Management tools in corporate communication: A survey about tool use and reflections about the gap between theory and practice.

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MANAGEMENT TOOLS IN CORPORATE COMMUNICATION

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Structured Abstract

Purpose: The purpose of this article is to introduce the research field of management tools to

communication management scholarship and open up new avenues for the field.

Design: The first part examines established knowledge from the strategic management

literature about management tools as a means to support and facilitate organizational

decision-making. The second part reports on a survey among 125 communication

practitioners in corporate communication departments about the use of 32 tools for the

analysis, planning, implementation and evaluation of communication.

Findings: The study sheds light on the perceived relevance and benefits of tools, as well as on

knowledge and satisfaction and on general patterns of tool use. The findings demonstrate that

tools are gaining in importance, but there is a lack of understanding, training and

documentation of tools. Tools for planning and implementing communication are most widely

spread, reflecting the operational focus of corporate communications.

Practical implications: Practitioners find value in the compilation of the most popular tools

and implications on how to reflect about tool usage and outcomes.

Originality: The article provides directions for future research and reflects about tools as a

means to bridge the divide between theory and practice.

Paper type: Research paper

Key words: management tools, communication management, communication practitioner,

communication department, strategic management

Introduction

The management aspect of communication has intrigued communication scholars for decades. While the field has drawn great inspiration from management, strategy, and organization research over years, one important issue widely discussed in strategic management has so far been overlooked by communication scholars: management tools. Popular and well-documented management tools comprise, for example, Porter's (1980) Five Forces, Kaplan and Norton's (1996) Balanced Scorecard, or the BCG growth-share matrix (Rigby and Bilodeau, 2018). These tools support managerial decision-making processes by providing standardized and uniform approaches to problem-solving. Management and organization research have a rich tradition of exploring the adoption of tools in practice and investigating how and why general managers use tools (Jarzabkowski *et al.*, 2013).

It is quite striking that communication scholars have devoted scarce attention to the topic of management tools yet, since tools – understood broadly as methods, techniques, concepts, or procedures – provide important support mechanisms for the management of communications. The lack of consideration is particularly surprising in light of the current developments in the communications industry. Along with the digital transformation and increasing complexity of globalized markets and societies, the workload of communication departments has risen sharply (Zerfass et al., 2018). Communication departments are asked to manage reputation, handle crises, monitor social media debates, produce content, coach top executives, enable employees to become brand ambassadors and much more at the same time. In order to cope with the growing number of tasks with limited resources, clear goal orientation and standardized procedures and routines are necessary. Today's communication executives are challenged to implement effective managerial processes for the analysis, planning, execution and evaluation of corporate communications. However, less standardized procedures and tools are available for managing communication as for general managerial problems, and few of these approaches have become common knowledge in the communication profession. For example, popular communication management tools include SWOT analysis, SMART goals, stakeholder maps, or media response analysis (e.g. Mariconda and Lurati, 2015; Lurati and Zamparini, 2018). But apart from these widely known approaches, to our knowledge, the overall adoption of standardized tools across the communication profession is quite low (Zerfass and Volk, 2019).

In view of the flourishing research and practical relevance of tools in the management discipline, the purpose of this article is to bring this research topic to the fore of

communication management scholarship and extend contemporary research on the management dimension of communication. This article reaches out to the management literature about tools and reports on a survey among 125 communication practitioners exploring the use of communication management tools. It sheds light on the perceived relevance and benefits of tools and on the application of and satisfaction with 32 specific communication management tools for the analysis, planning, implementation and evaluation of communication. The article furthermore engages in a discussion of the relevance of academic knowledge for communication practice, and tools as a means to bridge the divide between theory and practice, and outlines directions for future research.

Literature review and theoretical background

To open up the research area of management tools to corporate communication scholarship, we first conducted a literature review in the strategic management field.

The term 'tool' stems from the Old English word "tōl" that literally means "that with which one prepares something". It is often used in the sense of a device intended to make a task easier or the equipment used in a profession. Following Clark (1997, p. 417), management tools can be defined as techniques, frameworks, methods, models, approaches, procedures, and methodologies that serve managers as support mechanisms in decisionmaking. Tools codify knowledge within structured approaches to analysis, planning, implementation and evaluation, often through some form of propositional or visual representation (March, 2006; Frost, 2003). Well-known examples, besides the aforementioned, are core competences such as VRIN, scenario planning, benchmarking, or value chains. These popular tools are often easily memorable, as they have mnemonic character, use alliterative labels, and consist of relatively few elements (Jarzabkowski and Kaplan, 2015). They help practitioners to simplify and standardize complex problems by providing a uniform scheme for discussion and systematically mapping relevant elements and influencing factors (Gunn and Williams, 2007). Such practicable frameworks can be distinguished from theories that explain terms and connections, as well as from models that show empirically measurable effects (Ostrom, 2009).

Strategic management research

The strategic management discipline has a long tradition of researching the use of tools and teaching tools in the classroom in order to provide students with applicable

knowledge (Riggio *et al.*, 2003). With more than 100 general management tools available to date, there are numerous hands-on books directed towards management practitioners (e.g., Burtonshaw-Gunn, 2008; Schawel and Billing, 2018). While early research on tools was mainly driven by practitioners, recent years have seen vivid scientific discussions.

On a *conceptual level*, a persistent debate has evolved around the rigor-relevance gap between management theory, education, and practice (e.g., Hambrick, 1994; Cummings, 2007; Kieser and Leiner, 2008). This debate has more or less explicitly been linked to tools as one means to bridge the gap and make academic work more relevant for practice. In this context, management scholars have argued that the adoption of tools in practice could be interpreted as a proxy for the relevance of management education (Jarzabkowski *et al.*, 2010; Jarzabkowski *et al.*, 2013; Wright *et al.*, 2013).

Over more than three decades, the topic of tools has stimulated numerous *quantitative* and more recently qualitative studies across the world and across different industries (e.g., Bellamy et al., 2019; Belmondo and Sargis-Roussel, 2015; Clark, 1997; Frost, 2003; Gunn and Williams, 2007; Hussey, 1997; Prescott and Grant, 1988; Roper & Hodari, 2015; Tassabehji and Isherwood, 2014; Wright et al., 2013). Much of the early research has employed a positivist, instrumental or normative perspective, asking what tools are being used, linking tool usage to organizational performance, and evaluating whether managers use tools in the 'correct' (textbook-like) manner (e.g., Ghoshal and Moran, 1996; Lozeau et al., 2002).

A critical strand of research has explored the role of professional service firms and management consultancies like McKinsey, Bain and Company, or BCG in developing and selling practices with a one-type-fits-all approach, resulting in management fashions and fads (e.g., Newell et al. 2001; Ghemawat, 2002; Alvesson, 2004). Bain and Company itself has been conducting manager surveys since 1993, identifying the top management tools and trends across the world (Rigby, 2001; Rigby and Bilodeau, 2018). Another line of critical research has investigated the role of business schools in producing a tool education industry and 'scholar-consultants' (Adler and Beer, 2008; Kimberly, 2007; Mintzberg, 2004; Pfeffer and Fong, 2002).

Moreover, scholars have also investigated *unintended consequences of tool usage*, such as inhibiting creativity or critical thinking, oversimplifying complex problems, producing excessive trust in 'technologies of rationality', or constraining understanding across organizational boundaries (e.g., March, 2006; Mintzberg, 2004). Others have discussed

the *performative nature of tools*, shaping and changing the perceptions of organizational realities (e.g., Callon, 1998; Cabantous and Gond, 2011; MacKenzie, 2006).

Scholars arguing from a practice-based perspective have employed a *sociological-behavioral approach* to tool usage, contradicting rationalist and normative views of organizations and strategy processes. Research from the strategy-as-practice perspective has shifted the focus to how and why managers adopt tools, in what context and for what tasks. Generally, this line of research has found that tools are neither necessarily applied instrumentally for problem-solving or decision-making nor selected intentionally, but rather in a boundedly rational satisficing manner (Jarzabkowski and Kaplan, 2015). Tool usage, in this line of thought, is strongly influenced by social and political dynamics, power games in the organization, and actors' competence to adapt tools to their own interpretations. Research into the motivations of managers has identified a wide range of reasons beyond the traditional academic preconceptions of the instrumental utility of tools: Managers adopt tools for signaling rationality, for delineating territories and sociopolitical purposes, for achieving closure and legitimization of certain actions, for individual career advancement, and for achieving shared understanding by using tools as boundary objects in communication (e.g., Jarzabkowski and Spee, 2009; Jarzabkowski and Kaplan, 2015; Gunn and Williams, 2007).

An elaborated *theoretical framework* (Figure 1) founded on the strategy-as-practice perspective has been suggested by Jarzabkowski and Kaplan (2015), who draw on fieldwork of strategy-making processes. They look at tools as 'tools-in-use' and cast a 'sociological eye' on tool usage, as proposed by Whittington (2007, p. 1577). Their theoretical framework takes into account the *selection* and *application* process of tools-in-use, the variety of *outcomes*, the *affordances* of tools, and the *agency* of tool users. The arrows indicate the complex, mutually interdependent influences between the different dimensions. It allows for quantitative and qualitative explorations of why individuals use tools, and how tools and actors interact.

Affordances of communication management tools

Selection

Application

Outcomes

Figure 1. Theoretical framework of tools-in-use adapted from Jarzabkowski and Kaplan (2015)

Communication management research

Against the background of the vivid debate about tools in the management discipline, it comes by surprise that our field has scarcely picked up the topic of tools so far. None of the best-selling public relations textbooks that explore approaches to communication planning (e.g., Broom & Sha, 2013; Gregory 2015; Smith 2017; Tench and Yeomans 2017) provide an overview of tried and tested tools. Notable exceptions are a recent book on communication strategy by van Ruler and Körver (2019), that introduces a practical framework for strategy development, and a small number of journal articles describing novel tools (e. g. Greyser and Ude 2019; Mariconda and Lurati 2015; Van Ruler 2015; Zerfass and Viertmann 2018). To our knowledge, there is currently *no scientific discourse about tools* in our field, no empirical data about the adoption of tools in communication practice, and no definitive summary of tools available.

A brief look into the *communication industry* supports the notion that the topic of tools has been of little interest in practice as well. Our search indicated that there are only a few tools repeatedly mentioned or referred to as best practices, e.g. SWOT analysis, the RACE formula, SMART goals, stakeholder mapping, RepTrak, or the brand steering wheel. Apart from these commonly known tools, previous qualitative research conducted by the authors in communication departments (Volk et al., 2017; Zerfass and Volk, 2018; Zerfaß and Volk, 2019) has shown that there are currently numerous non-standardized techniques and approaches employed in practice. However, these tools are often little known across the industry and there are no systematic descriptions to date. When descriptions exist, they usually focus on sub-areas such as press relations or social media (Reineke and Pfeffer, 2000; Pfannenberg and Schmalstieg, 2015; Pfannenberg *et al.*, 2019) and are published as

professional guides or instructions. Oftentimes, the existing methods and techniques are used under different names or structured differently, which leads to confusion and inconsistencies.

To conclude, it is hard to find standardized tools for most aspects of communication management (Volk *et al.*, 2017). This is problematic for practitioners who need to solve day-to-day problems, but can seldom rely on structured approaches that are based on academic theories, for instance insights from messaging research, the situational theory of problem solving (STOPS), the situational crisis communication theory (SSCT), dialogic PR theory, or organizational communication theories. Instead, practitioners often still rely on practical knowledge and job experience, successful best practices, and sometimes even gut feeling when they develop content strategies, brand positionings, crisis communication or social media activities.

While management scholars have discussed tools as a means to make academic theories and education relevant for and applicable in practice, such a discussion has only recently been initiated in our community by the authors.

Research aim and questions

In view of the lack of empirical data about the adoption of tools in corporate communication practice, we tried to produce first insights about the current practices of tools-in-use in communication management. While it will certainly be more interesting to explore how and why communicators use tools through qualitative research in the future, we cannot attempt to gain an understanding of the 'big' questions until we have the base data on what tools are used. Since we could not build on any previous data gathered among the communication profession, this project posed three descriptive research questions and refrained from formulating hypotheses:

RQ1: What is the understanding, relevance and benefits of tools in the eyes of communication practitioners?

RQ2: Which tools are currently used in communication departments and with what level of satisfaction?

RQ3: How are characteristics of the communication professional, department and organization related to tool usage?

Method

The first step was to create a comprehensive list of communication management tools. Because no conclusive list of available tools for communication management exists to date, we made strong efforts to collate all formally documented tools from the academic (textbooks, handbooks, journal articles) and professional literature (guide books, magazines, industry reports, white papers, blogs), using a variety of search terms related to the management of communication (e.g., strategy, planning, situation analysis, evaluation and measurement, campaign, goals) and tool terminology (e.g., method, model, framework), resulting in more than 50 available tools specifically for communication management. For reasons of the practicability of the survey, the original list was reduced to 32 tools, which undoubtedly poses a limitation of our study. The criteria for including tools was that they are a) applicable to generic problems of communication management – not just for specific communication fields such as employee communication – and b) that they are written down, tried and tested in practice; this iterative process was c) informed through consultations with about 40 communication executives and d) two long-standing management consultants as well as e) prior case studies in ten communication departments (Zerfass and Volk, 2018). These tools had various disciplinary origins (e.g. general management, marketing, IT, journalism) and were systematized according to four management phases: analysis, planning, implementation, and evaluation (Table 1). Of course, this is an ideal-typical phase systematization and some tools, for instance media response analysis, can be used both in the analysis and the evaluation phase.

Analysis tools help to analyze changing stakeholder expectations, markets and environments, provide evidence-based foundations for decision-making, point out different strategies of action, forecast trends and innovation opportunities. Planning tools help to set up communication departments, define a communication strategy and derive specific goals, make staffing and budgeting decisions, develop time schedules and project management goals. Implementation tools help to implement communication programs and ensure that plans are in place, steer and lead teams and orchestrate co-workers, guide processes and workflows. Evaluation tools help to monitor and evaluate the execution of operations, identify improvement needs and adjust communication activities accordingly (Volk et al., 2017; Zerfass et al., 2017).

Table 1. Tools analyzed

Analysis tools	Planning tools	Implementation	Evaluation tools
		tools	

SWOT analysis
 Benchmarking
 Stakeholder map
 Process analysis
 Persona analysis
 Budget analysis / Financial
 Decomposition
 Scenario
 technique &
 forecasting
 Topi
 Sudget
 Reprince of the process of t

Communication

touchpoint analysis

Topic planning Editorial plan Budget planning Briefing Reputation Checklist management Communication Outsourcing scrum House of Portfolio of communication instruments targets Topics pyramid

Mission

statement

- Positioning
 matrix
 Brand steering
 wheel

 Target radar
 Flow charts and
 swim lanes
- Big data and social media analytics
- Dashboard
- Sentiment tracking
- Reports
- Media response analysis
- Communication scorecards
- Reputation analysis
- Brand assessment

Study design

We adopted the basic logic of the theoretical framework of tools-in-use by Jarzabkowski and Kaplan (2015) and focused on three out of five dimensions of the framework: *application* of tools, *outcomes* of tool usage, and *affordances* (*possibilities and constraints*) of tools. Indubitably, this represents only a fraction of the framework, but our goal was to provide the very first base data of *what* tools are used, before we can further explore the underlying processes of *why* and *how* tools are used in situated practice. Further work might follow our path and examine the remaining dimensions and mutual interactions of tools-in-use employing the full spectrum of available methods.

We then developed an online survey instrument, based on a self-report approach, which is a common approach to study tools usage (e.g., Jarzabkowski *et al.*, 2013; Frost 2003; Gunn and Williams, 2007). The instrument consisted of 30 questions, using five-pole Likert scales as well as single and multiple selection questions, and filters. Existing measures were adopted from management previous tool studies (Clark, 1997; Day *et al.*, 1990; Frost, 2003; Grant, 2003; Gunn and Williams, 2007; Hussey, 1997; Hodgkinson and Wright, 2002; Jarzabkowski *et al.*, 2013; Jarzabkowski and Giulietti, 2007) where possible; few items were developed based on polit-testing interviews with practitioners. Functionality and comprehensibility were checked during a pre-test with 15 practitioners and subsequently optimized.

Measures

The survey asked about the general understanding, relevance and benefits of tools, the application and satisfaction with the pre-identified 32 tools (Table 1), and general usage

patterns.

Understanding and relevance. We created a first question to explore the respondents' general understanding of communication management tools, using basic definitional elements of the tool definition by Clark (1997) as well as different connotations of the term used in communication practice; multiple answers were possible. We developed a new question battery asking for the perceived current and future relevance of tools and how respondents came into contact with tools; respondents indicated their level of agreement on a five-point Likert scale.

Application. We adapted the item battery developed by Jarzabkowski and Giulietti, (2007) to assess tool knowledge and application, including four possible dimensions: a) tools which are currently used/have been used in the communication department, b) tools which have never been used in the communication department, c) tools unknown to the respondent; d) tools of which the respondent does not know whether they have been used in the communication department. We furthermore asked about general usage patterns in the department and of peers; respondents indicated their level of agreement on a five-point Likert scale.

Outcomes. We used a filter to interrogate the respondents about their level of satisfaction with those a) tools which are currently used/have been used in the communication department, using a five-point Likert scale. We also tested the perceived instrumental utility of tools.

Affordances. Building on previous research, we incorporated individual, organizational, and external factors that together present possibilities and constraints of tools-in-use. Respondents indicated their level of agreement on a five-point Likert scale. Individual factors comprised personal demographics such as age, job experience in communications and consulting, hierarchical position, education and academic degree, attendance of management trainings, and responsibility for tools. Organizational factors included company size and revenue, headcount of the communication department, perceived top management support for tool usage in communications, and previous assessment of communication by management consultancies.

Sampling and sample characteristics

The focus of this project was the individual communication professional in a management position and/or in charge of strategic, steering or controlling responsibility in large companies. The rationale was to examine a senior group of practitioners who have been

in contact with a range of communication management tools due to their job function and are hence able to report on the usage of tools. The survey was administered online between April and June 2018 to a sample population of 383 communicators in management positions and/or with strategic, steering or controlling responsibility in large companies in Germany, one of the four largest economies in the world. The Email distribution list was collected by the authors over a time frame of more than eight years facilitated by numerous long-term research projects as well as personal contacts, continually updated, and manually checked by the authors for applicability to the sampling criteria, resulting in a high-quality list of top-level corporate communication managers in the country. The sample was personally invited via Email to participate in the study. Respondents who did not meet the criteria were excluded during data cleansing.

The final sample consisted of 125 fully completed questionnaires (response rate: 32.6%; without excluding nonresponsive e-mails). 68 percent of the surveyed communicators were male, with an average age of 46.6 years. 40.8 percent of the respondents were chief communication officers, 46.4 percent were in charge of leading departments, areas or teams, and 12.8 percent were employees. 96.8 percent reported to be responsible for selecting and implementing tools in their department or area/team. 72.0 percent had more than 16 years of job experience. The majority (87.2%) reported to attend management trainings regularly; 38.0 percent had gained previous experiences in management consulting and 36.0 percent had a management education background. Most respondents (79.2%) worked in large companies with an annual revenue of more than 1 billion Euro and up to more than 20 billion Euro; along this line, three out of four (72.0%) stated that their communication department had at least 11 and up to more than 100 employees.

Data analysis was conducted using IBM SPSS software. For RQ1 and RQ2, descriptive statistical methods were used. To answer RQ3, we made cross-tabulations (Pearsons's r and independent t-tests) to determine which factors influence tool usage.

Results

Understanding, relevance and benefits of tools

RQ1 asked for the general understanding of tools and the perceived relevance and instrumental benefits of using tools. Table 2 shows that the conceptual understanding of tools reported by the respondents did not always coincide with the general management discourse. A majority postulated that methods (85.6% approval; e.g. stakeholder or media analyses) or

techniques and procedures (76.8%; e.g. for communication planning) can be understood as tools. Only every second (52.8%) agreed that management tools also include thinking tools/frameworks (e.g. for situation analyses). Instead, databases (e.g. for journalists), software systems (e.g. for project management), platforms, channels and apps (e.g. Instagram, websites) or communication activities (e.g. newsletters) were often considered as tools as well.

Table 2. Understanding of management tools

		Agreement
Understanding of tools	n	Percent
Methods	107	85.6
Techniques and procedures	96	76.8
Thinking tools	66	52.8
Databases	81	64.8
Software systems	77	61.6
Platforms, channels, and apps	59	47.2
Activities	39	31.2

n = 125. Question: There are many different definitions and understandings of communication management tools. What do you mean by that? Percentages show agreement with individual statements. Multiple answers possible.

One reason for this more operational understanding of the term is probably the fact that only a quarter of the respondents were confronted with management tools during their academic studies or further education (see Table 3). For practitioners, the topic has so far become more or less randomly accessible – if at all – in everyday working life: 63.2 percent of the respondents have learned about tools in detail during the course of their professional practice. Only four out of ten communication leaders believed that peers working in their communication department are able to use tools competently (39.5%). The proportion of departments in which tools are systematically documented is a bit higher (41.9%).

On the other side, 72.1 percent of the respondents stated that communication management tools are used more intensively in their company compared to five years ago; even more claimed that tools will gain in importance with growing and more complex tasks in communication departments (88.0%). A clear majority of the respondents (91.2%) advocated that tools should be part of the professional skill set of communicators.

Table 3. Perceived relevance and general usage patterns of tools

		Agreement	
Relevance and usage pattern	Percent	M	SD
Our communication tasks are becoming increasingly complex	92.3	4.57	.874
Communication management tools are used more intensively today than five years ago	72.1	3.89	1.119
Tools will gain in importance due to growing and more complex tasks	88.0	4.42	.845
Tools should be part of the knowledge and skills of communicators	91.2	4.45	.724
I learned about tools in detail in my studies or in further education	25.6	2.50	1.336
I learned about tools in detail during the course of my professional practice	63.2	3.84	1.084
The staff in our department can use tools competently	39.5	3.18	.996
In our department tools are systematically documented	41.9	3.15	1.187

 $n \le 117$. Questions: If you think about the topic in general, to what extent do you agree with the following statements? Agreement on a scale from 1 (fully disagree) to 5 (fully agree). Percent shows scale points 4 (agree) and 5 (fully agree).

Table 4 reveals that the surveyed practitioners see a number of instrumental benefits of using tools for their daily work: 79.0 percent agree that tools facilitate structured problem recognition and routinized problem processing. More than two-third also mentioned the simplification of complexity (69.5%) and efficiency of finding solutions (68.5%) as benefits.

Table 4. Perceived instrumental benefits of tools

	Agreement		
Benefits of tools	Percent	M	SD
Tools facilitate a structured recognition of problems	79.0	4.15	.893
Tools enable a routinized processing of problems	79.0	4.02	.836
Tools help to simplify complex problems	69.4	3.85	.920
Tools enable efficient solution finding	68.5	3.85	.893
Tools help to accelerate decision-making processes	62.6	3.78	1.075

 $n \le 123$. Question: If you are thinking specifically about the use of communication management tools in your daily work, to what extent do you agree with the following statements? Agreement on a scale from 1 (fully disagree) to 5 (fully agree). Percent shows scale points 4 (agree) and 5 (fully agree).

Use of and satisfaction with tools

RQ2 asked for the application of the 32 tools provided and the outcomes of tools-in-use. Table 5 shows which tools are currently/have been used by the surveyed respondents, as well as which tools remain unknown or have not been used by the sampled communicators, and for those tools-in-use, how satisfied the tool users are. Interestingly, on average, the respondents reported that their communication department has already used 21 of the 32 tools. This indicates that a broad repertoire of established thinking tools and methods is available in practice – even if they are not systematically documented or reflected upon (Table 4).

As visualized in Table 5, tools for the *planning* and *implementation* of communication are most widely used by the surveyed respondents: Topic and budget planning, editorial plans and checklists have been used by 88 to 94 percent of the companies in the sample. Only one analysis tool (SWOT analysis: 90.4%) and one evaluation tool (media response analysis: 92.8%) have a comparable large spread. Overall, methods from strategic management or marketing, e.g. budget analysis (56.0%) or brand steering wheel (50.4%), are less often used than operational and traditional tools stemming originally from public relations or journalism.

A comparison of usage and satisfaction with tools in Table 5 indicates interesting gaps: satisfaction with more complex tools is often higher than with widespread, mostly operational standard procedures. The degree of satisfaction with established methods is least pronounced in the *analysis* stage. Only two methods reach the average mean value (M = 3.9)of tool satisfaction: SWOT analysis and communication touchpoint analysis. However, many respondents are not even aware of the communication touchpoint analysis (28.0%) and it is only used in 37.6 percent of the companies. Among the tools for communication planning, the house of communication targets received quite positive feedback from the users (M = 4.14, SD = .907), but is comparatively rarely used by only 52.8 per cent of the companies. Two well-known tools, mission statement and topic planning, lead the satisfaction ranking in this stage. Four favorites clearly stand out in the *implementation* stage of communication management, both in terms of use (over 80%) and satisfaction: checklists (M = 4.16, SD =.719), editorial plans (M = 4.14, SD = .869), briefings (M = 4.10, SD = .781), and portfolios of instruments (M = 4.01, SD = .796). Flow charts and swim lanes, in contrast, have the lowest values in both dimensions and among all tools. Of the evaluation tools, media response analyses (M = 4.0, SD = .903), reputation analyses (M = 3.97, SD = .794), and dashboards (M = 3.97, SD = .794)

= 3.97, SD = .822) have the highest satisfaction value, followed by brand evaluations (M = 3.87, SD = .818). The picture is different when it comes to usage: media response analyses (92.8%) and reports (80.8%) are in the lead. However, only 63.5 percent of the communication departments that use reports are (very) satisfied with the tool (M = 3.81, SD = .893). For big data and social media analytics, spread (68.8%) and satisfaction (68.8%, M = 3.84, SD = .875) are exactly the same – this is not the case with any other tool.

On the flip side, there is also a *knowledge gap*, as many communicators in the sample had never heard of some tools, especially those originating from marketing or organizational development. The least known tools include touchpoint analyses (unknown to 28.0% of the respondents), persona analyses (16.8%) and the brand steering wheel (16.0%), communication scrum (26.4%), flow charts and swim lanes (20.8%), or scenario technique and forecasting (14.4%).

Table 5. Comparison of use and satisfaction with communication management tools

Tool	Has been used	Has never been used	Don't know this tool	Don't know whether it has been used	Satisfaction*		*
-	Percent	Percent	Percent	Percent	M	SD	Percent
Analysis							
SWOT analysis	90.4	4.0	2.4	3.2	3.95	.866	68.4
Communication touchpoint analysis	37.6	21.6	28.0	12.8	3.89	.809	73.0
Budget analysis	56.0	20.0	11.2	12.8	3.83	.968	59.3
Benchmarking	84.8	8.0	4.0	3.2	3.77	.927	64.1
Stakeholder map	74.4	12.0	8.0	5.6	3.77	.939	57.7
Scenario technique and forecasting	44.0	26.4	14.4	15.2	3.68	.909	56.8
Persona analysis	59.2	15.2	16.8	8.8	3.58	.869	53.3
Process analysis	63.2	16.8	7.2	12.8	3.54	.905	50.0
Planning							
House of communication targets	52.8	24.8	17.6	4.8	4.14	.907	74.1

Topic planning	94.4	4.0	.8	.8	4.12	.863	76.2
Mission statement	81.6	11.2	1.6	5.6	4.11	.988	77.1
Brand steering wheel	50.4	23.2	16.0	10.4	3,98	.941	68.9
Budget planning	92.0	4.8	2.4	0.8	3.93	.972	71.3
Positioning matrix	61.6	18.4	10.4	9.6	3.91	.864	70.7
Reputation management	62.4	19.2	10.4	8.0	3.80	.780	64.1
Outsourcing	46.4	28.0	7.2	18.4	3.57	.890	57.1
Implementation							
Checklist	88.0	3.2	4.8	4.0	4.16	.719	81.1
Editorial plan	94.4	2.4	3.2	0	4.14	.869	77.5
Briefing	84.0	7.2	7.2	1.6	4.10	.781	82.8
Portfolio of instruments	81.6	8.0	7.2	3.2	4.01	.796	75.8
Target radar	37.6	31.2	19.2	12.0	3.89	.981	65.8
Communication scrum	25.6	37.6	26.4	10.4	3.83	.913	63.3
Topics pyramid	40.0	32.8	19.2	8.0	3.79	1.00	64.3
Flow charts and swim lanes	35.2	32.8	20.8	11.2	3.45	1.12	42.4

Evaluation							
Media response analysis	92.8	5.6	1.6	0	4.00	.903	71.2
Communication dashboards	68.8	20.0	5.6	5.6	3.97	.822	70.8
Reputation analysis	71.2	20.8	4.0	4.0	3.97	.794	75.3
Brand assessment	60.0	26.4	4.8	8.8	3.87	.818	70.9
Big data & social media analytics	68.8	21.6	4.0	5.6	3.84	.875	68.8
Reports	80.8	12.0	3.2	4.0	3.81	.893	63.5
Sentiment tracking	55.2	25.6	8.8	10.4	3.79	.970	61.9
Communication scorecards	43.2	40.0	9.6	7.2	3.58	1.234	55.6

Note. n = 125. Questions: Which of the following tools have already been used in your department? How satisfied are/were you with the practical application of the tool in your department? *Satisfaction on a scale from 1 (not satisfied at all) to 5 (very satisfied). Percent shows scale points 4 (satisfied) and 5 (very satisfied).

Factors correlated to tool usage

RQ3 asked about the individual and organizational factors that enable or constrain tool use. In line with previous management studies, the survey results confirmed that organizational and individual factors are related to the average number of tools used. Interestingly, no significant relationship was found between external factors and tool usage.

First of all, it was assumed that larger companies and larger communication departments use more tools than smaller ones, because the need for coordination between the communication function and other company functions or service providers increases and the expected benefit of using standardized procedures is greater. This positive relationship between the *average number of tools used* (21 out of 32) and *company size* (r = .363, p = .000) and *department size* (r = .342, p = .000) is supported by the empirical data. Smaller companies with annual revenues of up to 1 billion Euros use an average of 17 different tools, while the largest companies with revenues of over 20 billion Euros use 23 different tools on average. This number is also reported by communication departments with more than 100 employees; those with up to 10 employees use an average of 18 tools.

Interestingly, there was no significant relationship between management support and tool usage. However, management consultants seem to leave their mark. An independent t-test, t(114) = 3.473, p = .001, revealed that significantly more tools are used in communication departments, which have been *analyzed by external or internal management consultancies* such as McKinsey in the last five years.

The respondents' demographics were also correlated to tools usage. Significantly more tools are used by communicators who have longer *job experience* in the industry (r = .223, p = .012). An independent t-test, t(123) = -4.502, p = .000, showed that respondents who attend *management trainings* also report an average use of 22 tools in their department; if they are not exposed to management trainings, the number is significantly lower with 15 tools on average.

Finally, there is also a low correlation between the average number of tools and *perceived tool benefits*. The contribution of tools to accelerating decision-making processes (r = .220, p = .015) and to efficient solution finding (r = .299, p = .001) are seen more clearly by respondents who work in departments that use more tools. Contrary to our initial assumptions, job position, management education background, and previous consulting experience had no significant relationship with tool use.

Discussion

Our study provides a first glimpse into tools usage in communication management, revealing high agreement from the surveyed communication practitioners that tools are nowadays used more intensively than five years ago and will be gaining in importance. However, the findings also indicate a lack of understanding, training and documentation of tools, as two thirds of the respondents have only learned to use tools 'on the job'. The descriptive findings show that the surveyed practitioners use mostly traditional operational and simple frameworks and methods. The wide spread of operational tools for planning and implementing communication (e.g. topic planning, editorial plan) – and the low satisfaction with analysis tools – mirrors the often-bemoaned operational focus of corporate communications. The use of traditional tools (e.g. SWOT, stakeholder maps) is little surprising, since these usually enjoy technical, cultural and linguistic legitimacy in a profession (Campbell, 1997) – even if satisfaction is low. But the surveyed communicators are little aware of more complex tools with high strategic impact and of concepts originating from outside the PR and communication field. This is counterintuitive considering the fact that the respondents reported that communication tasks are becoming increasingly complex and that satisfaction is often higher for more advanced tools (e.g. brand assessment, touchpoint analysis). The wide spread of more simple tools with comparatively lower satisfaction (e.g. reports), on the other hand, might indicate that institutionalized professional norms or routines drive the selection of tools. Overall, these discrepancies support the notion that tool spread and satisfaction not necessarily coincide, contradictory to functionalist assumptions of practice-oriented tool research.

Of course, no study is without limitations and we are aware that the sample of senior communicators working in large companies surveyed in this study – based on a high-quality list and strict selection criteria – might have resulted in a positive bias, mirrored in a greater ascribed relevance to tools. Like almost all studies of the profession, our results are not representative or generalizable to other contexts, as the population of communication practitioners in this and many other countries is unknown due to a lack of census data. Further studies should therefore aim for larger sample sizes of communication practitioners to test for differences across job functions and hierarchical levels, industries, company sizes (e.g., startups, small and medium companies), organization types (e.g. non-profit, governmental), and countries. It would also be desirable to further develop the survey instrument by including more sophisticated measures of the external drivers (e.g., complexity, uncertainty) and examining the multi-faceted outcomes beyond satisfaction with instrumental usage at the

individual, organizational, and field level. Such research is, however, challenged by the fact revealed in this study that the concept of management tools is less known in the profession, compared to marketing or general management. It is therefore most important that future research continues to examine tool usage in practice both from large-scale quantitative and much-needed qualitative perspectives.

In spite of the limitations, our study emphasizes the gap identified in the literature analysis between strategic management in general and communication management specifically. Our research confirms our assumption that theories and concepts from our field are rarely translated into applicable knowledge for the communication profession, as it is common practice in the management discipline. We assume that one possible explanation is that the knowledge transfer between academia and practice is insufficient. Another one is that contemporary research might be less relevant for the profession: Today's research produces a bulk of micro studies, often based on experiments with a myriad of variables that are statistically relevant. However, the results are oftentimes irrelevant in practice because they cannot be controlled or influenced by communication practitioners and hence seldom help solve daily problems.

Viewed in light of the overall debate about management tools in management science, we derive three implications from the literature and our observations: 1) for our scholarly community (how to translate theories into tools), 2) for those educating and transferring knowledge between academia and practice (how to teach tools and stimulate this exchange), and 3) for communication practitioners (how to reflect about tools and enable team members to use tools). Our intention is to encourage and stimulate a more detailed engagement with tools in the future both in academia and practice:

1) Scholars may reflect about the relevance of academic education from a new viewpoint and consider communication management tools as a perspective to discuss this gap: Can theory-based and practicable tools help to bridge the divide between theorizing and practice? Understanding tools as a proof point of theories and concepts might help to focus future research on problems that matter in the real world. Attempting to explain key elements, connections, and drivers in a consistent and easily understandable way to those who are in charge of making decisions in complex situations in practice is hence a large opportunity for scholars who are interested in making their research matter to the practice. We believe that many well-established concepts – such as crisis communication or stakeholder relationship management research – have not yet been broken down to their very essence and translated

into standardized practicable methods or frameworks until now. It would hence be worthwhile to develop such tools, collaborate with companies or agencies to implement them, and evaluate the use and satisfaction. Translating theories into tools however comes with multiple risks that scholars need to be aware of: the oversimplification of complex theories when broken down for practice, the potential of misinterpretation or incorrect adoption in practice, a possible misunderstanding in different cultural or linguistic professional fields, and the risk of role confusion and ambiguity as a 'scholar-consultants' (Kimberly, 2007; Adler and Beer, 2008).

2) Educators should reflect upon what they are currently teaching in undergraduate and graduate courses. Tools can and should also be trained and used in the classroom – this has been done in business schools for decades and is part of the success of the management discipline. In contrast, our survey shows that only a quarter of the respondents were confronted with management tools during their academic studies or further education. Future studies should hence systematically explore which tools are currently taught in communication programs and which are not. Is our contemporary communication management education at all beneficial to communication practice? How do communication alumni incorporate their academic education into their practice? How can we integrate tools in teaching and textbooks? Which formats (i.e. case studies, real-world experiences) are suitable for training tools as a way of thinking and means for discussion in the classroom?

As educators, scholars should also ask how they can support transferring knowledge from theory to practice, i.e. by getting involved in executive trainings or professional associations. Together with dedicated transfer associations and organizations like the A.W. Page Center, The Plank Center, or the Institute for Public Relations in the United States, The Academic Society for Communication and Management in Germany, LOGEION in The Netherlands, educators can stimulate the development, spread and assessment of management tools for corporate communications.

3) Communication practitioners should start to reflect upon the adoption of communication management tools. Using standardized routines is not only a sign of professionalism, but a contribution to the bottom line as it helps to save costs and leverage the full potential of competencies. Providing a company-specific selection of tools – a toolbox – signals rationality and increases acceptance as a business partner by top management and other departments, as indicated by previous research. However, caution is required with regard to

elusive management tool fashions promising 'the one right method' (Kiechel, 2013). Selecting appropriate tools requires thorough research, weighting strengths and weaknesses, and exchanging experiences with other tool users. Research shows that quick and simple solutions are not always effective: The lower the effort involved in selecting and implementing tools, the greater the risk of dissatisfaction (Rigby and Bilodeau, 2018). Systematic documentation and standardization of tools is essential, since knowledge can only be codified and passed on to new employees or service providers if tools are documented in written form. A solid understanding of business fundamentals and regular attendance of management training courses is positively correlated with the use of management tools in general (Nohria *et al.*, 2003) and especially in corporate communication (see above).

Communication consultants and agencies should consider investing into the development of agency-specific tools for consulting as well as for the different stages of communication management. Management consultancies such as McKinsey or BCG have done this since decades. Promoting such concepts helps to profile consultancies and stimulates a competition on the level of approaches, not only based on deliverables and execution.

Conclusion

This research project extends existing scholarship on managing corporate communication and standardizing decision-making, planning, and measurement activities in communication practice. It opens up new avenues for our field by integrating established knowledge from management science and by initiating a discussion about tools as a means to bridge the gap between theory and practice. At the same time, our empirical results address current needs of practitioners, who are struggling to manage a rising number of tasks with limited resources.

Armed with this base data of *which* tools are used in communication practice, we now need to explore in more depth *how* tools are used. Additional quantitative and comparative research would be useful to acquire insights into the use of management tools in other professional cultures. The instruments used for this study can be shared to advance international research that matters to the profession. Which tools are used with which motivations in different countries, industries, and in which situations? Which factors drive tool application, tool selection, and tool outcomes, and how do they interact? What is the level of competencies and expertise for tool usage among communicators and alumni of our

undergraduate and graduate programs? Which application patterns are more or less useful or beneficial? Will standardized management tools and toolboxes reduce the adoptability to local management traditions? These questions are future terrain for scholars wanting to engage in tool research.

Looking ahead, qualitative empirical research employing a 'sociological eye' (Whittington, 2007) is needed to better understand the contextual dimensions of tools-in-use and capture why and how tools are used. Especially the two dimensions selection of tools and agency of tool users of the theoretical framework by Jarzabkowski and Kaplan (2015), which were not included in this survey, warrant further explorations. Attention should also be directed to the relationship between tools and professional, organizational, or institutional contexts as well as dynamics over time. We have recently initiated qualitative research in five communication departments and ten communication agencies to learn more about the motivations of tool users beyond instrumental benefits, about satisficing symptoms during the selection process, the multiplicity of potential outcomes and problems associated with tools, which we were unable to include in the quantitative survey. From these first explorative insights we can already conclude that there is great potential for future studies investigating tools-in-use in communication management further.

Methodologically, interview settings, observations or shadowing studies, ethnographic research, and document analyses would be desirable to explore the everyday applications of tools by practitioners, different types of use, and the general praxis across the communication profession. In this regard, it would be insightful to examine how communicators change and adapt tools to their organization to fit their particular needs. Moreover, we know from previous research that in-house communicators and agencies invent organization-specific new tools; what are the motivations and benefits of creating new tools, when there are tools already available? Agency theory might pose a valuable theoretical lens to investigate the (hidden) motives and power games of tool users. The communication-constitutes-organization (CCO) perspective could shed light on how tools are codified in texts and language and serve as symbolic communicative mechanisms to create sense in the organizational context. In this line of thought, tools may help (or hinder, Grant, 2003) to develop a common language for workplace communication, from which 'outsiders' not speaking this language can be excluded. Such research might explore i.e. how communicators conform with 'business language' and use tools for career or status purposes (Jarzabkowski et al. 2013; Barry and Elmes, 1997; van der Heijden, 2005). Along this line, it would be interesting to also read tools as texts and explore how tools themselves speak for an organization.

Furthermore, it would be insightful to reflect about tools from an institutionalist viewpoint and explore how tools become routinized in organizational practice, how tool fashions and fads emerge and spread across the industry, or how tools become institutionalized as 'rationality myths' for ceremonial display and impression management. The performative nature of tools and the potential paradoxes accompanying their application, i.e. overly trust in tools, blind spots, or functional stupidity, also deserves scholarly attention.

We trust that the subject of tools opens up numerous research opportunities for scholars exploring management aspects of corporate communications. Telling from the resonance that our study sparked in German industry magazines and at professional congresses, we believe that the development of theory-based and practicable tools might also serve as a compelling evidence for the relevance of academic knowledge for practice and help to bridge the rigor-relevance gap.

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