2022

The Impact of Persuasive Response Sequence and Consistency when IT Service Providers Address Auditor-Identified Issues in SOC2 Reports

Mark D. Sheldon
John Carroll University, msheldon@jcu.edu

Sudip Bhattacharjee
Virginia Tech

Reza Barkhi
Virginia Tech

The Impact of Persuasive Response Sequence and Consistency when IT Service Providers Address Auditor-Identified Issues in SOC2 Reports

* Mark D. Sheldon
Associate Professor
Kramer School of Accountancy and Information Sciences
Boler College of Business
John Carroll University
University Heights, OH 44118
msheldon@jcu.edu

Sudip Bhattacharjee
Tom Wells and Kathy Dargo Professor
Department of Accounting and Information Systems
Pamplin College of Business
Virginia Tech
Falls Church, VA 22043
sudipb@vt.edu

Reza Barkhi
KPMG Professor
Department of Accounting and Information Systems
Pamplin College of Business
Virginia Tech
Blacksburg, VA 24061
reza@vt.edu

June 20, 2022

Running Head: Persuasive response sequence and consistency in SOC2 reports

* Corresponding Author

The Impact of Persuasive Response Sequence and Consistency when IT Service Providers Address Auditor-Identified Issues in SOC2 Reports

ABSTRACT

We examine how an IT service provider's persuasive communication related to SOC2 report findings influences management's (i.e., user-entities') perceptions of the outsourced services. Within SOC2 reports, service providers can attempt to influence management's impressions of auditor-identified issues and, due to the report's limited audience, also follow-up with management about these issues. Using dual-process theories of persuasion, we predict the type of persuasion used by a service provider in a SOC2 report (contend or concede), and its consistency with follow-up persuasive appeals (contend or concede), will influence management's perceptions of the services provided. In an experiment, only when the service provider first contends the auditor's findings does a follow-up concession (rather than contention) result in more favorable perceptions. Persuasion tactics also influence management's processing of risk factors, which impact their trust in the service. Thus, IT service providers' initial and follow-up persuasive communications influence management's assessment of SOC2 auditor-identified issues.

Keywords: persuasion, dual-process theories, SOC2, information technology outsourcing, data privacy.

Data Availability: Data used in this study are available upon request

I. INTRODUCTION

Information technology (IT) outsourcing has become increasingly common in business (e.g., Blaskovich and Mintchik 2011), but can lead to concerns such as management's loss of in-house control over the outsourced function(s). In response, the American Institute of Certified Public Accountants (AICPA) has established an attestation engagement for auditors to report on the service provider's internal controls over information and systems. Results of this attestation are communicated in a System and Organization Control 2 (SOC2) report, which has a controlled (i.e., non-public) distribution. While a SOC2 report can contain commentary from the service provider about any auditor-identified issues (e.g., Hauser 2020; Moschella 2020), it is also common for the service provider to then follow-up with management and explain/elaborate on the significance of any findings.[1] Such communications, particularly if persuasive, may impact management's perceptions of the service provider differently than in publicly available audit reports where tailored interactions are not likely. While prior audit research has examined the impact of client persuasion tactics on auditor judgments (e.g., Wolfe, Mauldin, and Diaz 2009) and auditors' persuasive arguments to convince clients (e.g., Perreault and Kida 2011), it has not investigated the impact of persuasive appeals on end-user management, a group with inherently different motives than auditors and/or clients. We use a data privacy SOC2 report setting to examine how the nature and consistency of a service provider's persuasive responses to auditor-identified issues influence managements' perceptions of outsourced services.

Two persuasion tactics that an IT service provider might use to influence management's perceptions of auditor-identified issues are conceding and contending. A conceding persuasion tactic occurs when the service provider acknowledges that the auditor identified a valid internal

[1] We use the terms "manager" or "management" to refer to individuals that work for a company that outsources functions to an IT service provider and are end-users of the associated SOC2 attestation report.

control exception and accepts responsibility for this finding. For example, if a control used to ensure the privacy of customers' data did not execute as designed, the service provider might directly admit the exception when communicating with management. In contending, the service provider disagrees with the auditor's classification of an internal control exception (i.e., views the issue as an inconsequential control deviation), but does not contest any objective facts associated with the finding. Here, if a control used to ensure the privacy of customers' data did not execute as designed, the service provider might argue to management that the underlying spirit of the control still worked.

As noted, there are two opportunities for the service provider to persuade management to view the auditor's findings differently in a SOC2 reporting scenario: directly in the SOC2 report and, due to the report's limited audience, in follow-up direct communications with management. Service providers may be consistent in their persuasion attempts where they use similar persuasion strategies (concede or contend) in the report and in the follow-up communication. Alternatively, service providers may concede in the report but contend in the follow-up communication (or vice-versa). We argue that the four possible combinations of service providers' persuasion tactics (i.e., concede-concede, concede-contend, contend-concede, and contend-contend) will differentially impact management's information processing and the resulting perceptions of the service.[2]

When a service provider initially concedes, it is likely to disconfirm management's expectations since management expects the service provider to adopt a self-serving position and argue against the auditor's subjective conclusions (e.g., Verrecchia 1983; Holder-Webb, Cohen,

[2] Discussions with auditors who work on SOC engagements and audit clients that receive SOC reports reveal that combinations of responses occur in practice, including the types of conceding and contending persuasion tactics examined in this study (see Section II for a detailed discussion of this data).

Nath, and Wood 2009; Sheldon and Jenkins 2020). For instance, if the auditor identifies an internal control exception pertaining to the privacy of customer data that is ambiguous in its potential impact on the quality of the service, the service provider may (unexpectedly) concede that the exception occurred but indicate that any vulnerabilities were ultimately resolved. In this scenario, dual-process theories of persuasion predict that management will increase scrutiny of the persuasive message and critically evaluate the content of the SOC2 report by focusing on all relevant information. This critical evaluation, in turn, will decrease the impact of persuasion attempts and heuristic cues. Research on persuasive message order demonstrates a primacy effect in high-thought conditions, whereby the influence of the initial assessment persists across multiple persuasion attempts (e.g., Petty, Tormala, Hawkins, and Wegener 2001). Therefore, the increased thought due to the increased scrutiny of the initial concession will persist through subsequent communications. Thus, management will continue to critically evaluate any follow-up communications by scrutinizing both risk-increasing and risk-decreasing factors. Managers' assessment of a service provider will therefore not differ regardless of whether the service provider's follow-up communication concedes to or contends the findings.

In contrast, an initial contending argument will align with management's expectations that the service provider will challenge the auditor's subjective conclusions. In effect, the service provider (predictably) contends the auditor's identification of an internal control exception, possibly by arguing that the spirit of the control worked and that vulnerabilities were ultimately resolved. Here, dual-process theories of persuasion predict that management will not extensively scrutinize the persuasive message or critically evaluate the content of the SOC2 report, which increases their susceptibility to persuasive appeals and heuristic cues. When this is followed-up by managers receiving an unexpected concession, research on persuasive message order suggests

that managers will respond in a different manner since recency effects have been found in low-thought conditions (i.e., initial contend), indicating the follow-up concession will have more influence than the initial contending argument. Therefore, an unexpected follow-up concession may lead managers to scrutinize the available information more extensively, making them less susceptible to persuasive appeals and heuristic cues. This leads to a balanced evaluation of risk-increasing and risk-decreasing factors. In contrast, managers who receive a follow-up contention confirm their initial impression and do not further scrutinize the persuasive message or SOC2 report. Here, managers remain susceptible to persuasive appeals and heuristic cues, and form less favorable impressions of the service provider based on cues of its self-interested and non-cooperative behavior (Perreault and Kida 2011; Griffith, Nolder, and Petty 2018). This will lead to the consideration of more risk-increasing than risk-decreasing factors and increase concerns with the observed internal control exception. Thus, following an initial contending position, management will assess a service provider more favorably when its follow-up communication concedes, rather than contends.

To examine these issues, we use a 2 x 2 between-participants experimental design and manipulate the *initial persuasive response* (contending or conceding) and *follow-up persuasive response* (contending or conceding). In our experiment, participants were 120 business managers who assumed the role of a manager that is responsible for maintaining the privacy of customer data, which is stored with a third-party technology services provider. Managers review the service provider's SOC2 report that includes an internal control exception identified by the auditor (i.e., a subjective classification based on professional judgment) that relates to the privacy of customer data, but is ambiguous in its potential impact on the quality of service provided. The SOC2 report also includes the service provider's initial persuasive response to the

finding. Managers then receive a follow-up persuasive response from the provider in a transcribed voicemail. After reviewing these materials, managers assess their concerns about the privacy of customer data, the extent to which they believe the service provider failed in its responsibility to maintain the privacy of customer data, and whether they would recommend a contract renewal with the service provider.

Results indicate that when the service provider first concedes to an auditor-identified internal control exception, managers' perceptions of the service provider's ability to maintain the privacy of customers' data is similar regardless of whether the follow-up persuasive appeal concedes or contends. Managers systematically processed information that involved a balanced analysis of risk-increasing and risk-decreasing factors. As such, they were not influenced by the follow-up concession or contention. In contrast, when the service provider first contends the internal control exception, managers who receive a follow-up concession have significantly less concerns about the service provider's ability to maintain privacy than managers who receive a follow-up contention. As expected, managers considered more risk-increasing factors with a follow-up contention, likely due to the influence of heuristic processing. However, managers also considered more risk-decreasing factors with a follow-up concession, possibly due to the salience of the service provider's updated non-self-interested and cooperative behavior. A path analysis reveals that the interaction of the initial and follow-up persuasion tactics impacts the risk factors considered by managers, these risk factors impact managers' trust in the service provider, and this trust impacts perceptions of the provided services. These perceptions, in turn, impact managers' recommendations to renew the service provider's contract.

This study is important for several reasons. First, it examines responses to internal control exceptions outside of a Sarbanes-Oxley (SOX) setting and therefore provides insight into how

persuasion works in non-public audit reports. By using a SOC2 setting, we also offer a preliminary look into managers' perceptions of IT outsourcing arrangements (e.g., Blaskovich and Mintchik 2011) that have data privacy implications (e.g., Kauffman, Lee, Prosch, and Steinbart 2011). These insights are important given the recent growth in compliance audits that involve IT outsourcing and data privacy (AICPA 2018). Furthermore, while audit research on persuasion tactics has focused on the decisions of auditors and audit clients (e.g., Wolfe et al. 2009; Perreault and Kida 2011), we examine the influence that persuasion tactics have on management users of the audit report. Prior research has also not examined the impact of multiple persuasion tactics within the same reporting scenario, and we therefore extend audit research to show when the sequence and consistency of auditees' (i.e., the service provider) persuasion tactics differentially impact managers' information processing and perceptions. Finally, our results can help policymakers better understand the impact of service providers offering commentary in SOC reports, and can motivate public accountants to inform their clients of the potential influence that multiple service provider commentaries can have on their perceptions of the services provided.

II. BACKGROUND, THEORY, AND HYPOTHESIS

Service Organization Control Framework

The AICPA's SOC framework provides a mechanism for auditors and third-party service providers to report the results of internal control attestation engagements to management.[3] While variations of SOC reports exist (i.e., SOC1, SOC2 and SOC3), this study focuses on SOC2 given its emphasis on data privacy and other technology matters for a general user-base of stakeholders

[3] The importance of these reports was recently highlighted when the AICPA Peer Review Board mandated that SOC1 and SOC2 engagements be included in System Reviews as part of Peer Review Alert 12-04 (October 2012).

knowledgeable about the related services, processes, and internal controls (AICPA 2019).[4] Three parties have a particular interest in the results of SOC2 reports: the service provider, external auditor, and management of the company using the services. These parties differ in their uses of, and contributions to, the information included in SOC2 reports as depicted in Figure 1.

SOC2 focuses on IT service providers and must address at least one of the AICPA's Trust Services Criteria (TSC), which include: security, availability, processing integrity, confidentiality, and privacy. We focus on the data privacy criterion given the increasing concerns with this issue as more third-parties are being trusted/expected to protect personal data.[5] A completed SOC2 report provides details on the examined controls, including the control description, the auditor's testing procedures, and the auditor's conclusion on the operating effectiveness of each internal control (AICPA 2012). This level of detailed reporting on internal controls is not common in the U.S. audit industry and prior accounting research has not examined management perceptions of services using SOC2, or similar, reports.

Section 5 of a SOC2 report is reserved for the service provider to offer "other" information, which may include responses to internal control exceptions identified by the auditor in Section 4. This "other" information is not attested to as part of the auditor's opinion, but serves as a formal communication mechanism through which the service provider can speak directly to management and potentially persuade them to view the auditor's findings differently.

Discussions with Auditors Regarding Section 5 of SOC2 Reports

Given its importance to the study, we gathered anecdotal evidence to determine what "other" information is typically included in Section 5. To do so, we contacted seven partners

[4] This stands in contrast to SOC1 reports, for which the intended audience includes other auditors and specific members of the service provider and management (AICPA 2019).

[5] As part of the AICPA's Trust Services Criteria, privacy is described as applying to personal information and how it is "collected, used, retained, disclosed, and disposed of to meet the entity's objectives" (AICPA 2020, 7).

(denoted as P1 to P7) and three managing directors (denoted as M1 to M3) from Big-4 public accounting firms and asked (1) how Section 5 of a SOC2 report is utilized in practice and (2) what motivations service providers have to use Section 5 to contend internal control exceptions. These ten practitioners averaged 21.3 years of experience in public accounting and 19.0 years of experience with SOC reports (including predecessor reports such as SAS-70 and SSAE-16). Findings from this inquiry are summarized below, while complete responses appear in Table 1.

When asked about the use of Section 5 of a SOC2 report in practice, all ten practitioners commented that service providers use this section to respond to control exceptions identified by the auditor in Section 4. Practitioner M2 responded that "*… service organizations' use of this section to comment on internal control exceptions disclosed in section 4 IS the most common use of section 5 in SOC2 reports*", while P3 offered "*In more recent years, responses and other commentary related to exceptions are nearly the only thing I see in Section 5*." P5 and P7 noted that Section 5 is also used to discuss matters related to disaster recovery and business continuity planning (DRP/BCP), while P6 and M1 see mappings of tested controls to other frameworks such as the National Institute of Standards and Technology (NIST) and International Organization for Standardization (ISO). Finally, M3 indicated that service providers use Section 5 to "*convey messaging that they want their customers to better understand*." These comments by practitioners provide evidence that service providers most commonly use Section 5 to respond to control exceptions identified by the auditor.

We also asked about the motivations service providers have to use Section 5 to contend internal control exceptions. Half of the practitioners indicated that a contending argument might be used as a way to manage client relationships. Furthermore, as part of managing client relationships, P5 highlighted the motive to achieve any defined "*SLAs [service-level agreements]*

and contractual obligations", which can help service providers avoid potential legal liabilities. Three of the practitioners [P3, P7, and M2] indicated they would not allow a service provider to contend as this section cannot include misstatements of fact. In our experimental design, the service provider communication in Section 5 does not contain any material misrepresentation of facts. Indeed, the contending position does not contest any facts surrounding the identified control exception. Rather, both the conceding and contending position were designed based on prior audit research (e.g., Wolfe et al. 2009; Robertson and Houston 2010) and reflect a difference in professional judgment about a subjective audit matter. Notably, participants in all conditions were informed that the vulnerabilities were ultimately resolved. As such, the manipulations adhere to authoritative guidance (e.g., AT-C 205, *Examination Engagements*) which suggests the use of professional judgment when there are no material misstatements of fact(s) (AICPA 2016).

Based on our inquiries with practitioners, it is reasonable that service providers might use Section 5 of a SOC2 report to concede to, or contend, the auditor's subjective classification of a control deviation (e.g., Wolfe et. al 2009; Robertson and Houston 2010), while not challenging any objective facts surrounding the issue.

Persuasion Tactics and Manager Judgments

As noted, two persuasion strategies may be particularly relevant when dealing with assessments of internal control exceptions: conceding and contending tactics. Prior auditing research notes the costs and benefits of using these tactics. The cost of a concession includes attributing blame to the auditee for the identified internal control exception, which suggests more preventative measures could have been taken by the auditee to avoid such issues (Wolfe et al. 2009). However, there may also be value in the auditee accepting responsibility via concession,

as this may imply that the auditee acknowledges the presence of an issue and is therefore more likely to take remedial actions (Wolfe et al. 2009). By contending such findings, the auditee attempts to circumvent responsibility for the exceptions, which creates an intentional separation between the event and the (in)actions of the auditee (Kim, Ferrin, Cooper, and Dirks 2004; Wolfe et al. 2009).

While the auditing literature considers the effect of persuasion on an auditor's assessments of internal control exceptions, it has not yet considered whether a service provider's persuasion attempts can influence management's perception of the service provider in the context of internal control attestations. Studying this impact on management is necessary because their motives are inherently different from auditors. For example, auditors assess internal control exceptions for any risk posed to the client environment and associated impact on obtaining an appropriate level of audit comfort and assurance. On the other hand, management may assess internal control exceptions to address operational issues that threaten their ability to serve/protect customers and employees, and in deciding whether to maintain key business relationships (i.e., with vendors and service providers). These differences between auditors and management motivate an examination of whether management can be influenced by service provider persuasion in a SOC2-like setting.

Sequence and Consistency of Multiple Persuasive Appeals

We examine a service provider's communication with management regarding an auditor-identified internal control exception in the body of the SOC2 report, as well as in informal follow-up with management to discuss the exception. While management's consideration of persuasive appeals should not be influenced by communication formality (e.g., Chaiken 1980), multiple communications creates the opportunity for inconsistent messaging. For example, given

our focus on contending and conceding persuasion tactics, a scenario with two communications could include consistent concessions, consistent contentions, or one concession and one contention (in either sequence).

In designing this study, we sought out practitioner input to assess the realism of the aforementioned sequence and consistency of persuasive appeals in a SOC setting. We conducted informal discussions with three auditors that work on SOC engagements (with an average of eight years of experience on such engagements) and three audit clients that receive SOC reports (with an average of five years of experience with such reports). These discussions indicate that while consistent responses are likely more common (e.g., contend-contend), the inconsistent responses also occur as driven by impression management and the complex nature of relationships among the auditor, service provider, and managers. For example, practitioners indicated that a service provider might initially respond to the auditor's finding in a way that they believe will cause the least amount of damage to the majority of their end-user relationships. However, the service provider might feel constrained in what they can say in the initial response since the auditor can modify the Independent Service Auditor's Report if they believe the service provider's response contains any material misstatement of facts (AICPA 2016; Hauser 2020; Moschella 2020). As such, the service provider might provide a modified response to specific managers in a follow-up communication to better manage those relationships. Finally, a change in position might also occur given the time lag between when the SOC report is finalized and when it is provided to and analyzed by management.

To develop our expectations for how management will respond to multiple persuasive appeals that vary in sequence and consistency (e.g., concede-concede, concede-contend, contend-concede, contend-content), we leverage dual-process theories of persuasion.

Dual-Process Theories of Persuasion

Dual-process theories of persuasion offer a framework to understand the influence of persuasion tactics when individuals engage in different types of information processing. In general, these theories posit that individuals process information in a way that is either fast and intuitive (Type I) or slow and systematic (Type II), and that the type of processing affects the influence of persuasive appeals on related judgments and decision-making (Chaiken 1980; Petty and Cacioppo 1986; Evans 2008; Kahneman 2011). Type I processing occurs when individuals focus on a subset of information to provide a quick and definitive response (e.g., Schneider and Schiffrin 1977; Chaiken 1980; Strack and Deustch 2004; Hammond 1996; Evans 2008), while Type II processing occurs when individuals consider all available information to provide a response based on a balanced assessment (e.g., Schneider and Schiffrin 1977; Chaiken 1980; Epstein 1994; Hammond 1996; Evans 2008). For example, individuals engaged in Type I processing are informed by simple context cues and are therefore more vulnerable to persuasive appeals than when engaged in more deliberate Type II processing. Particularly relevant to this study, dual-process theories hold that disclosure unexpectedness influences whether an individual engages in Type I or II processing.

Disclosure Unexpectedness

Individuals have certain expectations of the communications they receive, and violations are perceived when the communication does not occur as anticipated (Burgoon and Burgoon 2001). These violations initiate an attentive appraisal of the violator and the message itself and can impact the message recipient's scrutiny of the communication (Burgoon, Bonito, Lowry, Humpherys, Moody, Gaskin, and Giboney 2016). Recipients also scrutinize information that explains the mismatch between an expected and actual communication (Burgoon and Hubbard

2005). Finally, recipients are more influenced by a message that disconfirms their expectations of the communication (Eagly, Wood, and Chaiken 1978), and find a message to be less persuasive when it aligns with the sender's interests (Hirst 1994).

Given this study's use of discretionary disclosures in a SOC2 report setting, the voluntary accounting disclosure literature helps to establish the impact of message (un)expectedness. Specifically, this literature finds that (1) firms make self-laudatory disclosures (e.g., Holder-Webb et al. 2009), (2) users expect firms will make voluntary disclosures of a more positive nature (e.g., Sheldon and Jenkins 2020), and (3) users are rational to expect that firms will withhold unfavorable news with voluntary disclosures (e.g., Verrecchia 1983). As such, when a service provider uses Section 5 of a SOC2 report to initially concede to an internal control exception, it is likely to disconfirm management's expectations since management expects the service provider to take a self-interested position and argue against the auditor's findings. Here, dual-process theories predict that management will engage in Type II processing and, in turn, increase scrutiny of the reported information. That is, as a result of the heightened awareness due to the service provider's unexpected response, management will critically evaluate the content of the SOC2 report and focus on all relevant information. In contrast, an initial contending argument aligns with management's expectation that the service provider will challenge the auditor's findings. In this case, dual-process theories predict that management will engage in Type I processing and, thus, will rely on situational cues and be more susceptible to persuasive appeals embedded in the service provider's initial response (Petty, Haugtvedt, and Smith 1995).

An alternative argument could be made that a service provider's initial contending response may lead to more systematic (Type II) processing. Management may perceive a contending response to be aligned with the service provider's incentives to be viewed favorably,

which could increase message scrutiny and processing. However, as noted, an initial concession will likely lead to more deliberate processing in the setting that we are examining. Specifically, given the ambiguity of the internal control exception (i.e., the control fails testing but the overall opinion remains unqualified), management will expect the service provider to frame the auditor-identified exception as being inconsequential. In our setting, a contending argument would be expected by management since a service provider will be expected to promote their business by challenging an auditor's ambiguous findings and arguing in favor of their position, whereas an initial concession will be less expected leading to a mismatch between the actual and expected communication. As such, we maintain the position that an initial concession will be less expected and contrary to the service provider's self-interest and thus should trigger Type II processing.

Service providers' follow-up informal communications with management about SOC2 internal control exceptions provide another opportunity to either concede to or contend the auditor's findings. Following an initial concession in the body of the SOC2 report that leads to Type II processing and increased scrutiny of the reported information, we expect the impact of any follow-up communication by the service provider to be inconsequential. Research on persuasive message order demonstrates a primacy effect in high-thought conditions, whereby the influence of the initial assessment persists across multiple persuasion attempts (e.g., Kassin, Reddy, and Tulloch 1990; Haugtvedt and Petty 1992; Haugtvedt and Wegener 1994; Petty et al. 2001). Therefore, opinions formed upon receipt of an initial concession (i.e., Type II processing) will persist through subsequent communications, suggesting managers will continue to evaluate the service provider using a balanced set of risk-increasing and risk-decreasing factors. Similarly, research finds that opinions developed through systematic processing are often resistant to counter-persuasion (Petty and Cacioppo 1986) and, in fact, repeated persuasion can have reverse

effects (Petty and Cacioppo 1979; Calder and Sternthal 1980; Gorn and Goldberg 1980). Thus, following an initial concession, we expect management's assessment of a service provider to not differ regardless of whether the service provider's follow-up communication concedes to or contends the auditor's findings.

Following an initial contending argument in a SOC2 report that results in Type I processing, we expect that the service provider's choice of follow-up communication will differentially impact management's information processing. When the follow-up communication is a repeated contending argument, managers confirm their initial impression of the service provider and will not further scrutinize the responses (i.e., will maintain Type I processing). This continued reliance on heuristic cues is supported by research on persuasive message order, which finds a recency effect in low-thought conditions (i.e., Type I processing) (e.g., Kassin et al. 1990; Haugtvedt and Petty 1992; Haugtvedt and Wegener 1994; Petty et al. 2001). Therefore, when presented with two low-thought (Type I processing) communications (i.e., contend-contend), managers will rely on opinions formed from the more recent communication, which remains an expected contending argument. Here, management is expected to form less-favorable impressions of the service provider due to cues of its non-cooperation and self-interested behavior (Hirst 1994; Perreault and Kida 2011; Griffith et al. 2018). These cues will lead to the processing of more risk-increasing than risk-decreasing factors, consequently increasing concerns about the exception. Research on persuasive message order also suggests that managers will respond in a different manner to an unexpected follow-up concession. Specifically, the recency effect found in low-thought conditions (i.e., initial contend) indicates the follow-up concession will have more influence than the initial contending argument. Given that the follow-up concession would be viewed as a surprise, this would transition the managers from Type I to

Type II processing. This transition from Type I to Type II is also supported by the conflict management literature (e.g., Botvinick, Braver, Barch, Carter, and Cohen 2001; Neys and Glumicic 2008), which provides that Type II processing monitors Type I processing to manage cognitive conflict. When this monitoring identifies a conflict/surprise (here, with the follow-up concession), Type II takes control from Type I. Based on these arguments, a follow-up concession will lead management to scrutinize the reported information more extensively, making them less susceptible to persuasive appeals and heuristic cues, and more likely to perform a balanced evaluation of risk-increasing and risk-decreasing factors.[6] Considering the aforementioned line of reasoning, we expect that following an initial contending position in a SOC2 report, management will assess a service provider more favorably when its follow-up communication concedes, rather than contends.

To summarize, following an initial concession by the service provider, we expect management's assessment of the service provider will consist of a balanced set of both risk-increasing and risk-decreasing factors, and, thus, will not differ substantially regardless of a follow-up concession or contention. In contrast, following an initial contention, when the follow-up communication is also a contention, management confirms their initial unfavorable impression of the service provider and will not further scrutinize the responses. Here, management will consider more risk-increasing than risk-decreasing factors and will thus assess the service provider less favorably. If the follow-up communication is a concession, management will shift to Type II processing and scrutinize the responses more extensively. In doing so, management will consider a balanced set of risk-increasing and risk-decreasing factors, and will

[6] This differs from the concede-contend scenario in which managers enter Type II processing when confronted with an initial unexpected concession. As discussed, research finds that high-thought conditions (i.e., Type II processing) are associated with a primacy effect, and thus opinions persist when formed in response to the initial concession.

thus assess the service provider more favorably than when a contending argument is followed by another contending argument. Formally, we hypothesize:

H1: The impact of a service provider's initial and follow-up communication regarding the auditor-identified control exception, on management's assessment, will interact such that:

Following an initial contending position, management will assess a service provider more favorably when its follow-up communication concedes, rather than contends. However, when the initial position concedes, the follow-up communication will not lead to differences in assessed favorability.

Figure 2 provides a summary of our arguments and related predictions, and Figure 3 presents a graphical/visual representation of our prediction for H1.

III. METHOD

Participants

We used a Qualtrics Panel to recruit 120 participants who: (1) are business managers in the United States, (2) have experience working with vendors, (3) hold a four-year college degree, and (4) have at least five years of work experience.[7] Services of web-based research organizations have been used to recruit difficult-to-obtain experimental participants in prior accounting research (e.g., Brown-Liburd and Zamora 2015; Long and Basoglu 2016; Buchanan, Commerford, and Wang 2019). All recruited participants had experience working with vendors, 47.5% were female, and 31.7% held a post-graduate degree. Panel A in Table 2 reports demographic information. Managers average over 15 years of business experience and are familiar with SOC2 reports and internal control related manners. This pool is appropriate for our

[7] We follow the recommendations of Brandon, Long, Loraas, Mueller-Phillips, and Vansant (2014) regarding the gathering of data using Qualtrics Panels. We contracted with Qualtrics to provide a participant panel consisting of 120 U.S. managers using the criteria noted above. Qualtrics assigned a Project Manager to monitor the data collection who ensured that participants: (1) were not more than two standard deviations away from the average completion time, (2) did not submit response patterns indicative of low attention (e.g., providing the same rating for all responses with no variation, which indicates a lack of engagement with the experiment), and (3) did not enter grossly negligent text in the free response fields.

task as we ask participants to evaluate a service provider who recently disclosed an internal control exception in their SOC2 report. Panel B of Table 2 reports that participants' demographics do not vary significantly across our experimental conditions. Finally, we paid Qualtrics $20 per participant, and participants spent an average of 15 minutes and 28 seconds completing the experiment.

Experimental Design

This study uses a 2 x 2 between-participants experimental design in which we manipulate the *initial persuasive response* (contending or conceding) and the *follow-up persuasive response* (contending or conceding). The experiment was administered using Qualtrics. For the initial persuasive response manipulation, the persuasion attempt is communicated in the final section of the SOC2 report (i.e., in the same report that discloses the auditor-identified internal control exception). Then, the follow-up persuasive response manipulation appears as a transcribed voicemail from a follow-up touch point with the customer service representative at the service provider, and does not include any new objective information about the identified exception.[8]

Participants were asked to assume the role of a customer data manager of a company (Framous) that makes custom picture frames. Their role in the company is to maintain the privacy of customer data. They are provided background information in which Framous outsources its technology-related functions to Atlantic Web Services (herein "Atlantic"). As part of these services, Atlantic hosts a server that records and processes Framous' online sales transactions and stores customers' personal and payment information. Participants then learn that Atlantic provides them with an annual SOC2 report that details testing performed by an external

[8] The study and research instrument were approved by a university Institutional Review Board.

auditor over the internal controls related to the outsourced services.[9] Participants are told that Atlantic is up for contract-renewal and before senior management makes the renewal decision they would like their input into whether Atlantic meets the objective of maintaining the privacy of customer data (Prasad 2019; AICPA 2021).

Participants then view excerpts from the most recent SOC2 report that included the five sections typically found in a SOC2 Type II report (i.e., Type II being the form of SOC2 report with tests of internal control operating effectiveness over a period of time). We held Sections 1 to 4 of the SOC2 report constant across all conditions. Section 1 included Atlantic's written assertions that their system is fairly presented, controls were properly designed, and controls operated effectively for the period covered by the SOC2 report. Section 2 presented the auditor's unqualified opinion on the fair presentation of the system, design of controls, and operating effectiveness of controls. Section 3 displayed Atlantic's description of its system, while Section 4 presented the auditor's detail testing of three internal controls. No exceptions were noted for two of the controls, however the third control had an exception noted for server vulnerability reports not being reviewed timely. The potential impact of this control exception was intentionally left ambiguous, as it was significant enough for the auditors to note the exception in Section 4, but not significant enough to qualify the auditor's opinion in Section 2. Our first manipulation then appeared in Section 5.

Initial Persuasive Response Manipulation

[9] There were no differences in participants' perceptions about the external auditor's trustworthiness, competence, credibility, ability to look after client's interests, and belief that the internal control exception was properly classified across the four experimental conditions. This confirmed that the auditor was viewed uniformly across the experimental conditions. In addition, participants believed Atlantic was to blame for the internal control exception, and that the service provider was motivated to downplay the significance of the exception. These perceptions of motivation were expected as the service provider's contract was up for renewal.

In Section 5, Atlantic provides a response to the auditor's finding of an internal control exception. In all conditions, this initial response recounts the objective facts of the finding, but then includes a subsequent paragraph elaborating Atlantic's response with either a conceding or contending persuasive message. The basis for all conceding and contending arguments is whether the untimely review of an IT server constitutes an exception. Conceding responses accept the exception with statements like "we at Atlantic Web Services admit that this is an exception for this internal control" and "we concede that we had a control issue." Contending responses argue against the auditor's subjective classification of the issue as an exception with statements like "we at Atlantic Web Services do not believe that this is an exception for this internal control" and "we believe the spirit of the control worked", but do not contest any objective facts surrounding the identified issue.[10] Neither the conceding or contending responses make any misstatement of facts, and both mention that the identified vulnerabilities were ultimately resolved. As such, all groups were provided the same information with the only difference being the persuasion tactics, which were designed based on prior auditing and psychology research (e.g., Kim et al. 2004; Wolfe et al. 2009; Tan and Trotman 2010; Perreault and Kida 2011).

Follow-up Persuasive Response Manipulation

After reviewing the SOC2 materials, participants were presented a transcribed voicemail from their customer relations contact at Atlantic. The voicemail includes a friendly opening and closing, but the body of the message again takes on either a conceding or contending position

[10] To further support our argument that managers will expect the service provider to contend any findings, participants in our study were asked the extent to which they agree that service provider customer relations personnel are motivated to downplay the significance of internal control exceptions identified by CPA firms (1 = strongly disagree; 9 = strongly agree). Across all participants, the average assessment is 6.74, with no significant differences across experimental conditions ($p > .10$). Notably, this assessment is significantly higher than the midpoint of the scale (of 5) [$t = 9.42$; $p < .001$]. This further supports our argument that management expects a contending response in which the service provider seeks to downplay any observed deviations.

towards the identified exception. The message body opens by re-stating Atlantic's initial position on the exception, but then transitions into the follow-up conceding or contending response. There is a conceding and contending follow-up response for each of the two initial responses, thus making up our four experimental conditions. Conceding and contenting statements like the ones described for the initial responses were again used. Similarly, all groups were provided the same information with the only difference being the persuasion tactics.

Dependent Variables, Manipulation Check, and Post Experimental Questions

Participants were asked whether Atlantic failed to maintain the privacy of customer data, and whether they had concerns about the privacy of customers' data given the relationship with Atlantic. Participants also indicated how likely they would be to recommend that Framous management renew its service contract with Atlantic, and listed the factors they considered in making this decision. Thereafter, they responded to manipulation check questions, several demographic and post-experimental questions (e.g., their level of trust in Atlantic), and concluded the study.

IV. RESULTS

Manipulation Checks

We performed two tests to assess the effectiveness of our manipulation to the service provider's initial response. First, participants were asked, on a Likert scale, if the response seemed to deny or admit there was an internal control exception (1 = deny there was an internal control exception; 9 = admit there was an internal control exception). The mean response for the initial concede group was 6.700, while those in the initial contend group had a mean of 5.817. An untabulated ANOVA indicates that the difference in these means is statistically significant ($F = 4.638$; $p = 0.033$, two-tailed). Next, we measured the time participants spent viewing the SOC2

report (the initial response was manipulated in Section 5 of the SOC2 report). Dual-process theories of persuasion suggest that participants in the initial concede condition will scrutinize and systematically process the information (i.e., Type II), whereas participants in the initial contend condition will process the information heuristically (i.e., Type I). As such, participants in the initial concede condition should spend more time reviewing the SOC2 report. We find the mean time for participants in the initial concede group was 257.3 seconds, while those in the initial contend group spent a mean time of 184.2 seconds. An untabulated ANOVA indicates that this difference in mean times is significant ($F = 1.746$; $p = 0.053$, two-tailed). Based on these two analyses, it appears that we successfully manipulated the initial persuasive response variable.

Our second manipulation was to the follow-up response. To assess the effectiveness of this manipulation, we asked participants if the phone message seemed to deny or admit there was an internal control exception (1 = deny there was an internal control exception; 9 = admit there was an internal control exception). The mean response for participants in the follow-up concede group was 6.867, while those in the follow-up contend group had a mean of 5.333. An untabulated ANOVA indicates the difference in these means is statistically significant ($F = 14.245$; $p < 0.001$, two-tailed). As such, it appears that we successfully manipulated the follow-up persuasive response.

For the manipulation checks, we note that the mean ratings of the participants are above the midpoint of the scale for both the concede and, notably, the contend conditions (1 = deny there was an internal control exception; 9 = admit there was an internal control exception). This suggests a general propensity of the service provider to admit there was an exception. These results are expected because neither the conceding or contending manipulation make any misstatement of facts, and both mention that the identified vulnerabilities were ultimately

resolved. The only difference between the groups were the use of persuasion tactics about the severity of a subjective control exception, which were designed based on prior auditing and psychology research (e.g., Kim et al. 2004; Wolfe et al. 2009; Tan and Trotman 2010; Perreault and Kida 2011). These results further verify that participants in the contend conditions did not view management as contesting any objective facts surrounding the exception. Rather, as intended, management challenged the auditor's subjective classification of the issue as a control exception.

Responsibility to Maintain Privacy of Customer Data

Table 3 reports our analyses of the dependent variable that asked participants: "Do you believe Atlantic has failed in its responsibility to maintain the privacy of Framous' customer data?" (1 = Did not fail and 9 = Completely failed). Panel A reports descriptive statistics. A 2 x 2 ANOVA in Panel B identifies a main effect for Follow-up Response ($p = 0.02$, two-tailed) as well as a significant interaction ($p = 0.03$, one-tailed). We then performed a test of planned contrasts in Panel C and coded the cells to directly test our hypothesis that responses to follow-up communications differ following an initial contending, but not initial conceding, response. We used the following contrast weights: Initial Concede / Follow-up Concede (-1), Initial Concede / Follow-up Contend (+1), Initial Contend / Follow-up Concede (-1), and Initial Contend / Follow-up Contend (+1). Results were computed utilizing the tools in Guggenmos, Piercey, and Agoglia (2018), and indicate that the contrast is significant ($p < 0.02$, two-tailed).

Results of simple effects tests (Panel D) indicate that following an initial contending argument, a follow-up concede leads to lower (mean = 4.20) managers' concerns about the service provider's ability to maintain privacy than a follow-up contend (mean = 5.967) [$p < 0.01$, two-tailed]. However, after an initial concession, there are no differences in managers' concerns

about the service provider's ability to maintain privacy between when there is a follow-up concede (mean = 4.867) and a follow-up contend (mean = 5.067) [p = 0.73, two-tailed].[11] These results support H1 in that following an initial contending argument, managers perceive the service provider more favorably when its follow-up communication concedes, rather than contends.[12] However, when the initial position concedes, the follow-up communication does not lead to differences in assessed favorability (see Figure 4).

Concerns about the Privacy of Customer Data

Table 4 displays our analyses of the dependent variable that asked participants: "Do you have concerns about the privacy of Framous customers' data given the service relationship with Atlantic?" (1= Not at all concerned and 9 = Very concerned). Panel A reports descriptive statistics, and Panel B presents a 2 x 2 ANOVA that identifies a significant interaction (p = 0.08, one-tailed). We then performed a test of planned contrasts in Panel C and again coded the cells to directly test our hypothesis that responses to follow-up communications differ following an initial contending, but not initial conceding, response. We used the same contrast weights as previously described: Initial Concede / Follow-up Concede (-1), Initial Concede / Follow-up Contend (+1), Initial Contend / Follow-up Concede (-1), and Initial Contend / Follow-up Contend (+1). Results indicate that the contrast is significant (p < 0.07, two-tailed). Simple effects (Panel D) indicate that when participants first receive a contending argument there is a significant difference in responses when the follow-up response is conceding (mean = 4.867)

[11] There were no differences across experimental conditions in participants' perceptions of the adequacy and credibility of explanations for the internal control exception provided by the service provider and the service provider's representative (all p's > 0.05). Thus, the results are not driven by perceptions of the quality of the initial and follow-up persuasive responses.

[12] Following an initial contend, participants also believed that the service provider's customer representative was more trustworthy (p = 0.02, two-tailed) and would act in their best interest (p = 0.03, two-tailed) when the follow-up response conceded rather than contended. Further, participants believed the internal control exception was a more severe issue (p = 0.03, two-tailed) and made the service provider a higher risk provider (p = 0.06, two-tailed) when the follow-up response contended rather than conceded.

rather than contending (mean = 6.133) [p = 0.02, two-tailed]. However, we do not identify a significant difference between the follow-up concede (mean = 5.733) and the follow-up contend (mean = 5.900), following an initial concession (p = 0.76, two-tailed). These results mirror those above for the responsibility to maintain privacy variable, and are consistent with the pattern predicted in H1.

Consideration of Risk Factors

In order to understand participants' information processing, we developed a measure of the risk factors considered by participants to identify those that used more risk-increasing or risk-decreasing information processing. To do so, we examined a free response question that asked participants to comment on the factors they considered when evaluating whether they would recommend a contract renewal with the service provider. A business faculty member with 9 years of prior work experience, blind to experimental conditions and our predictions, and one of the authors, blind to the experimental conditions, independently coded the participants' free responses to determine net risk factor scores (i.e., the number of risk-increasing statements minus the number of risk-decreasing statements provided by each participant). A net risk factor score closer to zero should indicate more balanced information processing of the risks and benefits, whereas scores further from zero should indicate processing that is focused more on either risk-increasing (i.e., a net positive score) or risk-decreasing (i.e., a net negative score) information. The raters achieved an agreement level of 91.67% (Cohen's kappa = 0.905, $p < 0.001$), suggesting strong agreement (Landis and Koch 1977). The few disagreements between raters were independently reconciled by a second author to produce the final net risk factor scores.

Descriptive statistics related to the net risk factors scores appear in Table 5. As presented, participants that first received a concession have net risk factor scores closer to a mean of zero

(follow-up concede = -0.0385; follow-up contend = -0.1429) whereas participants that first received a contending argument have mean scores that are further from zero (follow-up concede = -0.9630; follow-up contend = 0.9545). These results suggest that participants who first received a concession considered a similar number of risk-increasing and deceasing factors. In contrast, following an initial contending argument, participants that received a follow-up concession focused on more risk-decreasing factors while those that received a follow-up contend focused on more risk-increasing factors. This result differs from our argument that managers in the initial contend / follow-up concede condition would consider a balanced set of risk-increasing and risk-decreasing factors, and is possibly due to the salience of the service provider's updated non-self-interested and cooperative behavior. Still, this positive response to a concession is consistent with findings from the auditor negotiation literature (e.g., Sanchez, Agoglia, and Hatfield 2007; Tan and Trotman 2010; Cheng, Tan, Trotman, and Tse 2017).

Impact of Information Processing and Trust on Management's Evaluations

Using the net risk factors measure, we performed a path analysis to simultaneously estimate parameters associated with the initial persuasive response (1 = contend; 0 = concede), the follow-up persuasive response (1 = contend; 0 = concede), and the interaction of initial and follow-up persuasive responses on participants' consideration of risk factors. We then estimate the impact of risk factors on management's trust in the service provider. Trust is central to IT outsourcing arrangements, including ours in which the service provider assumes direct control over management's sensitive data processing and storage. In our study, managers (i.e., trustors) had no prior knowledge of, or experience with, the service provider and thus had to rely on situational cues to determine the level of trust warranted (McKnight, Cummings, and Chervany 1998; McKnight, Choudhury, and Kacmar 2002). Our manipulated persuasive appeals provide

different cues about the service provider, which likely impact management's trust in the service provider (e.g., Guo and Main 2012). We then examine if this trust, in turn, impacts perceptions of whether the service provider failed to maintain the privacy of customer data. Finally, we examine the link between failed to maintain the privacy of customer data and the likelihood of recommending a contract renewal with the service provider.[13]

Figure 5 reports the results of the path analysis. The model fit statistics suggest a strong goodness of fit based on multiple statistics (TLI = 1.02, $\chi 2 = 10.05$, $p = 0.436$; CFI = 1.00; and RMSEA = 0.007). The standardized coefficient indicates a positive and significant coefficient between the interaction of our manipulated variables and the net risk factors (0.273; $p < 0.10$, two-tailed). This indicates a larger difference in the evaluation of net risk factors in the initial contend conditions than in the initial concede conditions. Next, we examine the link from net risk factors to participants' trust in the follow-up response and observe a significant and negative coefficient (-0.493; $p < 0.01$, two-tailed). A more-risky net score leads to participants having less trust in the follow-up response. We then examine the link between trust and whether participants believe the service provider failed to maintain the privacy of customer data and observe a significant and negative coefficient (-0.758; $p < 0.01$, two-tailed). The more trust participants have in the follow-up response, the less they believe the service provider failed to maintain the privacy of customer data. Lastly, we examine the link between whether participants believe the service provider failed to maintain the privacy of customer data and the likelihood that they would recommend that management renew the contract with the service provider. We identify a

[13] The contract renewal variable asked participants, given their role at Framous includes oversight of customer data, if the service contract between Framous and Atlantic was up for renewal this year, how likely they would be to recommend that Framous management renew the service contract with Atlantic. This was measured using a nine-point Likert scale with endpoints labeled "Very unlikely to recommend renewing" (1) and "Very likely to recommend renewing" (9).

significant and negative coefficient (-1.398; $p < 0.01$, two-tailed). Thus, the more the participants believe the service provider failed to maintain the privacy of customer data, the less likely they are to recommend the renewal of the contract. Collectively, the path analysis indicates that the interaction of manipulated variables influences the net risk factors considered by participants, which then affects trust in the service provider.[14] Trust in the service provider, in turn, influences management's assessment of the service provider.

These results also provide additional insight into the contract renewal decision. Untabulated results indicate no significant differences in the contract renewal recommendations across the experimental conditions. While the manipulated variables do not directly lead to differences in contract renewal recommendations, the path analysis demonstrates that these recommendations are influenced by a belief that the service provider failed to maintain the privacy of customer data, and this belief is influenced by a lack of trust in the service provider. These results are appropriate from a business decision-making perspective since managers will likely assess their level of trust in a service provider, then determine whether the provider failed to maintain the privacy of customers' data, before making a contract renewal decision.

V. CONCLUSION

Recent trends in business have created a demand for compliance audits that address IT outsourcing arrangements (e.g., AICPA 2018; Prasad 2019). One option, the AICPA's SOC2 attestation engagement, produces a controlled (i.e., non-public) distribution report that management can use to gain comfort over its IT functionality that has been outsourced to a third-party service provider. While SOC2 reports can focus on any/all IT matters covered by the

[14] In a separate path analysis, we added a direct path between the interaction term (i.e., Initial X Follow-up Response) and the Trust variable. This direct path is not significant, which indicates the key role of net risk factors in explaining the relationship between the independent variables and trust in the service provider.

AICPA's Trust Services Criteria (i.e., security, availability, processing integrity, confidentiality, and privacy), we focus on the data privacy criterion given the increasing concerns with this issue as more third-parties are being trusted/expected to protect personal data. Our findings indicate that the service provider's multiple opportunities to respond to auditor-identified issues in a SOC2 setting can lead to management having different perceptions of the outsourced services. This means that, even when tasked with sensitive IT oversight, managers remain susceptible to service providers' persuasive influences on related internal control matters.

This study extends prior research by examining auditee persuasive responses to auditors' findings in limited audience, non-public assurance reports. We find that service provider (i.e., auditee) comments in the body of the SOC2 report regarding the auditor's findings, and follow-up communication with management, jointly influence managers' perceptions of the services provided. Specifically, following an initial contending response, management assesses a service provider more favorably when its follow-up communication concedes to rather than contends the auditor's findings. However, following an initial concession, the follow-up communication does not lead to differences in assessed favorability. These findings suggest that conceding tactics make managers' information processing more systematic, which makes them immune to multiple persuasion attempts. Furthermore, our findings demonstrate that service provider persuasive appeals, particularly the sequence and consistency of these appeals, can have different impacts on management's perceptions of the service provider. Finally, we find that persuasion tactics impact managers' processing of risk factors, these risk factors influence managers' trust in the service provider, this trust impacts perceptions of the provided services, and these perceptions impact whether managers will recommend a contract renewal with the service provider.

Our study has limitations that can provide opportunities for future research. While we focused on the privacy of customer data stored with an IT service provider, future research could consider whether our findings hold across other responsibilities of IT service providers (i.e., security, availability, processing integrity, and confidentiality) (AICPA 2020). Participants were also exposed to a limited number of internal controls, with one issue identified by the auditor. Future research should consider whether responses to control exceptions in SOC2 reports change when a comparatively higher number of other controls are found to be ineffective. Our study also does not assess individual personality factors (e.g., need for cognition), and future research can examine how such factors might impact management decision-making when evaluating SOC2 reports. Finally, our manipulations do not directly lead to differences in contract renewal recommendations, as it potentially takes several and/or more severe exceptions to impact this decision, and possibly issues identified over multiple audit reports/periods to damage trust to a point to not renew the contract. Future research can examine whether a pattern of historical failures or more severe issues directly impact contract renewal decisions with service providers. Related to this, participants did not know whether viable alternative service providers were available with good privacy reputations and cost of services, and future research should examine whether explicit alternatives impact contract-renewal decisions.

REFERENCES

American Institute of Certified Public Accountants (AICPA). 2012. *Reporting on Controls at a Service Organization Relevant to Security, Availability, Processing Integrity, Confidentiality, or Privacy (SOC 2) – AICPA Guide*. Durham, NC: AICPA.

AICPA. 2016. *AT-C 205, Examination Engagements*. Durham, NC: AICPA.

AICPA. 2018. *Performing and reporting on a SOC 2 ® examination in accordance with International Standards on Assurance Engagements (ISAEs) or in accordance with both the AICPA's attestation standards and the ISAEs*. Durham, NC: AICPA.

AICPA. 2019. *SOC for Service Organizations: Information for Users and User Entities*. Available at: www.aicpa.org/interestareas/frc/assuranceadvisoryservices/users.html (last accessed January 2019).

AICPA. 2020. *TSP Section 100: 2017 Trust Services Criteria for Security, Availability, Processing Integrity, Confidentiality, and Privacy*. Available at: https://www.aicpa.org/content/dam/aicpa/interestareas/frc/assuranceadvisoryservices/downloadabledocuments/trust-services-criteria.pdf (last accessed March 2021).

AICPA. 2021. *SOC2® - SOC for Service Organizations: Trust Services Criteria*. Available at: https://us.aicpa.org/interestareas/frc/assuranceadvisoryservices/aicpasoc2report (last accessed November 2021).

Blaskovich, J., and N. Mintchik. 2011. Information technology outsourcing: A taxonomy of prior studies and directions for future research. *Journal of Information Systems* 25 (1): 1-36.

Botvinick, M., T. Braver, D. Barch, C. Carter, and J. Cohen. 2001. Conflict monitoring and cognitive control. *Psychological Review* 108 (3): 624-652.

Burgoon, J. K., and M. Burgoon. 2001. Expectancy theories. *The New Handbook of Language and Social Psychology* 2: 79-102.

Burgoon, J. K., and A. E. Hubbard. 2005. Cross-cultural and intercultural applications of expectancy violations theory and interaction adaptation theory. *Theorizing and Intercultural Communication*, 149-171.

Burgoon, J. K., J. A. Bonito, P. B. Lowry, S. L. Humpherys, G. D. Moody, J. E. Gaskin, and J. S. Giboney. 2016. Application of expectancy violations theory to communication with and judgements about embodied agents during a decision-making task. *International Journal of Human-Computer Studies* 91: 24-36.

Brandon, D. M., J. L. Long, T. M. Loraas, J. Mueller-Phillips, and B. Vansant. 2014. Online instrument delivery and participant recruitment services: Emerging opportunities for behavioral accounting research. *Behavioral Research in Accounting* 26 (1): 1-23.

Brown-Liburd, H., and V. L. Zamora. 2015. The role of corporate social responsibility (CSR) assurance in investors' judgments when managerial pay is explicitly tied to CSR performance. *Auditing: A Journal of Practice & Theory* 34 (1): 75–96.

Buchanan, J., B. P. Commerford, and E. Y. Wang. 2019. Can increased auditor scrutiny deter managers' operational opportunism? The importance of communication with the board and consistency with peer behavior. Working paper, Kent State University, University of Kentucky, and University of Massachusetts Amherst.

Calder, B. J., and B. Sternthal. 1980. Television commercial wearout: An information processing view. *Journal of Marketing Research* 173-186.

Chaiken, S. 1980. Heuristic versus systematic information processing and the use of source versus message cues in persuasion. *Journal of Personality and Social Psychology* 39 (5): 752.

Cheng, M. M., H. T. Tan, K. T. Trotman, and A. Tse. 2017. The impact of the timing of a prior year's auditor concessions on financial officers' judgments. *Auditing: A Journal of Practice & Theory* 36: 43-62.

Eagly, A. H., W. Wood, and S. Chaiken. 1978. Causal inferences about communicators and their effect on opinion change. *Journal of Personality and Social Psychology* 36 (4): 424.

Epstein, S. 1994. Integration of the cognitive and psychodynamic unconscious. *The American Psychologist* 49 (8): 709–724.

Evans, J. St. B. T. 2008. Dual-processing accounts of reasoning, judgment, and social cognition. *Annual Review of Psychology* 59 (1): 255–278.

Griffith, E. E., C. J. Nolder, and R. E. Petty. 2018. The Elaboration Likelihood Model: A meta-theory for synthesizing auditor judgment and decision-making research. *Auditing: A Journal of Practice and Theory* 37 (4): 169-186.

Gorn, G. J., and M. E. Goldberg. 1980. Children's responses to repetitive television commercials. *Journal of Consumer Research* 6 (4): 421-424.

Guggenmos, R. D., M. D. Piercey, and C. P. Agoglia. 2018. Custom contrast testing: Current trends and a new approach. *The Accounting Review* 93 (5): 223-244.

Guo, W., and K. J. Main. 2012. The vulnerability of defensiveness: The impact of persuasion attempts and processing motivations on trust. *Marketing Letters* 23 (4): 959-971.

Hammond, K. R. 1996. *Human Judgment and Social Policy*. New York: Oxford University Press.

Haugtvedt, C. P., and R. E. Petty. 1992. Personality and persuasion: Need for cognition moderates the persistence and resistance of attitude changes. *Journal of Personality and Social Psychology* 63: 308-319.

Haugtvedt, C. P., and D. T. Wegener. 1994. Message order effects in persuasion: An attitude strength perspective. *Journal of Consumer Research* 21: 205-218.

Hauser, B. 2020. *Testing exceptions in a SOC report*. (July 15). Available at: https://gbq.com/testing-exceptions-in-a-soc-report/ (last accessed March 2021).

Hirst, D. E. 1994. Auditors' sensitivity to source reliability. *Journal of Accounting Research* 113-126.

Holder-Webb, L., J. R. Cohen, L. Nath, and D. Wood. 2009. The supply of corporate social responsibility disclosures among US firms. *Journal of Business Ethics* 84 (4): 497-527.

Kahneman, D. 2011. *Thinking, Fast and Slow*. New York, NY: McMillan.

Kassin, S. M., M. E. Reddy, and W. F. Tulloch. 1990. Juror interpretations of ambiguous evidence: The need for cognition, presentation order, and persuasion. *Law and Human Behavior* 14: 43-55.

Kauffman, R., Y. Lee, M. Prosch, and P. Steinbart. 2011. A survey of consumer information privacy from the accounting information systems perspective. *Journal of Information Systems* 25 (2): 47-79.

Kim, P. H., D. L. Ferrin, C. D. Cooper, and K. T. Dirks. 2004. Removing the shadow of suspicion: the effects of apology versus denial for repairing competence-versus integrity-based trust violations. *Journal of Applied Psychology* 89 (1): 104.

Landis, J. R., and G. G. Koch. 1977. The measurement of observer agreement for categorical data. *Biometrics* 33 (1): 159-174.

Long, J. H., and K. A. Basoglu. 2016. The impact of task interruption on tax accountants' professional judgment. *Accounting, Organizations and Society* 55*:* 96-113.

McKnight, D. H., L. L. Cummings, and N. L. Chervany. 1998. Initial trust formation in new organizational relationships. *Academy of Management Review* 23 (3): 473-490.

McKnight, D. H., V. Choudhury, and C. Kacmar. 2002. Developing and validating trust measures for e-commerce: An integrative typology. *Information Systems Research* 13 (3): 334-359.

Moschella, C. 2020. *Tips for good management responses to testing exceptions in SOC 2 reports*. (May 26). Available at: https://keitercpa.com/blog/good-management-responses-testing-exceptions-soc-2-reports/ (last accessed March 2021).

Neys, W. D., and T. Glumicic. 2008. Conflict monitoring in dial process theories of thinking. *Cognition* 106: 1248-1299.

Perreault, S., and T. Kida. 2011. The relative effectiveness of persuasion tactics in auditor–client negotiations. *Accounting, Organizations and Society* 36 (8): 534-547.

Petty, R. E., and J. T. Cacioppo. 1979. Issue involvement can increase or decrease persuasion by enhancing message-relevant cognitive responses. *Journal of Personality and Social Psychology* 37 (10): 1915-1926.

Petty, R. E., and J. T. Cacioppo. 1986. The elaboration likelihood model of persuasion. In *Communication and Persuasion* (pp. 1-24). Springer New York.

Petty, R. E., C. P. Haugtvedt, and S. M. Smith. 1995. Elaboration as a determinant of attitude strength: Creating attitudes that are persistent, resistant, and predictive of behavior. In R. E. Petty, and J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences,* (pp. 93-130). New York, NY: Psychology Press.

Petty, R., Z. Tormala, C. Hawkins, and D. Wegener. 2001. Motivation to think and order effects in persuasion: The moderating role of chunking. *Personality and Social Psychology Bulletin* 27 (3): 332-344.

Prasad, V. 2019. *The next challenge in IT compliance reporting: SOC2 2017 Trust Services Criteria*. Available at: https://www.isaca.org/resources/news-and-trends/isaca-now-blog/2019/the-next-challenge-in-it-compliance-reporting-soc2-2017-trust-services-criteria (last accessed November 2021).

Robertson, J., and R. Houston. 2010. Investors' expectations of the improvement in the credibility of audit opinions following PCAOB inspection reports with identified deficiencies. *Accounting and the Public Interest* 10 (1): 36–56.

Sanchez, M. H., C. P. Agoglia, and R. C. Hatfield. 2007. The effect of auditors' use of a reciprocity-based strategy on auditor-client negotiations. *The Accounting Review* 82 (1): 241-263.

Schneider, W., and R. M. Shiffrin. 1977. Controlled and automatic human information processing I: detection, search and attention. *Psychological Review* 84: 1–66.

Sheldon, M. D., and J. G. Jenkins. 2020. The influence of firm performance and (level of) assurance on the believability of management's environmental report. *Accounting, Auditing & Accountability Journal* 33 (3): 501-528.

Strack, F., and R. Deutsch. 2004. Reflective and impulsive determinants of social behavior. *Personality and Social Psychology Review* 8 (3): 220–47.

Tan, H., and K. T. Trotman. 2010. Effects of the timing of auditors' income-reducing adjustment concessions on financial officers' negotiation judgments. *Contemporary Accounting Research* 27: 1207-1239.

Verrecchia, R. E. 1983. Discretionary disclosure. *Journal of Accounting and Economics* 5: 179-194.

Wolfe, C. J., E. G. Mauldin, and M. C. Diaz. 2009. Concede or deny: Do management persuasion tactics affect auditor evaluation of internal control deviations?. *The Accounting Review* 84 (6): 2013-2037.

Figure 1
SOC Reporting Structure

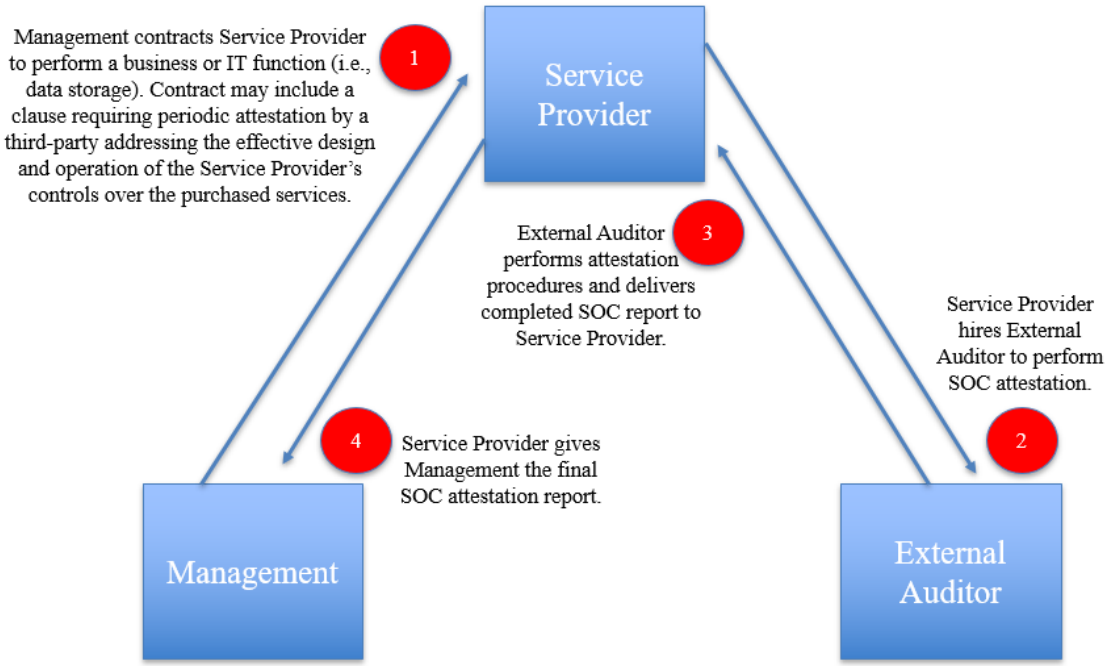
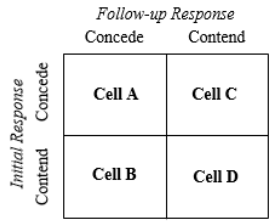


Figure 2
Managers' Information Processing based on Dual-Process Theories of Persuasion and Predictions of Risk Factor Processing and Service Provider Favorability



Core Elements of Argument			
Concede • Disconfirms expectations of service provider's response • Offers cues that the service provider is cooperative and not engaged in self-interested behavior • Leads to Type II processing	**Contend** • Confirms expectations of service provider's response • Offers cues that the service provider is non-cooperative and is engaged in self-interested behavior • Leads to Type I processing	**Type I Processing (Intuitive)** • Low scrutiny; focus on a subset of available information • Less-balanced processing of risk-increasing and risk-decreasing factors • More susceptible to persuasive appeals and heuristic cues	**Type II Processing (Deliberate)** • High scrutiny; focus on all available information • More-balanced processing of risk-increasing and risk-decreasing factors • Less susceptible to persuasive appeals and heuristic cues

Cell	Initial Response	Processing after Initial Response	Follow-up Response	Processing after Follow-up Response	Level of Scrutiny and Risk Factor Processing after all Responses are Received	Predicted Perceptions of Service Provider Favorability	Explanation
A	Concede	Type II	Concede	Type II	High scrutiny → Focus on all available information → Primacy effect → Balanced processing of risk-increasing and risk-decreasing factors	Similar to Cell C	The continued use of Type II processing makes managers less susceptible to persuasive appeals and heuristic cues, and more likely to highly scrutinize all available information. Thus, managers perform balanced processing of available risk-increasing and risk-decreasing factors, resulting in similar perceptions of service provider favorability in Cells A and C.
C	Concede	Type II	Contend	Remains in Type II (i.e., does not revert to Type I)	High scrutiny → Focus on all available information → Primacy effect → Balanced processing of risk-increasing and risk-decreasing factors	Similar to Cell A	
B	Contend	Type I	Concede	Type II	High scrutiny → Focus on all available information → Recency effect → Balanced processing of risk-increasing and risk-decreasing factors	More favorable than Cell D	The ultimate use of Type II processing in Cell B makes managers more likely to highly scrutinize all available information and be less susceptible to persuasive appeals and heuristic cues, while those in Cell D remain in Type I and thus vulnerable to these influences (i.e., given their low scrutiny and focus on a subset of available information). Managers in Cell B engage in balanced risk processing, while those in Cell D focus on risk-increasing factors, thus resulting in more favorable perceptions of the service provider in Cell B.
D	Contend	Type I	Contend	Type I	Low scrutiny → Focus on subset of available information (i.e., cues of non-cooperation and self-interest) → Recency effect → Process more risk-increasing factors	Less favorable than Cell B	

Figure 3
Graphical/Visual Representations of H1

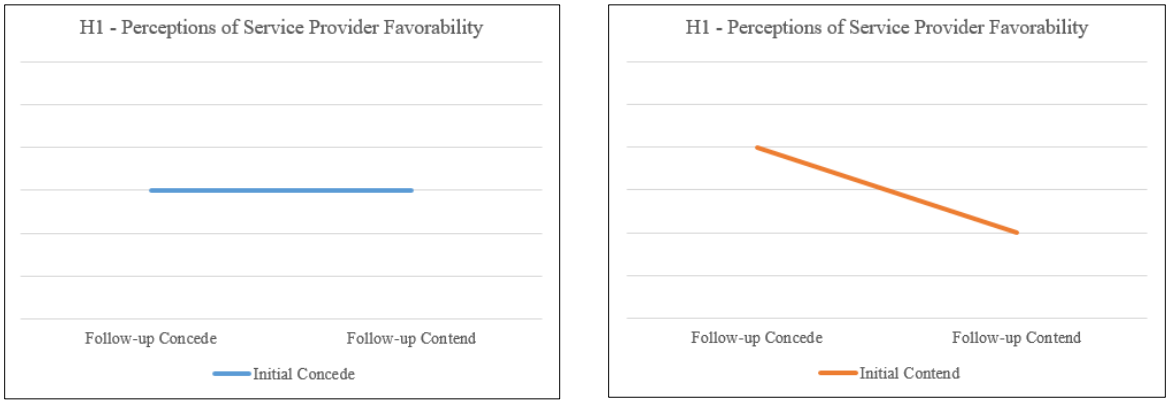


Figure 4
Graphical Representations of Dependent Variables' Means

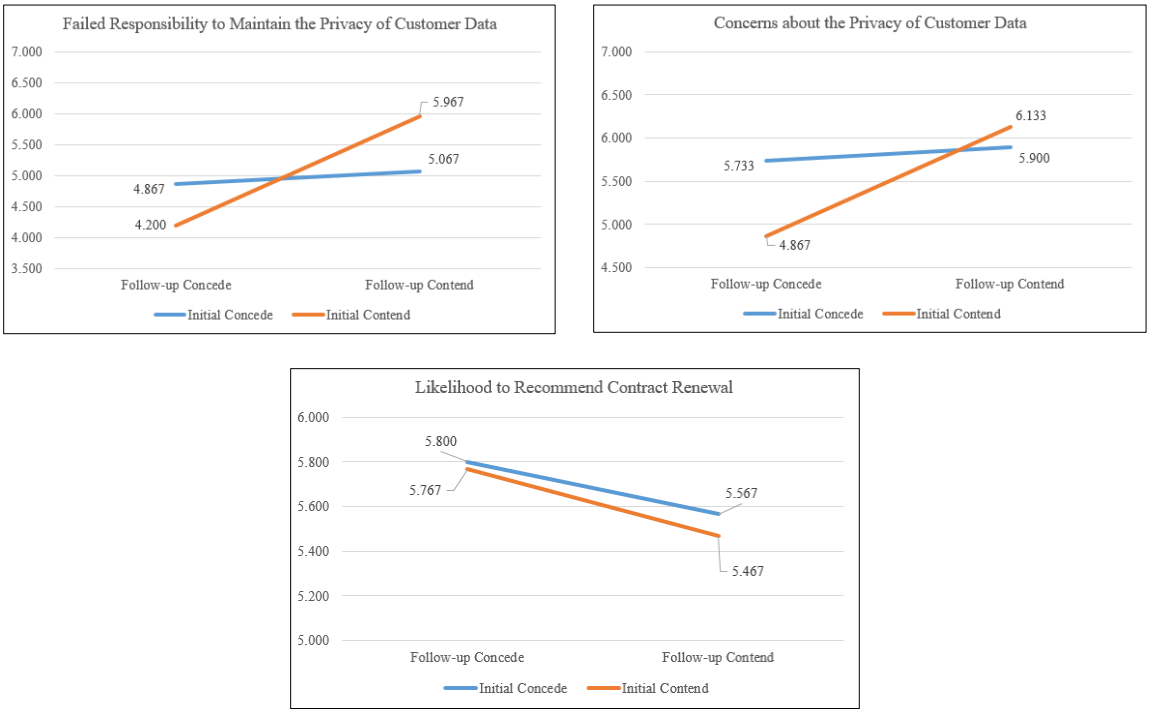


Figure 5
Path Analysis Results of Estimated Links using Standardized Coefficients

Model fit statistics: TLI = 1.02, $\chi 2$ = 10.05, p = 0.436; CFI = 1.00; RMSEA = 0.007.
*, **, *** Indicate significance at less than 0.10, 0.05, and 0.01 levels, respectively.
a: Initial response was coded 1 for a contending response and 0 for a conceding response.
b: Follow-up response was coded 1 for a contending response and 0 for a conceding response.
c: Net risk factors is determined by taking the number of risk-increasing statements less the number of risk-decreasing statements provided by participants when asked about the factors they considered in determining the likelihood they would recommend that management renew the contract with the service provider.
d: Trust was measured on a nine-point Likert scale indicating that participants trusted the service provider representative providing the follow-up response (1 = strongly disagree; 9 = strongly agree).
e: Failed to maintain the privacy of customer data was measured on a nine-point Likert scale indicating whether the service provider failed in its responsibility to maintain the privacy of customer data (1 = did not fail at all; 9 = completely failed).
f: Contract renewal likelihood was measured on a nine-point Likert scale indicating the likelihood that participants would recommend that management renew the contract with the service provider (1 = very unlikely to recommend renewing; 9 = very likely to recommend renewing).

Table 1
Big-4 Partner and Managing Director Inquiries on Section 5 of SOC2 Reports

Participant	Job Title	Years worked in public accounting	Years worked with SOC (or predecessor) reports	How do you see Section 5 of a SOC2 report utilized?	What motives do service providers have to use Section 5 to contest an internal control exception?
P1	Partner	20.5	20	Section 5 is an unaudited section of the report. As long as it is not blatantly false, the service organization can write what they so desire. Service organizations sometimes reply to exceptions disclosed and also provide other information about their organization.	Manage Relationships
P2	Partner	26	25	To address exceptions and/or to describe an area of focus that is unaudited	To reduce questions about the current criticality of the risk by the time the user receives the report. Manage the relationship. To share the timeline of the issue
P3	Partner	22	20	In more recent years, responses and other commentary related to exceptions are nearly the only thing I see in Section 5. Historically, companies would include other operational information but most have streamlined to just what is necessary and audited in section 4 (outside of responses to exceptions).	I have not seen management contest the finding. Agreement on the facts of the finding is a critical component of the process and supports the service organization's responsibility in their assertion.
P4	Partner	19	19	In SOC2s I have predominantly seen Section 5 used for management response toward reported control exceptions. This differs slightly from what my experience is with Section 5 in SOC1s in that in SOC1s we do see information added about areas that may be key operationally to the user organization, but not related to their financial reporting. In SOC2 since because the principals and criteria area very defined it does not seem like there is as much additional information to add, outside of exception responses.	Typically clients view it advantageous to share the additional detail or response to the control exception to try to be proactive in the communication with the user organizations and hopefully address some questions prior to follow up discussion.
P5	Partner	21	18	In my experience, Section V is typically utilized for responses to control deficiencies noted in Section IV or further information on the DRP/BCP.	I haven’t experienced contesting an exception. However, I would think that managing client relationships, including achieving SLAs and contractual obligations. Describing limited risk exposure would hopefully appease its constituents.
P6	Managing Director	21	10	Section 5 can be used to reconcile AICPA Trust Principles to the NIST standard, provide management response to exceptions identified and any policy information they'd like to share with clients that are beyond the scope of the SOC 2.	The main use of Section 5 is to provide additional information to readers to elevate the follow up conversations once the report is received and read.
P7	Partner	29	29	I see section 5 used for a couple of things recently - disaster recovery/business continuity, cyber programs and discussion around exceptions.	I wouldn't allow it. They must remain factual in their responses. I don’t allow opinion based information in their response.
M1	Managing Director	14	12	Given that Section 5 is an unaudited section, service orgs can use it for various things such as providing management responses to internal control exceptions disclosed in Section 4, specifically if	The motive is to provide additional context to exceptions and to hopefully ease any concerns that their customers might have. Managing relationships is certainly a factor.

				the response is forward looking. Generally speaking, management responses in Section 4 have to be tested/validated by the service auditor, but if it's in Section 5, it can be used to capture "future plans" to address the issue. We also see it used to capture mappings of controls tested in Section 4 against other control frameworks, such as NIST, ISO 27001, etc. for informational purposes.	
M2	Partner	22	22	My experiences are similar to [*M1*]. I would offer that in my experience, service organizations' use of this section to comment on internal control exceptions disclosed in section 4 IS the most common use of section 5 in SOC2 reports.	I don't consider the auditor's allowance of such commentary in section 5 as in keeping with the standards. That is because, while section 5 is 'unaudited', the standards required that the auditor read section 5 to determine whether it is materially inconsistent with management's description, management's assertion or the service auditor's report and/or material misstatements of fact and, if such inconsistencies / misstatements are identified, to address the matter with service organization management. Management commentary in section 5 contesting internal control exceptions would typically be considered a material inconsistency as previously defined. As such, in my experience, I have not seen such presentations in SOC reports.
M3	Managing Director	18	15	Section 5 is not audited by the service auditor, so service organizations use this section to convey messaging that they want their customers to better understand. For example, if the service organization is expecting changes or wants to comment more on exceptions noted in the report then this section would be used.	Since management of the service organization signs an assertion of their control environment, I don't think they use section 5 of a SOC report to contest internal control exceptions. They use it more to provide additional context to the reader of the report. This is mainly done because of the items you listed, but also understanding that they are in a service business and they are looking to make their customers happy.

Table 2
Demographics and Post-Experimental Questions

Panel A: Demographics and Post-Experimental Questions (Averages Reported)

	Initial Concede		Initial Contend		
	Follow-up Concede (n = 30)	Follow-up Contend (n = 30)	Follow-up Concede (n = 30)	Follow-up Contend (n = 30)	Total
Familiarity with SOC 2 reports (1 = Very Unfamiliar and 9 = Very Familiar)	4.53	4.37	4.33	4.83	4.52
Experience working with internal controls (1 = No Experience and 9 = Significant Experience)	5.47	6.00	5.30	5.43	5.55
Years of experience in the business world	15.37	15.73	16.73	13.03	15.22
I understand the facts surrounding the internal control exception (1 = Strongly Disagree and 9 = Strongly Agree)	7.50	7.40	6.90	6.70	7.10
I understand the impact of the internal control exception (1 = Strongly Disagree and 9 = Strongly Agree)	7.37	7.57	7.17	6.93	7.26

Panel B: One-Way ANOVAs of Demographic and Post-Experimental Questions (Model Results Reported)

Question	SS	df	MS	F-Stat.	p-value [a]
Familiarity with SOC 2 reports	4.70	3	1.57	0.177	0.91
Experience working with internal controls	8.57	3	2.86	0.408	0.75
Years of experience in the business world	220.78	3	73.57	0.997	0.40
I understand the facts surrounding the internal control exception	13.43	3	4.48	1.644	0.19
I understand the impact of the internal control exception	6.63	3	2.21	0.895	0.45

[a] All p-values are two-tailed.

Table 3
Failed Responsibility to Maintain the Privacy of Customer Data [a]

Panel A: Descriptive Statistics: Means, (Standard Deviation), Number of Observations

Initial Response	*Follow-up Response*				
	Concede		**Contend**		**Overall**
Concede	[A]	4.867 (2.688) n = 30	[C]	5.067 (2.116) n = 30	4.967 (2.400) n = 60
Contend	[B]	4.200 (1.883) n = 30	[D]	5.967 (2.297) n = 30	5.083 (2.265) n = 60
Overall		4.533 (2.325) n = 60		5.517 (2.236) n = 60	

Panel B: ANOVA

Source of Variation	**SS**	**df**	**MS**	**F-Stat.**	**p-value [b]**
Initial Response	0.41	1	0.41	0.08	0.78
Follow-up Response	29.01	1	29.01	5.65	0.02
Initial X Follow-up Response	18.41	1	18.41	3.59	0.03
Error	595.10	116	5.13		

Panel C: Planned Contrast Test [c]

Source	**SS**	**df**	**MS**	**F-Stat.**	**p-value [b]**
Contrast	29.01	1	29.01	5.65	0.02
Residual between-cells variance	18.82	2	9.41	1.83	0.16
Error	595.10	116	5.13		

Proportion of between-cells variance not explained by the contrast (q^2): 0.39

Panel D: Simple Effect Tests

Source	**Cells**	**df**	**t-stat**	**p-value [b]**
Initial Concede, Follow-up Concede vs. Follow-up Contend	[A - C]	116	-0.34	0.73
Initial Contend, Follow-up Concede vs. Follow-up Contend	[B - D]	116	-3.02	< 0.01
Initial Concede vs. Initial Contend, Follow-up Concede	[A - B]	116	1.14	0.26
Initial Concede vs. Initial Contend, Follow-up Contend	[C - D]	116	-1.54	0.13

[a] The dependent variable asked participants if they believed Atlantic, the service provider, failed in its responsibility to maintain the privacy of their company's customer data. This was measured using a nine-point Likert scale with endpoints labeled "Did not fail" (1) and "Completely failed" (9).
[b] All p-values are two-tailed, with the exception of the interaction term (Initial X Follow-up Response), which is one-tailed.
[c] Panel C presents the results of a planned contrast test, used to evaluate the inequality: D – B > C – A. Here, contrast weights are coded as follows: Cell A Initial Concede / Follow-up Concede (-1), Cell B Initial Contend / Follow-up Concede (-1), Cell C Initial Concede / Follow-up Contend (+1), and Cell D Initial Contend / Follow-up Contend (+1).

Table 4
Concerns about the Privacy of Customer Data [a]

Panel A: Descriptive Statistics: Means, (Standard Deviation), Number of Observations

Initial Response	*Follow-up Response*		
	Concede	**Contend**	**Overall**
Concede	[A] 5.733 (2.504) n = 30	[C] 5.900 (2.023) n = 30	5.817 (2.259) n = 60
Contend	[B] 4.867 (2.129) n = 30	[D] 6.133 (1.697) n = 30	5.500 (2.103) n = 60
Overall	5.300 (2.346) n = 60	6.017 (1.855) n = 60	

Panel B: ANOVA

Source of Variation	**SS**	**df**	**MS**	**F-Stat.**	**p-value [b]**
Initial Response	3.01	1	3.01	0.68	0.41
Follow-up Response	15.41	1	15.41	3.47	0.07
Initial X Follow-up Response	9.08	1	9.08	2.04	0.08
Error	515.50	116	4.44		

Panel C: Planned Contrast Test [c]

Source	**SS**	**df**	**MS**	**F-Stat.**	**p-value [b]**
Contrast	15.41	1	15.41	3.47	0.07
Residual between-cells variance	12.08	2	6.04	1.36	0.26
Error	515.50	116			

Proportion of between-cells variance not explained by the contrast (q^2): 0.44

Panel D: Simple Effect Tests

Source	**Cells**	**df**	**t-stat**	**p-value [b]**
Initial Concede, Follow-up Concede vs. Follow-up Contend	[A - C]	116	-0.31	0.76
Initial Contend, Follow-up Concede vs. Follow-up Contend	[B - D]	116	-2.33	0.02
Initial Concede vs. Initial Contend, Follow-up Concede	[A - B]	116	1.59	0.11
Initial Concede vs. Initial Contend, Follow-up Contend	[C - D]	116	-0.43	0.67

[a] The dependent variable asked participants if they have concerns about the privacy of customers' data given their relationship with the service provider. This was measured using a nine-point Likert scale with endpoints labeled "Not at all concerned" (1) and "Very concerned" (9).
[b] All p-values are two-tailed, with the exception of the interaction term (Initial X Follow-up Response), which is one-tailed.
[c] Panel C presents the results of a planned contrast test, used to evaluate the inequality: D – B > C – A. Here, contrast weights are coded as follows: Cell A Initial Concede / Follow-up Concede (-1), Cell B Initial Contend / Follow-up Concede (-1), Cell C Initial Concede / Follow-up Contend (+1), and Cell D Initial Contend / Follow-up Contend (+1).

Table 5
Net Risk Factors

Descriptive Statistics: Means, (Standard Deviation), Number of Observations

Initial Response	*Follow-up Response*				
	Concede		**Contend**		**Overall**
Concede	[A]	-0.0385 (2.863) n = 26	[C]	-0.1429 (3.274) n = 28	-0.0926 (3.055) n = 54
Contend	[B]	-0.9630 (2.488) n = 27	[D]	0.9545 (3.229) n = 22	-0.1020 (2.974) n = 49
Overall		-0.5094 (2.693) n = 53		0.3400 (3.268) n = 50	

Net risk factor measure is determined by taking the number of risk-increasing statements less the number of risk-decreasing statements provided by participants when asked about the factors they considered in arriving to their conclusion on whether to recommend a contract renewal. For example, a mean score closer to +1 indicates a focus on more risk-increasing factors, whereas a mean score closer to -1 indicates a focus on more risk-decreasing factors. Cells with sample sizes less than 30 indicate that some participants in those cells did not provide a written response to this question, or did not provide responses that could be coded by the authors as risk-increasing or risk-decreasing.