

## Organizational Social Media: A Comprehensive Framework and Research Agenda

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### Abstract

*Social media refer to technology artefacts that support various actors in a multiplicity of communication activities for producing user-generated content, developing and maintaining connections and social relationships, or enabling other computer-mediated interactions and collaborations. Despite the growing proliferation of social media articles, the topic of Organizational Social Media (OSM) has hitherto received little attention despite the fact that social media technologies are likely to have a tremendous effect on various organizational processes of communication and collaboration. To set the stage for future OSM research, we review the full set of existing literature on social media to date—618 journal and conference articles—in general, as well as papers on OSM, in particular. We augment these with insights from general organization science and management literature that addresses collaboration in order to develop a comprehensive research framework, identify important research gaps and present crucial research topics to guide future OSM research.*

*Keywords: Social Media, Organizational Social Media, Organizations, Collaboration, Comprehensive Research Framework*

### 1. Introduction

In recent years, the increasing popularity of Social Network Sites has resulted in a vast amount of empirical and conceptual papers on social media. However, in spite of a burgeoning field of social media research, the topic of Organizational Social Media (OSM) has received very little attention to date. Despite the growing awareness that social media technologies have the potential to radically change important organizational processes of communication and collaboration, research in the area of social media

and organizations has merely addressed the use of social media for advertising and marketing purposes and has largely ignored the more general use of social media by and within organizations.

Yet, as new social media continue to emerge and existing social media proliferate, it seems likely that various organizational actors will use these technologies beyond the context of advertising and marketing to increasingly support all sorts of organizational activities, including collaboration, knowledge sharing, relationship building, learning and innovation. Hence, there is a strong need for research to understand the role of OSM in supporting a variety of actors in performing these important organizational communication activities.

The lack of research on OSM seems to be related to two challenges facing the domain of social media research. First of all, despite the plethora of definitions on social media and related terms, the field lacks a thorough, theoretically grounded description of the meaning of social media [5]. Instead, as it became apparent in the course of the study being presented here, the majority of definitions that we identified in the literature so far myopically reference a set of characteristics of social media platform or specific examples of social media technologies, hence, offer little of an analytic definition.

Second, there is a preoccupation with the individual user as a level of analysis [5] at the expense of analyzing social media-related phenomena that transcend the individual user and relate to higher-level units of analysis, such as the group and organizational level. Nonetheless understanding social media in the context of organizational communication practices and activities requires multi-level research that spans across numerous levels of analysis, including the individual, organizational and extra-organizational (i.e., systemic) levels.

Therefore, in order to address these two challenges, this paper provides the following contributions. On the one hand, we formulate a

working definition of social media that is based on a review and integration of the existing literature on social media published to date—i.e., a total of 618 conference and journal articles. On the other hand, based on these findings and additional insights from the more general literature on technologies for supporting collaborative activities, we formulate a working definition of OSM and use this to develop a comprehensive research framework that can further guide research into this area.

In order to develop this research framework, we integrate popular concepts already studied in the social media literature—regardless of the context of analysis—with important concepts in the organization science and management domain that have hitherto been neglected in social media studies. The proposed framework consists of two layers, each of which is represented by three components respectively. The first layer encompasses three general elements of OSM, namely artefacts, actors and activities. The second layer encompasses three specific sets of actors that engage with and are affected by OSM, namely management, employees and external stakeholders. While the majority of these components can be analyzed at the organizational level, we argue that most components can be applied at multiple levels of analysis, since the components span across individual, organizational and extra-organizational (i.e. systemic) levels of analysis. By broadening the theoretical focus, this multilevel model enables studying and capturing the idiosyncrasies and complexities associated with the implementation and use of OSM.

Before discussing the details of our comprehensive research model, the following section first describes how the literature review of social media articles was conducted and discusses several general findings from this review, in particular regarding the levels of analysis and existing definitions. Based on these insights, we present a general working definition of social media. In the subsequent section, we present a definition of OSM as well as our integrative framework of OSM. The multiple components of the framework are then discussed through outlining the existing literature as well as highlighting research gaps that provide opportunities for future OSM research. Additionally, for each component we identify and develop a set of potential research topics that need to be addressed. Finally, we conclude through summarizing the findings of this conceptual analysis and discussing the implications of the proposed framework.

## **2. Social media: prior work and a definition**

In order to understand the state of social media research with respect to the levels of analysis, existing definitions, and the topics of social media use in organizational contexts that have been addressed so far, an in-depth literature review was conducted in the fall of 2011. We searched for scholarly articles in the ProQuest database from 2005 onwards. It is important to note that our review of the social media literature was not restricted to MIS journals, rather, we conducted a broad search for articles containing a social media technology, regardless of the journals' primary domain of research. Therefore, in what follows our discussion of social media research is based on a broad set of outlets rather than a narrow subset of MIS journals, including both journal articles and conference papers/proceedings from any disciplinary domain. This strategy allowed us to cast a wider net to see where social media research is being published, if not in the top MIS journals. The following keywords were used in our search: social medium, social media, social network site(s), social networking site(s), online social network(s). Our initial search resulted in 1516 journal and conference articles, of which 466 articles were duplicates. After the removal of duplicate articles, our remaining dataset consisted of 1050 unique scholarly articles.

The main acceptance criterion for inclusion of an academic paper in this review was the use of the term social media or any of the abovementioned related terms as the core technology analyzed or as part of the core argument. Hence, in order to assess whether the articles were truly relevant to this study, two independent coders read the abstracts of all articles in the data set. The initial agreement between the two coders on the relevance of each article was 92%. In a face-to-face meeting, the coders discussed and negotiated their choices until they agreed upon the relevance of every article in the dataset. After this last step, the dataset included a total of 688 articles. For the final review, we analyzed 618 articles as we were unable to retrieve 70 papers from the Internet (through the e-resources of three large University libraries) and after requesting a copy from the authors via email.

With respect to the 618 articles on social media in general, we found only one article on social media in the 'AIS Basket of 6' (i.e. European Journal of Information Systems (EJIS), Information Systems Journal (ISJ), Information Systems Research (ISR), Journal of AIS (JAIS), Journal of MIS (JMIS), and MIS Quarterly (MISQ)), which was published in ISR. We found an additional two articles by expanding the search to the 'AIS Basket of 8' (i.e. Journal of

Information Technology (JIT) and Journal of Strategic Information Systems (JSIS) in addition to ‘AIS Basket of 6’), which were both published in JIT. When sorting the 618 articles by journal, we found that the following three journals were the most popular outlets, namely: Cyberpsychology, Behavior and Social Networking (21 papers), Computer in Human Behavior (21 papers), and Journal of Computer-Mediated-Communication (13 papers).

Since the aim of this paper is to provide a comprehensive research framework of Organizational social media, we decided not to restrict our literature review to papers dealing with social media in organizations for the first step of the review, that is, for analyzing applied levels of analysis, definitions, and research questions. Given that the number of articles on social media in organizations is extremely low, such a focus would have resulted in a very restricted literature review and hence would have limited the possibilities for identifying relevant themes for future research on OSM. However, in the second step of the literature review, we filtered out and zoomed in on the articles dealing with social media in the context of organizations, which resulted in only 19 papers in order to delineate recommendations for future research.

The 618 articles are almost evenly split between conceptual (288 articles, 46.6%) and empirical (330 articles, 53.4%) and only about a quarter of all papers (163 papers, 26.4%) is based on strong theoretical grounding. As mentioned in the introduction, most of the articles focus on the individual level of analysis (285 papers, 86.36%) as summarized in Table 1 below.

**Table 1. Levels of Analysis in Social Media Research**

Level of Analysis	Raw Count	Percentage of total*
Individual	285	86.36%
Group	19	5.76%
Organization	18	5.45%
Other	8	2.42%

\*Total is 330 papers, which report level of analysis

In framing the discussion to follow, a working definition of social media is warranted and will be proposed based on the findings of the literature review described earlier. Of the 618 social media articles coded, 229 (or 37%) defined “social media”, while “social network site(s)”, “social networking site(s)”, and “online social network(s)” were defined by another 97 (16%), 82 (13%), and 61 articles (9%) respectively. The relative popularity of the term “social media” is likely due to its broader, “all-encompassing” nature, which resulted in subsuming a number of the

remaining terms and other information and communication technologies in its conceptualization. Focusing on the definitions put forth for “social media”, a number of both similarities and discrepancies were observed between them.

Among the similarities shared, many definitions argued that social media foster ‘communication’ and involve ‘user-generated content’, with the latter element having been observed in the vast majority of retrieved definitions. Further, notions that social media users ‘create’ and ‘contribute to content’ being used and observed by other users were highly popular. Two related elements also frequently identified were ‘interaction’ and ‘relationships’. Through the act of content creation, social media users are often found interacting with others via enabling technology; in the process of doing so, they are forming or further developing relationships with others.

Another key similarity, albeit a negative one, among these definitions was the lack of a theoretically grounded approach in their development. This may be consequent of prior scholars having focused on the interactions in social media (e.g. generating content, communicating, and building relationships with other users) while overlooking the various actors and technologies related to social media as well as the interplay or context [8] between all of these dimensions. Such interplay, or context, is at the core of Information Systems (IS) research, as demonstrated through the corresponding definition of IS by [16] who argues that Information Systems in a broad sense refers to the interaction between people, processes and technology. I.e. Information Systems include not only the Information and Communication Technology (ICT) an organization uses, but also the way in which people interact with this technology in support of (business) processes.

It was this lack of contextual consideration that was the key discrepancy among the retrieved definitions for social media. For example, many articles myopically referenced a single social media platform as the means by which scholars defined social media. A few papers also mentioned the potential uses of social media within their definitions, e.g. the use of social media in politics or in marketing. Critical thinking of the various contexts in which social media may be used and the interplay between people, processes and technology, would spare definitions of specific features, domains, applications, or technologies resulting in definitions that stand the test of generalizability.

Furthermore, as social media is increasingly being used both in an organizational setting and on an individual basis, a more general conceptualization is needed. Hence, we argue that ‘people’ corresponds to

any user participating or taking part in social media activities, i.e. any actor; ‘processes’ speak to those actors’ broad range of social media activities; and ‘technology’ refers to any ICT artefact used in the fulfillment of these social media activities. Hence, and by considering both shared elements found in prior definitions of social media and key components of IS research, the following definition for social media is put forth:

*“Social media: are technology artefacts, both material and virtual, that support various actors in a multiplicity of communication activities for producing user-generated content, developing and maintaining social relationships, or enabling other computer-mediated interactions and collaborations.”*

### 3. Organizational Social Media

Based on the abovementioned social media definition and applied to the context of organizations, the following working definition of Organizational Social Media (OSM) is derived:

*“Organizational Social Media are technology artefacts, both material and virtual, that support various intra- and extra-organizational actors—including management, employees and external stakeholders—in a multiplicity of organizational communication activities for producing user-generated content, developing and maintaining social relationships, or enabling other computer-mediated interactions and collaborations in the context of a specific organization and its environment”.*

Similar to the definition of social media, it is founded on the general definition of Information Systems [16] that distinguishes three aspects of Information Systems, namely actors (people), artefacts (information and communication technologies), and activities (processes). In addition to these three elements, this definition zooms in on three sets of actors that play an important role in organizational activities entangled with or enabled by social media, namely management, employees and external stakeholders.

As such, our definition encompasses two layers. On the one hand, we distinguish three general elements of OSM, namely artefacts, actors and activities. On the other hand, we zoom in on three central actors, who are part of the organization and its environment, hence, who engage with OSM, namely management, employees and external stakeholders.

In what follows, we will further discuss the literature on OSM as an additional foundation for our comprehensive model of OSM encompassing the six elements identified in the abovementioned OSM definition.

### 3.1 Literature Review on Existing Articles on Organizational Social Media

The 19 papers that were identified as dealing explicitly with social media in the context of organizations, were further classified and reviewed based on the three components of the definition of Organizational Social Media (OSM), namely artefacts, actors and activities, as follows.

**3.1.1 Artefacts** First, we categorized the specific social media artefact that the 19 studies dealt with according to the six types of social media identified by [14], namely: *collaborative projects*, *blogs/microblogs*, *content communities*, *social networking sites*, *virtual games*, and *virtual social worlds*. However, since virtual games category is not relevant in the context of organizations and none of the 19 papers dealt with virtual games, we decided to exclude it from the final classification of papers.

In this context it is important to note that these social media artefacts were merely the research context, as none of the papers dealt explicitly with design or affordances of the artefacts per se. The review of these 19 papers revealed that, except 4 conceptual papers discussing social media in general, the three most dominant artefacts were *collaborative projects* (4 papers; 21%), *blogs/microblogs* (4 papers; 21%), and *social networking sites* (4 papers; 21%), followed by *content communities* (2 papers; 11%) and *virtual social worlds* (1 paper, 5%) as shown in Figure 1.

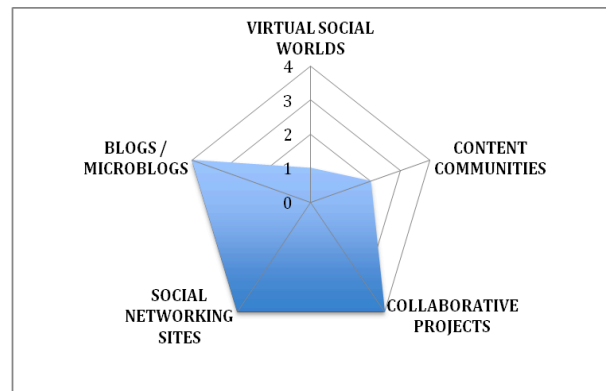
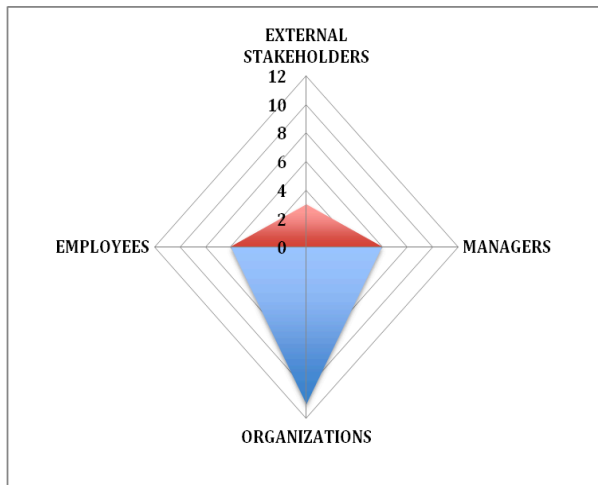


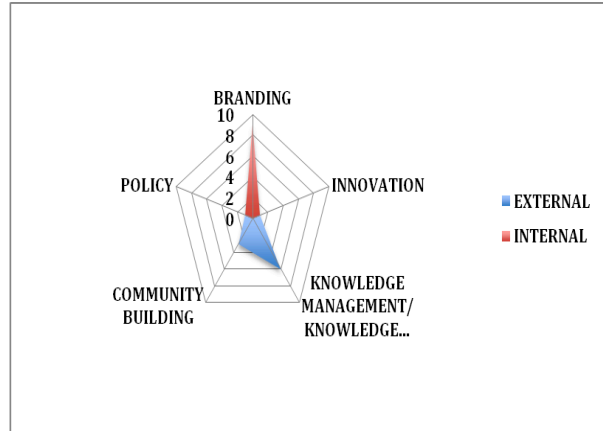
Figure 1. Focal Social Media in Existing Literature

**3.1.2. Actors** Second, we further classified the 19 studies according to the main focal actor. We found four types of focal actors, namely: *managers*, *employees*, *external stakeholders* (most importantly customers) and *organizations*. The majority of papers focus on the *organization* (11 papers; 58%), followed by *managers* (6 papers; 32%) and *employees* (6 papers; 32%), with *external stakeholders* (3 papers; 16%) being the least analyzed focal actor, as summarized in Figure 2.



**Figure 2. Focal Actors in Existing Literature**

**3.1.3. Activities** Third, we classified the 19 studies according to the main organizational activity discussed in the paper. We found five types of organizational activities that were supported by social media, of which four were internal activities, namely *community building*, *knowledge management/sharing*, *innovation*, and *policy formation*, and one external activity, namely *branding/marketing*. The papers were almost equally split among those focusing on internal activities (11 papers; 58%) and those focusing on external activities (9 papers; 47%). Yet, classified by activity, *branding/marketing* (9 papers; 47%) was by far the most popular organizational activity, followed by *knowledge management/sharing* (6 papers; 32%), *community building* (3 papers; 16%), *innovation* (1 paper; 5%), and *policy formation* (1 paper; 5%), as summarized in Figure 3.

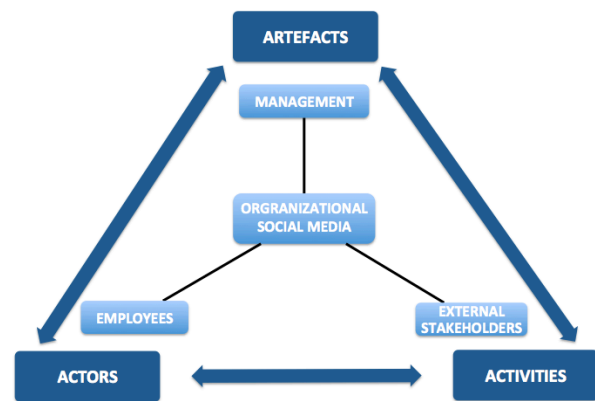


**Figure 3. Focal Activities in Existing Literature**

Based on these insights, a comprehensive framework for Organizational Social Media will be provided as well as a research agenda for future research into this topic.

### 3.2 Framework for Organizational Social Media

The six components of the Organizational Social Media definition provided earlier provides the foundation for our comprehensive framework of Organizational Social Media as provided in Figure 4 below. This comprehensive framework can be applied at multiple levels of analysis, since the components span across individual, organizational and extra-organizational (i.e. systemic) levels of analysis.



**Figure 4. A Comprehensive Framework for Organizational Social Media Research**

### 3.3 A Research Agenda for Organizational Social Media

In what follows, we will zoom in on each component of the model in Figure 4 and identify

important gaps in the literature from which we formulate a set of relevant topics for future research.

**3.3.1. Artefacts** Although most studies involve a specific artefact, these artefacts usually provide merely the study context with limited to no discussion of the materiality (e.g. affordances) of ([18]; [1], [23]) or design principles underlying the artefacts. From the papers analyzed, only one paper was identified [11] which amongst other things looks at the structural characteristics of social media channels in relation to the different roles these channels play in image construction (see Table 2). Nonetheless, this topic was a secondary emphasis in the investigation, with the primary focus being Public Relations. Hence, future research could further explore the materiality and design principles of social media artefacts as a means for understanding core differences between successful and unsuccessful social media as well as the effect of materiality on enabling and constraining a variety of organizational actors in their respective task domain ([18]; [1], [23])

Furthermore, of the 19 articles reviewed, only 3 (or 16%) involve proprietary systems, while the remaining articles centered on commercially available social media, such as Facebook and Twitter. So far organizations have thus largely relied on existing social media, the design of which may in fact constrain affordances that are of value for the specific activities and goals of the organization. Thus, significant opportunities exist for future research analyzing custom OSM that are designed in alignment with the overall organizational strategy.

**3.3.2. Actors** With respect to actors, we observed dominance of internal actors—managers and employees—even though the majority of studies investigated matters relevant to external stakeholders (e.g. consumers and marketers). Surprisingly, in spite of this external focus, there was little consideration of external actors. Hence, an opportunity for future studies that undertake a holistic approach in consideration organizational communication facilitated by social media emerges.

Furthermore, while two studies made peripheral reference to actor-related issues of motivation and participation (see Table 2), we identified an overall lack of research in this area. Hence, future research on OSM could focus on the challenges that individuals, groups, and organizations face when dealing with OSM that could offer guidance for the design of social media that are conducive to effective engagement by employees and other relevant stakeholders.

**3.3.3. Activities** In spite of the focus on internal actors described above, there were no studies analyzing

internal communication activities in the context of OSM. Hence, future research could focus on the internal value proposition of social media for organizations with an emphasis on collaboration and participation.

Furthermore, on a more abstract level, we identified only one article that peripherally dealt with issues of adoption and use continuance of social media (see Table 2) in the context of organizations. Hence, future studies exploring the antecedents and consequences of OSM, in both voluntary and mandatory settings, could highlight the potential roles for and value propositions of OSM.

**3.3.4. Management** Our analysis revealed the absence of studies analyzing the role and influence of OSM on dynamics of power, control and corporate governance in organizations (see Table 2). Given that the implementation of novel tools inside organizations impact the interactions between people and may constrain certain organizational actors while enabling others, understanding the constitutive entanglement of OSM with complex multi-stakeholder interdependencies is an interesting area for future research.

A related area of research that has been ignored and deserves future consideration is the role of OSM in processes of intended (i.e. planned) and unintended (i.e. emergent) organizational change.

**3.3.5. Employees** With respect to employees, only embryonic work has been done in the areas of employee collaboration and engagement (see Table 2). Hence, the role of OSM in evoking and enhancing employee engagement, which in turn can help increase productivity, has yet to be studied. More specifically, future research could analyze the potential contributions of OSM to processes of knowledge sharing, knowledge management, and innovation.

Additionally, no studies were found on the potential of OSM in facilitating employee training and development and more broadly HR-related matters, which presents another opportunity for future research.

**3.3.6. External stakeholders** Although the vast majority of studies investigated matters relevant to external stakeholders, many of them did not actually involve such audiences in the studied samples (see Table 2). For example, with respect to branding, reputation management, and marketing, consumers (or other relevant external stakeholders) were not involved in the research design.

Furthermore, in the context of business-government relations, no studies were identified. Hence, another area that is worthwhile exploring is the role of OSM in regulatory compliance. That is, how

can OSM drive (effective communication for ensuring) compliance with company policies on corporate governance, environmental regulations, and quality assurance.

**Table 2. Summary of Existing Papers & Topics**

Research Topics	Subtopics	References*
Artefacts	e.g. Affordances, Proprietary vs. Custom OSM	[11]
Actors	E.g. Motivation, Participation	[9]; [12]; [25]
Activities	E.g. Adoption, Use Continuance, Voluntary vs. Mandatory Use of OSM	[12]
Management	E.g. Power, Control, Governance, Organizational Change	[15]
Employees	E.g. Collaboration, Engagement, Training and Development	[9]; [12]; [10]; [13]; [2]; [24]
External Stakeholders	E.g. Marketing, Sales, Regulation Compliance	[21]; [22]; [25]; [26]; [3]; [4]; [11]; [17]; [19]; [20]; [6]; [7]

\*References provided in italics refer to studies that peripherally refer to the identified subtopics in column 2.

#### 4. Discussion and Conclusion

With the proliferating use of social media, understanding the impact of social media in organizations will be critical to effectively implementing and using these tools in an organizational context. Nevertheless, very little research has examined the role of OSM in practice. This is due, largely, because of the lack of a strong analytic definition of social media and the preoccupation with the individual user as a level of analysis [5] at the expense of analyzing social media-related phenomena that transcend the individual user and relate to higher-level units of analysis, such as the group and organizational level. The existing research on OSM, albeit fragmented, and recent calls for special issues focusing on OSM, are positive indicators for increased interest and coverage of this topic.

We hope that the definitions and framework presented as well as the formulated directions for future research in this paper will motivate further research on OSM. The six components underlying the proposed framework presented in this paper—artefacts, actors and activities as well as managers, employees and external stakeholders—provide a comprehensive model for a holistic examination of OSM.

By integrating diverse domains of research into this interdisciplinary, multi-level framework, we aim to bring value to both researchers and practitioners. In doing so, we hope managers can better see the potential role OSM can play in a wide range of organizational activities, namely organizational communication and collaboration, employee training and development, corporate control and governance, as well regulatory compliance and other external matters. Furthermore, we hope this framework can help managers identify challenges associated with implementing and using OSM that need to be addressed and overcome.

Although this paper represents an initial attempt to offer a holistic framework of OSM, more work remains to be done. One potential next step is to identify relevant theoretical perspectives, both from IS and other relevant disciplines, that can be used in order to address the key research topics that we have identified. More importantly, though, we encourage empirical research on OSM. One of the main challenges here is to formulate research questions and collect empirical data that addresses higher levels of analysis, such as the group and organizational level. A related challenge is the empirical testing of multilevel research and the measurement of multilevel constructs.

The interdisciplinary, multilevel framework provided in this paper provides a comprehensive lens for OSM research, in general, and for OSM artefacts, actors and activities, in particular. While the research directions identified in this paper necessitate a more in-depth empirical assessment, the framework that we present takes a critical step towards enriching our understanding of how OSM will impact various actors and activity domains of organizations. This under-researched domain provides rich ground for further research that is likely to accrue valuable benefits to individuals, communities, and organizations as well as important avenues and opportunities for the IS discipline as a whole.

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