Increasing Software as a Service (SaaS) Customer Retention: Do Intangible Factors Matter?

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EDITORIAL NOTE

A strategy of replacing product-oriented business models with service-oriented business models has proven its worth in many management arenas. But such transitions can be treacherous either for late-to-market players when a market leader makes such a shift, or for market leaders who have made such a shift and now must face subsequent competitors seeking to gain market share with their own better service business models. As such service markets mature, what are the most well-founded practices for keeping customers happy to help retain and increase market share? In this topics article, Jim Schleckser examines the evidence and the science that justifies a thorough attention to intangible factors in relational marketing management. While the context of Schleckser's research is software-as-a-service, his findings lend credibility to similar practices for any business anchored to service-oriented business models. These well-grounded practices include building trust through service quality and openness, together with relationship management through cooperation, flexibility, responsiveness, plus care in managing relationship risks.

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ABSTRACT

This topic paper examines whether intangible customer relationship factors drive customer retention for a subscription-based software business. My analysis is based on a review of peer-reviewed articles that focus on renewal intent for subscription-based offerings. Subscription-based offers can include a range of products, from enterprise software to IT support to streaming video services. My findings indicate that intangible relationship factors are essential to the renewal intent of subscription-based software. Intangible relationship factors are not directly related to the product but do affect relationship quality, including social factors like trust and technical aspects like knowledge transfer. A company focused on customer retention would be well served to attend to these intangible elements, including emotional factors, relationship factors, and relationship management. This focus differs from the traditional attention paid to the product and the value exchange with the customer. Favorable value exchange is necessary but not sufficient for high customer retention.

RESEARCH QUESTION

The review question for this topic paper is this: *Does the consideration of intangible relationship factors increase business customer retention for subscription-based software businesses?*

Table 1: PICOC Framework

PICOC Element	Description
Problem	Customer retention
Intervention	Management of intangible relationship factors
Comparison	Compared to the neglect of intangible factors
Outcome	Increased customer retention
Context	Subscription-based software businesses

BACKGROUND

Kamakura et al. (2005) define churn as the tendency for customers to defect from or cease business with a company. Customer retention is the inverse of churn: the propensity for customers to remain with a company. A software business targeting enterprise customers should see at least a 90% retention rate of clients from one year to the next to be considered best-in-class (Vista Point Advisors, 2022). This retention rate represents an average customer relationship of 10 years and acknowledges the high lifetime value of customers. Increased customer retention causes a ripple effect on growth, predictability of business financial performance, and valuation when the company is sold (Cohen & Neubert, 2019). Retaining existing customers represents approximately 20% of the cost of acquiring a new customer (Bahnsen et al., 2015). Keeping customers is less expensive for the company, and changing products is more costly for the client. Therefore, maintaining the business relationship is of interest to both parties.

Marketing and customer relationships have shifted from a transactional to a relational view since Gronroos (1995) advocated for a relational approach outside of the service industry. An exchange of value and experiences between a supplier and customers can influence the customer's decision to continue the relationship. Traditional marketing focuses on the exchange of value, but less attention is paid to the experiences and intangible elements of the relationship. Intangible elements in a customer relationship, such as adaptability, trust, and cooperation, are not directly related to the product or service, but they influence customer perception of the business relationship (Bùrca et al., 2004). Compelling evidence suggests that businesses lose their customers' loyalty mainly because they do not pay sufficient attention to their relationships with these customers (Bùrca et al., 2004). Intangible factors mentioned by customers include flexibility, trust, technical information, and service personalization, among others These relationships have moved to longer term ongoing relationships that increase in maturity and depth over time. Relationship management is relevant for software as a service (SaaS) and for any business seeking extended revenue streams and relationships (Gronroos, 1995). The shift is best described by Gronroos (1995, p. 253): "[T]he goal of transactional marketing is to get customers, whereas the goal of relational marketing is to get *and keep* customers."

The findings from this topic paper identify potential pathways to improved relationships and thus aid customer retention. Revenue growth is more predictable when businesses can minimize the need to replace lapsed customers. SaaS providers with high customer retention have a more predictable revenue flow and can better plan for financial performance (Maldonado, 2015).

SEARCH STRATEGY AND RESULTS

I searched three databases: Business Source Complete, a business and management article database; Scopus, a broad-based peer-reviewed article database; and ProQuest, a compilation of scholarly databases. I selected these databases for their breadth and the specific inclusion of business and management articles. I found additional articles by analyzing the reference lists of high-quality papers for other relevant studies. A summary of the search strings appears in Figure 1. The search string used was (Business-to-Business" OR B2B OR SaaS OR Software-as-a-service) AND (Loyalty OR Continuance OR Satisfaction OR renewal OR Churn OR commitment).
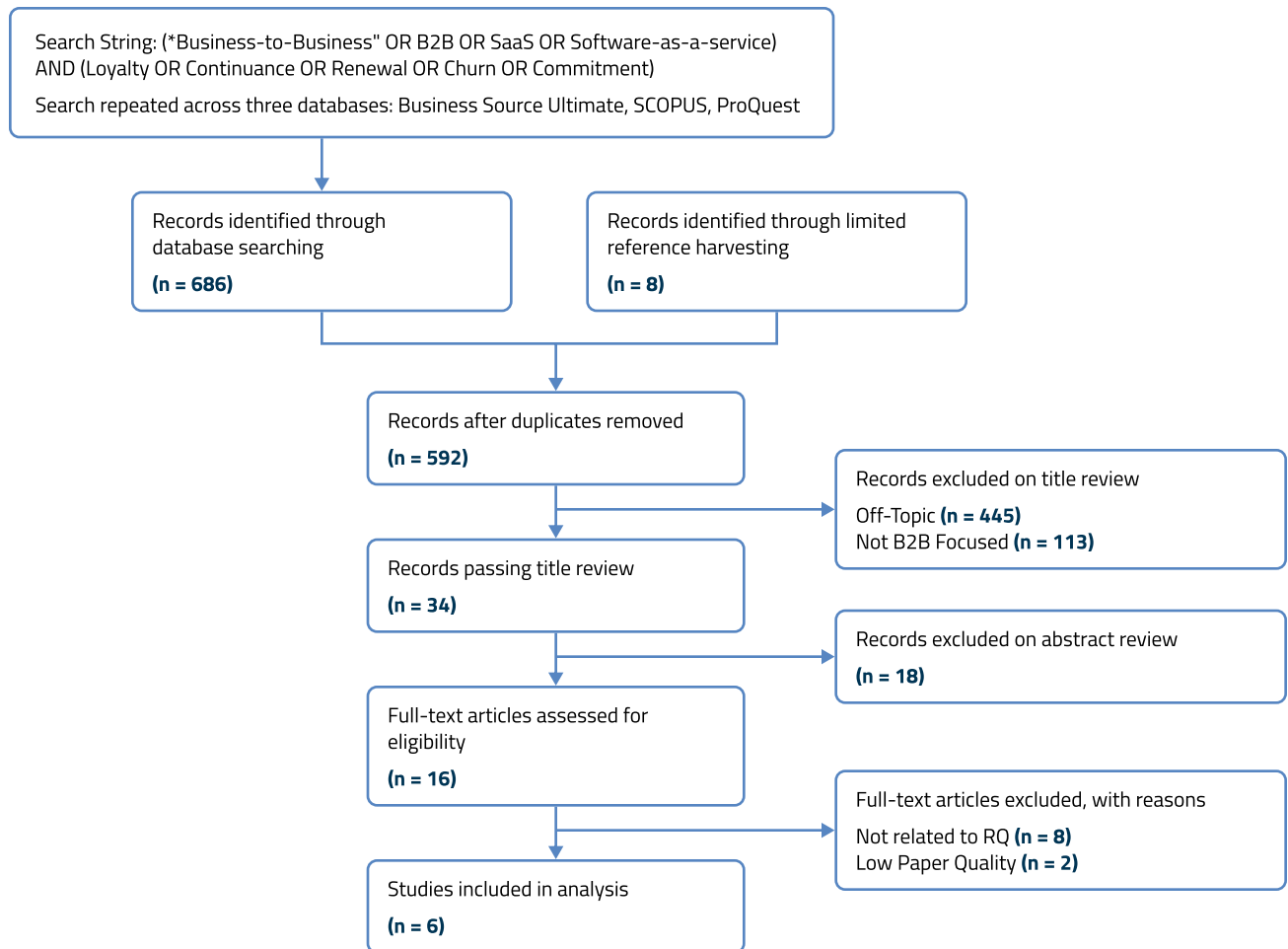
I limited the search period to articles after 2000 because of the relatively recent development of SaaS. I further constrained the search to full text, English language, and peer-reviewed articles. This search yielded 686 results for consideration, and 8 additional articles were identified by snowballing from the original search result articles. After I removed duplicate articles, 592 articles remained for more detailed analysis.

I reviewed the final sample of 592 articles to determine relevance, analyzing the paper titles and also the abstracts if the title was unclear. From this sample, papers were included if they were from proceedings or journals; dealt with a subscription business, customer renewal, or retention; and were primary research. Articles were excluded if they were non-academic literature, systematic reviews, case studies, business-to-consumer populations, or not written in English. The study selection flow is presented in Figure 1.

This down-selection yielded 34 articles for further consideration. I reviewed the 34 articles, focusing on both the research question and the sample used in the study. Of the 34 articles, I put aside 18 as irrelevant to the review question. I then reviewed the remaining articles in detail, considering the entirety of the paper, including methodologies, introduction, conclusions, and sample population. Of the

Figure 1: Search Flowchart

Search String: (*Business-to-Business" OR B2B OR SaaS OR Software-as-a-service) AND (Loyalty OR Continuance OR Renewal OR Churn OR Commitment)

Search repeated across three databases: Business Source Ultimate, SCOPUS, ProQuest

Records identified through database searching (n = 686)

Records identified through limited reference harvesting (n = 8)

Records after duplicates removed (n = 592)

Records excluded on title review
Off-Topic (n = 445)
Not B2B Focused (n = 113)

Records passing title review (n = 34)

Records excluded on abstract review (n = 18)

Full-text articles assessed for eligibility (n = 16)

Full-text articles excluded, with reasons
Not related to RQ (n = 8)
Low Paper Quality (n = 2)

Studies included in analysis (n = 6)

remaining 16 articles, 10 lacked robust literature reviews, specific research questions, clear hypotheses, or a significant discussion of results, or further analysis revealed little applicability to the review question. The final sample, including six articles from various journals and geographies, is shown in Table 2.

Benlian et al. (2011) developed, refined, and tested SaaS-Qual, a zone-of-tolerance (ZOT)–based service quality measurement model specifically for SaaS solutions. In addition to validating already established service quality dimensions (i.e., rapport, responsiveness, reliability, and features), the authors identify two new factors (i.e., security and flexibility) that are essential for evaluating the service quality of SaaS solutions. SaaS-Qual demonstrates strong psychometric properties.

Čater and Čater (2010) found that customer loyalty depends more on "emotional" (affective commitment) motivation than on "rational" (negative calculative commitment and product quality) motivation to continue the relationship. The authors build a predictive model on these factors, weighing their influence on continuation intent.

Chou and Chiang (2013) use dedication–constraint mechanisms as a theoretical lens to explain how trust affects satisfaction, including competence-based and openness-based trust, and how service quality affects trust. They also investigated the moderating effect of relational norms when examining the influence of trust on satisfaction and developed a model based on the theoretical framework.

Ghosh et al. (2019) performed qualitative surveys of North American software publisher employees to build a synthesized picture of the current industry practice related to the end-to-end software license renewal process. They presented descriptive statistics on the results and a framework for renewal decisions.

Table 2: Search Results

Study #	Article Reference
1	Benlian, A., Koufaris, M., & Hess, T. (2011). Service quality in software-as-a-service: Developing the SaaS-Qual measure and examining its role in usage continuance. *Journal of Management Information Systems*, *28*(3), 85–126.
2	Čater, T., & Čater, B. (2010). Product and relationship quality influence on customer commitment and loyalty in B2B manufacturing relationships. *Industrial Marketing Management*, *39*(8), 1321–1333.
3	Chou, S., & Chiang, C. (2013). Understanding the formation of software-as-a-service (SaaS) satisfaction from the perspective of service quality. *Decision Support Systems*, *56*(1), 148–155.
4	Ghosh, A., Nashaat, M., & Miller, J. (2019). The current state of software license renewals in the IT industry. *Information and Software Technology*, *108*(January), 139–152.
5	Xiao, X., Sarker, S., Wright, W., Sarker, S., & Mariadoss, B. (2020). Commitment and replacement of existing SaaS-delivered applications: A mixed-methods investigation. *MIS Quarterly*, 44(4), 1651–1678.
6	Yang, C., & Chou, S. (2015). Understanding the success of software-as-a-service (SaaS)—the perspective of post-adoption use. *Pacific Asia Conference on Information Systems, PACIS 2015 Proceedings*, 198.

Xiao et al. (2020) used a mixed-methods approach, drawing on the cognitive-affective–conative–action (CACA) framework to investigate the IS replacement phenomenon in the context of SaaS-delivered applications. They differentiated commitment to the SaaS application vs. commitment to SaaS technology in general. The quantitative study validated how the two types of commitment influence organizations' intentions to replace a SaaS application and allowed for the development of a predictive model.

Yang and Chou (2015) explored the effects of service quality on trust, affecting a client firm's post-adoption use in SaaS. Having developed a model that included service quality, trust, and SaaS post-adoption as independent variables, they found that client orientation quality, client response quality, and environmental quality positively affect the quality of customers' faith in service. In addition, client orientation and environmental quality positively influenced trust in the provider.

Table 3 presents a snapshot of each article by author, the research approach used, and the empirical basis and analytical method of the research, as well as a critical evaluation of the overall validity of these studies.

Table 3: Evaluation of Overall Validity

Study# & Author	Research Approach	Empirical Basis	Analysis Method	Overall Validity
1–Benlian et al., (2011)	Quantitative; survey and model development	Survey of 172 German IT executives	Statistical analysis and model verification	High validity: Conclusions follow from the literature review, statistical analysis, and model
2–Čater & Čater (2010)	Quantitative; survey and model development	Survey of 477 Slovenian purchasing managers	Statistical analysis and model verification	High validity: Conclusions follow from the literature review, statistical analysis, and model
3–Chou & Chiang (2013)	Quantitative; survey and model development	Survey of 124 Taiwanese senior IT managers	Statistical analysis and model verification	High validity: Conclusions follow from the literature review, statistical analysis, and model
4–Ghosh et al. (2019)	Qualitative; interviews	Interviews with 20 North American software publisher employees	Descriptive statistics	High validity: Results derived directly and transparently from interview data
5–Xiao et al. (2020)	Mixed-method; interview and survey model development	Interview and survey of 190 Taiwanese cloud computing-using customers	Statistical analysis and model verification	High validity: Results derived directly and transparently from interview data
6–Yang & Chou (2015)	Quantitative; survey and model development	Survey of 246 Taiwanese executives using SaaS	Statistical analysis and model verification	Moderate validity: Conclusions follow analysis; paper is from conference proceedings

RESEARCH

For a description of the findings and a synthesis of the evidence gleaned from the research in the six articles, see Table 4. My review of the articles showed that findings of what influences customer retention for SaaS providers fall into three main categories: emotional factors, relationship factors, and relationship management.

Table 4: Key findings and translation of the collective finding

Study# & Author	Category 1: Emotional Factors	Category 2: Relationship Factors	Category 3: Relationship Management
1–Benlian et al. (2011)		Responsiveness and security have the most substantial effect on customer satisfaction.	Customer relationship management can involve the setting of expectations, such as uptime guarantees or response time.
2–Čater & Čater (2010)	Emotional motivation is a stronger driver than rational motivation; it evolves in a cooperative atmosphere and with a supplier considered benevolent and trustworthy.	Customer commitment comes from knowledge transfers, adaptation, and cooperation.	Focus should be on relationship building and on developing long-term mutual advantages. Customers will be more committed and loyal if they correctly perceive such relationship-oriented efforts.
3–Chou & Chiang (2013)	Trust has a theoretically and empirically sound relationship to satisfaction, including for SaaS customer retention.	Flexibility by suppliers, including commercial terms, scalability, interoperability, and modularity, is a way that customers measure relationship quality.	Suppliers can influence customer satisfaction by demonstrating competency-based trust and openness-based trust.
4–Ghosh et al. (2019)		Dedicated customer support teams can be structured to focus on different revenue groups, thus improving customer service, which is a key relationship factor.	Low supplier relationship quality indicators include partial customer renewal, gradually dropping licenses, and low communication responsiveness.
5–Xiao et al. (2020)	Customer commitment is composed of both affective/emotional and calculative/rational components.	SaaS service quality influences customer satisfaction, influencing customer commitment to the application and to SaaS technology.	Suppliers should manage customer commitment to the application and the technology to increase retention.
6–Yang & Chou (2015)	Trust in the provider exerts a stronger influence on the intention to continue than trust in service quality.	SaaS providers can focus on client orientation quality, client response quality, and environmental quality to retain customers and earn trust.	Active management of service quality through client orientation, product quality, client response quality, and environmental quality reduces client uncertainty and improves retention.
Translation	Trust is the most critical element within the emotional factors; it includes consideration of service quality, openness, and competency and can be managed by consistently meeting commitments.	Relational factors include adaptation by the supplier, cooperation, flexibility, information quality, responsiveness, and service quality, leading to a positive supplier–user relationship.	Communications, customer relationship evaluation, customer relationship risk, customer risk management, and active relationship management control relationship management quality.

Emotional factors. Emotional factors could also be called affective commitment or perceived emotional attachment to the organization (Čater & Čater, 2010). Emotional factors relate to the perception of the relationship and are essential in the retention of clients (Čater & Čater, 2010). Evaluating the emotional commitment of a SaaS supplier is part of clients' retention decision and can incorporate elements like rapport, positive relations, and cooperation (Chou & Chiang, 2013). Ultimately, trust is the most critical of the emotional factors and includes considerations related to service quality, openness, and competency (Chou & Chiang, 2013; Yang & Chou, 2015). A supplier can manage trust by meeting commitments consistently (Yang & Chou, 2015). This finding was supported by articles 2, 3, 5, and 6.

Relationship factors. Relationship factors are the technical elements that lie at the crossroads where supplier and customer meet, such as adaptation of the offer and knowledge transfer (Čater & Čater, 2010). These relationship factors are positively perceived by the customer and are mainly under the supplier's control, but they also can generate a sense of reciprocal obligation in the client (Čater & Čater, 2010). Customers monitor these observable items like involvement in the product development roadmap or a customer specific modification to develop a view of their relationship with the supplier and of the supplier's priorities. The items might even be listed or explained in a service-level agreement (Yang & Chou, 2015). These characteristics of business operations, such as flexibility, adaptation, cooperation, information quality, and service quality, are not product features; nor are they relational features in the same way that trust is. Nevertheless, they drive the customers' measure of the relationship (Chou & Chiang, 2013). Service quality, which may be the most controllable of these factors, directly relates to satisfaction and commitment (Benlian et al., 2011). Dedicated support teams and effective training on interpersonal service are two means of addressing service quality (Ghosh et al., 2019).

As noted, the elements of this finding include adaptability by the supplier, cooperation, flexibility, information quality, responsiveness, and service quality and are important in leading to a positive supplier–customer relationship. All the articles reported such findings.

Relationship management. Relationship management is an active and ongoing effort between the supplier and the client (Ghosh et al., 2019). This finding comprises all the emotional and relational factors that customers use to evaluate relationship continuation. The opposite of relationship management would be a transactional exchange of goods, without further interaction (Bùrca et al., 2004). Regular and effective customer communications enable suppliers to reinforce the customers' perceptions of the relationship and the value exchange (Ghosh et al., 2019). These communications demonstrate competency and allow the supplier to evaluate the relationship's strength (Chou & Chiang, 2013; Ghosh et al., 2019).

Trust balances and moderates customers' perceptions of non-performance risk, which also encompasses personal and organizational risk—particularly during transitions like product upgrades (Yang & Chou, 2015). The finding of trust as a moderator directs SaaS companies to find ways to communicate in a manner that instills trust in clients they desire to retain.

Elements of the findings in this area address communications, customer relationship evaluation, customer relationship risk, and management of customers' perception of risk. Customer relationship risk and customer risk perception differ in that relationship risk refers to analysis of the probability of a client's exiting. In contrast, managing customers' perception of risk deals with the supplier's actual or perceived risk of non-performance. All the articles incorporated this finding in some manner.

CONCLUSION

A SaaS provider's management of intangible social and technical relationship elements can improve customer retention. Specifically, SaaS providers should focus on customers' perceptions of technological and social relationship factors that can be monitored and improved with regular, active relationship management.

Bringing the three categories of findings together, SaaS providers should focus on trust-building actions that improve the social relationship factors and that demonstrate positive technical relationships through flexibility, responsiveness, and good post-purchase service. Providers can monitor and manage relationships through active communication, expectation setting, competence, and long-term thinking about the relationship.

RECOMMENDATIONS

SaaS companies that want a high degree of customer retention need to manage both the social and the technical intangible elements of customer relationships. Suppliers should not ignore the need for a core product offer that has good exchange value, with good value for the price. In conjunction with this basic product requirement, they can improve client retention with non-product based actions.

Grow trust. Trust is the central element of the social relationship, and high retention comes from an ability to inspire and grow trust between the supplier and the customer (Chou & Chiang, 2013). Trust can be developed through openness and competency (Yang & Chou, 2015). Consistently meeting obligations to a customer most effectively grows trust in a SaaS supplier (Yang & Chou, 2015). Although committing to fulfill any request from a client may be tempting, successful SaaS companies are careful only to make commitments they have a high degree of confidence in achieving. Such careful strategizing is able to grow customer commitment levels by building trust.

On some occasions, commitments may be made but not fulfilled, and in this case, a collaborative environment with high rapport and cooperation can be crucial in maintaining trust levels and retaining the client (Chou & Chiang, 2013). The goal is always to fulfill a commitment. When suppliers do not fulfill a promise made, they must take a transparent and collaborative approach with customers to resolve the issue and maximize client retention.

Implement knowledge transfer. Knowledge transfer is a critical technical element that customers use to measure the quality of a relationship, and SaaS suppliers should look for opportunities to transfer knowledge to customers (Benlian et al., 2011). Increased knowledge transfer can come from training, market updates, involvement in the product roadmap, or techniques to get maximum results from the software. Many SaaS providers have created user groups and events for these user groups to share ideas and approaches for the best results.

Upgrade service quality. Service quality is a critical technical relationship metric that clients use to evaluate the supplier of a product, and it affects their intent to renew (Benlian et al., 2011). Improved service quality can be delivered by front-line employees trained to show responsiveness in customer relations (Chou & Chiang, 2013). Measures of service quality include the time to respond to an issue, the time to resolve the problem, and the client's satisfaction with the resolution (Ghosh et al., 2019). Service quality is a non–product-related factor that customers use to determine their intent to renew. It needs to be as carefully designed and engineered as the core product.

Implement relationship management. Improved relationships do not happen accidentally; active management of the technical and social relationship elements is needed to ensure a relationship's maintenance and improvement (Čater & Čater, 2010). SaaS suppliers should deploy this active management through regular customer communications to build openness and competency-based trust (Ghosh et al., 2019). Regular contact can take the form of monthly or quarterly formal communications between the supplier and the customer, as well as frequent contact points between customers and customer service representatives. Ideally, SaaS suppliers collect the information generated in these contacts and store it in a customer relationship management system.

Monitor warning signs. Client flight risk can and should be measured during regular communications (Xiao et al., 2020). Such measures should be integrated with other risk signals, such as a reduction in the number of licenses, slow client communication response times, and partial renewals of the service (Ghosh et al., 2019). Deploying an early warning system allows SaaS providers to take proactive steps to improve the relationship before the client lapses.

LIMITATIONS AND FUTURE RESEARCH

This review of the literature has a few limitations. First, in such a rapid investigation, what is gained in speed may be lost in depth and comprehensiveness. Relevant factors or findings may have been missed in this analysis because of its brevity. Second, many of the articles are from non-US populations, which may limit their applicability; the results may not be entirely appropriate for US-based SaaS providers, for example. Although I detected no obvious bias in the articles, some findings may lack relevance because of cultural differences.

This topic paper depended on the available data sources and articles. Future researchers might take these recommendations and perform controlled experimentation, separating clients into control and treatment groups and applying interventions, or they might undertake a longitudinal study pre-and post-intervention. Client selection may have implications for retention as well; this perspective could be expanded as a research topic to help providers understand how to identify and attract the kinds of clients that tend to be more loyal. Retention rates for clients may vary by industry, and the effects of market and culture on retention offer another promising area of investigation.

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