundational Theory	Business model hybridisation; non-equity strategic alliances; institutional embedding	Value chain disaggregation; modular design; equity-based governance
Ownership Structure	Independent practitioner retains full clinical and business control	60% shared ownership among member practices; 40% allocated to external investors
Value Proposition	Embedded care in lifestyle settings (e.g., gyms, malls); improves accessibility and brand synergy	Offloads administrative burdens, improves profitability, service quality, and reduces burnout
Revenue Model	Revenue-share, lease, or hybrid model with commercial host	Monthly service fees from member practices + dividend

https://ijmp.regent.ac.za | Open Access

		payout from operational surplus
Patient Experience	Increased convenience: care delivered in familiar, socially integrated settings	Indirect improvement through professionalised support services and improved practitioner focus
Scalability & Replication	Highly replicable across commercial networks, smart cities, education, fitness, transport sectors	Highly scalable across practices, specialisations, and geographies through modular services
Strategic Benefits	Brand elevation, referral generation, new patient acquisition	Economies of scale, enhanced governance, resilience against acquisition by corporates
Implementation Challenges	quality control; logistical coordination	High setup costs; potential legacy system resistance; needs central team competence
Societal Impact	Enhances decentralised access; aligns with WHO goals for community-based healthcare	Strengthens practitioner independence; supports equitable participation in private healthcare ecosystem

Source: Author

9. Conclusion

This study reframes private healthcare entrepreneurship as a catalyst for transformative, practitioner-led innovation in emerging markets. Through the SAP and CBAS models, it demonstrates how business model innovation can overcome systemic inertia and foster sustainable value creation within resource-constrained systems. Beyond functional adaptation, these frameworks advance a shift toward decentralised governance, professional collaboration, and entrepreneurial agency. Ultimately, the research positions business model innovation as a vehicle for enduring renewal in healthcare, inviting future exploration of its scalability across diverse emerging contexts.

https://ijmp.regent.ac.za | Open Access

REFERENCES

Ackerman, P. (2017). Industrial cybersecurity: Efficiently secure critical infrastructure systems. 1st Edition. UK: Packt Publishing.

Ahmad, F. A., White, A.J., Hiller, K.M., Amini, R. and Jeffe, D.B. (2017). An assessment of residents' and fellows' personal finance literacy: an unmet medical education need. International Journal of Medical Education, 8:192 – 204.

Alderwick, H., Hutchings, A., Briggs, A. and Mays, N. (2021). The impacts of collaboration between local health care and non-health care organisations and factors shaping how they work: A systematic review of reviews. BMC Public Health 21: 753.

Anshu, D. and Singh, T. (2017). Continuing professional development of doctors. National Medical Journal of India, 30: 89-92.

Arora, S., Thornton, K., Murata, G., Deming, P., Kalishman, S., Dion, D. and Parish, B. (2017). Outcomes of treatment for hepatitis C virus infection by primary care providers. New England Journal of Medicine, 376(21): 2010-2020.

Baldwin, L. (2018). Research concepts for the practitioner of educational leadership. Netherlands: Brill Sense.

Barrutia, J.M. and Echebarria, C. (2021). Effect of the COVID-19 pandemic on public managers' attitudes toward digital transformation. Technology in Society, 67: 101776-101776.

Bashir, M. and Verma, R. (2018). Internal factors & consequences of business model innovation. Management Decision, 57(1): 262-290.

J.J.S. Lalaram; N. Naranjee

https://ijmp.regent.ac.za | Open Access

Baum, N. and Kahn, M.J. (2020). The business basics of building and managing a healthcare practice. Switzerland: Springer.

Bennett, L. (2020). Employee engagement in healthcare: How much do you really know? [Online]. Blink. Available from: https://joinblink.com/intelligence/employee-engagement-healthcare/. [Accessed: 23 July 2022].

Berkowitz, E. (2017). Essentials of health care marketing. 4th ed. Burlington: Jones and Bartlett.

Bocken, N.M.P., Rana, P. and Short, S.W. (2015). Value mapping for sustainable business thinking. Journal of Industrial and Production Engineering, 32(1), pp.67–81. Available at: https://doi.org/10.1080/21681015.2014.1000399

Bouncken, R. and Fredrich, V. (2016). Business model innovation in alliances: Successful configurations. Journal of Business Research, 69(9): 3584-3590.

Bouwman, H., de Vos, H. and Haaker, T. (2008). Mobile service innovation and business models. Berlin: Springer.

Braun, V. and Clarke, V. (2021). Thematic analysis: A practical guide. New Zealand: Sage.

Bryman, A., Bell, E., Hirschsohn, P., dos Santos, A., du Toit, J., D. and Masenge, A. (2016). Research methodology: Business and management contexts. Cape Town: Oxford University Press South Africa.

J.J.S. Lalaram; N. Naranjee

https://ijmp.regent.ac.za | Open Access

Burgess, L. (2022). Running a private medical practice? Here's how to overcome the challenges. [Online]. Capterra. Available from: https://www.capterra.com.au/blog/3160/challenges-of-running-a-private-medical-practice [Accessed: 03 March 2022].

Buswell, G. (2023). The healthcare system in South Africa. [Online]. Expatica. Available from:

https://www.expatica.com/za/healthcare/healthcarebasics/healthcareinsouthafrica1 05896/#:~:text=There%20is%20a%20two%2Dtier,in%20much%20of%20the%20 country. [Accessed: 20 May 2023].

Caldwell, C. and Anderson, V. (2021). Employee engagement: A human resource management perspective. New York: Nova Science Publishers, Inc.

Casalino, L.P., Ramsay, P., Baker, L.C., Pesko, M.F. and Shortell, S.M. (2018). Medical group characteristics and the cost and quality of care for medicare beneficiaries. Health Services Research, 53(6): 4970-4996.

Channelnomics. (2017). Annuity-based revenue. [Online]. Available from: https://channelnomics.com/2112-channel-dictionary/annuity-based-revenue/. [Accessed: 12 February 2023].

Chen, J., Ou, L., Hollis, S. J. and Aghdasi, F. (2018). A systematic review of the effectiveness of technology-based interventions for substance use, gambling, and sex addiction. Addictive Behaviors, 87: 143-152.

Chesbrough, H., C. Lettl, and T. Ritter. (2018). Value creation and value capture in open innovation. Journal of Product Innovation Management, 35 (6): 930-38.

https://ijmp.regent.ac.za | Open Access

Clauss, T. (2017). Measuring business model innovation: Conceptualisation, scale development and proof of performance. R&D Management, 47(3): 385-403.

Clauss, T., Bouncken, R. B., Laudien, S., and Kraus, S. (2020). Business model reconfiguration and innovation in SMEs: A mixed-method analysis from the electronics industry. International Journal of Innovation Management, 24(02): 2050015.

Cook, D.A., Kuper, A., Hatala, R. and Ginsburg, S. (2016). When assessment data are words: Validity evidence for qualitative educational assessments. Academic Medicine, 91(10): 1359-69.

Creswell, J. and Poth, C. (2018). Qualitative inquiry & evaluation methods. California: Sage Publications.

Creswell, J.W., and Creswell, J. B. (2020). 30 Essential skills for the qualitative researcher. 2nd Ed. California: Sage Publishing.

DeLucia, P. R., Ott, T. E. and Palmieri, P. A. (2017). Technology integration in the operating room. Journal of Perioperative Practice, 27(9): 194-198.

Dhir, S. and Shukla, A. (2018). The influence of personal and organisational characteristics on employee engagement and performance. International Journal of Management Concepts and Philosophy, 11(2):117-131.

Elrod, J. and Fortenberry, J. (2020). Direct marketing in health and medicine: using direct mail, email marketing, and related communicative methods to engage patients. BMC Health Services Research, 20: 822.

https://ijmp.regent.ac.za | Open Access

Ferri, S. and Ricci, F. (2021). Financial strategies for distressed companies: a critical analysis and operational tools. Switzerland: Springer.

Fischer, T. and Sojer, M. (2015). On the relationship of value creation and value capture. *Journal of General Management*, 41: 106 - 79.

Fjeldstad, Ø. D. and Snow, C. S. (2018). Business models and organisation design. Long Range Planning, 51(1): 32-39.

Foss, N. J. and Saebi, T. (2018). Business models and business model innovation: Between wicked and paradigmatic problems. Long Range Planning, 51(1): 9-21.

Geissdoerfer, M., Vladimirova, D. and Evans, S. (2018). Sustainable business model innovation: A review. Journal of Cleaner Production, 198: 401-416.

Ghiasipour, M., Mosadeghrad, A. M., Arab, M. and Jaafaripooyan, E. (2017). Leadership challenges in health care organizations: The case of Iranian hospitals. Medical journal of the Islamic Republic of Iran, 31: 96.

Golda, N., Beeson, S., Kohli, N. and Merrill, B. (2018). Analysis of the patient experience measure. Journal of the American Academy of Dermatology, 78(4): 645-651.

Goldenberg, D. (2021). COVID's Impact on health and healthcare workers. UK: Oxford University Press.

Grenier, C. and Oiry, E. (2021). Altering frontiers: Organisational innovations in healthcare. United States: John Wiley & Sons.

J.J.S. Lalaram; N. Naranjee

https://ijmp.regent.ac.za | Open Access

Hughes, S. (2018). 4 medical billing issues that are affecting your private practice. [Online]. Coronis Health. Available from: https://www.coronishealth.com/blog/4-medical-billing-issues-that-are-affecting-your-practice-revenue/ [Accessed: 24 February 2023].

Jabłoński, A. (2019). Sustainable business models. Sustainability, 11(6): 1663.

Jassal, N.S. (2022). Chapter 10 - Developing a niche. Year One of Practice Transition, 1:69-73.

JUTA Medical Brief. (2021). SA's private healthcare sector is starting to recover from the pandemic. [Online]. JUTA Medical Brief. Available from: https://www.medicalbrief.co.za/sas-private-healthcare-sector-is-starting-to-recover-from-the-pandemic/. [Accessed 24 March 2021].

Kemperman, J., Geelhoed, J. and op't Hoog, J. (2017). Brilliant business models in healthcare. Netherlands: Springer.

Khubeka, B.Z., Carter, V. and Mwaura, J. (2020). Social media health promotion in South Africa: Opportunities and challenges. African Journal of Primary Health Care & Family Medicine, 12(1): 1-7.

Levien, M. A. (2021). Business management challenges for physicians in private practice. The Journal of Medical Practice Management: MPM, 36(3): 143-147.

Massa, L., Tucci, C. L. and Afuah, A. (2017). A critical assessment of business model research. Academy of Management Annals, 11: 73-104.

J.J.S. Lalaram; N. Naranjee

https://ijmp.regent.ac.za | Open Access

McCabe, R. and Healey, P.G.T. (2018). Miscommunication in doctor-patient communication. TOPICS in Cognitive Science, 10(2): 409 – 424.

Medical Brief. (2018). Malpractice costs put SA's doctors on the defensive. [Online]. Medical Brief. Available from: https://www.medicalbrief.co.za/malpractice-costs-put-sas-doctors-defensive/ [Accessed: 02 November 2021].

Medical Economics. (2021). Top Challenges 2021: No.1 Administrative burdens and paperwork. Medical Economics Journal [Electronic], 9(1). [Online]. Available from: https://www.medicaleconomics.com/view/top-challenges-2021-1-administrative-burdens-and-paperwork (Accessed: 24 November 2022).

Mirza, A. (2022). Why and how physicians can improve their practice management strategy through outsourcing. [Online]. Forbes. Available from: <a href="https://www.forbes.com/sites/forbescommunicationscouncil/2022/07/28/why-and-how-physicians-can-improve-their-practice-management-strategy-through-outsourcing/?sh=7dc599de7b06. [Accessed: 13 March 2023].

Moawad, H. (2021). Doctors can learn professional skills from non-physicians. [Online]. Medical Economics. Available from: https://www.medicaleconomics.com/view/doctors-learn-professional-skills-non-physicians [Accessed: 03 November 2021].

Nabity, J. (2020). How much does malpractice cost? [Online]. Physicians thrive. Available from: https://physiciansthrive.com/malpractice-insurance/costs/. [Accessed 21 June 2021].

https://ijmp.regent.ac.za | Open Access

Ornell, F., Halpern, S., Kessler, F. and Narvaez, J. (2020). The impact of the COVID-19 pandemic on the mental health of healthcare professionals. Cadernos de Saúde Pública, 36(4): e00063520

Osterwalder, A. and Pigneur, Y. (2010). Business model generation: a handbook for visionaries, game changers, and challengers. New Jersey: John Wiley and Sons.

Patel, V.M., Panzarasa, P., Ashrafian, H., Evans, T.S., Kirresh, A., Sevdalis, N., Darzi, A. and Athanasiou, T. (2019). Collaborative patterns, authorship practices and scientific success in biomedical research: a network analysis. Journal of the Royal Society of Medicine, 112(6): 245-257.

Porter, S. M. (2019). Challenges facing physicians in private practice. The Journal of Medical Practice Management: MPM, 34(3): 157-160.

Purcarea, V. L. (2019). The impact of marketing strategies in healthcare systems. Journal of Medicine and Life, 12(2): 93–96.

Ramdani, B., Binsaif, A. and Boukrami, E. (2019). Business model innovation: a review and research agenda. New England Journal of Entrepreneurship, 22(2): 89-108.

Ravitz, R. (2020). Why healthcare can be slow to adopt technological innovations. [Online]. Med-Tech Innovation News. Available from: https://www.med-technews.com/medtech-insights/why-healthcare-is-slow-to-adopt-technological-innovations/. [Accessed: 14 July 2022].

Rehman, A. A., and Alharthi, K. (2016). An introduction to research paradigms. International Journal of Educational Investigations, 3(8): 51 - 59.

https://ijmp.regent.ac.za | Open Access

Rittenhouse, D.R., Ramsay, P.P., Casalino, L.P., McClellan, S., Kandel, Z.K. and Shortell, S.M. (2017). Increased health information technology adoption and use among small primary care physician practices over time: A national cohort study. Annals of Family Medicine, 15(1): 56-62.

Saeedi, M., Al-Othman, N. and Rabayaa, M. (2021). Breaching the bridge: An investigation into doctor-patient miscommunication as a significant factor in the violence against healthcare workers in Palestine. BioMed Research International, 2021: 1-8.

Said, K. and Korbi, F.B. (2017). Asymmetric alliances and information systems: Issues and prospects. 7th Edition. New York: John Wiley & Sons.

Scott, W.R., 2008. Institutions and organizations: Ideas and interests. 3rd ed. Thousand Oaks, CA: Sage.

Seetharaman, P. (2020). Business models shifts: Impact of Covid-19. International Journal of Information Management, 54, 102173.

Setyawan, F. E. B., Supriyanto, S., Ernawaty, E., and Lestari, R. (2020). Understanding patient satisfaction and loyalty in public and private primary health care. Journal of Public Health Research, 9(2), 1823.

Sjödin, D, Parida, V, Jovanovic, M. and Visnjic, I. (2020). Value creation and value capture alignment in business model innovation: A process view on outcome-based business models. Journal of Product Innovation Management, 37(2): 158-183.

https://ijmp.regent.ac.za | Open Access

Smyth, D. (2019). Advantages of studying business management. [Online]. Bizfluent. Available from: https://bizfluent.com/about-4777288-advantages-studying-business-management.html . [Accessed: 25 February 2023].

Sng, J. H., Pei, Y., Toh, Y. P., Peh, T. Y., Neo, S. H. and Krishna, L. K. R. (2017). Mentoring relationships between senior physicians and junior doctors and/or medical students: A thematic review. *National Library of Medicine*, 39(8): 866–875.

Sridhar, D.S. (2017). Direct pay: A simpler way to practice medicine. Florida: CRC Press.

Steyl, T. (2020). Satisfaction with quality of healthcare at primary healthcare settings: perspectives of patients with type 2 diabetes mellitus. South African Journal of Physiotherapy, 76(1):1-7.

Stieler, M. (2017). Creating Marketing magic and innovative future marketing trends: Proceedings of the 2016 Academy of Marketing Science (AMS) Annual Conference. Germany: Springer.

Tranberg, M., Vedsted, P., Bech, B.H., Christensen, M.B., Birkeland, S. and Moth, G. (2018). Factors associated with low patient satisfaction in out-of-hours primary care in Denmark - a population-based cross-sectional study. BMC Family Practice, (19):15.

Tripathy, M. (2018). Building quality teamwork to achieve excellence in business organisations. International Research Journal of Management, IT and Social Sciences, 5 (3): 1-7.

https://ijmp.regent.ac.za | Open Access

Van der Pijl, P., Lokitz, J., and Wijnen, R. (2020). Business model shifts: Six ways to create new value for customers. New Jersey, USA: John Wiley & Sons.

van Tonder, C., Schachtebeck, C., Nieuwenhuizen, C. and Bossink, B. (2020). A framework for digital transformation and business model innovation. Journal of Contemporary Management Issues, 25(2): 111-132.

Vartabedian, B. (2018). Should physicians give their cell phone number to patients? [Online]. 33 Charts. Available from: https://33charts.com/physicians-cell-phone-patients/ [Accessed: 23 March 2023].

Vekić, A., Borocki, J., Fajsi, A. and Morača. (2018). Adapting business model and strategies for next wave of mass customization. Conference: 8th International Conference on Mass Customization and Personalisation - Community of Europe (MCP-CE 2018).

Vorbach, S., Müller, C., and Poandl, E.M. (2019). Co-creation of value proposition: stakeholders co-creating value propositions of goods and services. In Redlich, T., Moritz, M. Wulfsberg, J.P (Eds). Co-creation: Reshaping business and society in the era of bottom-up economics. Cham: Springer.

Wagner, S. (2018). Fundamentals of medical practice management. Chicago, USA: Health Administration Press.

Westwood, J. (2022). How to write a marketing plan: Define your strategy, plan effectively and reach your marketing goals. 7th Edition. UK: Kogan Page Publishers.

Whitler, K.A. (2021). Positioning for advantage: techniques and strategies to grow brand value. New York: Columbia University Press.

J.J.S. Lalaram; N. Naranjee

https://ijmp.regent.ac.za | Open Access

WHO. (2016). Global strategy on Human Resources for Health: Workforce. [Online]. World Health Organisation. Available from: https://apps.who.int/gb/ebwha/pdf_files/WHA75/A75_15-en.pdf. [Accessed: 21 April 2021].

Wirtz, B.W., Pistoia, A., Ullrich, S. and Gottel, V. (2016). Business models: Origin, development, and future research perspectives. Long Range Planning, 49(1): 36-54.

Xu, Y. and Koivumäki, T. (2019). Digital business model effectuation: An agile approach. Computers in Human Behaviour, 95: 307–314.

Yakovchenko, V., McInnes, D. K., Petrakis, B. A., Gillespie, C., Lipschitz, J. M., McCullough, M. B., Richardson, L., Vetter, B. and Hogan, T. P. (2021). Implementing automated text messaging for patient self-management in the veterans' health administration: Qualitative study applying the Nonadoption, Abandonment, Scale-up, Spread, and Sustainability Framework. JMIR mHealth and uHealth, 9(11): 182 - 194.

Yang, M., Evans, S., Vladimirova, D. and Rana, P. (2017). Value uncaptured perspective for sustainable business model innovation. Journal of Cleaner Production, 140: 1794-1804.

Yi, Y., Chen, Y. and Li, D. (2022). Stakeholder ties, organisational learning, and business model innovation: A business ecosystem perspective. Technovation, 114: 1-11.

https://ijmp.regent.ac.za | Open Access

Zhang, X. and Saltman, R. (2022). Impact of Electronic Health Record interoperability on telehealth service outcomes. JMIR Medical Informatics, 10(1): 31837.