IMPROVING CORPORATE COMMUNICATIONS: A CLUSTER ANALYSIS

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ABSTRACT
Scientific literature demonstrates that a corporate communications function integrated within the entire organization adds value to the enterprise and prevents reputational damage. To achieve such integration, enterprises require a clear strategy and a corporate purpose. This study designed a survey that unearthed different facts about the corporate communication function's current status and managers' improvement priorities. The method allowed us to tally and cluster how the regions and departments reported current and desired communications practices. This objective method, combined with the fact that we had asked the internal customer, legitimized the necessary investments in the corporate communications function we subsequently proposed.

Keyword: Corporate Communications, External Relations, Assessment, Ambition, Clustering.

1. INTRODUCTION
Literature indicates many reasons why the corporate communication function is vital for an organization. It also suggests that creating a corporate communications function that constantly adds more value and improves performance is a challenge. Especially now Communications change due to the rise of social media and the increased interst in corporate social responsibiliy.

Corporate Communications theories
There is often a disconnection in the perceived objectives of strategic communication between top executives and communication managers. A broad study of German companies found that top executives saw "informing and motivating employees" as the primary objective. In contrast, the communication professionals saw the "creation of a positive image" as their primary objective (Zerfass et al., 2014). Zerfass and Viertmann (2017) developed the Communication Value Circle (CVS) after extensive literature review and field studies. The CVS is a concept that explains the four value-drivers of corporate communications: (1) Enabling operations, (2) Ensuring flexibility, (3) Building intangibles, and (4) Adjusting strategy. Jain and Bain (2017) identify the need for communications leaders to develop measures aligned with business outcomes and, therefore, resonate with upper management to demonstrate the value of communication functions. They identify financial acumen, operational insight and management/leadership skills as critical competencies that require investment to develop communications managers into trusted business advisors and leaders rather than just good communicators.

Although top communications executives consider corporate communications crucial to business success, many business leaders believe the performance of the IT and finance functions are more critical to business success (Penning & Bain, 2018). High-performing communications teams create consistent narratives that reinforce the desired reputation of the corporation. Belasen and Belasen (2018) make a case for the "Competing Values Framework" to enable the function to assess the potential gap between stakeholders' expectations and corporate communication responses, seeking to develop focused strategies that strengthen the reputational assets of companies. As with any desired improvement, Beger (2018) argues that a solid evaluation of the communications activities' success to date precedes any strategic planning to define and achieve the organization's communications objectives. A rarely discussed aspect of corporate communications is that communication policies are often implemented without any formal translation process, as Sanden and Kankaanranta (2018) demonstrate. This absence of translation can create confusion and even conflict within the workplace, potentially damaging the message's external consistency.

New technologies and digital transformation in the workplace

Digital transformation is reshaping the way companies work, which also applies to communications. Klewes et al. (2017) examine trends in technology, business, organization, and society and question whether "communication as a profession" might disappear due to digital transformation. Balmer and Yen (2017) discuss how the "Internet of Things" revolution offers corporate marketing managers efficient tools to engage with stakeholders and new challenges in assuring validity and reliability of information. Big Data poses a challenge for corporate communication strategies. Companies need to continuously adapt to these challenges, for example, by reinventing content, mastering algorithms, and using them as an additional tool, and also reflecting on how the role of communication is changing (Murtarelli, 2017). Wiencierz and Röttger (2017) noted in their literature review that while there is much research on how big data can assist in marketing communication, there is a lack of research about the effect of big data on internal communications. Zerfass and Sherzada (2015) showed that top executives operating in various companies located in Germany focus on primary stakeholders (customers and employees) and largely do not account for secondary ones, such as politicians and activists. These executives favor mass media outlets more than social media. Lalic et al. (2020) studied the implementation and use of new technologies in corporate communications. The study analyzes how several companies, including Amazon, Microsoft, Apple, Google, and others, incorporated tools, such as artificial intelligence, machine learning, augmented reality, chatbots. The results indicate that companies, particularly technology companies, are integrating the full suite of new tools into their internal and external communication strategies. At the Enterprise Connect presentations in 2018, Microsoft and Google discussed how the rise of AI would simplify our lives and presented a new way to view communications within the workplace. For example, Grech (2018) proved that the latest technologies that support simple things like scheduling a meeting and searching for an internal expert could significantly improve efficiency and communication. Following the suggestions by the previous researchers, we applied an essential AI tool for this paper: unsupervised learning via K-means clustering.

Social media as a corporate communication channel

Social media as a corporate communication channel provides organizations with a low-cost and direct way to give stakeholders a significant volume of information, which, according to Ghio and Verona (2020), disrupts the media's monopoly on reporting corporate information. Hajarian et al. (2021) argue that despite social media, digital influencers, and messenger marketing occupying a more significant fraction of online efforts, email and websites still prove relevant as critical channels for corporate communications.

After analyzing how organizations interact with the public via social media, Capriotti et al. (2021) presented a framework of five dimensions - (1) active presence, (2) interactive attitude, (3) responsiveness, (4) interactive resources, and (5) conversation – as a way to understand the changes caused in such organizations in terms of communication strategies. Therefore, we included questions about the use of social media in our questionnaire.

Integration of Corporate Social Responsibility (CSR)

Reilly and Hynan (2014) demonstrated how different companies, divided amongst two groups - green and not green firms (as defined by Newsweek's Greenest Company 2012 rankings) - use social media to communicate about their sustainability efforts as a means to improve perception about their CSR credentials. The results indicate that green firms actively engage with social media to address sustainability issues rather than green firms. Recently, Responsible Research and Innovation (RRI) has been considered applicable in business areas, including corporate communications. Castillo et al. (2020) argue it "*has the potential to become the driving force for new forms of…communication*," but that as with CSR, there is the need for a change in corporate philosophy by adopting a bottom-up approach. In a study done by Pollach et al. (2012), in the early 2010s, most organizations surveyed had CSR departments separate from the communications department, albeit with cooperation. The study was one of the earliest to investigate how organizations managed CSR and communications and suggested that many could benefit from merging the two departments.

As integrated CSR communications become more popular, it increases a company's risk of being perceived as only window-dressing or green-washing. Still, Bruhn and Zimmerman (2017) show that companies that abide by social ethics improve their reputation and brand image. Also, at the same time enhancing its relationships with stakeholders and with the public.

The dilemma of corporate social responsibility is to balance ethical obligations with profit maximization, which extends to CSR-integrated communications, as it generates new stakeholder demands and social expectations towards the organization. This issue highlights three debates: (1) self-promotion, (2) generating CSR value for employee identification, and (3) communication towards this newfound role of CSR-integrated communications (Andersen et al., 2017). Within the context of CSR, there is also the extent to which an organization executes its communication strategy sustainably, including inward-facing communications, which are often overlooked (Bittner-Fesseler & Weicht, 2020). Knebel (2020) takes integrated CSR communications even further to include procurement tender processes within the scope of corporate communications.

As a new generation of civic-minded employees becomes a significant part of the workforce, Weder et al. (2019) note that literature on CSR communications is beginning to head in an impact-oriented direction instead of information-oriented. According to the authors, economic pressure,

legal and political obligations, reputational risks in a digital media ecology, and a new civic-minded and well-being-oriented generation of employees are factors that contribute to the now-seen changes in the field of corporate communications.

Knowing where you are and where you want to be

Corporate communications teams all work through the dynamic developments in their field daily. Many will lead, follow or sometimes even suffer the changes mapped out above and manage their way through as best as possible. And just as many realize that it is worth taking a step back from time to time to identify precisely where the function stands today (AS-IS), where it wants TO-BE, and implement the changes necessary to get on the front foot of these developments. It is of great value to have the crowd's wisdom (i.e., as many valid assessments of the AS-IS and TO-BE) before making choices on how to get there (i.e., defining the functional strategy).

GR-IQ (https://www.gr-iq.com), a consultancy company advising about corporate communbications, developed an assessment approach that helps corporate communications teams create an explicit strategy for the corporate communications function by collecting the wisdom of the crowd. In this study, based on the GR-IQ's assessment approach, we applied a new digital platform (PRAIORITIZE), developed by Transparency Lab (www.praioritize .com). This platform measures how individuals assess the current situation and ambition through a survey. Interestingly, significant difference amongst managers' present situation and future ambitions is observed. The findings of this research helps design more effective implementation roadmaps, strategic courses of action, and support internal alignment.

2.METHOD
Procedure and participants

To test our approach, we selected 134 of the most senior leaders from 10 departments in 7 different geographical regions within one multinational. We surveyed them on corporate communications topics and asked 30 online questions that took 15 minutes to complete. We used the PRAIORITIZE platform to analyze the data and derive insights that informed the strategy of the corporate communications function.

Measurement Details

We wanted to understand how the managers assessed many corporate communications practices in their business unit and how they would like to see developments in the foreseeable future? To make that foreseeable future specific, we asked the respondents to indicate what practice they expected to see six months after the date of the survey. The design reduced the inherent subjectivity associated with surveys to the maximum extent possible. Firstly, we replaced the traditional Likert survey for questions using a Guttman scale, designed for employee polling (Van de Poll, 2018 and 2021). This scale works with "current-status data" (Diamond, McDonald, and Shah, 1986). Every following answer indicates a higher degree of professionalism or maturity than the previous one. This staircase of better and better answers are so-called breaking points (Uhlaner, 2002). To assess the delta between the managers' actual situation and their ambition, we added a dimension of time. For example:

Q. How does the communications function align with and support business objectives?

	Now	In 6 months
1. There is no formal process to align these	☐	☐
2. The business leads and formally asks the communications function for input	☐	☐
3. The business and communications functions agree on mutual objectives	☐	☐

The questions ask for verifiable facts/behavior. By doing so, respondents provide answers that could be qualified as 'objectively real' or 'a testable proposition' (Ahrens & Chapman, 2006). We also eliminated non-verifiable adjectives and adverbs to reduce interpretation bias. And we added words like, e.g., 'formally,' 'documented,' and 'measurable' to diminish respondent self-reporting bias (a bias discussed by Donaldson and Grans-Vallone, 2002). Additionally, such words suggest the availability of proof and discourage respondents from adding a cognitive or emotional meaning (Frese & Zapf, 1988). Finally, we ensured that multiple respondents in the same business unit would be asked to report on that same business unit and informed them of this, which limited the temptation to paint an inaccurate picture somewhat more.

Data analysis

Our survey presented three possible answers to each question, counted as 1, 2, and 3. The resulting matrix was 134 rows (respondents) by 40 columns (questions). Each 'cell' in the matrix contained either a 1, 2, or 3 or was empty (the respondent had skipped the question). We applied a k-means algorithm to cluster the respondents. We fixed the number of clusters to five, bypassing the standard elbow - or silhouette method. We did 20,000 iterations and calculated the improvement (if any) in the maximum distance over the clusters' 30 questions. In the end, this resulted in a local optimum of five maximally distanced clusters. Each respondent belonged to one cluster resulting in a frequency table for the five clusters.

The first (and 'worst') answer per question scored 0 points, the second answer 5 points, and the third (and 'best') answer 10 points. This scoring translated the clustered answers into an overall cluster score, both for actual and ambition scores. Next, we only considered the questions where the distance among the clusters was the largest, and we compared only the answers where one cluster differed from the other. As k-means is unsupervised learning, we added the clusters' labels ourselves; for both the actual and the ambition clusters. Finally, we made a Sankey diagram to show the 'flow' from the actual score to ambition.

3. RESULTS

Table 1 shows the five clusters for the actual situation, which are defined as "Opportunistic," "Also Opportunistic," "Profossionalizing," "Integrating," "Worldclass" for clusters 1,2…5, respectively.

Table 1: Five clusters - ACTUAL SITUATION

Cluster 1   OPPORTUNISTIC   Share: 18%   Score: 2.8

1.	How does Communications align with business objectives?	The business leads and formally asks the communications function for input
2.	How does Communications measurably support business targets?	Support is not planned, but provided when needed. Results are not formally assessed
3.	How easy it is to engage with the communications function?	It is not clear with whom to connect for what area in the communications function
4.	How do businesses manage (non-crisis) issues?	Individual business leaders manage issues locally and escalate according to their judgment
5.	When there is an opportunity for reputable positive publicity:	The business seizes the opportunity
6.	How does internal communications add value to the business?	By helping the business navigate and use the internal communications channels
7.	How does the business involve the content and brand teams?	It is unclear what the central content and brand team contribute to the business
8.	How are digital and social media used?	Our business has a presence on digital and social media and reacts frequently
9.	How are regulatory issues prioritised?	There is no formal prioritisation process, issues are addressed as they arise

Cluster 2   ALSO OPPORTUNISTIC   Share: 26%   Score: 2.8
Same answers as Cluster 1, except ....

1.	How does Communications align with business objectives?	There is no formal process to align these
3.	How easy it is to engage with the communications function?	There is a formal list of communications contacts, but individual responsibilities are not clear
4.	How do businesses manage (non-crisis) issues?	Individual business leaders manage issues based on predetermined criteria and standards
5.	When there is an opportunity for reputable positive publicity:	The business seizes the opportunity, involving the communications function to provide support
7.	How does the business involve the content and brand teams?	The local business is best placed to lead content creation; management and reaches out if needed
8.	How are digital and social media used?	Our business has no presence on social media and responds to mentions on an ad-hoc basis only

Cluster 3   PROFESSIONALIZING   Share: 14%   Score: 5.0
Same answers as Cluster 1 or Cluster 2, except ....

3.	How easy it is to engage with the communications function?	There is a formal list of communications contacts, but individual responsibilities are not clear
4.	How do businesses manage (non-crisis) issues?	Individual business leaders manage issues based on predetermined criteria and standards
6.	How does internal communications add value to the business?	By proactively supporting staff engagement opportunities
8.	How are digital and social media used?	Digital and social media activities are part of the communications strategy
9.	How are regulatory issues prioritised?	Issues are categorised based on likelihood of success and/or value to the business

Cluster 4   INTEGRATING   Share: 16%   Score: 6.5
Same answers as Cluster 3, except ....

1.	How does Communications align with business objectives?	The business and communications function agree on mutual objectives
2.	How does Communications measurably support business targeted?	The business can give feedback on DRAFT plans and there is some measurement of results
3.	How easy it is to engage with the communications function?	A detailed 'who is who' shows accountabilities and contact details
4.	How do businesses manage (non-crisis) issues?	Same, plus some issues get escalated to and reviewed by senior management periodically
5.	When there is an opportunity for reputable positive publicity:	The business and communications function are actively identifying such opportunities
7.	How does the business involve the content and brand teams?	The business involves the central content and brand team early
8.	How are digital and social media used?	Our business has a presence on social media and reacts to social media messages frequently

Cluster 5   WORLDCLASS   Share: 25%   Score: 8.9
Same answers as Cluster 4, except ....

2.	How does Communications measurably support business targeted?	The business and the communications function jointly agree on SMART targets
6.	How does internal communications add value to the business?	By providing strategic communications advice that supports the business' change agenda
8.	How are digital and social media used?	Social media activities are part of the communications strategy and communications plan
9.	How are regulatory issues prioritised?	Praioritized on likelihood of success and value to the business (part of strategic advocacy program)

Table 2: Five clusters - AMBITION

Cluster 1   DISCONNECTED   Share: 9%   Score: 4.6

#	Question	Answer
1.	How does Communications measurably support business targets?	Communications support is not planned, but available; results are not formally assessed
2.	How does Communications support the business during crisises?	The business manages crisis communications without support from Communications
3.	How are messages to internal audiences managed?	The business drafts manages internal communications locally without Communications
4.	How does the business involve the content and brand teams?	It is unclear what the central content and brand team contribute to the business
5.	How are costs/benefits managed with regard to external agencies?	The business usually works with agencies that they worked with before
6.	Describe the company's position and its regulatory environment:	Our business has a demonstrable influence on the laws and regulations
7.	Who manages the relationship with government(s) in this BU?	BU leadership plus they are supported by external Public Affairs and Lobbying firms
8.	How are regulatory issues prioritised?	There is no formal prioritisation process, issues are addressed as they arise
9.	Categorize our stakeholder management approach:	Adhoc and opportunistic (engaging stakeholders reactively and as opportunities arise)

Cluster 2   AD HOC   Share: 9%   Score: 4.8
Same answers as Cluster 1, except ....

#	Question	Answer
1.	How does Communications measurably support business targets?	The business can give feedback on DRAFT plans and there is some measurement of results
2.	How does Communications support the business during crisises?	The business seeks Communications' support from Head Office in times of crisis
3.	How are messages to internal audiences managed?	The business manages its own internal communications but aligns with Communications
4.	How does the business involve the content and brand teams?	The local business is best placed to lead content creation and reaches out when needed
5.	How are costs/benefits managed with regard to external agencies?	The business and the communications function identify the best resources
6.	Describe the company's position and its regulatory environment:	Our business is a rule-taker: We focus on complying with applicable laws and regulations
8.	How are regulatory issues prioritised?	Issues are categorised based on likelihood of success and/or value to the business
9.	Categorize our stakeholder management approach:	Planned and focussed (engaging stakeholders relevant for our projects and objectives)

Cluster 3   STRUCTURED   Share: 6%   Score: 6.9
Same answers as Cluster 2, except ....

#	Question	Answer
2.	How does Communications support the business during crisises?	The business receives crisis communications guidance, support and tools from Head Office
6.	Describe the company's position and its regulatory environment:	Our business is a rule-taker and a rule-maker: some influence on laws and regulations
7.	Who manages the relationship with government(s) in this BU?	BU leadership plus they are supported by external Public Affairs and Lobbying firms

Cluster 4   STRATEGIC   Share: 39%   Score: 7.7
Same answers as Cluster 3, except ....

#	Question	Answer
1.	How does Communications measurably support business targets?	The business and the communications function jointly agree on SMART targets
3.	How are messages to internal audiences managed?	Communications provides tools and guidance to use when communicating to staff
4.	How does the business involve the content and brand teams?	The business involves the central content and brand team early in the process
5.	How are costs/benefits managed with regard to external agencies?	The business and communications function are actively identifying such opportunities
7.	Who manages the relationship with government(s) in this BU?	The General Manager and/or Commercial / Business Development managers (BU leadership)

Cluster 5   WORLDCLASS   Share: 37%   Score: 9.6
Same answers as Cluster 4, except ....

| #	Question	Answer
5.	How are costs/benefits managed with regard to external agencies?	Performance review after significant communications milestones have formally been achieved
7.	Who manages the relationship with government(s) in this BU?	BU leadership plus specialised staff with government knowledge and networks
8.	How are regulatory issues prioritised?	Categorised based likely success and value to the business as part of a strategic advocacy program
9.	Categorize our stakeholder management approach:	Strategic and value-based (engaging stakeholders based on a comprehensive strategy)
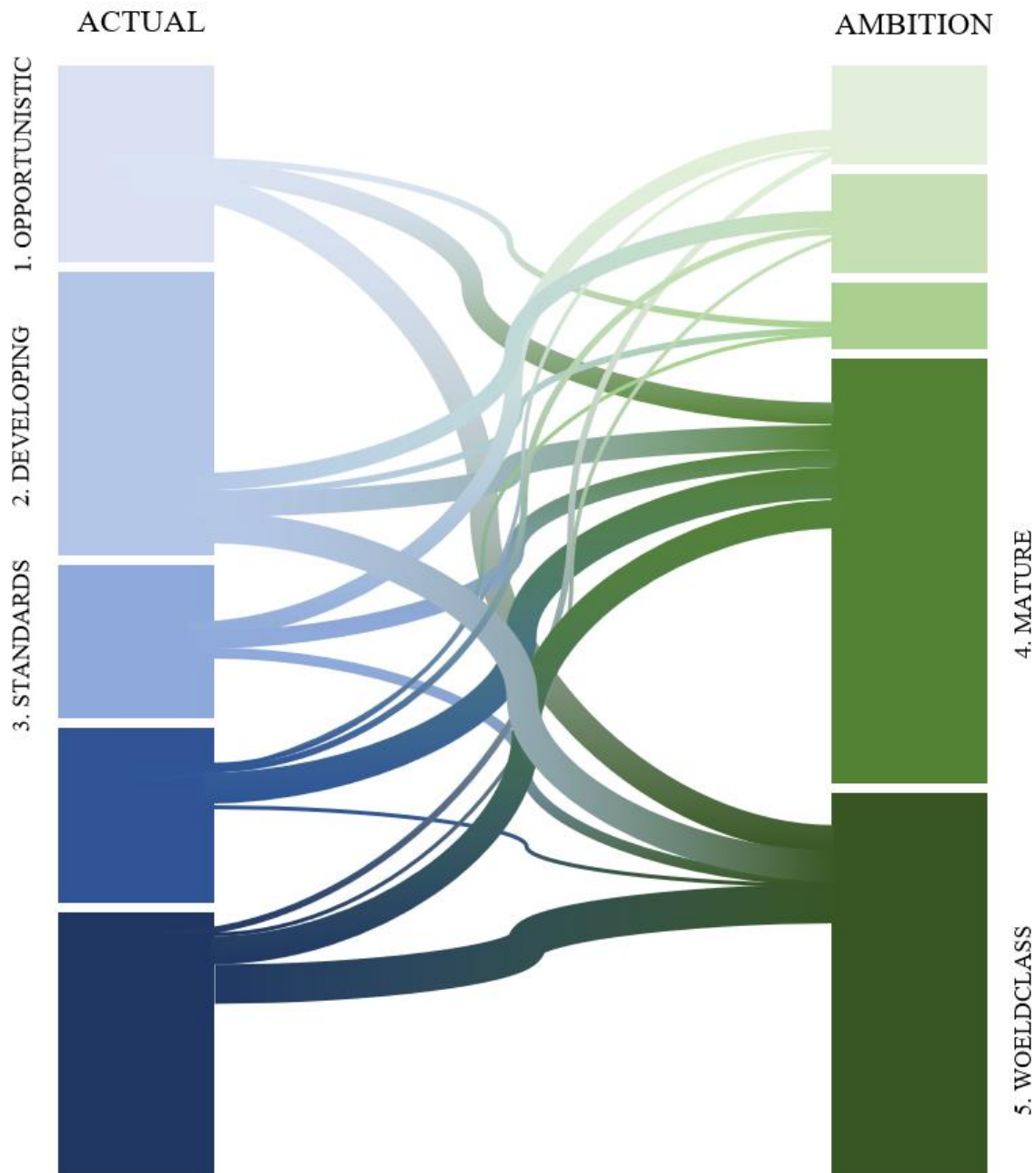
Figure 1: Operationalization

The two worst scoring clusters (2.8 on a scale from 0-10 in Table 1) are both versions of 'opportunistic' use of corporate communications. Of the respondents, 42% scored closest to these clusters. The highest scoring cluster (cluster 5) scored 8.9, and 25% of respondents achieved this cluster. The remaining two clusters (Cluster 3 and 4) scored 5 (14%) and 6 (16%), respectively.

Table 2 shows the five clusters for the ambition in 6 months, which are Disconnected, Ad-Hoc, Structured, Strategic and finally "Worldclass." The five clusters move through the scores and progress after the first two clusters: 2.8 and 2.8 (5.0 (6.5 (8.9. The score progression starts with two equally scoring clusters: 4.6 → 4.8 → 6.9 → 7.7 → 9.6. The Sankey diagram visualized the move from actual - to ambition clusters in Fig.1, which shows five clusters on the left: the actual situation and five clusters on the right: the ambition in 6 months. The size of the clusters represents the percentage of respondents belonging to that cluster. The lines show the move: how do the respondents view their ambition for the practices in corporate communications in the next six months?

Most notable is the large share of cluster 4 (**Mature**, 39%) and cluster 5 (**Worldclass**, 37%) on the right side of the Sankey diagram. Both the actual and ambition views show clusters 1 and 2 being (almost) equal in the score but different in content. In the actual situation, 42% scores around 2.8 and – including cluster 3 – 58% scores 5.0 at best. It seems like a huge endeavor to realize the ambition of 76% of the respondents to be in clusters 4 or 5 in only six months.

4. DISCUSSION

Scientific literature is clear about the importance of corporate communications and the recent developments in this field. It is then interesting to see how an organization uses a relatively objective assessment to assess actual and desired practice. The cluster analysis groups' like-minded' respondents and unearths patterns to help understand the complexity of moving an entire organization towards a consistent set of professional communications practices across the globe.

When looking at the support for the two clusters, 76% of respondents (cluster 4 and 5 in Ambition) indicate they aspire to these types of practices, giving the communications function a solid basis to inform functional strategy. But there are still different schools of thought regarding the fundamental aspects of corporate communications in the surveyed organization.

It means that the journey towards any level of maturity will be different for different respondents and thus potentially complex to manage. How to unpack that complexity requires much more analysis than we can present here. Still, one could draw some comfort from the fact that today, a significant number of respondents already operate at the required level of maturity (i.e., 44% scoring clusters 4 and 5 in the actual situation). If the corporate communications function chooses to strive for maturity levels 4 or 5, it would be wise to bring those that already operate at this level on board as a change agent.

5.CONCLUSIONS

Despite the documented benefits and scientific literature corroborating the efficiency of structured corporate communications within organizations, the results of the survey point to a significant difference amongst managers' present situation and future ambitions. Objectively tallying and clustering what communications practices managers aspire to will help design more effective implementation roadmaps, strategic courses of action, and support internal alignment. And by doing so, legitimize investments into a function that some still consider reactive and non-strategic. This study is based on 30 questions, which comply with the literature studies. Researchers could ask more questions to understand the situation better in future studies. The patterns we encountered for the dataset we employed might differ in another organization.

However, the software used in conducting this research is user-friendly and entirely customizable and can be used in further studies to complement and detect patterns in other datasets.

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