

**The New Organizational Gatekeeper:
Enhancing Reputation Management Through Data**

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Abstract

This research explores the role data plays in helping organizations manage their reputation. The results are based on 13 interviews with senior communications professionals within the private and public sectors across North America. The research results indicate how data-driven platforms and tools have altered the practice of reputation management. Respondents from across a spectrum of industries acknowledged the value of incorporating data-driven platforms into their communications strategies and day-to-day operations. The results also provide a practical framework informed by North American companies who are successfully using data analytics tools, platforms and knowledge to improve and enhance the communications function. This research study elaborates where further studies can examine best practices for utilizing data to both better inform communications management, but also elevate its status amongst business leaders.

Keywords: reputation, communications management, data, public relations, two-way symmetrical communication, relationship management

Executive Summary

The use of data will continue to infiltrate the way organizations across various sectors make decisions, from budgetary and resource allocation to their marketing and communication efforts (Cukier & Mayer-Schoenberger, 2013; Dykes, 2019; Kelm & Johann, 2023; Sweeney, 2013). Data will also play a role in the determination of content development and execution (Argenti et. al, 2018). The gradual incorporation of data and the analytics derived from its evaluation represent a major transformation for the business world as we know it (Cukier & Mayer-Schoenberger, 2013). This is especially apparent in the way data analytics will inform communications strategy and tactics.

Communications Technology, also referred to as CommTech, provides an opportunity to enhance performance and transformation that emphasizes dynamic content and identification of on-brand opportunities. According to a recent survey of over 100 chief communications officers (CCOs) across Canada conducted by Flynn and Lavi (2023), almost 57% of respondents indicated CommTech has been critical to their team's success in the last three years and 36% believe CommTech has without question made a measurable impact for their communications teams. As Bruning and Ledingham (2000) put forth, "the movement from measuring communication outputs to linking public relations activities to key public members' symbolic and behavioral [relationship] outcomes" (p. 88) is becoming more paramount. This has become increasingly the norm rather than the exception, as stakeholders, especially the general public, have put more emphasis on trust in businesses. The latest Edelman Trust Barometer results continue to indicate organizations are becoming the beacon for trust (Edelman, 2023). Possessing a favorable reputation has many tangible benefits for organizations, such as reduced attrition and elevated customer loyalty (Coombs & Holladay, 2006; Dowling, 2002), so developing and maintaining it should be of vital importance. As Hutton et al., (2001) highlights, the process of managing an organization's reputation is "a rather awkward, superficial and potentially self-defeating endeavor" (p. 249). Incorporating a measurement and analytics function within communications should allow practitioners to bring into the fold data analytics with human intervention.

Key Findings and Implications

Through qualitative interviews, participants noted that putting CommTech tools into practice has many tangible benefits. From analyzing sentiment, volume and whether messages are resonating with target audiences, chief communications officers and their teams can harness these tools to provide more informed counsel to senior leadership. As one participant from the post-secondary sector remarked, "these tools are allowing us to make evidence-based decisions and giving communicators a true sense of what is happening. Our decisions become based in the data, and we can action and respond in real-time." A participant from the government sector remarked how the use of CommTech is helpful for "monitoring stories and mentions in the media that could have reputational impacts for our institution so we can identity, plan and respond." All participants also agreed that the use of these tools brought value to their organization by allowing their actions to support their organization, in terms of strategy and response.

Why This Research Matters to the Public Relations Profession

The results of this research reveal the role data-driven decision-making plays in communications management. The shift towards an evidenced-based approach to communications management represents an opportunity for the profession to elevate itself from a cost centre to a revenue generating function (Edelman, 2021). The shift will help not only propel the profession away from selective bias, but it will also ensure that communications is viewed and actively engaged by an organization's senior leadership for critical decision-making.

Introduction

Data is changing the world around us as we know it and is poised to reshape how we work, think and live (Cukier & Mayer-Schoenberger, 2013). The unprecedented volume of data generated by technology, social media platforms and applications, combined with advanced computing storage and processing power, is propelling the digital-first economy at lightening speeds (Arthur W. Page Society, 2016). The widespread prevalence of data is also making immense shifts in the way the communications industry is operating (Wiesenberg, Zerfass & Moreno, 2018; Smalec, 2021).

CommTech, is beginning to transform the communications function by delivering meaningful and quantifiable value to an organization and its leadership (Arthur W. Page Society, 2021; Brockhaus et al., 2022; Edelman, 2021; Weiner, 2021). CommTech has the potential to propel the profession and its practice from a proactive function to a predictive function, providing better avenues for engagement with stakeholders and helping practitioners forge new skills and digital capabilities (Benigson, 2021; Samson & O'Leary, 2020). In particular, the use of data can "inform PR decision making from the initial steps of forming a strategy, to getting ahead of a crisis or dealing with one, to measuring the impact of a communications strategy and making better reputation-based decisions for the company" (Benigson, 2021, para. 4).

The ubiquitous nature and speed of technological acceleration and the advancement of digital tools and data analytics will serve to sharpen messaging and brand, but also help better reach an organization's key stakeholders (Casale, 2018; Weiner & Kochhar, 2016; Whiting, 2022). In today's fast-paced business environment, organizations are continuously looking for valuable insight to inform their planning and to help make smarter, more efficient decisions (Dykes, 2019). Data allows communications leaders to explore more possibilities and potential implications in a predictive manner than ever before (Cukier & Mayer-Schoenberger, 2013). Through algorithmic modeling and projections, Sweeney (2013) suggests communications leaders can use data-informed decision-making to better identify stakeholders affected by an organization's decision-making and better determine stakeholder sentiment directed towards an organization.

As the role and scope of responsibility of the CCO grows (Argenti, 2019), the use of CommTech can help these leaders activate the organization's mission in new and profound ways (Casale, 2018). "The role of a CCO is to ensure that stakeholder strategies ultimately drive reputation, commercial performance, and effectively manage risk—all crucial to strong value creation, which is really the purpose of the brand" (DeSalva, 2020, para. 12). To accomplish this,

communication leaders need to adequately define their value, measure it and prove it (Jain, & Bain, 2017). The use of data analytics can help (Jamison & Gorman, 2016).

Literature Review

To better grasp the full scope and role data plays in reputation management, it is important to examine several key conceptual elements. For the purposes of this research study, the following theories and concepts were explored based on the existing scholarship: strategic communications management, public relations, reputation, CommTech, data, relationship management, stakeholder and two-way symmetrical communication.

Strategic Communications Management

There is a growing body of literature that defines the scholarship of communications management. Hallahan, Holtzhausen, van Ruler, Verčič, and Sriramesh (2007) define strategic communication as, “communicating purposefully to advance (the organization’s) mission” (p. 4). The authors go on to distinguish strategic communication from integrated communication “because its focus is how an organization communicates across organizational endeavors” (p. 7). Holtzhausen and Zerfass (2015) posit strategic communications management is “the practice of deliberate and purposive communication that a communications agent enacts in the public sphere on behalf of a communicative entity to reach set goals” (p. 4). Holtzhausen (2008) believes that communications management covers “the full spectrum of economic and social sectors, such as trade and industry, politics, non-profit and government agencies, activist groups, and even celebrities in the sports and entertainment industries” (p. 4849).

With respect to the relationship between communications management and data, Holtzhausen (2016) argues, “data cannot be the future of strategic communication and communication decisions should not be made at the technical level without input from communication practitioners” (p. 32). Holtzhausen (2016) also emphasizes the importance for practitioners to ensure they have a seat at the table when decision-making is occurring to prevent a completely technology-relegated approach from taking shape.

Communications management, when optimized, seeks to provide a beneficial exchange of outcomes between both stakeholders and organizations (Flynn, Gregory & Valin, 2008, as cited in Canadian Public Relations Society; Grunig & Hunt, 1984; Hallahan, Holtzhausen, van Ruler, Verčič, and Sriramesh, 2007). These outcomes include perceptions, attitudes, opinions, trust, engagement, loyalty, relationships and behavior (Macnamara, 2015).

Public Relations

Similar to communications management, public relations is centered upon linkages between organizations and its stakeholders. Grunig & Hunt (1984) define public relations as the “management of communication between an organization and its publics” (p. 4). According to Cutlip, Center, & Broom (1994) public relations is conceptualized as “the management function that establishes and maintains mutually beneficial relationships between an organization and the publics on whom its success or failure depends” (as cited in Broom, Casey and Ritchey, 1997, p. 84). Similarly, Flynn (2006), puts forth “public relations is at the focal point of where organizations and stakeholders attempt to create and maintain a delicate balance between the

interests of the organization, the stakeholders, and the many publics that travel through this intersection” (p. 193).

The Canadian Public Relations Society considers public relations to be the “strategic management of relationships between an organization and its diverse publics, through the use of communication, to achieve mutual understanding, realize organizational goals and serve the public interest” (Flynn, Gregory & Valin, 2008, as cited in Canadian Public Relations Society).

Reputation

There has been much debate within the field as to a widely agreed upon definition of reputation as both a theoretical framework and a managed practice. At its core, Fombrun (1996) believes that the concept of reputation is tied to the “firm’s past actions and future prospects” (p. 72). Similarly, Davies and Miles (1998) put forth that reputation is defined based on three core elements: personality, identity, image. Likewise, according to Zinko et al., (2007) “reputation is a perceptual identity formed from the collective perceptions of others, which is reflective of the complex combination of salient personal characteristics and accomplishments, demonstrated behavior, and intended images presented over some period of time” (p. 165). Grunig (2001) puts forth that the exchange of ideas, attitudes, and behaviors among organizations and their stakeholders helps build reputation.

Likewise, Murray and White (2005) demonstrated the role both public relations practitioners and all leaders of an organization play in upholding an organization’s reputation. Gibson, Gonzales & Castanon (2006) point out “corporate reputation signifies public evaluation of organizational activity. Reputation includes elements of trust, credibility, responsibility, and accountability” (p. 15).

As such, we can think of reputation as a product of relationships that situate the behavior of different groups. For instance, consumers, investors, employees, government and the media (Grunig & Hung, 2002, p. 11). Cravens, Goad Oliver & Ramamoorti (2003) highlight, “through the actions of all employees, at the senior management and lower levels, the public derives an image of the corporation” (p. 205). While Doorley & Garcia (2021) put forth that corporate reputation is simply “how the corporation is perceived” (p. 2). Gotsi and Wilson (2001) provide a more fulsome definition and define reputation as:

A corporate reputation is a stakeholder’s overall evaluation of a company over time. This evaluation is based on the stakeholder’s direct experiences with the company, any other form of communication and symbolism that provides information about the firm’s actions and/or a comparison with the actions of other leading rivals. (p. 29)

Additionally, Roberts and Dowling (2002) describe reputation as “a perceptual representation of a company’s past actions and future prospects that describe the firm’s overall appeal to all its key constituents when compared to other leading rivals” (p. 1078). Reputation is derived from previous actions and relationship-building activities that strategically contribute to an organization’s consistent profitability over time (Roberts & Dowling, 2002). According to Flynn (2006) the growing importance of measuring an organization’s reputation “is

attributable...to the attempt to quantify and measure the intangible assets of reputation, corporate responsibility, employee and customer satisfaction, and brand equity” (p. 197).

With these elements in mind, the reputation of an organization is both a strategic resource that lends itself well to influencing the relationships amongst stakeholders and boosting the value of communications management (Cheney, Thøger & Christensen, 2006; Christensen, L-T., Morsing, M., & Cheney G, 2008). This is supported by Walker (2010) who argues most organizations possess a different reputation based on the issue or stakeholder affected.

CommTech

The term CommTech remains highly debated with little research to support its foundation (McCorkindale & Weiner, 2022) and merely describes the “intersection of communications and digital technology in any possible way” (Arthur W. Page Society, 2021). According to Brockhaus, Buhmann and Zerfass (2022), “CommTech are digital technology provided or used by communications functions or departments to manage and perform primary activities, particularly stakeholder communications and internal advising, or functional support activities such as managing internal workflows for monitoring, content planning, or evaluation” (p. 6). CommTech encompasses the digital tools, software and services used to help in the day-to-day communications practice of practitioners and to help strategize for campaigns (Brockhaus et al., 2022).

Some common tools and platforms include:

- Social media management systems: Sprout Social and Sprinklr
- Media monitoring: Brandwatch, Meltwater and Talkwalker
- Data pipeline tools: Rivalry, Medallion and Alteryx
- Web analytics: Google Analytics
- Data visualization: Microsoft’s Power BI and Tableau

The use of these technologies, platforms and tools are changing the way communications professionals develop and manage content, respond to stakeholders through various earned and owned channels and strategize how their work contributes to the broader organizational goals. Brockhaus et al., (2022) put forth a framework encompassing three conceptual layers. This framework breaks down the fundamental components of the communications role into primary and secondary activities in which the use of CommTech can be incredibly useful and beneficial. For the purposes of this research study, the primary activities, inclusive of stakeholder communications and advising, will be examined only as they are primarily linked to the value of reputation management and proactive communications which is the focus of this research. The emergence of a public relations-focused tech stack, such a customer relationship management (CRM) databases, publishing tools, email marketing, media monitoring and content analysis tools can provide practitioners with the real-time information needed to make strategic decisions based in fact (Guarnaccia, 2020).

It is important to note the use of CommTech should be used to “bring their brands to life in a way that is meaningful, authentic and resonates with stakeholders” (Hernandez-Blades, 2020, para. 6). This is supported by Samson and O’Leary (2020) who put forth:

Over the years, many organizations have evolved from being corporate reporting functions to being proactive, stakeholder-focused teams. But it should not end there. With the advent of CommTech, the aim should be to accelerate the next step-change – moving from a proactive communications function to a predictive one. (para.7)

This highlights the importance of utilizing the tools, platforms and technological resources at our disposal to better strategize, plan, respond and measure our activities.

Data

The terms data and big data are often used interchangeably. For the sake of this research study, the term data was used. According to Cukier and Mayer-Schönberger (2013), there is not a concrete definition of data. However, the concept of data can be referred to as the ability “to extract new insights or create new forms of value, in ways that change markets, organizations, the relationships between citizens and governments, and more” (p. 6). The concept of data is often defined by volume, velocity, variety and value (De Mauro, Greco & Grimaldi, 2016; Laney, 2001; Weiner & Kochhar, 2016). According to Gartner, volume refers to the size of a data set while velocity is conceptualized as time-sensitive requiring analysis within a specified period of time before the data itself becomes obsolete (Laney, 2001). In terms of variety, this can involve several types of data, such as demographic and transactional. According to IBM, value refers to verifying the source of data to ensure it follows required protocols (e.g., GDPR) (Gillis, n.d.). Weiner and Kochhar (2016) believe data “is transforming the world of business, and even more specifically, the public relations profession” (p. 4).

For the CCO, or the most senior communications professional at an organization, leveraging data has many benefits. For instance, data can inform larger enterprise-level communication goals, build more integrative marketing and communications strategies (Smalec, 2021) and develop advocacy among internal and external stakeholders (Arthur W. Page Society, 2016). Data can also be used to predict employee behavior (Lee, 2023; O’Neil et al., 2021). Macnamara (2020) elaborates on the role of data by exploring its listening capacity. According to his theory of corporate listening, he puts forth the usage of tools to listen to employees and other important stakeholders to understand their sentiments, which has traditionally received little attention (Macnamara, 2020, p. 17). Data can also be leveraged to conduct advanced environmental scanning (Kent & Saffer, 2014), capture stakeholder sentiment through earned and shared media (Kaput, 2021, Lynch, 2018, Panda et al., 2019) and communicate in a more personalized manner with stakeholders (Men et al., 2022).

Incorporating data within the communications function allows organizations to make more confident decisions, become more proactive in their strategy and increase their ability to realize valuable cost savings (Stobierski, 2019). The lack of data-driven decision-making (DDDM) usage by communicators represents a major hurdle to the further growth and development of the profession (Zerfass et al., 2012). According to Macnamara (2015), one avenue to approach long-cited barriers of insufficient budget, lack of knowledge or standards for usage is the creation of a process: measurement analysis, insights and evaluation, also known as MAIE.

The use of data within the communications management function is also supported by top global consultancy and communications firms, like Edelman. According to Edelman’s ‘2021

Future of Corporate Communications’, data gathered from technology use has profoundly positive effects for communication leaders as it offers measurement and evaluation and can positively impact the stakeholder relationship (Edelman, 2021). Despite these benefits, the profession lags behind others when it comes to incorporating measurement and evaluation (Tench & Moreno, 2015; Zerfass et al., 2018). According to Wright and Hinson (2012) practitioners tend to focus on aspects of social listening only without adequately delving into deeper, more behavioral elements. The traditional focus of collecting media clippings and advertising value equivalents (AVEs) have done little to advance the profession’s ability to illustrate value (Wright, Gaunt, Leggetter et al., 2009). However, as the volume of tools and technology grows, so too do the opportunities for practitioners to engage data-driven approaches to their communications practice (Fitzpatrick & Weissman, 2021; Weiner & Kochar, 2016).

Relationship Management

The role of relationship management within the study and practice of communications management centers upon the organization’s ability to develop and nurture positive relationships with its key publics (Hon & Grunig, 1999; Yang, 2007). It also remains central to the future practice of the profession (Bruning & Ledingham, 2000; Grunig, 1993). The concept of relationship management has been widely defined by many scholars across the communications management and public relations disciplines (Bruning & Ledingham, 1998; Ledingham & Bruning, 2000; Yang, 2007). According to Bruning and Ledingham (1998), relationship management is:

The organization's willingness to be open when communicating with the public, the level at which the consumer trusts that the organization will do what it says it will do, the organization's level of involvement in the communities it serves, the organization's financial investment in the communities it serves, and finally the organization's long-term commitment to the communities it serves. (p. 199)

Similarly, Ledingham (2003) believes that by focusing on the organization’s capacity to effectively manage the “organizational–public relationships around common interests and shared goals, over time, results in mutual understanding and benefit for interacting organizations and publics” (p. 190). By focusing on the strategies that emphasize relationship maintenance over time, organizations can foster stronger relationship outcomes with their stakeholders (Bowen & Derville Gallicano, 2013). Likewise, Hon and Grunig (1999) believe that organizations need to develop “communication programs to develop and maintain effective long-term relationships between management and those publics” (p. 9). Similarly, Yang (2007) puts forth that relationship management needs to emphasize “the identification of active publics and the strategic management of communications with them” (p. 115).

Stakeholder

Strong relationships with stakeholders helps organizations understand what their organization is doing well and where there is room for growth. “Reputations are built through interactions [relationship] and communication between organizations and stakeholders” (Coombs & Holladay, 2005, p. 124). The use of the terms publics and stakeholder are often referenced interchangeably with one another. However, for the purposes of this research study, the term stakeholder was used. The term according to Freeman (1984) is defined as “any group of

individuals who is affected by or can affect the achievement of an organization's objectives" (as cited in Rawlins, 2006, p. 2).

Similarly, Gotsi & Wilson (2001) argue:

A corporate reputation is a stakeholder's overall evaluation of a company over time. This evaluation is based on the stakeholder's direct experiences with the company, any other form of communication and symbolism that provides information about the firm's actions and/or a comparison with the actions of other leading rivals. (p. 29)

However, Grunig provides a better distinction between the term stakeholders from the concept of publics by emphasizing that "organizations choose stakeholders by their marketing strategies, recruiting and investment plans, but publics arise on their own and choose the organization for attention" (as cited in Rawlins, 2006, p. 2). Grunig (2005) expands upon this definition by stating that "stakeholders are people who have something to risk when the organization makes decisions" (p. 779).

Likewise, the critical linkage between stakeholders and communications management was put forth by Bunting and Lipski (2001), who argue the strategic function has ownership in shaping the interpretations and perceptions of an organization's activities, which may lead to overall positive evaluation by stakeholders.

Two-Way Symmetrical Communication

According to Grunig and Hunt (1984) the concept of two-way symmetrical communication occurs when organizations agree to engage with their stakeholders, manage any issues and work collectively to build mutual understanding and respect. Grunig (2001) believes that organizations should approach two-way symmetrical communication by developing communications strategies and programs "based on the concepts of strategic management, an integrated communication function, and the managerial role" (p. 536). Likewise, Grunig (2001) puts forth that communicating in an authentic manner can produce better relationships and establish positive and supportive actions that strengthen the organization. The two-way symmetrical communication model cultivates long-lasting relationships, which improve an organization's reputation and help shift an organization's approach to interacting with its key publics (Grunig, 2001). Grunig (2006) further expanded upon his definition to encompass an understanding that "individuals, organizations, and publics should use communication to adjust their ideas and behavior to those of others rather than to try to control how others think and behave" (as cited in Sriramesh et al., 2013, p. 6). For the purposes of this research, two-way symmetrical communication was an ancillary consideration, but remains a key component of reputation management among critical stakeholders.

While many studies of data have focused on advertising (Malthouse & Li, 2017) and marketing (Xiao, Param & Srinivasan, 2016), few studies have examined the use of data to manage reputation and how organizations decide on the process to incorporate it. The primary challenges facing communications leaders and their teams is the sheer volume and speed at which data is being generated, the growth in responsibilities despite stagnant budgets, trailing headcounts and limited knowledge of data analytics combined with the ongoing pressures to

manage the reputation of their organizations (Benigson, 2021; Institute of Public Relations, 2021; Macnamara, 2015; Samson & O’Leary, 2020).

Research Problem and Questions

The primary purpose of this study was to demonstrate how organizations can embrace the value of CommTech as both a driving force for managing key relationships and protecting the reputation of an organization. The ancillary purpose of this study was to highlight the use of data-driven decision-making by providing a practical framework informed by North American organizations who are successfully using data analytics tools, platforms and knowledge to improve and enhance the communications function from a reputational standpoint.

To address how data can be used to enhance the reputation management function of an organization, this research focuses on two questions:

RQ1: How and to what extent is data used to manage reputation?

RQ2: How and to what extent do data analytics platforms, tools and software enhance reputation management in a proactive manner?

The driving force behind these research questions was to delve into the practical tools and resources at the disposal of communications leaders and their teams to pre-emptively monitor, track and address reputation-based issues before they materially affect the organization.

Method

This exploratory, qualitative research study examined how and to what extent the use of CommTech is helping senior level practitioners inform their strategic objectives and tactics to bolster reputation management among the organizations they work for. Through 13 interviews, the researcher engaged participants with eight interview questions that delved into the current tools, experiences and challenges facing their organizations and the use of CommTech.

Data Collection

Upon receiving research ethics approval, the researcher solicited participants for online and telephone interviews between October 2022 and March 2023 based on their role within an organization, namely the most senior communications leader (e.g., chief communications officer, vice president, communications). The recruitment process consisted of email recruitment for the interviews. All participants were selected based on publicly available contact information. The researcher sent emails to potential participants using an approved script requesting potential interview candidates to contact the researcher by phone or email.

Once a participant agreed to take part in an interview, the researcher scheduled a meeting and provided participants with the ethic’s approved letter of information consent, which outlined the full details of the research study. After each interview, the researcher reviewed the audio recording of the interview and made notes in relation to each interview question. All participants

were informed at the beginning and end of the interviews that their responses, employers and full names would be completely anonymized to align with best practices for qualitative research (Stacks, 2017). The researcher elected to only include their job title and industry for the purposes of demonstrating the position, experience and sector.

The validity of this type of research benefits from using more than one source of evidence as this serves to strengthen the study's findings and concluding evidence (Yin, 2018). For the purposes of this research, the researcher relied on interviews and a literature review (Yin, 2018). All interviews were conducted using Zoom and Microsoft Teams and lasted approximately 30 minutes. The researcher outlined participants' associated rights to privacy and confidentiality (Yin, 2018). To maintain each participant's privacy, after each interview was analyzed, the audio and visual recordings were deleted, and all typewritten notes were prompted deleted. To preserve the authenticity and accuracy of the interview contents, all 13 interviews were reviewed and transcribed immediately following the interview. The researcher chose this method in an attempt to quickly identify patterns and common themes among the participants (Yin, 2018).

The incorporation of interviews remained an essential element for this research (Yin, 2018). At the request of the 13 participants, the interview questions were provided in advance of the interviews. Throughout the interview sessions, the researcher remained constantly aware of her potential reflexivity and the ability to "unknowingly influences the interviewee's responses" (Yin, 2018, p. 120).

Data Analysis

In terms of analyzing the qualitative information provided by each of the participants, the researcher focused on the descriptions, concepts, perceptions and sentiments expressed by participants. Yin (2018) discusses four general strategies for data analysis. These include, "relying on theoretical propositions, working your data from the "ground up," developing a case description, and examining rival explanations" (p. 164). For the purposes of this research, the researcher relied on theoretical propositions and working from the data. The rationale is that the reputation and communications management theories guided the researcher to frame the data analysis within these two theoretical lenses and the latter helping to "organize the entire analysis, pointing to relevant contextual conditions to be described as well as explanations to be examined" (Yin, 2018, p. 168). Yin (2018) also puts forth there are several methods of analyzing qualitative data: pattern matching, explanation building, and time series. For the purposes of this study, the researcher relied on pattern matching as it is one of the most effective analytic strategies for analysis (Yin, 2018). Pattern matching consists of using matching theoretical patterns that originate from both the existing literature and observed patterns emerging from the data (Sinkovics, 2018).

In addition, the use of narrative analysis revealed mindsets and perspectives of interview participants while thematic analysis revealed similarities and differences that could be grouped together for deeper interpretations. As Neuman (2006) describes, "fair, honest and balanced account of social life from the viewpoint of someone who lives it every day" (p. 196) captures a behind the scenes view and in-depth account of the situation being studied.

Results

After five months of outreach to senior communications professionals across Canada and the United States, the researcher engaged in a further month of analysis, reviewing and synthesizing transcripts. The 13 interview participants interviewed as part of this research came from various industries as demonstrated in Table 1 below. The researcher ceased outreach to additional participants as responses to the questions began to exhibit saturation and no longer provided new critical insights relevant for the study. This is supported by Hennink and Kaiser's (2021) latest study which found qualitative research interviews reach saturation between 9-17 participants. Participants represented the highest position or level of communications at their respective organizations or served as the most appropriate subject matter expert to provide insight and context as to their organization's use of CommTech.

Table 1

Overview of research participants

Position	Location	Industry
Associate Professor	Canada	Academia
Principal Founder and CEO	United States	Agency
Chief Communications Officer	United States	Airline
Chief Communications Officer	Canada	Energy
Principal Founder and CEO	United States	Agency
Principal Founder and CEO	Canada	Financial Services
Content Manager	United States	Food and Beverage
Leader, Communications	United States	Retail
Chief Communications Officer	Canada	Government
Director, Public Affairs and Communication	Canada	Hospital
Senior Director, Communications	United States	Construction
Director, Communications	Canada	Post-Secondary
Director, Corporate Communications	United States	Technology

All participants indicated they were using some form of CommTech platform or stack of platforms to inform their organization's reputation management. Participants represented a wide range of industries adding breadth to the results.

RQ1: How and to what extent is data used to manage reputation?

Use of CommTech

To determine the level of CommTech adoption by interview participants, the researcher engaged participants to share the types of platforms and tools their organization used. All interview participants indicated their use of some type of platform. The most common platforms used were Talkwalker, Meltwater, Cision, Sprout Social and Google Analytics.

One participant from the airline industry noted the importance of measurement stating that the "measurement and analytics function within communications allows for analysis to determine reputation from multi-view lens."

This was complemented by another interview participant from the energy sector who put forth:

Having a measurement regime to find the single source of truth through evaluation is very valuable. Moving away from regional interpretations, for example reach or impressions, and moving towards engagement reach based on digital behavior is more important. It allows our team to develop campaigns and content based on an understanding of that our audience wants and promote content through our channels accordingly.

For the agency and consulting participants, the use of CommTech tools was not for explicit management of their own companies, but rather for the clients they service. One participant remarked that their firm assesses the client's individual needs and recommends the CommTech tool that best suits their desired business outcome. The firm developed a framework of categories – content, insights and relationship management tools. Content, which serves a large function of reputation management. This involves the creation and publishing of content, through tools like Sprinklr or Meltwater. The next category, insights, involves data analysis, warehousing and visualization tools, such as Tableau, Looker, Domo and Power BI. The last category focuses on a CRM tool for tracking relationships among journalists or analysts depending on the nature of the organization.

This was echoed by another agency participant who uses these tools on behalf of clients to help when requested as part of their key performance indicators (KPIs) tied to the business. The participant shared an example of a client who wanted to understand their organization's baseline corporate reputation, including sentiment. The agency was able to develop a tracking dashboard across all communications channels within the earned, shared, and owned arenas. The client then wanted to expand their measurement to evaluating their performance against their direct competition. The agency's services to the client continued to expand based on the business' initial evaluation of their reputation.

The use of CommTech has also been the focus of internal communications and managing the reputation amongst internal stakeholders. One participant in the construction industry indicated using the output analytics through their internal web portal to understand what internal stakeholders, namely what employees want to see, in terms of content and regularly engaged in surveys to constantly keep a pulse on their preferences. It also allows them to see what employees search for and how long they spend reading on certain pieces of content. These analytics tools are built into their internal web function, allowing the company to reap the benefits of engagement metrics without having to pay for a subscription to a platform or aspect of a CommTech stack given their limited budget and human capital.

This use of CommTech in an internal context was also echoed by a participant from the government sector who indicated their use of Microsoft's stack of tools, which includes Teams, Outlook and SharePoint. These tools have become particularly relevant to help inform the organization's intranet amongst employees. The organization also uses Staff Base as a plugin for all staff communications.

Other participants utilized a sub-set stack of CommTech for managing their reputation in traditional media to help track stories about their institution and the education sector. The participant noted this is especially helpful for “monitoring stories and mentions in the media that could have reputational impacts for our institution, so we can identify, plan and respond.” The same participant indicated they use Sprout Social to track and manage the institution’s social channels, in particular any issues or threats arising that might warrant a response. The institution takes their level of reputation management further by employing Constant Contact, an online e-marketing tool to flag messages, make announcements and directly connect with students and ensure the messaging students receive is tailored to their program or action required by the institution.

Within the food and beverage industry, managing reputation is a constant, never-ending process of refinement. Gathering data from various online sources helps brands understand what their customers are looking for, how to enhance their products against the competition and manage the stories and discussions in relation to their products or services. One participant remarked that their reputation management strategy focused on a mix of social and operational listening across 80 countries.

Despite the plethora of tools available at our disposal, some organizations believe there is value in evaluating each tool’s purpose based on the required business need. A participant from the tech sector indicated “some tools are better at doing stuff than others, even though there is inevitably some overlap between all of them. So, we use a few different tools across a wide range of things – namely monitoring and listening.”

All participants agreed that the use of these tools brought value to their organization by allowing their communications actions to support their organization, in terms of strategy and response. One participant in the energy sector remarked, “while certain tools may change, they all come back to whether or not you’re measuring whether your messages were received in the way you intended them to be and in addition to that, whether or not that is making any kind of difference.”

Short-term and long-term value of CommTech

Using CommTech to inform the management of an organization’s reputation hinges on its value – both in the interim and on a long-term basis. One participant from the airline industry stated that CommTech allows their communications team to use these “tools at their disposal to aggregate perceptions, thoughts and themes of employees which allows the organization to “own the employee experience”, better understand the issues and pivot more quickly to rectify pain points.”

The same participant remarked:

From an external perspective, these tools serve as an early warning system to discover a topic that is trending and get ahead of it and allocate resources for it. In a crisis response, it allows our organization to understand whether the narrative and associated messaging going out is resonating and determine course correction as needed as opposed to approaching it in an analog way.

Another participant from the energy sector discussed the advantages in relation to business outcomes and driving change in a behavioural way. For example, the participant discussed how the use of activity-based analytics (e.g., clicks, shares and likes) does not provide an understanding as to changes in behaviour. Therefore, the benefits of using these platforms comes from a strategic business interest, specifically how a business can encourage someone to buy a product or service. This was echoed by another participant from the tech sector who put forth, “there seems to be an interest from businesses to keep subscribing to these platforms. Businesses want to know and understand what conversations are taking place, whether they are on traditional news media or social channels.”

Another participant from the financial services sector developed a tool to measure reputation in response to a growing need. According to the participant, the tool was designed around the concept of social positioning. Through the use of Twitter data on 20,000 publicly and privately listed companies, this tool provides financial organizations with a social positioning score every 10 minutes, based on seven distinct factors. The tool is used by institutions as a pulse check to help understand their short-term and long-term positioning.

For consultants, advising clients on the use of CommTech has tremendous advantages.

One participant within consulted noted:

These tools serve as a guiding north star. By building a strategy and identifying the gaps in technology usage, we are able to enlist the use of these tools to measure the client’s strategy, define current business successes and areas of opportunity. Part of our role is to serve as an enabler – to architect a solution that breaks free from a siloed approach to work and communication. Data in general is highly scattered. Measurement tools help drive efficiency which helps clients improve their outcomes.

Within the public sector, one participant explained how the data generated from CommTech platforms “helps inform not only its community engagement and communications strategies, but also critical outcomes. In this case, it might be a construction project.” A participant from the post-secondary industry also highlighted, “it helps measure against competing institutions and very valuable from a management perspective, as it can help galvanize buy-in by using data.”

Some participants referenced the gap in understanding from management in terms of how to bring CommTech into the fold of the communications practice. A participant from the agency industry elaborated on the gap between technology companies offering these platforms and communications professionals within organizations as there was an inherent gap in knowledge and understanding of what these platforms could do or how they could be utilized by an organization to enhance the communications management function. The participant went on to note that their business represents the conduit between these two entities which allows technology clients to better communicate with their clients and allows communicators the opportunity to learn how these platforms work.

A participant from the hospital sector noted:

For the longest time, we did not have the necessary expertise to use some of the tools at our disposal. But after some changes in staff and reorganizing the structure of our team, we were able to add someone with the expertise to help us better understand, interpret the data and apply it to our daily work.

RQ2: How and to what extent do data analytics platforms, tools and software enhance reputation management in a proactive manner?

Most participants offered advice for organizations looking to incorporate CommTech into their reputation management. The challenge for many communications professionals is having someone who can understand and interpret data. One participant from academia suggested two options for practitioners to employ. The first involves outsourcing the data collection and analysis to a subject matter expert (SME) or hiring one to work within your organization or immediate team. From there, the SME can easily use a CRM tool built into an organization's website and social channels to automate customer responses, engage in social listening and conduct media scans to understand where an organization sits against its competitors, partners or the industry. "Reputation measurement can be done for zero to one million dollars. What really matters is whether there is an improvement. That is why instilling a culture of measurement, in addition to having the necessary time and resources is so critical." Another participant from the airline industry noted:

You have to get started somewhere, so do not get overwhelmed by the whole idea of influencing outcomes; just start with what product you have. Think about one thing you can do at a time and build from there and find ways to share it in context with the people that matter.

Similar to the participant from the airline industry, a participant from the food and beverage industry highlighted the importance of starting with something small to measure, for example trends within your industry:

Using a free, online tool like Google trends, is great. From there, a communicator can look at these trends – what is changing, what is gaining momentum to start making decisions. Even incorporating this task within your communications work will help keep decision-making grounded in data. The key is to look for tools at your disposal to quantify the reputational issues. This also helps to start building a culture around data.

The notion of a culture predicated on measurement was also echoed by another participant in the retail industry. The participant emphasized the importance of evaluation with senior leadership. "One of the easiest ways to get started is tell your organization's leaders that you know a way to target key audiences better that won't cost a lot of money." Once a practitioner has the approval to start, "developing a strong evaluation criteria for the purpose or business goal you're trying to measure becomes important" said one participant from the tech sector. From there, assigning a team member to undertake the process of product demos is important remarked one participant from the post-secondary industry. "This will help communicators understand what these tools are

capable of doing and through that process determine if there is direct application for what their team and organization is seeking to evaluate.”

Once communicators have a set of criteria to evaluate, the next step involves using the tool to help with proactive planning for issues management or crisis management. “By using these tools when you’re not caught off guard, you’re able to start your predictive journey in a manageable way with the bandwidth to learn and experiment.”

Another participant from the hospital sector referenced how incorporating the data from these tools has helped show value to their external board and senior leadership team, simply by presenting the hospital’s share of voice in relation to the other similar institutions.

Operationalizing CommTech

Putting these tools into practice has many tangible benefits. From analyzing sentiment, volume and whether messages are resonating with target audiences, chief communications officers and their teams can harness the tools to provide more informed counsel to senior leadership.

A participant from the airline industry remarked that these tools allow the team to be more data-driven as opposed to relying on gut instinct. “These tools give communicators access to the opinions of our employees and our customers in real-time. By consuming information on an aggregated basis, we have been able to refine our approach to issues management and planning in a data-driven way.”

From an internal communications perspective, maintaining reputation amongst employees is equally a critical one. This was also mentioned by one participant from the construction industry who noted the importance of using data-based tools to amplify the employee voice. By tracking the feedback of employees through regular surveys and analyzing dialogues on internal sites, the communications team is able to action the change employees are looking for. For example, increasing the cadence of employee town halls from quarterly to monthly or reducing the number of employee email newsletters from weekly to monthly. “Using the tools at our disposal has helped us understand what our employees want and ultimately helps improve our lines of communication between employees and our senior leadership team.”

A participant from the post-secondary industry remarked:

These tools are allowing us to make evidence-based decisions and giving communicators a true sense of what is happening – we no longer have to draw from assumptions of what we see in our own personal day-to-day experience or practice – our decisions become based in the data, and we are able to action and respond in real-time.

Echoed by a participant from the financial services industry, these tools help communicators determine “early indications of customer or investor preferences in an easily digestible way. This allows communications professionals and teams to change the way they engage with their stakeholders and track changes over time.” In the food and beverage industry, “CommTech tools are great for seeing what is coming towards you and determining what the

probability of an issue affecting your brand is. This makes it easier to understand what should be on your radar and quickly assemble an action plan.”

Having these tools to evaluate in a case study scenario is also a valuable endeavour. A participant from the energy industry remarked that by employing a data-driven approach, they were able to save their organization money by drilling down on the reasons why a particular plant was experiencing higher than normal volumes of turnover. That experience provided the leaders of the organization with greater confidence in the tools and resulted in increased budgets for sustained usage. “Saving the organization hundreds of thousands of dollars, we instilled within management the value we as communicators were providing and how these tools were unlocking the key to better employee productivity.”

A similar experience was mirrored by a participant in the government sector. The participant indicated that by showing a cost-benefit analysis of the total cost for salary for the communications department in comparison to a construction delay, this participant was able to demonstrate how the communications function was adding value as opposed to be regarded as a cost centre.

Discussion

This research study examined how and to what extent CommTech is informing the practice of reputation management among senior level communicators across North America. In particular, the researcher was keen to understand how data informs strategy and tactics, but also whether data contributes to the elevation of the communications management function as a strategic business priority worthy of consideration at the executive leadership level. The researcher engaged in interviews with senior executives within the public and private sectors across the United States and Canada. The objective of these interviews was to better understand each organization’s usage of CommTech as both an informer of action and the way communications is strategized and implemented when it comes to reputation management. The incorporation of CommTech into communications goes beyond the use of tools and work practitioners do. CommTech is a process that incorporates people and technology together to deliver more meaningful outcomes. The transition to using the platforms and tools at our disposal requires a critical mindset shift on the part of practitioners and organizations.

According to a study conducted by the Arthur W. Page Society (2021) encompassing a survey of 170 respondents and over 200 in-depth interviews, CommTech is listed as a top four critical element for the CCO. In particular, the study revealed that CCOs of the future will not only have to embrace their role as corporate brand stewards, but they will also need to acknowledge the power of CommTech.

It was apparent from speaking with all 13 participants that understanding what the data is telling you is just as relevant and important as using it. A participant from academia remarked that, “a lot of non-experts may misinterpret what a Net Promoter Score or tool is trying to tell you. They may look at the results in such a way that skews positively to what they want to see even if that’s not case.” This indicates the importance of communicators becoming more familiar and acquainted with the data that is being used to help determine decision-making. As

Holtzhausen (2016) argues, it is important that communication practitioners remain at the forefront of strategic communications decision-making and use data to better inform their strategy and actions, but utilizing these technologies for real-time monitoring can mitigate risks in relation to reputation (Ristuccia & Rossen, 2015).

Similar to O'Neil et al., (2023), participants also found the use of CommTech saved time, boosted efficiency and reduced time spent on tedious tasks. By incorporating a strategic approach to communications management, practitioners can more seamlessly ensure a successful transformation towards a data-driven approach to managing their organization's reputation and communications practice (Brockhaus et al., 2022).

Likewise, the research indicates that while incorporating data analytics, tools and platforms helps communicators bridge the gap between the vernacular of business and communications within an organization, it is also equally important to ensure that industry leaders understand the language and use of communications to protect, mitigate and guide an organization's reputation. Since businesses operate on the premise of numerical data, avoiding their use altogether could prove detrimental to communicators (O'Neil et al., 2023). Therefore, taking an open approach to learning about these recent technologies and gaining the knowledge to factor them into communications management will further move practitioners and the profession closer to demonstrating value to business leaders.

However, most importantly, this research highlights the value data brings to the profession with respect its strategic function within an organization (Fitzpatrick & Weissman, 2021; Weiner & Kocher, 2016). In particular, the study highlights how data can be used to shift the perception of the profession away from being conceptualized as a cost centre function and one that supports an organization's goals and increases the effectiveness of relationship management and engagement with critical stakeholders (O'Neil et al., 2023). Recent studies also suggest that digital tools support practitioners uncover their own digital maturity and guide their strategies and day-to-day operations (Brockhaus et al., 2022; O'Neil et al., 2023). Through the use of communications technology, practitioners are able to foster a culture of curiosity that will propel communicators to use the tools and information at their disposal to drive communications management towards an empirically focused path (O'Neil et al., 2023).

Finally, all participants reiterated the value of incorporating data analysis into other facets of their decision-making, specifically when it comes to determining organizational strategy and budgetary approvals. A participant from the hospital sector noted that from their initial use of the platform, Cision, they are actively taking steps to incorporate the performance indicators from the tool into their own yearly performance plans. However, two of the respondents emphasized the pervasiveness of data-driven decision-making having a more nuanced presence in their organization. Operationally, data helps to provide the best counsel for external stakeholders when it comes to conducting operational duties. These leaders pointed to the use of data for strategic business planning and goal development that is focused on increasing awareness and affirming direction at the operational level that serves as relational evidence to help their teams to be accountable and transparent.

Recommendations for Practitioners

The driving force behind this research was to provide practitioners with a roadmap and process of conceptualizing where CommTech can be incorporated into the practice of reputation management for their organization. Based on the qualitative data derived from the researcher's interviews, the researcher has developed a framework of elements to consider:

1. **Examine organizational stakeholders:** Who are the primary communities, groups or individuals your organization engages with? For the for-profit sector, consider competitors, customers or regulators. For the non-profit and public sectors, consider constituents, patients, donors, community groups and the general public.
2. **Understand the scope and scale of organizational goals:** What is the primary mission of the organization? How does the organization define success?
3. **Determine availability of budgetary and human capital resources:** What existing financial resources are available to support the development of an evaluation-driven approach to communication? Can a designated member of the communications team be appointed or is outsourcing to a third-party agency or expert an option?
4. **Investigate the appropriate tools and platforms:** Conduct an in-depth evaluation of the resources available. What platforms or tools will suite the organization's business goals and budget?
5. **Determine the baseline of evaluation:** Understand what will be initially measured and begin analyzing the organization from this point.
6. **Expand analysis to incorporate issues, crisis and trend analysis:** Once a baseline of measurement has been established, begin enhancing the use of the tool or platform to look at potential issues and trends affecting the organization's industry. In the event of a crisis, the use of a tool or platform can help monitor conversation, sentiment and assist with environmental scanning throughout the full cycle of the crisis.

Limitations

During participant selection, it became apparent to the researcher that most Canadian organizations failed to use components of CommTech to manage the ongoing reputation of their organizations. The researcher engaged 40 potential research participants from across Canada who indicated they could not comment or participate given their level of digital immaturity as it relates to incorporating analytics into their communications planning, strategy or tactics. Therefore, the results of this study remain limited in scope.

In addition, the researcher is keenly aware and acknowledges two crucial factors when it comes to exploring the topic of CommTech and communications management. First, data-driven decision-making is not without its flaws. Storing data can become exponentially costly for

organizations (Gandhi et al., 2021). Questions surrounding data governance, security and reliability of the information presented are noteworthy considerations, especially within the context of communications management (Gandhi et al., 2021). Communications leaders and teams will need to collaborate closely with their appropriate cross-sectional teams (e.g., legal and privacy) to determine management and governance on an on-going basis.

Finally, the researcher acknowledges that many organizations are operating within a data-driven culture that remains in its infancy. However, as data begins to slowly become incorporated in organizational practices, the likelihood of this spilling over into fostering long-term two-way symmetrical communication amongst an organization's strategic stakeholders grows (Stobierski, 2019).

Future Research

To corroborate the findings from the qualitative interviews conducted, further studies of CommTech could include a time-based, semi-reoccurring survey, distributed across Canada to better understand how communications teams and leaders are using elements of CommTech to enhance their practice.

In addition, the researcher believes that additional studies could compare the use of methods and tools like Reputation Quotient, RepTrak, Leger, Reputation Index or a Net Promoter Score to help organizations understand where their organization's reputation sits in relation to emotional or product appeal, innovation, financial strength or overall performance.

Conclusion

Data analytics offers a predictive and real-time capacity pronounced at all three levels of reputation management: before, during and after a crisis or when an issue arises affecting an organization. The use of data-driven platforms allows organizations to work and collaborate directly with external stakeholders and help organizations to limit the margin of error and make better choices when prescribing advice and collaborating with stakeholders. At the very least, the use of data can help organizations at various stages of CommTech usage better grasp how their organization is performing, in terms of brand, messaging and engagement in comparison to other organizations. At its best, data-driven decision-making serves as the conduit between this shift and as more communicators at all levels of the profession – whether tactical practitioner or strategic leader – are able to constantly demonstrate the value of communication.

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Appendix: Interview Guide (Semi-Structured)

1. Does your organization currently use any form of communications technologies, also known as CommTech, to manage the reputation of the organization?
2. What tools, platforms and knowledge has helped advance the reputation management capabilities of the organizations?
3. Are there any immediate and/or long-term advantages of using CommTech when it comes to communications and reputation management?
4. To what degree have the advances in CommTech shifted the way communications practitioners strategize and conduct their day-to-day practice?
5. Do you feel that these technologies have had a beneficial impact on your work (and your team's work)?
6. What steps did you and team take to initially incorporate CommTech into the communications and reputation management functions?
7. What advice or guidance would you offer other organizations that are looking to incorporate CommTech into their communications and reputation management function?
8. That is the end of my questions, would you like to add anything further?