

Opportunities And Challenges: Digital Communication Strategy For Micro, Small And Medium Enterprises (Msmes) In Semarang City

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Abstract—Digital Transformation plays an important role in increasing the competitiveness of Micro, Small and Medium Enterprises (MSMEs). Digital communication is a crucial aspect in strengthening digital interaction and increasing the competitiveness of MSMEs in Semarang City. However, digitalization requires special strategies and approaches to be implemented effectively. This research aims to analyze the digital communication strategies implemented by MSMEs in Semarang City and the challenges faced in the digitalization process. The research method used is a qualitative approach by collecting primary data through interviews with MSME actors and secondary data analysis of documentation. The research results show that digitalization allows MSMEs to increase digital interactions, strengthen brand identity through creative content strategies and improve performance. Although MSMEs emphasize digital communication strategies, with creative content and local wisdom identities, they are faced with the problem of content optimization. In achieving optimal digital transformation, a more comprehensive strategy is needed involving stakeholder collaboration and inclusive policies to support the growth of MSMEs in the digital era.

Keywords— Digital Communications, MSMEs, Content, Digital Transformation

I. INTRODUCTION

Digital communication drives innovation, especially in increasing market reach and competitiveness. However, the problem of its adoption is often an obstacle. Business model innovation through digital technology can improve operational efficiency and product relevance (Putri & Widadi, 2024). However, limited resources, technical knowledge, and access to digital training are still obstacles to sales (Husriadi & Ningsi, 2024). For Micro, Small, and Medium Enterprises (MSMEs), digitization is a supporting aspect. Digital communication can transcend local market boundaries, reach a wider audience, and increase sales (Ningsih & Tjahjono, 2024).

MSEs in Semarang City are one of Indonesia's economic growth centers with great potential. The development of MSMEs in Semarang City has increased rapidly. According to data from the Semarang City Communication, Informatics, Statistics, and Coding Agency, the number of MSMEs in the city increased from 22,212 in 2021 to 29,611 in 2022 and increased again to 30,024 in 2023. The number of MSMEs fostered reached 4,006 (data.semarangkota.go.id, 2024). This condition is a challenge when adapting to digitalization. Based on the data collection results from the Ministry of Cooperatives and SMEs from 2022 to 2023, 13.4 million cooperatives and MSMEs in the nonagricultural sector are spread across 455 districts/cities in 34 provinces.

Meanwhile, until July 2024, as many as 25.5 million micro, small, and medium enterprises (MSMEs) have transformed and entered the digital ecosystem (Ayudiana, 2024). The digital ecosystem trend that provides convenience in the digital market requires the ability and skills of MSME actors. Moreover, digitalization is not only entering the digital market, but also utilizing smart factories and the Internet of Things (IoT).

In supporting Indonesia towards the golden era in 2045, Indonesian MSMEs are expected to grow and develop, contributing to the national economy. The Indonesian government, through the "MSME Level Up 2024 Program," aims to encourage MSME players to be more extensive in adopting digital technology. Such efforts are highly dependent on the penetration of MSME digitalization. The condition of MSMEs in Semarang City is faced with various issues such as capital, marketing, managerial skills, limited utilization of digital platforms, service innovation, and sustainability (Ma'arif, 2020; Wibisono, 2023; Laeis, 2023; Wiranto, 2024). In addition, knowledge of technology, limited resources, and low levels of digital literacy are challenges that must be overcome. Based on these conditions, it is important to see how MSMEs can optimize digital communication to improve competitiveness. Digital communication involves using digital platforms and technologies to convey information and engage consumers. In the context of MSMEs, digital communication is important in improving competitiveness by enabling businesses to adapt quickly to market changes. Effective digital communication strategies, such as utilizing social media platforms like Facebook, allow MSMEs to reach a wider audience, build closer relationships with consumers, and utilize technological features for innovative marketing, ultimately driving growth and success in the global market (Mulyana & Irfan, 2024). Digital communication serves as a means of promotion and a medium to build closer relationships with consumers through relevant, interactive, and innovative content.

The utilization of social media, e-commerce, and other digital platforms has brought significant changes in the business world, including for Micro, Small, and Medium Enterprises (MSMEs). Through social media and e-commerce platforms, MSMEs can reach consumers in various regions, even in international markets. This opportunity can be utilized to increase revenue and strengthen the existence of MSMEs. Social media in Indonesia has a significant influence on marketing. According to We Are Social data, the number of social media users in Indonesia will reach 139 million people, or around 49.9 percent of the total population, in 2024, making it an ideal platform for MSMEs to share product information with consumers. Meanwhile, e-commerce enables fast and sophisticated communication services to complete business transactions (Parvin et al., 2022). In addition, entrepreneurial competencies, such as risk-taking and innovation, also play an important role.

This study analyzes the digital communication strategies implemented by MSMEs in Semarang City. Understanding how MSMEs utilize digital technology and the role of digital communication is expected to provide applicable and strategic recommendations to support the digital transformation of MSMEs in Semarang City.

II. LITERATURE REVIEW

Developing digital communication skills and a focused marketing strategy is essential for MSMEs to remain competitive (Mulyana & Irfan, 2024). Business model innovation through digital technology can improve operational efficiency and product relevance (Putri & Widadi, 2024). MSMEs that use digital tools increase their resilience to external challenges and their competitiveness in the global market. Partnerships and Support: Collaboration with e-commerce platforms and government support can help SMEs optimize their e-commerce potential (Raji et al., 2023; Silaban & Yasin, 2024).

Digital Literacy and Infrastructure: Many MSMEs, especially in developing countries, struggle with digital literacy and lack the necessary infrastructure to utilize e-commerce (Parvin et al., 2022). Many MSMEs feel ready to manage social media, actively engage in following trends, and create content to attract consumers. However, a comprehensive digital marketing strategy is often lacking, indicating the need for further education and support in advanced digital marketing tools. Small and medium-sized enterprises (SMEs) face unique challenges in digital transformation, including limited financial resources, insufficient digital skills, resistance to change, and data security issues (Omowole et al., 2024). Employees' lack of digital skills is a significant barrier, making it difficult for MSMEs to effectively implement and manage digital tools (Li, 2024). The role of entrepreneurial competence in moderating the relationship between social media use and marketing performance is critical.

III. METHODOLOGY

This research uses a qualitative approach to deeply understand the digital communication strategies implemented by MSMEs in Semarang City to improve their competitiveness in the digital era. According to, Creswell & Poth, (2016), qualitative research aims to explore and understand the meaning given by individuals or groups to a particular social phenomenon or problem. With a qualitative approach, it can focus more on the interpretation of data obtained from observations, interviews, and document studies. The data in this study were collected through primary and secondary data collection techniques. Primary data was obtained through interviews with ten MSME players in Semarang City. In addition, the digital communication strategies implemented by each MSME should be observed by looking at various posts on social media.

Meanwhile, secondary data was collected through literature studies related to the digital communication strategies of MSMEs, content analysis of social media, and official websites of MSMEs. This research was conducted in Semarang City, considering that it has MSMEs actively adapting to digital transformation and a growing business ecosystem through various digitalization initiatives. The research began with collecting literature and then observations on social media. Furthermore, interviews were conducted to see the utilization of digital communication strategies and interpret data from interviews. These steps can provide an in-depth picture of the digital communication strategies of MSMEs in Semarang City.

IV. RESULT AND DISCUSSION

Digital communication through digital platforms also allows MSMEs to build reputation and relationships between actors and marketing outreach. Direct interaction with customers, such as through comments or direct messages, allows one to understand consumer needs more deeply. Creating more effective and customer-oriented strategies requires user-preferred access for MSMEs. Digitization is considered to be a solution to the existing limitations. Social media is a tool MSMEs use to introduce products and display brand identity through engaging and relevant content. However, its application is still minimal.

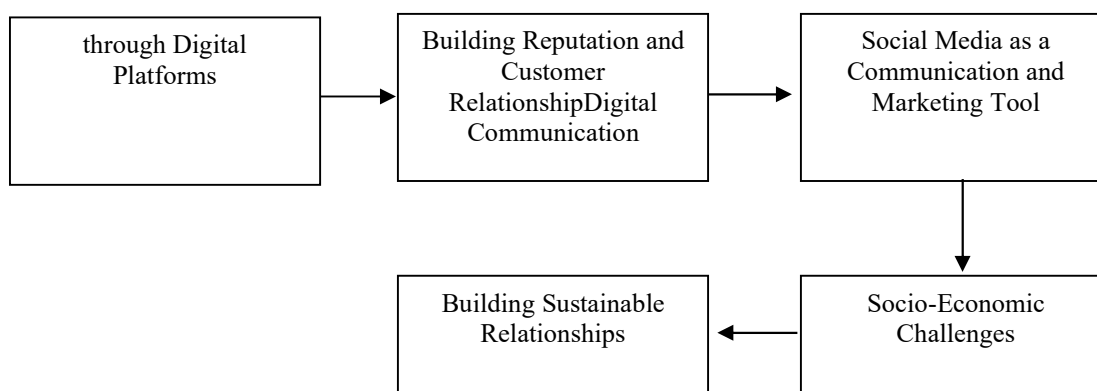


Fig. 1. : Digital Communication Utilization Flow Chart

MSMEs use social media as a communication tool to introduce products and expand marketing areas, which are believed to be more efficient and powerful in building customer loyalty. However, using digital technology such as social media is still very limited. Low levels of digital literacy and limited capital are socio-economic challenges in increasing digitalization penetration. Intense collaboration between the government, private sector, and the community is a strategic effort between the Semarang City Government, MSME players, and other stakeholders.

MSMEs Digital Communication Strategy

Effective digital communication is essential for MSMEs to develop their products and increase their market share (Rizky, 2023). Digital adaptation allows digital communication to determine digital marketing strategies, primarily through social media platforms. Creative content determines the position of digital share, including in building digital identity. Craftonesia MSME players consider that building a digital identity determines value. This condition makes the value of local creativity a

strategy that is considered effective in helping digital communication. The local identity approach preserves local skills and introduces Indonesian cultural identity in product design. This means that the commitment to maintaining the value of Indonesian culture by expanding its market reach is considered to have a positive value in developing a digital identity.

"We maintain local values by combining wicker techniques with wastras, such as batik and lurik fabrics, which reflect Indonesian culture. The name Craftonesia also has a philosophy to emphasize that this product comes from Indonesia, with the hope that it will be recognized globally", Craftonesia MSME.

Awareness of the importance of building a digital identity is decisive in improving competitiveness. For example, in Craftonesia MSMEs, positive reviews on social media platforms improve the good image of the product, especially international customer reviews, showing that products with local identity are well received in the local market and have global appeal. It can strengthen Craftonesia's reputation and trust as a brand that can maintain the quality and uniqueness of Indonesian culture. Product branding of environmentally friendly solutions through direct communication with visitors and digital responses that are not only familiar with handicrafts is an added value in supporting sustainable development. Combining digital and direct interaction in responsive customer service can strengthen competitiveness.

The digital skills of MSME players are important in determining the use of digital platforms in expanding market share. According to Fuchsia Handmade, utilizing social media is very important in strengthening branding and an effective strategy to maintain engagement with audiences and provide real-time updates to followers about products. However, skills and creativity are decisive in driving content effectiveness. For example, the utilization of video content and limited production time are potential barriers to reaching the audience. This means that digital communication is an alternative channel to interact directly with consumers and build loyalty.

"Fuchsia Handmade is usually more diligent in uploading Instagram stories about new products and products that have been sold out if our video content is still not optimal because the manufacturing schedule constrains it." Fuchsia Handmade MSME.

For MSMEs, building brand awareness and strengthening product image are strategies for strengthening product reputation, especially on social media. Bengok Craft says digital platforms can highlight sustainability principles, especially in products. The digital communication applied can express product values and connect consumers with sustainability messages and product uniqueness. For Bengok Craft, which processes water hyacinth into eco-friendly crafts, social media publications can determine the impetus for people to get involved.

"Because they also upload on social media that raises brand awareness related to Bengok Craft. Moreover, Bengok Craft is trying to strengthen its image in the market with the principle of sustainability, in addition to producing products by processing water hyacinth into various functional and yet eco-friendly handicrafts." Bengok MSME.

Direct interaction with consumers through social media platforms can strengthen relationships and enable collaboration to increase product innovation. This condition makes digital communication important in encouraging MSME innovation and increasing competition. However, each MSME actor's consistency, time, and skills differ.

How Digital Communication Changed MSMEs Work Flow

Optimizing digital communication can effectively drive growth, improve performance, and increase the productivity of MSMEs (Lestari et al., 2020), (Farooq et al., 2020). However, the lack of application of technology further exacerbates the challenges faced by MSMEs, especially in adopting digital technology and limited human resources in managing technical aspects and managerial capabilities (Erinda et al., 2022) (Umami et al., 2023) (Hartono et al., 2021) (Farooq et al., 2020). MSMEs are inseparable from digital marketing, which drives digital transformation. Strong digital marketing skills can increase online consumer interaction and creative thinking, essential for effective digital communication (Ananda et al., 2023; Cuijten et al., 2024).

While digital communication offers opportunities to innovate and improve the performance of MSMEs in Semarang City, the effectiveness of digitalization in improving competitiveness is limited. For example, creative content that can maintain digital relevance and competitiveness often cannot reach the entire product picture. According to MSME players, social media has become a platform for effective branding. Although social media is considered effective in building reputation, limitations in presenting creative content, consistency, and serializing analytical data are still challenges that hinder adoption. Meanwhile, websites are still very limited in use in building digital interactions. Limited human resources constitute a significant factor in content management. This is inseparable from MSME managers, who generally do not involve many people in the business, so there is limited time to use it. Although it was found that digital adoption of MSMEs has been developed in e-commerce, interaction, response, message management, and visuals are still very limited.

Table 1 Digital Communication for MSME

Digital Communication	Innovative
Digital Utilization	Websites, social media, and e-commerce platforms
Performance	Market expansion, promotion, brand awareness
Adoption Barriers	Skills
Collaboration	Government, influencers and customers

For MSMEs in Semarang City, digital communication can improve performance, especially regarding market expansion, easier promotion, and brand awareness. This condition improves performance by producing goods and increasing creative actions to fill digital content. Some MSME players do not entirely focus on creative actions in building content due to limited skills in following content trends, consistency, and limited human resources. Routinely serving buyers has saved more time for MSME actors. However, branding identity has encouraged various attitudes toward consistency. For MSMEs that strengthen local identities through batik, eco-friendly crafts, and handicrafts, digital communication has significantly improved performance. The habit of customers looking for digital reviews, social media posts, and sharing features encourages collaboration in building brand awareness. MSME players with digital interaction is a practical step to introduce similar products. This is considered to be an innovation in promotion, even though skills are an obstacle to advanced adoption. MSME players realize that social media is more cost-effective for promoting their products and services than traditional promotions.

Nevertheless, traditional promotions such as events are still a favorite way to introduce products. It is inseparable from the culture of direct interaction, which is favored. Events are used as a place to meet with customers, exchange ideas with fellow MSMEs, and showcase products. However, the need to maximize digital platforms such as social media can optimally build brand image. It means that the strategy's success is inseparable from the role of entrepreneurial competence (taking risks, thinking innovatively, and adapting) and digital competition managing information, creative content, and interaction data).

The involvement of government and stakeholders in overcoming these obstacles has played a role in reducing the gap. Training programs, supporting the creation of spaces in events, and involving MSME products in various activities are forms of cooperation. The government encourages collaborative partnerships between MSMEs and industry. This collaboration is highly dependent on the performance of MSMEs. Digital training and digital skills are strategies for expanding the reach of collaboration. Government and industry stakeholders play an important role in providing this support to ensure the success of MSME digital transformation.

Digital communication, as a digitization effort using e-commerce and social media, significantly improves the performance of MSMEs in Semarang City. Integrating digital and offline spaces is crucial in establishing a foothold in the ever-increasing share of competitiveness. Reaching and interacting with digital users is key to strengthening the position. This means that developing interactive products and services faces barriers regarding technical skills, content, and human resources. The digitalization of information built by MSMEs is still challenging in connecting with customers through digital marketing strategies that drive business growth.

Government and Stakeholder Collaboration in Supporting MSMEs

Collaborative efforts that not only encourage the penetration of digitization for MSMEs but lead to providing innovation in protecting, promoting and strengthening batik identity. For example, MSMEs engaged in traditional clothing, Batik Semarang, realize the importance of a globally integrated digital database to improve the recognition of intellectual property rights. Government and industry players can use digital platforms, including traditional techniques, to promote the uniqueness of Indonesian batik.

"To protect Indonesian batik makers, competency tests and certification must be used to face and ward off these challenges. Regarding these recognitions, the government has protected them with competency tests", said Batik MSMEs.

Efforts to build government collaboration to protect MSMEs amid massive digital marketing are essential strategies in dealing with these issues. MSME players realize that digitalization requires special skills, so this condition is the main obstacle in using various digital platforms. So far, the government, through innovative policies and programs, has also played an essential role in helping MSMEs transform digitally, including providing various access to training, so knowledge is needed to adapt to change. In addition, the Semarang City Government is involved in supporting promotional activities. For MSMEs, Batik is promoted through exhibitions, catalogue development, and digital marketing training. These efforts help businesses expand their market and improve product competitiveness. The effort is part of creating a digital ecosystem, ensuring the protection of local products, and providing policies that encourage the growth of MSMEs.

"Promotion must be done through the exhibition, and then there is a catalogue. There is digital marketing training, but the business competition has narrowed employment opportunities, so more people are becoming MSME because of the demand to empower themselves. The community's welfare and prosperity are entirely the government's responsibility." said Batik MSME.

Collaboration between the government and MSMEs determines digitization can run well; encouraging innovation for MSME actors requires the government to provide access to training and policies that encourage MSME business efforts to develop. For environmentally friendly-based MSMEs (Gona Goni), government support is decisive for business development. Collaboration with the government is seen in various facilities, access to certification at no cost, and promotional opportunities through digital platforms, which benefit business actors. Although this process can be considered an obstacle for MSME actors, providing a spirit of healthy competition is also essential. This means that it can encourage increased standards and professionalism in business, which is necessary to increase competition.

"So far, I have never had any difficulties because we got a free booth. So, for me, the agency has many opportunities for brand facilities, etc., and Goena Goni has received a certificate; we also have TikTok and Instagram and are actively posting activities on both platforms", Gona Goni MSME.

The professionalism of MSMEs encourages various activities outside of the primary production. For example, Gona Goni MSME actively utilize digital platforms like TikTok and Instagram to strengthen their presence and support government initiatives promoting local products. Posting requires creativity that encourages positive perceptions of the product. However, this cooperative relationship has obstacles from differences in perceptions between local governments and MSME players. According to MSME Flower Sellers, there are differences in mindset and work approach. The creative sector often moves with dynamics and high flexibility, while the government follows formal procedures and rigid regulations. This means that the difference in perspective in understanding innovation is causing synchronization limitations. Another obstacle is the government's lack of understanding of the economic.

"Building relationships with the government in the creative industry sector has its challenges. One of them is the difference in the way of thinking between the creative world and the government, where the creative industry tends to be more dynamic and flexible, especially being involved in the world of florists. At the same time, formal procedures and standardized regulations often bind the government. Moreover, ignorance or

limited understanding of the economic potential of the creative industry can also be an obstacle, so it isn't easy to get the proper support or policies" Flower Sellers MSME.

MSME actors have this passive and proactive communication to overcome differences in perception. This is in routine activities and discussions of various development potentials, such as promotions, events, and facilities. This condition encourages the formation of a collaboration network between MSME actors, the private sector and the government. MSME actors realize that collaboration between the private sector and the government is one of the effective ways to bridge the perception gap formed from the process of difference. This means that innovations from the creative sector can be introduced as solutions that are relevant to the needs of society, and a creative ecosystem is formed as a response to the development of digitalization. The open attitude of MSME players, through intensive dialogue and an approach based on joint activities, strengthens the role of mutual support. Business development dialogues, such as management, digital marketing, and marketing of creative products, reduce the uncertainty of different perceptions.

"So far, the government has held training programs to improve the skills of creative industry players, including workshops, seminars, courses, and bootcamps that teach technical and practical skills to creative industry players, especially florists. In addition, these programs often include training on business development, such as management, digital marketing, as well as marketing of creative products in the global market" Florist MSME.

Table 2 Collaboration between MSME and Government

Identification	Activities
Challenges	<ul style="list-style-type: none"> Identify the needs of MSMEs in digitalization and promotion. Actors involved government, MSMEs, Stakeholders
Government	<ul style="list-style-type: none"> Provide training, certification, and supporting policies. Policies and programs that support the digital transformation of MSMEs. Support product promotion through exhibitions and catalogs.
MSMEs	<ul style="list-style-type: none"> Using social media for product promotion. Increased positive product reputation Propose development ideas through dialog with government and the private sector.
Collaborations	<ul style="list-style-type: none"> Increase promotion through digital platforms. through event access Organize workshops, seminars and courses. MSMEs gain digital and business management skills. Protection and strengthening of local products and sustainable growth of MSMEs.
Barriers	<ul style="list-style-type: none"> Different perceptions between the government and the creative sector. Digitization skills

Communication technology transformation: Responding to the challenges of digitalization

It must be acknowledged that digital marketing, social media and e-commerce have changed the landscape of interaction, enabling access to expanded markets and improved production efficiency. Looking at the development of MSMEs in the city of Semarang, digitisation promotes simplicity, but also poses challenges that require a shift from old habits to digital uncertainty. The transformation of communication technology affects interpersonal communication patterns, increases digital participation and creates new habits. Digitalisation has a significant impact on the growth of MSMEs, reducing unemployment and promoting economic growth (Ilyas, 2023). Employment opportunities in the digital age increase the trend of sustainable growth (Octaviana & Andni, 2023). There are several focal points of the transformation of communication technologies. First, digital activities. Digitisation has changed the communication paradigm of society, which interacts more interactively, quickly and personally through the use of social media and websites. This state of affairs is recognised by MSME actors, who see it as having both

positive and negative effects. Positive impact, digitalisation simplifies and speeds up the communication process, but requires more time intensity in responding. MSME players realise that there are many opportunities to miss interactions, especially in the social media comment section. This condition has an impact on barriers to information needs and content that can reduce trust. The biggest obstacle comes from within. Most MSME players are run on a limited basis, allowing limitations in responding and routines in providing products. The advantages of digitisation such as saving time, business operational efficiency, assigning tasks, and digitising information are still a common challenge.

Second, digital culture: the presence of technology has an impact on the believed culture, including behaviours, values and actions. New media, such as the internet and mobile technology, have significantly influenced culture by changing individual identities and leading to digital culture (Çöteli, 2019). Digital technologies are transforming culture, enabling new forms of participation and production, and influencing the relationship between culture and the creative economy (Wright, 2022). Social media has changed the way buyers get things, from trust to loyalty. Meanwhile, MSME actors are changing the way they work and interact. This state creates internal and external networked working conditions. This condition experienced by connected MSME actors creates dependence of MSME actors on digital. Meanwhile, the emergence of the habit of face-to-face transactions is the biggest obstacle leading to online transactions. This belief is still a lot of MSME actors who do with direct transactions and presence in multiple events. This condition is considered to provide detailed and in-depth information about the product to convince customers.

Third, digital tools. Communication technology plays an important role in extending outreach. This is seen as a new opportunity by MSMEs, although its use is very limited. Optimisation tools such as the use of search engine optimisation (SEO), advertising and email marketing are still very limited. Effectiveness is then measured by social media interactions, such as the number of likes and comments. Social media is a widely used digital tool, although there are often skill barriers to using social media. Platforms such as WhatsApp, as well as Instagram and TikTok, which allow text-based messaging in real time, are widely used by MSMEs due to their familiarity and ability to exchange messages quickly. The interactivity of digital culture and the rapid spread of information is a challenge to keep up with. The commitment to provide content on social media is a priority, while not all MSME actors have optimised the content. This condition has an impact on data-driven decisions, which are still very limited.

V. CONCLUSIONS

Digital communication strategies are important in improving the competitiveness of MSMEs in Semarang City. Utilizing digital platforms, especially social media, allows MSMEs to expand their market reach, build reputation, and increase customer loyalty. Digitalization is believed to improve the competitiveness of MSMEs in Semarang City. However, they still face challenges in digital adoption, such as improving their skills and managing digital content. Social media has become an effective tool for MSMEs to build a digital identity by showcasing creativity and local wisdom. This success is influenced by the ability to create interesting content, build interactions with customers, and express sustainability values through digital branding. Meanwhile, digital marketing and managerial skills are important factors that must be improved in optimizing digitalization strategies. A more intense collaboration approach between stakeholders can overcome differences in perception and limited understanding of the creative economy's potential, but building effective synergy is still a challenge.

ACKNOWLEDGMENT (Heading 5)

The preferred spelling of the word “acknowledgment” in America is without an “e” after the “g.” Avoid the stilted expression “one of us (R. B. G.) thanks ...”. Instead, try “R. B. G. thanks...”. Put sponsor acknowledgments in the unnumbered footnote on the first page.

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