Investigation of Practitioners' Attitudes and Intentions to Use Information Systems Research: A Mixed Method Study of the Research Format

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Abstract

Balancing research relevance and rigour has been a long-standing concern in the Information Systems (IS) discipline, crucial for advancing academic understanding and disseminating knowledge to practitioners. This paper addresses the need for effective knowledge product translation and dissemination by proposing the use of animated research briefs with visual storytelling cues. Grounded in the cognitive theory of multimedia learning and critical narrative theory, these briefs aim to make research more accessible and engaging for IS practitioners. A mixed-method approach is deployed: (1) a survey-based experiment to assess how research format influences practitioners' attitudes, which in turn affect their intentions to use academic research to solve work-related problems in the near term, and (2) in-depth interviews to explore practitioners' perceptions of different research formats and their impact on the intention to use academic research in the near term. The paper offers new insights into the effectiveness of multimedia formats in enhancing practitioner engagement and understanding, thereby fostering a more effective dissemination and translation of research knowledge for practitioner audiences.

Keywords: Research relevance, Research knowledge dissemination, Research knowledge translation, IS practitioners.

1 Introduction

Balancing research relevance and rigour has long been a topic of discussion in the Information Systems (IS) academic community (Dennis, 2001; Lee et al., 2021; Rosemann & Vessey, 2008). As an academic discipline, IS research seeks to advance scholarly understanding and disseminate knowledge to practitioners such as systems and business analysts, IT consultants

and advisors, IS developers and engineers, IS security and compliance specialists, and IS executives, who are often informed by applied research. Dennis (2001) emphasised that creating new research knowledge and disseminating it to practice should coexist and not be viewed as substitutes. Disregarding research relevance during knowledge creation can cause the original purpose of IS research to be lost or diverged. Therefore, balancing research relevance with knowledge creation is crucial to fostering both innovative advancements and implications in the IS discipline.

Benbasat and Zmud (1999) identified four key characteristics of IS research relevance linked to its content (i.e., interesting, applicable, and current) and style (i.e., accessible). They proposed four critical questions for evaluating the relevance of published research content: (1) Does it address pertinent concerns (interesting)? (2) Can it be utilised (applicable)? (3) Is it timely (current) for practitioners? and (4) Can practitioners understand the research content (accessibility)? When these characteristics are met, research output is considered to have potential relevance for practitioners (Benbasat & Zmud, 1999). Subsequent examinations of research relevance have further refined this construct. For example, Klein et al. (2006) consolidated the characteristics into three broader ones: importance, accessibility, and applicability. Rosemann and Vessey (2008) further introduced suitability, focusing on the fit of research to meet the needs of practice.

Although research relevance has attracted much attention since the early 2000s, recent work highlighted the ongoing challenge of balancing rigour and relevance due to unclear conceptualisation and a lack of comprehensive, actionable insights. In a review of the practical relevance in the IS discipline, Moeini et al. (2019) shifted from merely examining the critical characteristics of relevance to eliciting four specific perspectives: (1) potential practical relevance of research, (2) perceived research relevance by practitioners, (3) use of research in practice, and (4) realised research impact. This updated notion emphasises that research knowledge, including its content and style, is not the sole determinant of relevance. Relevance should not be seen as unidirectional but should consider the perspectives of both researchers and practitioners (Fox & Groesser, 2016). Importantly, Moeini et al. (2019) argued that researchers can control determining the potential practical relevance of their work by focusing on four key dimensions: (1) topic selection, (2) knowledge product creation, (3) knowledge product translation, and (4) knowledge product dissemination.

Effective *knowledge product translation* involves communicating research outcomes rather than processes and tailoring messages to practitioners' needs. Knowledge product translation can be achieved through offering contextualised examples, avoiding academic jargon, and creating compelling storylines (Moeini et al., 2019). *Knowledge product dissemination* involves publishing in practitioner-focused journals, leveraging digital technologies, and using interactive formats like videos and blog posts (Moeini et al., 2019). Despite the focus on improving knowledge product translation and dissemination approaches, gaps remain in actionable recommendations for researchers and the effectiveness of alternative formats for translating and disseminating research. For example, Toffel (2016) and Moeini et al. (2019) suggested leveraging blog posts and videos as concise and interactive formats to disseminate knowledge products in a manner that is more comprehensible for practitioners but did not offer any explicit guidance on designing these formats effectively. Hence, this paper builds on the extant efforts advocating for the dissemination of IS research through multimedia-enabled formats (e.g., Gaskin et al., 2016; Hull et al., 2019; Mirkovski et al., 2019) to develop theoretically driven,

yet actionable recommendations for knowledge product translation and dissemination based on empirical evidence.

In this paper, we propose using animated research briefs with visual storytelling features to impact potential research relevance. *Animated research briefs* are short videos using animated graphics, characters, and text to enhance accessibility compared to conventional text-based reports (Avital et al., 2017). *Visual storytelling* conveys research knowledge through narratives and visual elements, facilitating comprehension and engagement (Williams, 2019). Our approach is grounded in the cognitive theory of multimedia learning (CTML) (Mayer, 2005) and critical narrative theory (CNT) (Voithofer, 2004) based on which we develop an immersive, animated research brief that is a particularly suitable format for communicating practice-oriented academic research to practitioners who are not accustomed to reading academic manuscripts (Nunamaker Jr et al., 2015). We then aim to assess the effectiveness of this format with practitioners by examining their attitudes and short-term intentions to use academic research knowledge in their work (i.e., apply research findings to their work in the near future). We focus on short-term intention to use in order to assess specific and immediate applicability, rather than uncertain potential applicability.

In this paper, we employ a mixed-method approach. Study 1 conducts a survey-based experiment to investigate the impact of research format on practitioners' attitudes to use IS academic research and the effect of these attitudes on their intentions. Study 2 involves indepth interviews with IS practitioners to further explore their perceptions about traditional, text-based and multimedia-enabled research formats for conveying research knowledge and how they shape their short-term intentions to use academic work in their professional practice. Accordingly, we attempt to address the following research questions: (RQ1) *How does the format of academic research (e.g., text-based vs. multimedia-enabled) influence IS practitioners' attitudes and their intentions to use the research for solving practical business problems?* and (RQ2) *How do IS practitioners perceive text-based and multimedia-enabled formats for translating and disseminating research knowledge?* By addressing these research questions, we aim to contribute to the IS community's understanding of how to further improve knowledge product translation and dissemination.

The paper is structured as follows: We begin by reviewing current work on research relevance, followed by outlining our theoretical underpinnings. Next, we present our research model and hypotheses. The research methodology then details the data collection and analysis. After presenting the findings of both studies, we elaborate on these findings and how they contribute to the extant work on research relevance in the discussion section. Based on the findings of our work, we also provide practical recommendations for researchers about how to effectively translate and disseminate their knowledge products based on our findings. Finally, the conclusion highlights the paper's limitations and suggests avenues for future research.

2 Background Work

Achieving a balance between research relevance and rigour has been an ongoing debate in our discipline (Dennis, 2001; Lee et al., 2021; Rosemann & Vessey, 2008). While research relevance is often linked to securing funding (McClements et al., 2024), there is disagreement about whether the primary purpose of research is to produce knowledge that is directly applicable to practical problems. Some researchers argue that the primary goal of academia is to advance

theoretical knowledge, regardless of its immediate practical implications (Van de Ven, 2007). Concerns about securing funding from practitioners are also not universal. Some researchers worry that relying on practitioner funding could compromise the independence and freedom of academic inquiry, especially in the social sciences (Bourdieu, 1988). These concerns have led to funding models in some business schools where grants are primarily obtained from government sources rather than the industry, to preserve research integrity and independence (Etzkowitz & Leydesdorff, 2000). Importantly, Dennis (2001) emphasised that generating new research knowledge and making it relevant to practitioners are both crucial elements of research relevance and should not be considered mutually exclusive.

Seminal work identified four key characteristics of IS research relevance based on two perspectives: content (interesting, applicable, and current) and style (accessible) (Benbasat & Zmud, 1999). Klein et al. (2006) then built upon the work of Benbasat and Zmud (1999) to consolidate the four characteristics of research relevance into three more broad onesimportance, accessibility, and applicability-with importance signifying content that is currently of interest to the real world. Further to this work, Rosemann and Vessey (2008) introduced the characteristic of suitability emphasising the fit to meet the needs of practice, and together with importance serving as critical steps before considering applicability in practice. In a more recent work, Moeini et al. (2019) highlighted that the ongoing challenge of balancing rigour and relevance stems from unclear conceptualisation and a lack of comprehensive, actionable insights on how to address specific aspects of relevance. They examined four specific perspectives that guide the progression of achieving research relevance: (1) potential practical relevance of research, (2) perceived research relevance by practitioners, (3) use of research in practice, and (4) realised research impact. Moeini et al. (2019) proposed that researchers can enhance the potential practical relevance of their work by focusing on (1) topic selection, (2) knowledge product creation, (3) knowledge product translation, and (4) knowledge product dissemination.

To gain a better understanding of the current state of the literature, we reviewed and categorised existing studies on enhancing research relevance. We mapped these studies and their proposed measures across the four dimensions identified by Moeini et al. (2019), as detailed in Table 1. The dimension of *topic selection* has received significant scholarly attention. When selecting topics with potential value for practitioners, current work proposed specific measures that individual researchers should consider aligning their perspectives with the ones of practitioners (Moeini et al., 2019). These measures include establishing industry sponsorships or collaborations (Moeini et al., 2019; Pearson et al., 2005; Robey & Markus, 1998; Toffel, 2016; Van De Ven & Johnson, 2006), conducting regular surveys with IT executives to identify current issues and provide research guidelines (Srivastava & Teo, 2005), and placing researchers in industry settings to gain exposure to professional experiences (Gill & Bhattacherjee, 2009; Toffel, 2016). Further measures have been proposed to enhance the dimension of knowledge product creation in which the practice orientation is central. Some of these measures include adopting research models that integrate applied theory with evaluation or policy research (Robey & Markus, 1998), designing studies that accommodate the complex nature of practical applications (Fox & Groesser, 2016; Van De Ven & Johnson, 2006), and co-producing knowledge with practitioners throughout all stages of the research process (Moeini et al., 2019; Rosemann & Vessey, 2008).

The dimension of knowledge product translation highlights effective communication on the contextualised usability of research knowledge with practitioners (Moeini et al., 2019). The proposed measures for this dimension are twofold, addressing content and style of translation. From a content perspective, one of the key emphases to enhance potential research relevance is to focus on communicating research outcomes rather than research processes, such as dedicating and extending a practical implication section (Robey & Markus, 1998). Current work suggested that the implications derived should be tailored to more detailed segments of practitioners to meet their diverse needs (Fox & Groesser, 2016; Gill & Bhattacherjee, 2009). Moeini et al. (2019) further emphasised the importance of leveraging contextualised examples when adapting the conceptual knowledge for practitioners and associating the research knowledge with usable solutions in practice. From another perspective, considerations have been extended to the communication styles while translating research knowledge. Robey and Markus (1998) argued that academic reports indeed require rhetoric but still need a compelling storyline that is novel, critical, and constructive to motivate practitioners to continue reading and signal usability. Gill and Bhattacherjee (2009) further recommended tailoring research messages into stories that align with practitioners' knowledge structures, cognitive schemas, and communication patterns, which aims at mitigating the inherent differences between researchers and practitioners and facilitating more effective communication.

The dimension of *knowledge product dissemination* refers to the effective transmission of research findings to the targeted audience (Moeini et al., 2019). Although researchers have limited control over the low engagement of practitioners with senior IS journals and conferences, adopting practice-oriented formats and mediums has been identified as a means to enhance dissemination within the researchers' purview. For example, current work has recommended publishing in practitioner-focused journals and conferences, as well as in news columns (Gill & Bhattacherjee, 2009; Pearson et al., 2005; Toffel, 2016). Toffel (2016) and Moeini et al. (2019) advocated for leveraging dominant digital technologies, such as social media, as dissemination platforms, which are considered more accessible channels for practitioners. It was further emphasised that consumable reports are not the only effective formats and more concise and interactive formats, such as videos and blog posts, could also be employed to convey knowledge in a manner that is more comprehensible for practitioners.

Based on the synthesis of proposed measures for addressing research relevance, we identified two gaps in the current work. *First*, although considerable attention has been devoted to improving the style of translating research knowledge, there is a notable lack of effort in identifying actionable recommendations for researchers. For example, when tailoring communication messages to align with practitioners' communication patterns, existing measures primarily focused on the elements to omit, such as statistical methods, testing procedures, and academic jargon (Gill & Bhattacherjee, 2009; Robey & Markus, 1998; Toffel, 2016). Minimal guidance has been suggested on the elements and techniques required to effectively adapt to a more comprehensible style or to develop an engaging storyline for practitioners.

Second, there is limited work on the alternative dissemination formats and how to effectively create content for these emerging formats. As well, there has been little effort to examine the effectiveness of these alternative dissemination formats compared to traditional ones. For example, current work suggested leveraging blog posts and videos, which differ significantly from traditional text-based reports, as effective means for communicating research

knowledge. Nevertheless, there remains a lack of explicit guidance on how to design and develop these visual-oriented formats effectively. Moreover, even if researchers successfully create relevant knowledge based on guidance from current work, the absence of actionable measures to ensure practitioners' comprehension and accessibility may still hinder its full potential for relevance in practice.

To address these gaps, we develop theoretically driven yet actionable recommendations for the dimensions of knowledge product translation and dissemination. We extend existing measures by incorporating animated research briefs with visual storytelling cues to enhance the potential research relevance of the created knowledge. The content and style of our animated research briefs are grounded in theoretical frameworks, respectively the CTML and CNT. Importantly, adhering to the notion of research relevance proposed by Moeini et al. (2019), this paper moves beyond merely framing recommendations for promoting potential research relevance. We consider a broader scope of research relevance by examining the effectiveness of our proposed approach with practitioners, encompassing the downstream perspectives of how practitioners perceive the potential relevance and their attitudes and intentions to adopt the research knowledge.

Dimension	Measures for Addressing Potential Research Relevance
Topic selection	Pursuing practitioner sponsorship (Robey & Markus, 1998)
	Focus on the interests, needs, concerns and/or questions of practitioners
	(Pearson et al., 2005; Robey & Markus, 1998; Rosemann & Vessey, 2008;
	Srivastava & Teo, 2005; Van De Ven & Johnson, 2006)
	Developing working and/or professional relationships with IS/IT practitioners (Pearson et al., 2005)
	Placing researchers in practice (Gill & Bhattacherjee, 2009)
	Working as a practitioner (Toffel, 2016)
	Attending crossover workshops (Toffel, 2016)
	Co-authoring with practitioners (Toffel, 2016)
Knowledge product creation	Adopting new models of research (applied theory, evaluation research, policy research) (Robey & Markus, 1998)
	Designing the research project to be a collaborative learning community (Van De Ven & Johnson, 2006)
	Designing the study for an extended duration of time to building closer
	relationships and collaborations (Van De Ven & Johnson, 2006)
	• Employing multiple models and methos to study the complex reality (Van De Ven & Johnson, 2006)
	Conducting applicability checks as an integral part to the entire research
	process for ensuring interests and importance to practitioners (Rosemann & Vessey, 2008)
	Relating new research findings to the prior, and to extant theory, to provide coherent (Fox & Groesser, 2016)
	Developing a sounding board of practitioners (Toffel, 2016)
	Co-authoring with practitioners (Toffel, 2016)
	Conducting field visits and practitioner interviews (Toffel, 2016)
Knowledge product	Producing reports that are shorter and more concise (Robey & Markus, 1998)
translation	Creating novel critical and constructive storyline (Robey & Markus, 1998)
	Ensuring creditable evidence (Robey & Markus, 1998)
	• Writing in a different style and avoiding academic jargon (Pearson et al., 2005; Toffel, 2016)
	 Avoiding long literature reviews, extended explanations of methodologies, and abstract statistical analysis (Gill & Bhattacherjee, 2009; Pearson et al., 2005; Robey & Markus, 1998)

	 Developing different access, perceptual filters for different audiences (Fox & Groesser, 2016; Gill & Bhattacherjee, 2009; Robey & Markus, 1998) Clarifying what to do and how to apply the findings for addressing issues in practice (Fox & Groesser, 2016)
Knowledge product dissemination	 Submitting for practitioner-oriented journals (Gill & Bhattacherjee, 2009; Pearson et al., 2005; Robey & Markus, 1998; Toffel, 2016) Presenting to practitioners at conferences (Toffel, 2016) Disseminating in newspaper op-eds, blogs and social media (Moeini et al., 2019; Toffel, 2016) Encouraging other to convey to practitioners (Moeini et al., 2019; Toffel, 2016)

Table 1. Summary of Proposed Measures for Addressing Potential Research Relevance Based on the Four Dimensions by Moeini et al. (2019)

3 Theoretical Underpinnings

In our pursuit of identifying effective and actionable measures for addressing research relevance beyond topic selection and knowledge creation, we ground this paper in the fundamental cognitive theories that help us with aligning the translation and dissemination of research knowledge with human cognitive structures, particularly taking into account practitioners' communication styles and patterns. In the IS discipline, leveraging multimedia, particularly video formats, to complement traditional text-based reports has been widely discussed and underscored with additional values such as open access and enhanced visibility (Gaskin et al., 2016). Building on this foundation, we employ CTML (Mayer, 2005) and CNT (Voithofer, 2004) to guide the development of animated research briefs with visual storytelling cues for communicating research knowledge with IS practitioners.

CTML is recognised as a comprehensive framework that underscores the value of integrating text and visuals, leveraging multimedia technologies to enhance knowledge comprehension and learning outcomes (Mayer, 2005). CTML is underpinned by three core assumptions (Mayer, 2005): (1) *limited capacity*, which posits that humans have a restricted capacity in working memories for processing current information; (2) *active processing*, which asserts that meaningful learning can only be achieved when learners are involved in the active selection, organisation and interaction with content and information; (3) *dual channel*, which suggests that learners are engaged in two distinct channels for processing verbal (e.g. words) and visual (e.g. images) information respectively. Following the three assumptions, CTML outlines ten principles—*coherence*, *signalling*, *redundancy*, *spatial contiguity*, *temporal contiguity*, *segmenting*, *pre-training*, *modality*, *and personalisation*—that inform the design of multimedia instructional materials to optimise learning based on how individuals process information from both visual and auditory channels (Mayer, 2008).

CTML and its evidence-based principles have been widely served as guidelines for designing educational materials in research, tailored for specific user groups such as students with learning disability (Greer et al., 2013) and for specific learning tasks such as foreign language vocabulary acquisition (Immanuel & A, 2023) or assessment (Kirschner et al., 2023). Existing work in IS has also adopted the CTML to design videos that effectively support IS knowledge education, translation and dissemination. Hull et al. (2019) and Mirkovski et al. (2019) outlined the potential of CTML-based visual storytelling in enhancing the comprehension and perceived utility of research knowledge among students and academics, thereby positively affecting their intentions to cite, share, and accept IS academic research. Moreover, CTML and its principles have been employed in designing animated videos to support business

stakeholders in comprehending complex artefacts and dynamic business process models, which illuminates the opportunity of leveraging CTML-based aminated content to effectively accommodate the diverse cognitive needs and knowledge expertise levels when communicating with practitioners (Aysolmaz & Reijers, 2021). Therefore, we adopt CTML and its multimedia design principles to inform the design of the animated research briefs, and to improve the translation style and dissemination format of research knowledge for IS practitioners. We provide brief definitions of the ten CTML principles in Table 2.

Robey and Markus (1998) argued that a compelling storyline is also crucial for maintaining practitioner engagement with research knowledge. Given the minimal measures for constructing an effective storyline, we integrate CNT to guide the design of narratives and structures when translating research knowledge. CNT posits that story structures are not static, implying that stories evolve over time as social, cultural, historical and technical factors (e.g., media convergence) emerge, change, dissipate or merge (Voithofer, 2004). CNT provides a conceptual framework for designing and evaluating multimedia materials, explicitly focusing on eight elements of the story structure: genre, story, plot and subplot, space, place and settings, time, charter and characterisation, point of view/focalisation, complication/crisis and resolution and coda. In this paper, CNT offers an additional theoretical perspective to enhance the multimedia learning experiences by optimising the story structure as well as translating the research knowledge specific to the context and communication patterns of IS practitioners.

CNT has been extensively employed in improving the delivery structure and style of educational materials (Diamond, 2011). Extant work has leveraged CNT to improve the course structure for delivering ill-defined knowledge to engineering students (McCarthy, 2012). By enabling students to impose their own cognitive order on the course materials, the CNT-based intervention has significantly influenced students' engagement and motivation in addressing engineering problems and deriving solutions for given assignments. Furthermore, Mirkovski et al. (2019) also discussed that future research should adhere to evidence-based guidelines, such as principles outlined in CNT, to effectively communicate the story's meaning, rather than relying on mere paraphrasing, when conveying IS research knowledge through visual storytelling. We adopt CNT and its principles to inform the content of the animated research briefs, enhancing the storytelling aspect. As a result, the underlying IS research knowledge can be perceived as more comprehensible by the targeted audience. We provide explanations and examples of the eight CNT principles in Table 2.

In our paper, we propose to integrate CNT with CTML to develop animated research briefs to complement the existing textual-based research articles for translating and disseminating IS research knowledge. We propose that animated research briefs designed according to the *ten principles of CTML* for multimedia instructional materials and the *eight elements of CNT* for story structure would further encourage IS practitioners to perceive the disseminated research knowledge as being engaging, relatable, and impactful to their work. We thus develop an animated research brief with a design and a story informed by CTML and CNT for a published article by Ebel et al. (2016)¹ to improve the dissemination and translation of research

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¹ Readers can access the animated research brief at the following link: https://www.youtube.com/watch?v=0wHqX-vATcA (10:21). We selected Ebel et al. (2016) because their framework provides valuable support for developing and managing new business models, which is particularly relevant for IS practitioners in the IT industry focused on product and market development. The framework's systematic methodologies help roles like product owners, IT developers, and business analysts create innovative, scalable IT solutions that align with evolving business strategies and drive future growth.

knowledge for IS practitioners. In Table 2, we outline how our two theoretical foundations were applied in developing the animated research brief. Refer to Appendix 1 for more detailed information about the animated research brief.

Theoretical Foundation	Principle	Definition	Application
CTML	Coherence	Reduce use of irrelevant material.	The five activities of business model development projects were highlighted using voice narration, visual graphs, and printed text.
	Signalling	Highlight essential material.	Important information about each of the five activities of business model development projects was presented using a combination of narrative voice and visual graphics.
	Redundancy	Reduce (if possible) on- screen text to narrated animation only.	Capturing the voice narration in the form of on-screen text (e.g., subtitles) was included, despite the suggested omission, as some of the learners might not be native English speakers.
	Spatial Contiguity	Place corresponding text and graphics in proximity.	On some occasions, highlighted printed words were appropriately positioned in the proximity of graphics.
	Temporal Contiguity	Present corresponding narration and animation concurrently.	Visual graphics and voice narration were synchronised.
	Segmenting	Present animation in learner-paced segments.	The video narrative was divided four sections that included 53 viewer-paced segments, each consisting of two to three sentences with a duration of 12 to 15 seconds.
	Pre-training	Provide pre-training of essential material for learners.	A brief overview of the selected article was provided at the beginning of the video narrative, mentioning its key research objectives.
	Modality	Present words as narration instead of text.	Visual graphics were guided with narrative voice rather the printed words.
	Multimedia	Present words and graphics together rather than words separately.	Visual graphics and narrative voice were used simultaneously.
	Personalisation	Present words in conversational style rather than formal style.	A more personalised and less formal tone for the narrative voice was used. ²
CNT	Genre	The category or type of narrative with specific conventions and expectations.	The script was presented in a casual, yet professional settings using a young practitioner, named Steve, as a virtual tour guide.
	Story, plot, and subplot	The central narrative, additional interconnected narratives, and the main storyline's complexity.	The script followed the structure of the DSR framework, including four arc-story sections: introduction, motivation and research approach, problem formulation, and iteration cycles and research output.

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² In our attempts to use a more personal and less formal language, we were cautious not to alter the original and intended meaning; thus, we restrained ourselves from overly using buzzwords and acronyms.

Se	pace, place, and ettings	The physical and geographical aspects, including locations and environments.	Simulation of multiple virtual spaces (e.g., office meetings) were used.
T	ime	The sequencing, pacing, and chronological order of events in the narrative.	Various visual graphics were used to illustrate overlapping events with various meanings and interpretations (e.g., individual processes of the proposed framework).
	Character and haracterisation	The central figures in the story, their traits, motivations, and development.	A virtual tour guide, Steve, who was characterised as a young practitioner, led learners through the video narrative.
	Point of view focalisation	The perspective from which the narrative is narrated, such as first-person, third- person, or omniscient.	The script was narrated by a virtual tour guide, who discussed the key points from the perspective of practitioners.
	Complication/ risis	The turning point introducing conflict and tension in the narrative.	The script was aligned with the structure of the proposed framework, including problem-cantered instructions (e.g., problem identification and solution development) in the four sections.
1	Resolution and oda	The point where conflicts are resolved and the narrative's conclusion or reflection.	In the last section (i.e., iteration cycles and research output), visual graphics are used to illustrate the proposed framework for designing business model development tools.

Table 2. Definition and Application of CTML's Ten Principles and CNT's Eight Guidelines, Adapted from Mayer (2008) and Voithofer (2004)

4 Research Model and Hypotheses Development

Based on the theoretical underpinning of CTML and CNT, we develop our research model, as illustrated in Figure 1. While the potential relevance in IS academic research needs to be upheld by the researchers themselves, it is also imperative to assess whether the potential relevance can be perceived and embraced by practitioners (Moeini et al., 2019). We conduct two studies to address these aspects. In Study 1, we investigate how the format of research affects practitioners' attitudes to use IS academic research (H1) and how these attitudes before (H2a) and after consumption (H2b) of the academic research influence their short-term intentions to use it. In Study 2, we explore practitioners' perceptions of different research formats and their shape their short-term intentions to use academic research for their work.

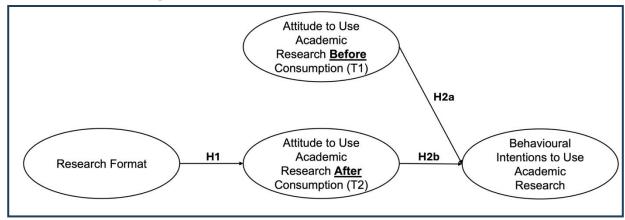


Figure 1. Research Model

In this paper, we investigate the effect of theory-driven, animated research briefs by assessing the positive influence on practitioners' attitudes, which refer to practitioners' favourable evaluations or appraisals to use IS academic research (Ajzen, 1991). We focus solely on the attitude construct because our proposed measure—supplementing traditional text-based reports with animated research briefs—primarily aims to improve practitioners' internal perceptions and intrinsic motivations to use IS academic research at an individual level. Other factors influencing behavioural intention, such as subjective norms and perceived behavioural control, which relate to social and organisational influences (Ajzen, 1991) are beyond the scope of this paper.

Having a positive attitude to use IS academic research not only signifies a positive evaluation of its potential relevance but also indicates inner acceptance among practitioners (Ajzen, 1991). This underlying acceptance is crucial because, although practitioners can acknowledge the perceived relevance of IS academic research, a lack of agreement or motivation to use it diminishes the value of the potential relevance created by researchers or perceived by practitioners. Importantly, we posit that CTML- and CNT-informed animated research briefs can foster positive attitudes to use IS academic research through three key mechanisms: (a) comprehension and retention, (b) personalisation, and (c) engagement. Each mechanism may also be associated with positive appraisals, further embracing practitioners' positive attitudes to use IS academic research. We further elaborate on the actualisation of these three mechanisms in the following paragraphs.

First, CTML emphasises that multimedia content enhances both comprehension and retention (Mayer, 2005). By presenting IS research knowledge in a manner that combines textual and visual elements following CTML design principles, animated research briefs facilitate a deeper understanding and memory. For example, as outlined by the signalling principle, animated research briefs utilise engaging narrative voice and alerting visual graphics (Mayer, 2008) to highlight and explain complex system architectures, such as microservices or cloud computing frameworks, which in turn can help to demystify abstract concepts like data modelling or system integration. In addition, adhering to the principle of temporal contiguity, these briefs can present voice narration and corresponding visual graphics simultaneously to enhance the dual-channel processing of information (Mayer, 2008). This approach is particularly useful for conveying detailed processes such as software development methodologies or cybersecurity protocols, ensuring that IS practitioners can better understand and retain the critical information needed for practical application. Hence, compared with other formats for translating and disseminating research knowledge, CTML-guided animated research briefs serve as a powerful supplement to explain complex concepts, which encourages IS practitioners to evaluate and perceive the potential research relevance that researchers intend to convey. Furthermore, the increase in comprehension and retention can strengthen the inner feeling of competence of IS practitioners while engaging with the research content, leading to a positive inclination and appreciation for the academic research, subsequently further enhancing the positive attitudes.

Second, CTML and CNT also emphasise a more personalised dissemination and translation of IS research knowledge. Theory-driven, animated research briefs attend to the communication patterns of practitioners when presenting the research knowledge, aiming to mitigate the barriers caused by the inherent differences between researchers and practitioners (Gill & Bhattacherjee, 2009). For instance, in accordance with the personalisation principle outlined in

the CTML, animated research briefs employ a less formal communication style with more content tailored to specific audience groups (Mayer, 2008). This could include simplifying technical jargon related to IT systems, cybersecurity, or data analytics, making the information more accessible. Furthermore, as suggested by the character and characterisation principle of CNT, these briefs can feature an animated narrator who embodies the role of an IT professional or systems analyst, mirroring the audience's real-life roles (Voithofer, 2004). This narrator can guide practitioners through complex topics such as cloud computing strategies or enterprise software deployment in a relatable manner, similar to how they learn and apply practical knowledge within their organisations. This approach not only makes the content more engaging but also helps practitioners see the relevance of the research to their everyday work. In such a way, animated research briefs do not only assist with comprehension through a more personalised translation of IS research knowledge but also enable a higher sense of relatedness for practitioners compared with traditional forms of academic reports, enhancing the positive attitudes of practitioners regarding IS academic research.

Third, CTML-based animated research briefs emphasise engagement. CTML principles, such as coherence, spatial contiguity, and multimedia, enhance engagement and reception when practitioners review IS research knowledge (Mayer, 2008). For example, traditional text-based research on topics, such as database management or emerging technologies, can often be dense and unengaging, leading to boredom or frustration among IS practitioners. Animated research briefs can alleviate this by using engaging visuals and interactive elements to illustrate complex concepts, making them more accessible and enjoyable. This approach can keep IS practitioners interested and help them see the potential relevance of IS academic research, fostering positive attitudes and increasing the likelihood of applying these insights in their work.

In summary, we posit that:

H1: <u>A text-based article supplemented with an animated research brief</u> will result in a larger positive change in practitioners' attitudes to use IS academic research (after consuming research) when compared to (1) <u>an extended abstract only</u>, (2) <u>an extended abstract supplemented with an animated research brief</u>, (3) an animated research brief only, or (4) a full text-based article only.

Positive attitudes are crucial in predicting behavioural intentions, a relationship that has been extensively discussed in IS research (Bhattacherjee & Premkumar, 2004; Karahanna et al., 1999). Extant work highlights the pivotal role of positive attitudes in fostering intentions to engage in certain behaviours in the workplace (e.g., Moeini & Rivard, 2019; Ormond et al., 2019; Titah & Barki, 2009). Building on this understanding, we also propose that positive attitudes toward IS academic research, both before and after consumption, can lead practitioners to have positive short-term intentions to use research knowledge through three key mechanisms: (a) *comprehension and retention*, (b) *personalisation*, and (c) *engagement*. We elaborate on the actualisation of these mechanisms in the following paragraphs.

First, CTML's modality principle highlights the importance of using multiple sensory channels (visual and auditory) for more effective learning (Mayer, 2008). Animated research briefs can simplify complex concepts, such as data analytics, cybersecurity protocols, or software development methodologies, by integrating text, visuals, and audio. For example, animated diagrams can break down intricate processes, such as machine learning algorithms or cloud infrastructure setups, while voiceovers can clarify key points and contextualise information. IS practitioners who engage with these multimedia-enhanced materials can develop positive

attitudes as they find the content easier to understand and retain. This clear and engaging presentation helps them grasp critical information more effectively, making them more likely to incorporate IS research knowledge into their professional practices, whether it involves implementing new technologies or optimising IT workflows. Similarly, the coherence principle of CTML ensures that materials are logically structured, making it easier for practitioners to follow and understand the content. When IS practitioners perceive research materials as well-structured and easy to understand, they are more likely to develop a favourable attitude toward the research. This enhanced comprehension and retention foster a positive attitude to use IS research knowledge, making practitioners more inclined to integrate this knowledge into their professional practices.

Second, the personalisation mechanism focuses on tailoring research materials to resonate with practitioners' unique perspectives and experiences. For instance, by incorporating elements that directly address the audience's professional context and needs, such as cybersecurity threats, efficient data management techniques, and the adoption of AI, the content becomes more relatable and engaging. This approach mirrors the CNT's character and characterisation element (Voithofer, 2004), where IS practitioners are seen as central figures in the narrative of the research application. When research materials are personalised, IS practitioners can see themselves reflected in the content, making it easier for them to connect with and internalise the information. This connection fosters positive attitudes to use research, as it feels more relevant and accessible. As a result, these positive attitudes increase practitioners' intentions to apply the research knowledge in their professional practices.

Third, the engagement mechanism is essential in motivating practitioners to use IS academic research. CNT's complication/crisis element introduces turning points in a narrative, creating conflict and tension that capture the audience's attention (Voithofer, 2004). For example, when IS practitioners encounter challenges in the research, such as data security breaches or system downtime, their engagement increases as they seek solutions. By presenting research findings within engaging narratives that highlight these relevant issues, animated research briefs can captivate practitioners, making the research more relevant and interesting. This heightened engagement fosters positive attitudes to use research, as practitioners perceive it as directly addressing their professional challenges. Consequently, these positive attitudes enhance their intention to apply the research in their work, emphasising the importance of engagement in effectively utilising IS academic research.

In summary, we propose that:

H2a: Practitioners' attitude to use IS academic research (<u>before</u> consumption) has a positive influence on their short-term intention to use IS academic research.

H2b: Practitioners' attitude to use IS academic research (<u>after</u> consumption) has a positive influence on their short-term intention to use IS academic research.

5 Research Method

We adopted a mixed-method approach³ to comprehensively address our research questions (Creswell & Clark, 2018), as shown in Figure 2. To address <u>RQ1</u>, Study 1 employs a survey-

³ This research has received approval from the Victoria University of Wellington (New Zealand) Human Ethics Committee, with the reference number 0000027590. For any questions regarding the ethical aspects of this research, you may contact the Human Ethics Committee Convenor at hec@vuw.ac.nz.

based experiment to quantitatively examine (1) the extent to which research format affects practitioners' attitudes to use IS academic research and (2) the effect of practitioners' attitudes, before and after consumption, on their behavioural short-term intentions to use IS academic research. We use ANOVA to assess the impact of research format on practitioners' attitudes (H1) and regression analysis to investigate the influence of practitioners' attitudes on their short-term intention to use academic research for their work (H2a and H2b). By comparing five distinct research formats—an extended abstract only (thereafter labelled as "abstract"), an animated research brief followed by an extended abstract (thereafter labelled as "abstract video"), a full academic article only (thereafter labelled as "video article"), and an animated research brief only (thereafter labelled as "video article"), and an animated research brief only (thereafter labelled as "video")—we identify specific influences on practitioners' attitudes which then influence their behavioural intentions. In Study 1, we further qualitatively explore practitioners' expected use cases of academic research through thematic analysis of the open-ended questions in the survey-based experiment.

To address <u>RQ2</u>, Study 2 employs in-depth interviews to qualitatively explore practitioners' perceptions of text-based and multimedia-enabled research formats for translating and disseminating research knowledge and how they shape their short-term intentions to use academic research in their work. We use thematic analysis to derive further nuanced insights into practitioners' experiences and suggestions for improvement about the five distinct research formats, thereby enriching our understanding of how to best translate and disseminate research knowledge for practitioner audiences.

By combining these quantitative and qualitative methods (Johnson & Onwuegbuzie, 2004), we aim to gain a more comprehensive understanding of how IS practitioners engage with various research formats, potentially enhancing the validity and depth of our findings about translating and disseminating research knowledge. We provide details about the measurements, data collection, and data analysis for Study 1 and Study 2 in the following sections.

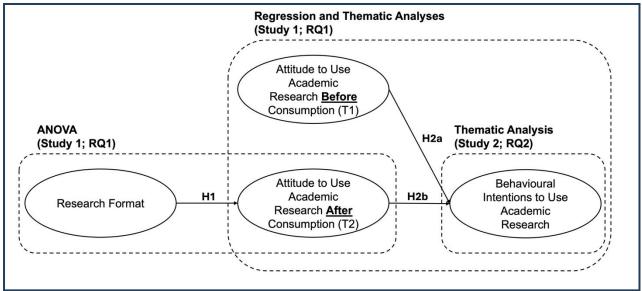


Figure 2. Research Method

5.1 Measurement

5.1.1 Study 1

The research model includes two adapted measures⁴. Attitude to use academic research is the practitioner's positive or negative feelings about using peer-reviewed academic research in their work practice. It was measured by attitude before and after exposing practitioners to the treatment (i.e., consumption of IS research in different formats). Behavioural short-term intention to use academic research is the extent to which the practitioner feels he/she would use the peer-reviewed academic material for their work practice. We also measured practitioners' specificity to use academic research, referring to the detailed and contextualised ways in which practitioners anticipate using academic research findings in their work, by collecting qualitative data in our survey-based experiment. This measurement encompasses the expected use cases and situations where they can apply these findings to solve practical problems. Refer to Table A1 in Appendix 2 for details on the measurement operationalisation.

5.1.2 Study 2

To capture the perceptions of perceptions of text-based and multimedia-enabled research formats for translating and disseminating research knowledge, this study adopted a semi-structured interview protocol. Interviews were informal and adaptable with prompts to gather data on a variety of issues and perspectives based on interviewees' work tenure and occupational work experience in the IT industry. Additional data were also collected on practitioners' perspectives and sentiments about using academic research in different formats, as well as their concerns and necessary improvements for translating and disseminating research knowledge to practitioner audiences. Refer to Appendix 2 for details on the interview protocol.

5.2 Data Collection

5.2.1 Study 1

We used Qualtrics to collect anonymous responses from highly filtered demographics for our survey-based experiment. We followed the latest procedures for effectively collecting data from third-party providers (e.g., mTurk, Dynata, and Qualtrics), which involved using screeners and attention traps to improve the data quality (Lowry et al., 2016). We outline the data collection procedures followed for our survey-based experiment in the following paragraphs.

In the early stages of the study design, it was acknowledged that IS practitioners have busy working schedules and therefore a financial reimbursement (AU\$40) for their time was deemed as necessary to increase the participation in and completion of the experiment. The participants had to meet six initial criteria: 1) work in the IT industry (since this was the target population for our theoretical agenda); 2) use a tablet, laptop or desktop device to complete the experiment (rather than a mobile phone, which might inhibit proper viewing of the content); 3) be at least 18 years old (due to IRB constraints and to be justifiably within our

⁴ We used attitude and behavioural intention measures from general technology use (Davis, 1989; Venkatesh et al., 2003) to assess practitioners' attitudes and intentions to use academic articles, given their versatility and adaptability. Mirkovski et al. (2019) adapted the behavioural intention variable to measure academics' intentions to cite, share, and accept research. Griffioen (2019) explored undergraduates' research attitudes and intentions for future professional use, while Hsiao and Chen (2015) investigated physicians' intentions to use clinical guidelines. This demonstrates the applicability of the general technology use measures in diverse professional contexts.

target population); 4) have at least high school diploma (since they were being treated with scientific literature); 5) have at least one year of working experience in the IT industry (again, to fall within our target population); and 6) have an IT related occupational role with experience in product/market development, including product owner, IT developer, product manager, software engineer, business analyst, IT analyst, IT project manager, solution tester, IT consultant, solution architect, and other (to be a relevant target for our research question). We further screened participants to ensure they met two additional criteria: (1) whether examining and learning from academic research had been part of their job and (2) whether they had consumed the academic article before today. These screeners were important to verify that participants had relevant experience with academic research and to eliminate any prior familiarity with the specific article, ensuring unbiased responses. These screeners filtered out 382 of the 652 pre-screened participants, leaving us with 270 participants who met all the eight criteria.

Besides meeting the eight criteria, we used multiple attention traps to filter out unengaged participants. First, we included five objective questions about the content covered in the consumed academic article to ensure credibility and quality of responses: (1) "What are the main phases of the authors' research approach?", (2) "Which company initiated the formulation of the problem and why?", (3) "Which theory was selected as the core theory to support the framework development for digital tools in new business model design?", (4) "What artefacts were created as part of the functional requirements of the proposed framework, and what are their objectives?", and (5) "How was the developed framework evaluated in the second iteration cycle?" Second, we employed a time-to-complete exclusion criterion by asking, "How long did it take to review the provided materials?" to filter out unengaged responses further. Third, we excluded responses that completed the experiment in an unreasonably short time, based on these criteria: (1) abstract video/video article > 12 mins (exclude treatments less than 12 minutes in duration) and (2) video/abstract/article > 12 mins (exclude treatments less than 12 minutes in duration). Fourth, since attitude was measured at t1 and t2 with the same questions, we inverted the scales for attitude at t2 as an attention trap. These comprehensive attention traps filtered out 40 participants, leaving us with 230 valid responses.

The final set of participants in our experiment covered all three AIS academic regions: Australia (n=51), the US (n=62), the UK (n=53), and India (n=64). The final sample was comprised of participants with an average age of 37 years, 66% of whom were male. The majority (89%) had a bachelor's degree or higher. The breakdown of the top 3 occupational roles was 33% project managers, 26% IT developers, and 10% IT/business analysts. The average number of years of experience in the IT industry was 11.8 with 62% of respondents operating in senior positions (e.g., IT project manager, IT consultant, solution architect), 23% in (self-employed) executive positions (e.g., product manager, product owner), and 15% in junior positions (e.g., IT developer, software engineer, solution tester, IT analyst).

In the first section of the experiment, participants answered demographic and screening questions. Before being exposed to a treatment, participants were asked to report their attitude to use academic articles in their everyday professional work. In the second section, participants completed the treatment. Participants were randomly assigned to one of the five treatments: 1) abstract (n=42); 2) abstract video (n=47); 3) article (n=43); 4) video article (n=47); and 5) video (n=51). In the third section, participants were asked to report their attitude and short-term

intention to use academic articles post-treatment. They were also asked to elaborate on how and in which situations they could use the findings of the article in their work. In this section, the experiment participants were also exposed to the attention traps.

5.2.2 Study 2

A call for interviews was posted on various professional associations and meet-ups, including IT professionals (New Zealand), NZTech, PMI New Zealand, and so on. A call for participation, offering a financial reimbursement of NZ\$40, was posted on multiple university alumni associations in New Zealand. The call clearly outlined our research objectives, interview expectations, and the financial compensation for participants.

Convenience sampling was undertaken which included utilising geographic locations and resources that make participant recruitment convenient. Hence, interviews were conducted with 12 practitioners from New Zealand, focusing on one academic AIS region convenient to one of the authors, as depicted in Table 3. The interview participants had to meet the same selection criteria and undergo screening as the ones in the survey-based experiment and were also exposed to the same set of attention traps, which in turn ensured the quality of the recruited participants. Those who met the initial selection criteria, passed all the filters from the screeners and attention traps, and accepted to participate in the interview were invited to consume the selected academic research in one of the formats from the five treatments of the survey-based experiment, assigned at random.

After completing this task, participants took part in a one-hour, face-to-face in-depth interview (Myers & Newman, 2007) to share their insights on their experiences with and suggestions for improving the different research formats, as well as how these formats impact their short-term intention to use academic research; thus, helping us develop a better understanding of how to best translate and disseminate research knowledge for practitioner audiences. We documented interviews' observational notes within 24 hours to capture contextual details that complemented the verbal data, providing deeper insights into participants' attitudes, feelings, and reactions to the different research formats. These notes enabled us to interpret the interview responses more accurately, identify patterns or inconsistencies, and enhance the richness of our analysis (Myers & Avison, 2002). Our data collection yielded 12 hours of indepth interviews and 1,400 words of interview notes, creating a rich qualitative dataset on how IS practitioners perceive text-based and multimedia-enabled formats for translating and disseminating research knowledge.

Ps (Sex)	Education Degree	Working Experience	Current IT roles	Position Level	Use of Academic Research	Treatment
A (M)	Vocational training	16 years	Service delivery manager	Senior	Not at all	Video
B (F)	Master's degree or above	18 years	IT consultant	Senior	To some degree	Video
C (M)	Vocational training	11 years	IT service designer	Senior	Not at all	Abstract video
D (F)	Bachelor's degree	2 years	User experience designer	Junior	To some degree	Video

E (M)	Master's degree or above	2 years	IT consultant	Junior	To some degree	Video article
F (M)	Bachelors	13 years	IT security consultant	Senior	Not at all	Article
G (F)	Master's degree or above	15 years	Business analyst	Senior	To large extent	Video article
H (M)	Bachelor's degree	3 years	Business analyst	Junior	To some degree	Abstract
I (M)	Bachelor's degree	13 years	IT consultant	Senior	Not at all	Abstract
J (M)	Bachelor's degree	22 years	Enterprise systems manager	Senior	To some degree	Video
K (F)	Bachelor's degree	18 years	Hardware engineer	Senior	To some degree	Abstract
L (M)	Master's degree or above	7 years	IT developer	Middle	To some degree	Abstract video

Table 3. Demographics on Interview Participants

5.3 Data Analysis

5.3.1 Study 1

We conducted our analysis of the survey-based experiment data in three stages. *First*, we utilised ANOVA (Tabachnick & Fidell, 2007) to analyse the quantitative experiment data and determine the extent to which research format influences practitioners' attitudes to use IS academic research to solve practical work-related problems. *Second*, we applied regression analysis (Cohen et al., 2002) to further analyse the quantitative experiment data and examine the effect of practitioners' attitudes on their short-term intentions to use academic research. *Third*, we used a thematic analysis (King et al., 2004) to analyse the qualitative experiment data and explore practitioners' expected use cases of academic research and situations where they can apply the findings to solve practical problems.

We started with open coding and allowed codes to emerge naturally from the data, which were constantly modified based on their usefulness and suitability (Corbin & Strauss, 2014). This step resulted in 28 descriptive first-order themes about the context in which IS practitioners can use the findings of the article, including leveraging virtual business model innovations, solving issues by applying researched and validated approaches, customising and streamlining work processes, evaluating and optimising technology implementation and others. To derive conceptually more abstract themes about the use case domains, we then started integrating qualitatively similar codes into higher-level categories via data reduction (Corbin & Strauss, 2014). This step resulted in nine second-order aggregate themes: business model development and innovation, problem-solving and decision-making, efficiency and customisation, collaboration and teamwork, data organisation and analysis, IS development and innovation, learning and skills development, application of research in practice, and customer relationship management. We have coded, analysed, and visualised the open-ended questions with NVivo™ 11. Refer to Table A2 in Appendix 3 for details on the final coding scheme from the thematic analysis in Study 1.

5.3.2 Study 2

Our goal was to gain a deeper understanding of the phenomenon through qualitative data, so we employed a structured yet creative approach to data analysis (Miles et al., 2014). We analysed the interview data in three stages. *First*, we integrated all our data to create rich narratives for each research format used to convey research knowledge, with a particular focus on text-based and multimedia-enabled formats. This step was crucial not only for preparing the data for subsequent analysis but also for validating our findings by triangulating data from interviews and observational notes. It also helped us form an initial understanding of how these formats impacted practitioners' short-term intentions to use academic research in their professional practice (Miles et al., 2014).

Second, we employed a thematic analysis (King et al., 2004) to analyse the transcribed interviews and observational notes. We began to inductively code the different research formats with a focus on their characteristics to translate and disseminate research knowledge (Corbin & Strauss, 2014). Our first step of the coding process was open coding, during which we allowed first-order codes to naturally emerge from the data and continuously modified, refined, and integrated them based on their usefulness and suitability. This step led to the identification of 48 relatively descriptive first-order codes about IS practitioners' perspectives of different research formats, such as article's content does not make sense, video's content is approachable, visual storytelling is a valuable practice, abstract's content lacks applicability, article's format is disengaging, and others.

To develop a more abstract understanding of their perceptions of the formats and how they impact their short-term intention to use academic research, we began grouping similar codes into higher-level categories through data reduction (Corbin & Strauss, 2014). To ensure the internal consistency and distinctness of the emerging categories, we evaluated each of the codes not only in terms of whether it was qualitatively similar to other codes within a category but also whether it was qualitatively different from codes within other categories. This approach led to the identification of four distinct second-level themes: content, format, information processing and recall, and storytelling. We used NVivoTM 11 to code, analyse, and visualise the interview data. Refer to Table A3 in Appendix 3 for the final coding scheme from the thematic analysis in Study 2.

6 Findings

6.1 Study 1

6.1.1 ANOVA

This study assessed whether practitioners' attitudes to use IS academic research varied depending on the format they were assigned. To investigate these differences (RQ1), we conducted a one-way ANOVA, using the post-treatment (T2) attitude variable as the dependent variable and the research format as the grouping variable. We ensured that our data met the ANOVA assumptions for normality and homogeneity of variance by performing a Shapiro-Wilk test (p = 1.48) and Levene's test (p = 0.770). A one-way ANOVA was then conducted, followed by Bonferroni pairwise comparisons to adjust for multiple comparisons. The ANOVA did not reveal any significant differences in attitudes based on the research format (F (4, 225) = 0.819, p = 0.514). Refer to Tables A4 and A5 in Appendix 4 for details on Bonferroni pairwise comparisons.

The attitude variables measured participants' perceptions of using academic articles, including whether they viewed it as a good idea (att1), an activity they would enjoy (att2), a wise choice versus a foolish one (att3), and a pleasant activity (att4). We averaged these scores to capture practitioners' overall attitudes both before (T1) and after (T2) consuming academic research. This approach allowed us to calculate attitude change by subtracting the average score at T1 from the average score at T2, as shown in Figure 3. We then conducted one-way ANOVAs, with research format as the grouping variable and attitude change as the dependent variable, which yielded non-significant results (F(4, 225) = 1.249, p = 0.291).

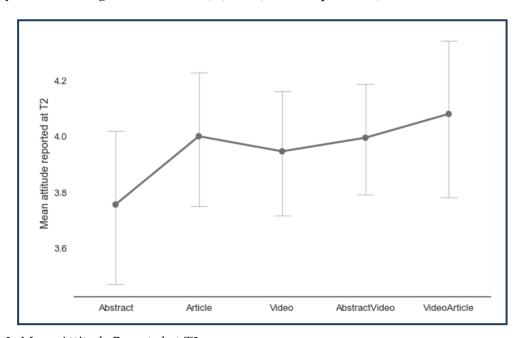


Figure 3. Mean Attitude Reported at T2

In conclusion, the one-way ANOVAs did not reveal a significant impact of specific research formats on IS practitioners' attitudes towards using academic research. Consequently, the hypothesis (H1), which suggested that different research formats would influence practitioners' attitudes at T2, was not supported. Although the differences between conditions were not statistically significant, it is noteworthy that attitude scores decreased the least in the "abstract video" condition.

There are several possible explanations for the insignificant relationship observed in this hypothesis. *First*, practitioners may already have strong, established views about the value of academic research, which could make their attitudes more resistant to change based solely on the format of the research presentation. These pre-existing attitudes might overshadow any potential influence of the format, making it difficult to detect significant changes. *Second*, the novelty of new formats, such as multimedia presentations, could have led to cognitive overload, distracting practitioners and preventing them from fully engaging with the content. This distraction might have limited the format's impact on their attitudes. *Third*, practitioners might be resistant to changing their established work practices, preferring familiar and traditional research formats. This resistance could have reduced the effectiveness of new formats in influencing their attitudes. Replicating the study with a larger sample size and considering different formats or longer-term attitude assessments could help to better understand these results. *Fourth*, this particular article might not have resonated with each scholar, when another article may have on a case-by-case basis; though we did try to mitigate

this by selecting an article we anticipated would be most relevant to those we solicited to participate in this study.

6.1.2 Regression analysis

This study evaluated the impact of practitioners' attitudes on their short-term intention to use IS academic research both before (T1) and after (T2) exposure to the experimental treatment. To examine the relationship between practitioners' attitudes and their short-term intentions to use academic research in their work (RQ1), we conducted a regression analysis. The results from the correlations and linear regression showed a strong and positive association between practitioners' attitudes towards using academic research and their behavioural short-term intention to use it, both before (T1) and after (T2) exposure to the treatment, depicted in Tables 4 and 5.

	Intend_to_use	Attitude _T2	Attitude _T1	
Intend_to_use	1	0.387***	0.646***	
att_T2	0.387***	1	0.454***	
att_T1 0.646*** 0.454*** 1				
*** Correlation is significant at the 0.001 level (2-tailed).				

Table 4. Correlations

	В	SE	Beta	t	p
(Constant)	0.140	0.280		0.501	0.617
att_T1	0.693	0.066	0.553	10.504	0.000
att_T2	0.241	0.053	0.240	4.565	0.000
Dependent Variable: Intend to use					

Table 5. Coefficients

The boxplots displaying the distribution of practitioners' attitudes at T1 revealed that the short-term intention to use academic research was lowest among those with negative attitudes and highest among those with positive attitudes, as shown on the left side of Figure 4. Interestingly, the short-term intention to use academic content increased among participants who initially reported negative attitudes at T2, as illustrated on the right side of Figure 4. This suggests that a pragmatic short-term intention to use academic research can persist even when personal attitudes are less favourable. However, there was significant variability in intention among participants who reported negative attitudes at T2.

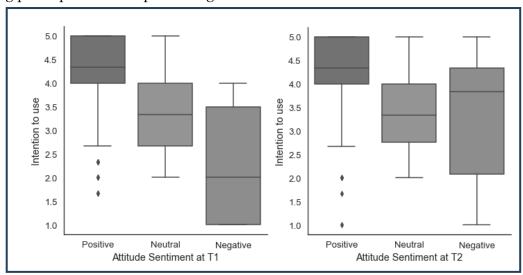


Figure 4. Boxplots of Intention to Use and Attitude Sentiment at T1 and T2

The histograms showing response frequencies in Figure 5 indicate that the distribution of mean attitude scores is skewed to the right at both T1 (left side) and T2 (right side). This suggests that practitioners generally agreed with the positive attitude statements at both measurement points. Furthermore, the histogram depicting attitude change on the right side of Figure 6 shows a range of responses, with some indicating a positive change (between 0 and a 1-point increase) and several reflecting a downward adjustment in attitude at T2. When examining the short-term intention to use IS academic research and its relation to attitude, we observed a consistent pattern: short-term intention to use remained overall positive and aligned closely with attitude scores at both T1 and T2, as depicted on the left side of Figure 6.

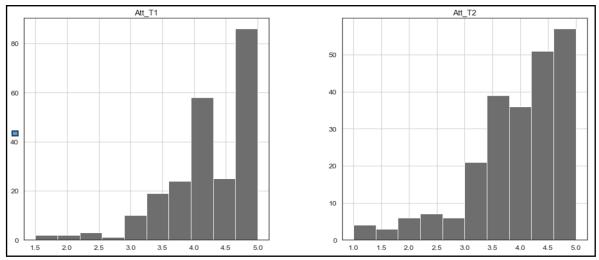


Figure 5. Histogram for Practitioners' Attitude to Use Academic Research at T1 and T2

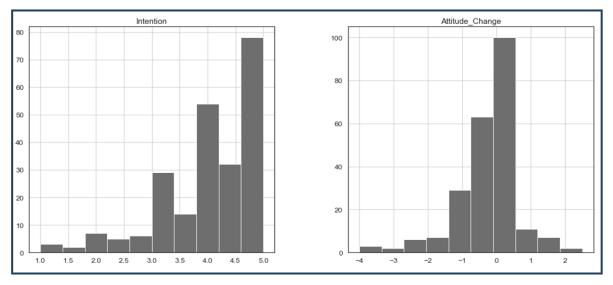


Figure 6. Histogram for Practitioners' Intention to Use Academic Research and Attitude Change

The paired samples t-test revealed a statistically significant difference (t(229) = 4.752, p < 0.001), indicating that the mean attitude reported at T2 (3.959) was lower than the mean attitude at T1 (4.238). To further analyse this change, we conducted a multiple regression analysis, using research format as the predictor variable and intention as a control variable. This analysis found that research format was not a significant predictor of attitude change: R^2 _adj = 0.003, F (5, 224) = 1.156, p = 0.33. Additionally, the considerable variability observed in the boxplot whiskers on the left side and the error bars on the right side of Figure 7 may explain why statistically significant differences between the research formats could not be detected.

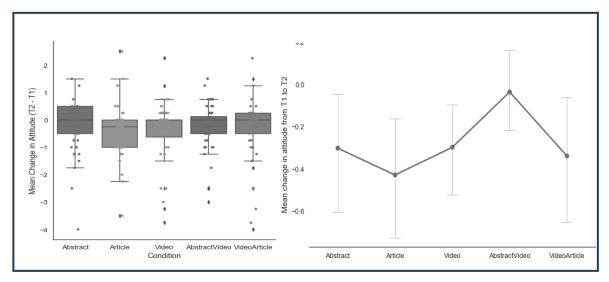


Figure 7. Mean Change in Practitioners' Attitude from T1 to T2 Across Formats

In conclusion, the regression analysis showed a significant impact of practitioners' attitudes on their short-term intentions to use IS academic research both before (T1) and after (T2) exposure to our experimental treatment. This supports our hypotheses (H2a and H2b) that practitioners' attitudes at T1 and T2 would correlate with their behavioural short-term intentions to use IS academic research. The negative average change in attitude between T1 and T2 suggests that mere exposure to academic content might have been challenging for practitioners, despite most participants in our sample reporting at least some prior use of IS academic research. Although we observed a change in attitude, we could not identify differential effects based on the format. We also cannot determine whether this change in attitude is attributable to a high baseline due to social norms: i.e., scientific research is supposed to be a good thing and is smart and clever, so as a businessperson, I should have a positive attitude towards it (even if I've never seen any). But then exposure to it brought the ideal expectation (attitude) toward a realistic (grounded) evaluation.

One possible explanation for the lack of differential effects based on research format is that the currently available research formats for disseminating IS academic research may not offer distinct advantages that resonate with practitioners. While practitioners may be open and willing to engage with IS academic research, the formats they are presented with might not effectively bridge the gap between academic content and practical application. This could mean that the traditional textual formats, even when supplemented with video content, are still perceived as detached from the real-world contexts in which practitioners operate.

Practitioners, especially those who are not deeply embedded in academic settings, might find it challenging to extract actionable insights from these formats, leading to a disconnect between their attitudes and their short-term intentions to use the research. The results suggest that despite their openness to utilising academic research, practitioners might not see a clear, immediate benefit in the formats provided. This highlights the need for more innovative and practically oriented formats that can directly address the specific needs and constraints of practitioners, making the research more accessible, relatable, and immediately applicable.

Interestingly, we found the highest short-term intention to use IS academic research when practitioners were exposed to the "abstract video" and "video article" formats. The drop in attitude at T2 was also smaller in conditions featuring video content than those with textual academic articles. Video formats, such as "abstract video" and "video article," likely offer a

more dynamic and visually engaging way to present research findings, making complex academic content more accessible and easier to digest. This is particularly important for practitioners who may be pressed for time or who might find traditional textual formats dense or challenging to navigate. Video content can convey key messages more directly, use visuals to simplify complex ideas, and incorporate storytelling elements that resonate with practitioners' real-world experiences.

Furthermore, the ability of video content to maintain a more stable attitude over time may indicate that these formats are not only more engaging initially but also leave a lasting impression that textual formats struggle to achieve. The interactive and multisensory nature of video content might help reinforce the material, leading to better retention and a stronger intention to apply the research in practice. Nevertheless, further investigation with a larger sample is necessary to understand better whether specific formats have a greater influence on practitioners' attitudes and short-term intentions to use IS academic research.

6.1.3 Thematic analysis

This study investigated practitioners' specificity to use IS academic research. We conducted a thematic analysis to explore how practitioners anticipate using the findings of Ebel et al. (2016) in their work, as presented in the experimental treatment. They anticipated using academic research findings in various detailed and contextualised ways to enhance their professional practices. A prominent theme is *Business Model Development and Innovation*, where practitioners aim to leverage academic insights to innovate and manage new business models, implement improvements, and develop efficient frameworks for problem-solving. They see academic research as a valuable resource for generating new business strategies and enhancing business processes systematically. Another significant theme is *Problem-Solving and Decision-Making*, with practitioners recognising the potential of research to offer validated approaches for more effective problem-solving and decision-making in their daily work.

Efficiency and Customisation is another area where research findings are expected to play a role, particularly in streamlining and customising work processes, reducing complexity, and optimising tasks. Practitioners also anticipate improvements in *Collaboration and Teamwork*, seeing research as a tool to enhance team communication, coordination, and collaborative project development. Additionally, *Learning and Skill Development* is a key area where practitioners expect to use research findings to facilitate learning, enhance research skills, and apply new management tools effectively.

In conclusion, these findings suggest that practitioners see practical value in academic research and are inclined to apply its insights to their professional activities. The detailed ways in which they plan to use these findings indicate a strong intention to integrate academic knowledge into real-world applications, demonstrating the relevance and applicability of academic research in solving practical problems.

6.2 Study 2

6.2.1 Thematic analysis

To explore practitioners' perceptions of text-based and multimedia-enabled research formats for translating and disseminating research knowledge and how these formats shape their short-term intentions to use academic research in their work (RQ2), we conducted a thematic analysis. The key themes emerging from the thematic analysis are (1) research content, (2) research format, information processing and recall, and research storytelling, which provided

insights into practitioners' experiences and suggestions for improving the five distinct research formats. Refer to Table A6 in Appendix 5 for exemplary evidence for the content theme of the thematic analysis.

Research Content

Practitioners who received academic content through the "video" format noted that, while the tone, visuals, and storytelling were engaging, the content lacked definite conclusions, working examples, and further details, making it less applicable. One participant mentioned, "I agreed with everything in principle with what was being said in it; I just found it very hard to get excited about it because it didn't really give you a lot of detail about exactly what was found" (Participant A).

Another practitioner noted that while the "video" format presented concepts that appeared relevant, the recommendations provided felt "somewhat generic." This participant acknowledged the potential applicability of these concepts but highlighted a critical limitation: the need for adaptation to fit the specific needs of their organisation. The practitioner remarked, "I can see how the concepts might apply, but I would need to adapt them to fit the specific needs of my organisation" (Participant D).

The precise academic language used in the video, not commonly found in professional circles, was also a concern, with one participant stating, "Some of these words get a bit complicated" (Participant D). Despite these issues, the narrative aspects of the video were appreciated, with a participant adding, "I liked that there was some kind of personification in the video, [...] the way that the storytelling worked, I felt like I was starting to get to know a host character in the video" (Participant D).

For those exposed to the "abstract" format, the lack of visuals, structure, and practical examples led to perceptions that the content was abstract and lacked direct relevance. As Participant H pointed out, "If it has a user story or example, it would be great [...] it gives me a vivid picture that I can really know when and where I can apply this theory." The abstract style and overly specific language were viewed as barriers to the content's applicability in professional practice. Similarly, practitioners assigned to the "article" format found it dense, overly theoretical, and difficult to translate into practical action without significant effort. Participant F expressed this sentiment by saying, "It will be difficult to pick up the article, run with it, and say that these are the three or five things that I as a customer need to do. You'd have to read the entirety of the article, try and summarise it yourself, and make it relatable to the problems that you have."

In contrast, the "abstract video" format was generally perceived as relevant and applicable. However, the extended abstract's lack of details and definite conclusions diminished its direct relevance. As Participant C explained, "I would definitely need more details before considering using that thing [...] I'm not sure I would quote it, I would need to think about it a little bit more." Despite these shortcomings, IS practitioners appreciated the engaging visuals of the short video, which Participant C found "really good as key takeaways," though they expressed a need for more substantial reference materials: "Maybe some reference materials or something afterwards that people could download."

Respondents indicated a preference for consuming research from more accessible and credible sources, such as suppliers' white papers and consultants' reports, over traditional academic formats. Participant J remarked, "I usually turn to sources like Gartner Magic Quadrant or SAS white papers when I need reliable and practical insights. They're more straightforward and relevant to what I'm working on, unlike some academic articles that are too theoretical and hard to apply directly."

Research Format

Regarding the "video" format, practitioners noted that while it provided a good overview and was engaging, it was not effective as a stand-alone tool for comprehensive information transfer. As Participant A noted, "The 10-minute video was great for a very brief introduction, but you'd want that to be your starting piece." The format was less effective for deep content comprehension due to its brevity and distractions like subtitles. Participant B added, "Generally, what I expect is if there is a printed version, that can really help because then you can [...] highlight the keywords."

One practitioner expressed a clear preference for more visual and interactive research formats, specifically highlighting the advantages of the video article format. She explained, "I prefer something more visual because it's easier to digest and keeps my attention." This participant contrasted this with text-based formats, noting that "Text articles are too dense and time-consuming for me to go through during a busy workday." (Participant G)

The "abstract" format was criticised for being disengaging, with participants finding it difficult to extract clear overviews or practical takeaways from the content. Participant K described it as "a lot of information and [...] all the words I feel are a little bit boring." The "article" format was viewed as time-consuming and difficult to digest. Participant F mentioned that "It's quite off-putting to look at the two-column text format," suggesting that pairing it with more interactive formats like videos could improve its accessibility and engagement.

One practitioner shared their intentions to apply insights from a research format that combined a short video with a full academic article, stating, "I haven't had a chance to implement any of the key takeaways from video and article, but I do plan to use some of the insights in an upcoming project." He appreciated the video for providing a quick and accessible overview but acknowledged the need to revisit the full article for more detailed information before he could effectively apply the insights, saying, "The video was great for giving me a quick overview, but I'll need to dive back into the article for more details before I can put anything into practice" (Participant E).

Information Processing and Recall and Research Storytelling

A practitioner expressed concerns about the practicality of implementing recommendations from the "abstract" format, stating, "One challenge I see is that the extended abstract didn't provide enough practical examples, so I'm not entirely sure how to implement the recommendations" (Participant K). This lack of concrete examples left them uncertain about how to apply the insights effectively in their work. She indicated that further effort would be required to bridge this gap, saying, "I'll need to do some additional research or maybe consult with colleagues to figure out the best way to apply these insights."

Practitioners who engaged with the "video" format found it challenging to recall key findings and implications due to the simultaneous use of animation, audio, and subtitles, which demanded focused attention. However, they were able to recall the narrative and story arches effectively. Participant D stated, "I can't remember parts of it because I haven't been able to read it, but I remember, I can kind of visualise the diagram where they had, start with this thing, do some of that thing, and then while you are doing it, do the other thing concurrently."

Similarly, the "abstract" treatment presented challenges in recalling details, though participants could recall the narrative structure. IS practitioners who were assigned to

consume the "article" format mentioned that they had to read the text multiple times to understand the content and evaluate its relevance. As Participant F explained, "I would have to re-read it and probably read it a third time to get any actual action points out of it."

When exposed to the "video article" or "abstract" formats, participants had better information recall but reported information processing overload due to needing to switch between materials. Despite this, the narrative structure of the animated research brief was acknowledged as an effective method for conveying complex academic content to practitioners. Participant G noted, "As a sort of takeaway and a way to engage my memory, it would be quite good to have a middle ground between the graphics that were presented and the script [...] that would be a nice way to tie them together."

In conclusion, these findings reveal that practitioners have varied experiences with different research formats. Practitioners generally find multimedia formats, particularly those with videos, more engaging and accessible than traditional text-based formats. However, they often seek more practical examples and clearer conclusions, which are typically lacking. Text-based formats are familiar but are frequently criticised for being dense, time-consuming, and difficult to apply in practice due to inaccessible language, lack of examples, and theoretical content. While they acknowledge the relevance of academic research in addressing current technological and business issues, they struggle to assess the applicability of traditional IS articles to their challenges.

As a result, they tend to favour more accessible sources like suppliers' white papers and consultants' reports over traditional academic formats. Thus, a blended approach that combines the engaging aspects of multimedia with the depth of traditional academic articles may be most effective for practitioners. For example, visual formats, such as animated research briefs are engaging and easier to digest, making them ideal for quick overviews. However, to support practical application, these should be paired with detailed, text-based formats that include specific examples and actionable insights. This combination ensures that practitioners can both quickly grasp the main concepts and have access to the depth of information needed for implementation. This highlights the importance of considering both content and format when translating and disseminating academic research to ensure it is both applicable and relevant to practitioners' needs.

7 Discussion

7.1 Contributions and Implications

This paper contributes to the ongoing discourse in the IS research discipline concerning the balance between research rigour and relevance, building on existing arguments made by Benbasat and Zmud (1999); Dennis (2001); Lee et al. (2021); Rosemann and Vessey (2008). Our findings reveal the complexities of translating and disseminating research to practitioners, highlighting the challenges in bridging the gap between academic insights and practical application (Moeini et al., 2019).

Our findings challenge the notion that merely modifying the format of research dissemination, such as incorporating multimedia elements, can substantially alter practitioners' attitudes towards using academic research. The non-significant results for H1 suggest that practitioners' attitudes are deeply ingrained and may not be easily swayed by superficial changes in presentation. This emphasises the importance of focusing on the substance and relevance of

the research itself rather than solely relying on multimedia formats to enhance its perceived value, as argued by Benbasat and Zmud (1999) who identified the content of research as a key characteristic of its relevance. Our qualitative findings further emphasise the need for research to be relatable and engaging, addressing the specific challenges and contexts that practitioners face in their daily work and supporting the notion that research relevance should consider the perspective of practitioners (Fox & Groesser, 2016).

We also found that practitioners' attitudes, both before and after consuming research, play a role in shaping their short-term intentions to use it. The significant results for H2a and H2b highlight the importance of fostering positive attitudes towards academic research among practitioners. This aligns with existing arguments by Bhattacherjee and Premkumar (2004), Karahanna et al. (1999), Moeini and Rivard (2019), Ormond et al. (2019), and Titah and Barki (2009) who have all discussed the pivotal role of positive attitudes in fostering intentions to engage in certain behaviours in the workplace. This can be achieved by ensuring that research is both relevant and presented in a clear, concise, and accessible manner, focusing on practical implications and actionable insights. This echoes the recommendations of Robey and Markus (1998) and Gill and Bhattacherjee (2009) regarding the importance of clear communication and tailoring research messages to practitioners' needs.

Our exploration of practitioners' perceptions of different research formats offers valuable insights into the strengths and weaknesses of various approaches. While multimedia formats, such as animated research briefs, are generally perceived as more engaging and accessible, aligning with the suggestions of Toffel (2016) and Moeini et al. (2019), they can lack the depth and practical examples that practitioners require for effective application. In contrast, traditional text-based formats, while valued for their comprehensiveness, can be overwhelming and difficult to navigate, resonating with the concerns raised by Gill and Bhattacherjee (2009) about the inherent differences between researchers and practitioners. Hence a blended approach, combining various formats, may be the most effective way to bridge the gap between IS research and practice. This approach supports the notion that, while textual articles are valuable, more concise and interactive formats can also effectively convey knowledge in a manner that is more accessible to practitioners.

Given the disconnect between research format and practitioner engagement, the IS research discipline should reconsider its traditional approaches to knowledge translation and dissemination. Given the disconnect between research format and practitioner engagement, the IS research discipline should reconsider its traditional approaches to knowledge translation and dissemination. Our findings advocate for more accessible, engaging, and practically oriented research dissemination strategies. Embracing a broader range of formats, including videos, animations, and interactive tools, could enhance the impact of IS research while maintaining its academic integrity. This approach aligns with the concept of the open artefact, where IS researchers are encouraged to disseminate models, methods, and frameworks outside the traditional academic paper, thus fostering a stronger connection between academia and practice (Doyle et al., 2019).

In conclusion, practitioners' attitudes toward academic research are complex and multifaceted. While different formats, such as the above, can enhance engagement and accessibility, they should complement rigorous and relevant research that addresses practitioners' practical needs. By focusing on clear communication, actionable insights, and relatable narratives, researchers can foster positive attitudes and increase the likelihood that their work will be

used to inform and improve practice, contributing to the effective knowledge product translation and dissemination advocated by Moeini et al. (2019). However, this requires researchers to think beyond the academic paper as the only output of their research and consider other formats that practitioners would appreciate (Doyle, 2021). By framing research findings within narratives that resonate with practitioners' real-world experiences and challenges, and disseminating them through the right format, IS researchers can make their work more engaging and impactful. This shift could foster a more robust collaboration and knowledge exchange between academia and practice, leading to more impactful solutions to real-world problems.

Based on these findings, we present Table 6, which outlines practical recommendations for translating and disseminating research knowledge products. Each recommendation is supported by detailed explanations and practical examples to ensure effective implementation.

Dimensions	Recommendation	Explanation
(Moeini et al.,		
2019)		
Knowledge	Prioritise Substance	Emphasise the importance of the research content itself in
Product	Over Superficial	addressing practitioners' challenges. Superficial changes in
Translation	Format Changes	presentation, such as adding multimedia elements, should not
		overshadow the substance of the research. By focusing on the
		relevance and practicality of the research, practitioners are more
		likely to engage with and apply the findings (Benbasat & Zmud,
		1999).
	Incorporate Practical,	Integrate detailed, real-world examples or case studies that
	Context-Specific	resonate with the specific industry or organisational context to
	Examples	which the research is being applied. This approach helps
		practitioners see the direct applicability and benefits of the
		research in their own work environments, making it more likely
		that they will adopt the recommendations (Fox & Groesser, 2016).
	Customise Research	Tailor the language, structure, and content of the research to fit
	for Practitioner	the specific needs and preferences of different practitioner
	Audiences	groups. This involves avoiding academic jargon and instead
		using terminology that is familiar and accessible to practitioners.
		Additionally, the content should be structured in a way that
		aligns with the practical decision-making processes within the
		targeted industry (Gill & Bhattacherjee, 2009).
	Highlight Actionable	Clearly identify and emphasise actionable insights at the
	Takeaways Clearly	beginning of research outputs. Practitioners often have limited
		time, so highlighting the practical steps they can take based on
		the research findings will increase the likelihood of
		implementation. This can include executive summaries, bullet
		points, or other concise formats that make it easy for practitioners
		to extract the key messages (Robey & Markus, 1998).
Knowledge	Adopt a Blended	Use a combination of traditional text-based articles and modern
Product	Dissemination	multimedia formats, such as videos, podcasts, and infographics,
Dissemination	Strategy	to reach a broader and more diverse audience. This approach
		recognises that different practitioners have different preferences
		for how they consume information. By offering multiple formats,
		researchers can ensure that their findings are accessible to all
		relevant audiences (Toffel, 2016).

Actively Involve Practitioners in the Dissemination Process	Engage practitioners directly in the dissemination process by inviting them to participate in events such as workshops, seminars, or webinars. This active involvement not only helps to communicate the research findings but also allows practitioners to discuss and explore practical applications in a collaborative environment. Such interactions can lead to greater buy-in and more effective implementation of the research outcomes (Ormond et al., 2019).
Create Visual Summaries for Quick Reference	Develop visual tools such as animated video briefs, infographics, or one-page summaries that distil complex research findings into easily digestible formats. These tools are particularly useful for busy practitioners who need to quickly understand the key points of the research and how they can be applied. Visual summaries can serve as quick reference guides that practitioners can revisit when implementing the research in their work (Moeini et al., 2019).
Ensure Research Artefacts are Openly Accessible	Make research artefacts, such as frameworks, models, or tools, available on open access platforms. These artefacts should be accompanied by detailed guides or tutorials that explain their practical application in real-world scenarios. Open accessibility ensures that a wider audience of practitioners can benefit from the research, while the supporting materials help them effectively implement the findings in their own contexts (Doyle, 2021; Doyle et al., 2019).

Table 6. Practical Recommendations for Researchers How to Effectively Translate and Disseminate Their Knowledge Products

7.2 Limitations and Future Research

This paper is not without limitations. *First*, only one IS article within the design science research methodological domain was used in both the survey-based experiment and interviews. This is particularly problematic because, while this article may not be relevant and useful to a specific practitioner, another article may be highly relevant. The body of IS literature is not generic or homogenous. This limitation affects both attitudes towards academic research and short-term intention to use academic research. Our measures were generic (e.g., "Using peer-reviewed academic articles for my professional work is a good idea"), but our operationalisation used only one specific study. Thus, our findings must be considered within this limitation that the practitioners' attitude and intentions are anchored by a specific study, despite asking about academic research in general. Results may have differed if given multiple articles or asked specifically about this paper. We tried to mitigate this issue by focusing our recruiting for Study 2 on IS practitioners dealing with product/market development in the IT industry (and therefore familiar with business model development). To generalise these findings across the IS community, future studies should include multiple IS articles representing various subfields and methodologies.

Second, the small sample size of 12 practitioners from New Zealand limits the generalisability of our qualitative findings. Future research should involve a larger, more diverse sample from different regions. Moreover, this paper focused exclusively on IS practitioners; future research should explore the dissemination of IS research to other stakeholders, such as government agencies and students, to better understand their attitudes and intentions regarding the use of

IS academic research. While some of the results may apply to other fields, this is beyond the scope of the current study.

Third, while we do control for age, gender, occupation, rank, and years of IT work experience, we fail to account for some known confounds, such as subjective norms and perceived behavioural control (Moeini et al., 2019). Thus, our findings might shift if these confounds were included in our models. Our multi-method approach helps to alleviate this limitation to some extent by providing alternative corroborating perspectives on the quantitative findings.

8 Conclusion

This paper offers important insights into how the format of academic research influences IS practitioners' attitudes and short-term intentions to use research in practice. It adds to the ongoing discussion about research relevance and rigour in the IS domain. The findings highlight the challenges and opportunities associated with translating and disseminating research knowledge to practitioners. By understanding the factors that influence practitioners' attitudes and short-term intentions, researchers can develop more effective strategies for bridging the gap between academia and practice, ensuring that their work has a meaningful and lasting impact on the real world, ultimately fulfilling the dual purpose of IS research (Dennis, 2001).

Regarding RQ1, the findings show that while H2 is supported—indicating that practitioners' attitudes significantly impact their short-term intentions to use IS academic research—H1 is not significant, meaning the format of the research did not influence practitioners' attitudes as hypothesised. However, despite this lack of direct influence, there was a general decline in attitude after exposure to academic content, suggesting challenges in engaging with the material, regardless of format.

For RQ2, the study reveals that practitioners generally prefer multimedia-enabled formats, such as animated research briefs, due to their engaging and accessible nature. However, these formats often lack the depth and practical examples that practitioners require for effective application. In contrast, traditional text-based formats, while valued for their comprehensiveness, are frequently criticised for being dense and difficult to digest. These findings suggest that a blended approach, combining the engagement of multimedia with the thoroughness of traditional formats, may better serve practitioners' needs.

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Appendix 1: Animated Research Brief

To address the audience and content considerations for translating and disseminating IS research knowledge, we have deliberately chosen a design science research article. One of the main tenets of design science research is to build a usable artefact that is relevant to the practice. It adopts an action design research methodology to (1) explore, induce, and deduct a real-world, practical problem or concern (i.e., the process of identifying new markets and developing suitable business models within a traditional workshop setting at SAP was being deemed as too costly and not feasible); (2) design and test a solution for the identified problem (i.e., proposing a new business model development tool by reviewing the existing literature and conducting expert interviews, and then piloting and evaluating the proposed tool in use setting at SAP); and (3) validate and generalise the findings to other applications outside the immediate context (i.e., applying the learnings from designing the new business model development tool to a broader class of problems and identifying its contributions to the literature on the development and management of new business models).

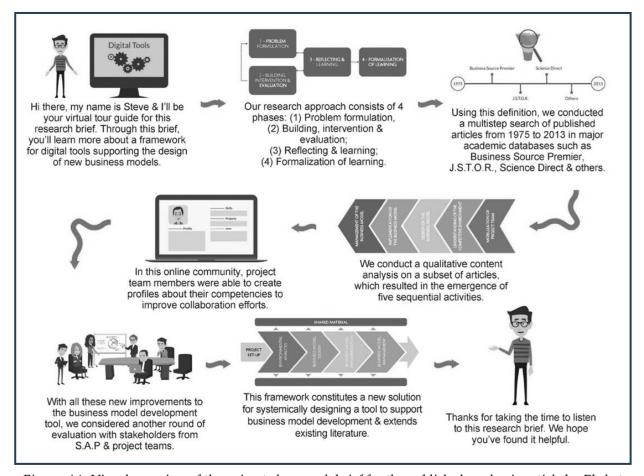


Figure A1. Visual overview of the animated research brief for the published academic article by Ebel et al. (2016)

This article presents a framework for developing a tool for supporting the development and management of a new business model (Ebel et al., 2016), which is relevant to IS practitioners dealing with product/market development in the IT industry. The proposed framework is particularly relevant for roles tasked with the creation, implementation, and management of innovative IT solutions that align with evolving business strategies. By leveraging virtual business model innovation, as outlined in the framework, practitioners (e.g., product owners, IT developers, product managers, software engineers, business analysts, IT analysts, IT project managers, solution testers, IT consultants, and solution architects) can enhance their capacity to develop robust, scalable, and market-responsive IT products. This framework for designing business model development tools provides systematic methodologies for assessing and integrating innovative business models, thus ensuring that IT solutions not only meet current market demands but also drive future growth, underscoring its practical utility for IS practitioners operating in the IT industry.

Appendix 2: Measurement Operationalisation and Interview Protocol

Construct (Source)	Items/Questions	Definition
Attitude to use academic research <u>before</u> consumption (att_t1) Attitude to use academic research <u>after</u> consumption (att_t2) (Ajzen, 1991; Davis et al., 1989; Taylor & Todd, 1995)	 Please indicate how much the statements below are applicable to you: Strongly disagree Strongly agree Using peer-reviewed academic articles for my professional work is a good idea (att1). I <u>like</u> the idea of using peer-reviewed academic articles to help my work (att2). (R) Using peer-reviewed academic articles for my work is a <u>foolish</u> idea (att3). I find use of peer-reviewed academic articles for my professional work to be <u>pleasant</u> (att4). 	The practioner's positive or negative feelings about using peer-reviewed academic research in his/her work practice.
Behavioural short-term intention to use academic research (biu) (Venkatesh et al., 2003)	Please indicate how much you agree with the statements below: Strongly agree Strongly disagree I intend to use peer-reviewed academic research for my work practice in the next 3-6 months (biu1). I predict to use peer-reviewed academic research for my work practice in the next 3-6 months (biu2). I plan to use to peer-reviewed academic research for my work practice in the next 3-6 months (biu3).	Extent to which the practitioner feels he/she would use the peer-reviewed academic material for his/her work practice in the immediate future.
Practitioners' specificity to use academic research	 How could this academic material help you? Briefly describe a situation in which you could use the main findings from this academic material and how the findings could help you deal with the situation. 	The detailed and contextualised ways in which practitioners anticipate using academic research findings in their work.

Table A1. Operationalisation of items for Study 1

Interview Protocol for Study 2

Opening Prompts:

- Could you start by telling me about your current role in the IT industry? How long have you been working in this position?
- How many years of experience do you have in the IT field overall? Have you worked in similar roles before, or has your career evolved into your current position?
- Can you describe some of the key responsibilities in your role? How do these responsibilities align with your experience in IT?
- Throughout your career, what significant changes or developments in the IT industry have impacted your work the most?
- In your current role, how frequently do you engage with academic research or new industry developments to inform your work practices? How does your experience shape the way you approach this information?

Main interview questions with prompts:

- 1. What are your overall thoughts regarding the academic article and/or research brief you have watched?
 - *Prompt 1a:* Was the information presented in a way that was easy to follow and understand? What aspects did you find particularly clear or confusing?
 - *Prompt 1b*: How do you feel about the depth of information provided in the academic article/research brief? Do you find this format effective for understanding complex concepts?
 - *Prompt 1c:* Did the content meet your expectations based on your experience with similar research materials? Why or why not?
- 2. What are your overall thoughts regarding the use of a story to translate and disseminate academic research? Tell me more. Please explain.
 - *Prompt 2a:* Do you think the storytelling approach made the research findings more memorable? Can you give an example?
 - *Prompt 2b:* Do you think a story or narrative format could make the content more relatable or actionable? Could you see yourself using a similar approach to communicate complex information in your own work?
- 3. What are your overall thoughts regarding the visuals that were used in the research article/research brief? Tell me more. Please explain.
 - *Prompt 3a:* Did the visuals aid your understanding of the research findings? Which visual elements were the most impactful for you?
 - *Prompt 3b*: Do you think the use of multimedia elements (e.g., video, animations) could help clarify the research findings? How would they impact your engagement with the material?
 - *Prompt 3c*: Were there any visuals that you found distracting or unhelpful? Why?
- 4. Was this relevant to your work practice? Can you use the recommendations to inform your work practice? How current is this? Please explain.
 - *Prompt 4a:* How adaptable do you find these recommendations to the unique aspects of your role or organisation? Would any modifications be needed?

- *Prompt 4b:* When considering how you consume research for your work, do you prefer a text-based format or something more visual and interactive? Why?
- 5. Did you action some of the key takeaways or do you plan to do so? Please explain.
 - *Prompt 5a:* How soon do you think you'll apply the key takeaways in your work? Are there specific projects or tasks where you see them being particularly useful?
 - *Prompt 5b:* Were there any barriers or challenges that might prevent you from acting on these takeaways? How might you overcome them?
- 6. What are the main takeaways in this research brief? Can you recall any of them? Please explain.
 - *Prompt 6a:* Which takeaway stood out to you the most, and why do you think it was memorable?
 - *Prompt 6b:* Did the way the information was presented (e.g., textual with figures, visually through storytelling) help you retain the key points? How so?
- 7. Do you think you will use any of the main takeaways from this research brief to inform your work practice? Please explain.
 - *Prompt 7a*: If you were to share this research with a colleague, which format would you choose and why? What do you think would resonate more with them?
 - *Prompt 7b:* Do you foresee any long-term changes in your work practice based on what you've learned from this research brief? What might those changes look like?

Appendix 3: Final Coding Schemes

Second-order aggregate themes	First-order codes
Business Model Development and	Leveraging virtual business model innovations
Innovation	Developing and managing new business models
	Implementing and improving business models
	Creating new ideas and business strategies
	Enhancing business processes through systematic approaches
	Creating efficient frameworks for business problem-solving
Problem-Solving and Decision Making	Solving problems more effectively
	Analysing and solving business-related issues
	Solving issues by applying researched and validated approaches
Efficiency and Customisation	Customising and streamlining work processes
	Evaluating and optimising work processes
	Reducing complexity in tasks
Collaboration and Teamwork	Collaborative project development
	Improving team collaboration
	Enhancing team communication and coordination
Data Organisation and Analysis	Organising raw data for better results
IS Development and Innovation	Building IT development models
	Integrating new technologies
	Evaluating and optimising technology implementation
Learning and Skill Development	Enhancing research skills
	Facilitating learning and problem-solving
	Learning management tools effectively
Application of Research in Practice	Applying academic material for practical solutions
	Applying findings to real-world scenarios
	Using academic research to enhance business practices
Customer Relationship Management	Improving customer satisfaction
	Gathering and using feedback

Gathering and analysing feedback from stakeholders

Table A2. Final Coding Scheme from Thematic Analysis for Study 1

Second-order aggregate themes	First-order codes		
Research Content	Article's content does not make sense		
	Article's content is complex		
	Video article's content has good applicability		
	Abstract video's content has good relevance		
	Video's content has language specificity		
	Video's content is accessible		
	Video's content is approachable		
	Article's content is too abstract and theoretical		
	Article's content is too condensed		
	Article's content lacks accessibility		
	Abstract's content lacks applicability		
	Article's content lacks definite conclusions		
	Abstract's content lacks direct relevance		
	Video's content lacks further details		
	Article's content lacks highlights		
	Article's content lacks relevance		
	Abstract's content lacks structure		
	Abstract's content lacks visuals		
	Abstract's content lacks working examples		
	Video article's content provides sufficient details		
	Video article's content has language specificity		
	Video article's content has timeliness		
	Video's content visuals are good		
	Article's content visuals are not good		
	Video's tone was good		
	Video article is reliable source		
	Video article has well-structured content		
Research Format	Article's format does not provide good overview		
	Article video's format is effective to convey information		
	Video's format is accessible		
	Article's format is disengaging		
	Article video's format is engaging		
	Video's format is good overview		
	Article's format is time-consuming		
	Article's format lacks accessibility		
	Abstract's format is not effective in isolation		
	Abstract's format is not suitable for comprehension		
	Video's format subtitles are distracting		
	Video articles' format is suitable for content comprehension		
	Video article's format subtitles are useful		
Information Processing and Recall	Alternative sources of IS knowledge		
,	Difficulty of information recall		
	Information processing overload		
	Reasonable information recall		
	Professionals lack of time		
Research Storytelling	Limited use of storytelling		
1	Storytelling is valuable practice		
	Visual storytelling is valuable practice		
	visual storytening is valuable practice		

Table A3. Final Coding Scheme from Thematic Analysis for Study 2

Appendix 4: ANOVA

(I) Format	(J) Format	Mean Difference (I-J)	Std. Error	Sig.	95% Confider	ice Interval
					Lower Bound	Upper Bound
Video	Video article	-0.13371	0.17867	1.000	-0.6402	0.3728
	Article	-0.05392	0.18294	1.000	-0.5726	0.4647
	Abstract	0.19013	0.18412	1.000	-0.3318	0.7121
	Abstract video	-0.04860	0.17867	1.000	-0.5551	0.4579
Video	Video	0.13371	0.17867	1.000	-0.3728	0.6402
article	Article	0.07979	0.18647	1.000	-0.4488	0.6084
	Abstract	0.32383	0.18762	0.857	-0.2081	0.8557
	Abstract video	0.08511	0.18228	1.000	-0.4316	0.6019
Article	Video	0.05392	0.18294	1.000	-0.4647	0.5726
	Video article	-0.07979	0.18647	1.000	-0.6084	0.4488
	Abstract	0.24405	0.19170	1.000	-0.2994	0.7875
	Abstract video	0.00532	0.18647	1.000	-0.5233	0.5339
Abstract	Video	-0.19013	0.18412	1.000	-0.7121	0.3318
	Video article	-0.32383	0.18762	0.857	-0.8557	0.2081
	Article	-0.24405	0.19170	1.000	-0.7875	0.2994
	Abstract video	-0.23873	0.18762	1.000	-0.7706	0.2932
Abstract	Video	0.04860	0.17867	1.000	-0.4579	0.5551
video	Video article	-0.08511	0.18228	1.000	-0.6019	0.4316
	Article	-0.00532	0.18647	1.000	-0.5339	0.5233
	Abstract	0.23873	0.18762	1.000	-0.2932	0.7706

Table A4. Bonferroni's Pairwise Comparison Average Attitude at T2

(I) Format	(J) Format	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Video	Video article	0.04141	0.17986	1.000	-0.4685	0.5513
	Article	0.13121	0.18416	1.000	-0.3909	0.6533
	Abstract	0.00455	0.18535	1.000	-0.5209	0.5300
	Abstract video	-0.26179	0.17986	1.000	-0.7717	0.2481
Video	Video	-0.04141	0.17986	1.000	-0.5513	0.4685
article	Article	0.08981	0.18772	1.000	-0.4424	0.6220
	Abstract	-0.03685	0.18888	1.000	-0.5723	0.4986
	Abstract video	-0.30319	0.18350	0.999	-0.8234	0.2170
Article	Video	-0.13121	0.18416	1.000	-0.6533	0.3909
	Video article	-0.08981	0.18772	1.000	-0.6220	0.4424
	Abstract	-0.12666	0.19298	1.000	-0.6738	0.4204
	Abstract video	-0.39300	0.18772	0.374	-0.9252	0.1392
Abstract	Video	-0.00455	0.18535	1.000	-0.5300	0.5209
	Video article	0.03685	0.18888	1.000	-0.4986	0.5723
	Article	0.12666	0.19298	1.000	-0.4204	0.6738
	Abstract video	-0.26634	0.18888	1.000	-0.8018	0.2691
Abstract video	Video	0.26179	0.17986	1.000	-0.2481	0.7717
	Video article	0.30319	0.18350	0.999	-0.2170	0.8234
	Article	0.39300	0.18772	0.374	-0.1392	0.9252
	Abstract	0.26634	0.18888	1.000	-0.2691	0.8018

Table A5. Bonferroni's Pairwise Comparison (Average Attitude Change T2-T1)

Appendix 5: Exemplary Evidence

Experiment	Codes	Interview Evidence
Treatment		
Video	Video's content visuals are good	"I guess with a cartoon you just take it at face value, don't you? You don't look terribly closely at the cartoon, not like a person's face; you examine a person's face a bit more than you would a cartoon, so probably a cartoon is probably good for that sort of message, to be honest" – Participant A "I liked that there was some kind of personification in the video but then it kind of felt like, the way that the story telling worked, I felt like I was starting to get to know a host character in the video" – Participant D "Ah, obviously really, I would say practical and, ah, self-explanatory. So, helps, ah, to improve the understanding" – Participant J
Abstract	Abstract's content lacks visuals	"And usually if we are going to use some kind of research material thing, it could be more like well-done research. Something like, we would prefer to see a well-organized results or finding first, and maybe more visualized way and with some kind of an easier to understand" — Participant H "It is quite a lot of information and well I think it would be more like efficient, if we can have some kind of a workflow or process flow that we can follow so it gives you some kind of a preface, some kind of an introduction that I can just in ten seconds, and I can know what it is talking about" — Participant H "Ah, yeah, it would've been great to see just a high-level diagram of the model and the factors in it that presents everything all at once — that would've been really nice" — Participant I "And for example, I noticed, um, there is, ah, it introduced, did some approaches, if oh if there is a flowchart to show the approaches, how the approaches are going, I think it would be better to, to read" — Participant K
Article	Article's content is too abstract and theoretical	"Talking about concepts in the abstract at quite a technical level often tends not to be communicated quite well down to the customer" – Participant H "So, in terms of tone and style they tend, these papers tend to adhere to quite an academic tone and style" – Participant H
Abstract video	Abstract video's content has good relevance	"[Authors] done all the research and them talking about the best, summarising the best ways that you've found through all those studies and all the evidence and going through and looking at how customers were involved and how to look at existing solutions as well and the development later with the customer was really good as key takeaways" – Participant C "I think it's always useful when someone else has already done the research and you can come across it for a start because it saves people a lot of time" – Participant C
Video Article	Video article's content has good applicability	"So, there were some process elements in the design phase where that absolutely could've been applicable, but it's very much a settled process now and we're overlaying the technology to support that at this point" – Participant E "If I was doing a business process job, I could definitely believe that it's something that would be absorbed and reapplied" – Participant E "Yeah. No, it seemed, yeah, modern and applicable" – Participant G

Table A6. Exemplary Evidence for the Content Theme of the Thematic Analysis in Study 2

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