



macromedia university
of applied sciences



CEO Communication in Social Media

Derivation and Pilot Application of a Methodology
Based on “Audience”, “Buzz”, and “Commitment”
 (“Social Media ABC Analysis”)

Macromedia Study
Report sr-2020-01
April 2020

Content

- Starting point and rationale of the study
- Overall methodology (“Social Media ABC Analysis”)
- Pilot application of the methodology to CEO communication
- Key findings, limitations, and outlook on further research
- Bibliography

Earlier Studies on CEO Communication in Social Media

Research into the social media usage of company leaders is limited

- The impact of corporate communication (e.g., Foreman & Argenti, 2005; Lah, Sušjan, & Redek, 2016; Murtarelli, 2017; Zerfass & Viertmann, 2017) and brand communication (e.g., Luxton, Reid, & Mavondo, 2015; Swaminathan, Sorescu, Steenkamp, O'Guinn, & Schmitt, 2020) on a company's performance have been researched extensively. Leadership communication and its impact on the organization's success and the influence on employees also drew some research attention (e.g., Lawrence, 2015; Löwstedt & Räisänen, 2018; Mayfield & Mayfield, 2017).
- However, the influence of a CEO's direct communication in social media is apart from rather qualitative elaborations (Tsai & Men, 2017; Zerfass, Verčič, & Wiesenberg, 2016) academically fairly unresearched. Only industry reports suggest that the social media presence and activity of a CEO could substantially contribute to promoting a company's reputation.
- CEO's being able to engage with stakeholders in genuine conversations on social media are even asserted to be the "new" corporate leaders (Manson & Kristula-Green, 2019; Weber Shandwick, 2012). Nevertheless, while CEOs are attributed to an increasingly influential role in public relations and corporate communications, theoretical reflections on how and why CEOs' social media interaction is essential, as well as strategic frameworks on how CEOs should communicate in social media platforms, are still limited.
- A survey among corporate communication departments of German DAX 30 companies on their CEOs' social media activities that we conducted preceding this study led to only negligible response.

Study Objectives and Approach

Visibility of CEO communication in social media is derived from a combination of audience, buzz, and commitment ("ABC")

- The main objective of the pilot study, "CEO Communication in Social Media" is to research the visibility of CEO communication by developing and implementing a methodology for measuring the Audience¹, Buzz², and Commitment³ (ABC) of Social Media communication. A, B, and C are obtained from standard Social Media KPI's (Gräve, 2019; Jeffrey, 2013).
- The following sub-objectives have been defined:
 - To develop a suitable method to measure quantitative levels in A, B, and C
 - To develop an approach to combine A, B, and C into a generalized scheme (ABC Analysis)
- Approach
 - Identify relevant platforms for CEO communication
 - Identify appropriate measures for each indicator A, B, and C
 - Combine A, B and C per Platform
 - Combine results across platforms

¹ Used synonymously for all social media followers (follower, fans), despite the type of media used

² Used synonymously for all social media reactions (shares, likes, comments), by audience and commitment, despite the type of media used

³ Used synonymously for all social media activities per time (tweet, post, article), despite the type of media used

Sampling Method and Data Collection

The most important platforms for corporate communication are evaluated

- The sample is based on all companies listed in the German Stock Index DAX 30, as of October 19, 2019. The platforms analyzed are Facebook, Instagram, LinkedIn, Twitter, YouTube, and XING.

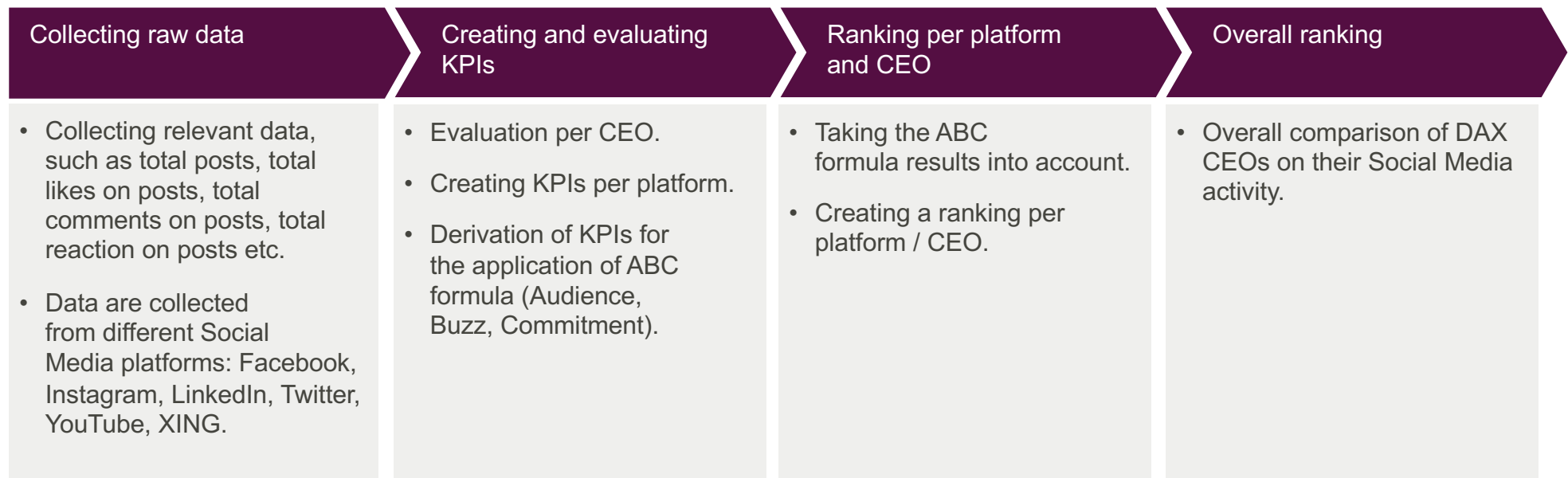


Figure 1: Four Steps of Calculating Overall Ranking (Own elaboration, 2020)

Sampling Method and Data Collection

Not all CEO's are active on social media and not all evaluated platforms are used by the active CEO's

- The following chart gives an overview of all DAX30 companies and their CEO's. The control group consists of the CEO's from the top five Dow Jones Industrial (DJI) companies, based on market capitalization (as of October 19, 2019).
- All platforms are checked for their audience, the buzz created, as well as the commitment of the CEO's from January 01, 2019, until November 30, 2019. The platforms YouTube and XING have been eliminated from the results, as none of the CEO's was present with a publicly available profile on both platforms.

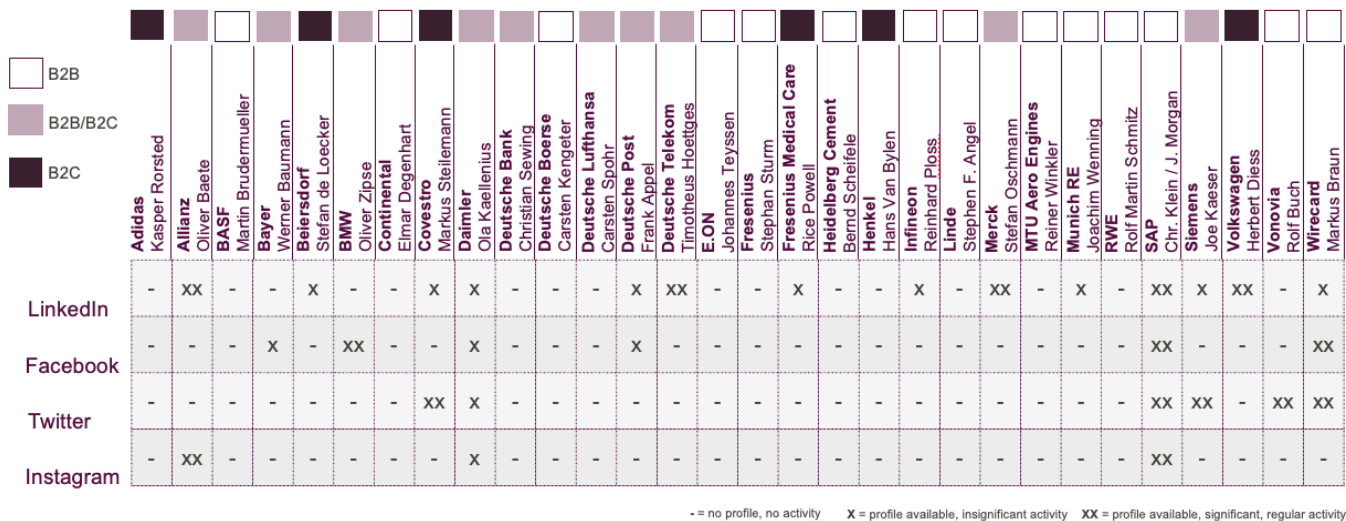


Figure 2: Usage of Social Media Platforms by CEOs of DAX Listed Companies (Own Elaboration, 2020)

Calculation of Each Indicator A, B, and C per Platform

- **Calculation methods**

- Due to the wide spread of numbers, all indicators are normed using logarithmic and hyperbolic functions. All figures are processed as of November 30, 2019. Non-existent values are nullified.

- **Indicator 1: A – Audience**

- Number of followers or fans per platform, as of November 30, 2019:

- $X_{platform}^{ceo} = \log_{10}(followers)$

- $A_{platform}^{ceo} = \tanh\left(\frac{X - \text{mean}(X)}{\text{std.dev}(X)}\right)$

Calculation of Each Indicator A, B, and C per Platform

- **Indicator 2: B – Buzz**

- Number of reactions per platform (likes, shares, etc.) divided by the number of posts by time per platform, divided by audience per platform:

- $$Y_{platform}^{ceo} = -1/\log_{10} \left(\frac{reactions}{posts_t / followers} \right)$$

- $$B_{platform}^{ceo} = \tanh\left(\frac{Y - \text{mean}(Y)}{\text{std.dev}(Y)}\right)$$

- **Indicator 3: C – Commitment**

- Number of posts by time per platform:

- $$Z_{platform}^{ceo} = \log_{10}(posts_t)$$

- $$C_{platform}^{ceo} = \tanh\left(\frac{Z - \text{mean}(Z)}{\text{std.dev}(Z)}\right)$$

Combining Indicators A, B, and C per Platform

Combined results are visualized on a scale from "--" to "++"

- **ABC analysis per platform**

- $ABC_{platform}^{ceo} = mean(A, B, C)$

- Reducing the complexity of the mathematical operations, the results are visualized using a scale from "++" := $ABC \geq 0,6$; "+" := $ABC \geq 0,2, ABC < 0,6$; "o" := $ABC \geq -0,2, ABC < 0,2$; " – " := $ABC \geq -0,6, ABC < -0,2$; " – – " := $ABC < -0,6$

Overview		LinkedIn			2019-01	2019-11	TTL ACTIVE:	15
DAX30								
COMPANY	CEO NAME	A	B	C	ABC	PLATFORM RANKING		
VW	Herbert Diess	++	-	++	4,5	1		
Allianz	Oliver Bäte	+	o	++	4,4	2		
Deutsche Telekom	Timotheus Höttges	++	-	++	3,8	3		
SAP	Jennifer Morgan	+	-	++	3,8	4		
SAP	Christian Klein	+	+	o	3,7	5		
Merck	Stefan Oschmann	++	-	++	3,2	6		
Daimler	Ola Källenius	+	o	o	1,9	7		
Deutsche Post	Frank Appel	o	++	-	1,8	8		
Siemens	Joe Kaeser	++	-	-	1,3	9		
Infineon	Reinhard Ploss	-	++	--	-1,6	10		
Covestro	Markus Steilemann	-	-	o	-2,4	11		
Munich RE	Joachim Wenning	--	++	--	-2,9	12		
Fresenius Medical Care	Rice Powell	--	+	-	-3,2	13		
Wirecard	Markus Braun	--	o	-	-4,0	14		
Beiersdorf	Stefan de Loecker	--	--	--	-9,5	15		

Figure 3: Example (LinkedIn) of ABC analysis per platform (own elaboration, 2020)

Combining Performance per Platform to Overall Performance Ranking

- **Overall ABC analysis and ranking on social media**

- Due to the largely different usage of the platforms, the complete analysis and ranking are based on weighted factors:

- $ABC^{ceo} = \frac{\sum_{platform} (ABC \times weight_{platform})}{\sum weight}$

Overall ABC Ranking			DAX30												
RANKING	RATING	COMPANY	CEO NAME	LinkedIn			Twitter			Facebook			Instagram		
				A	B	C	A	B	C	A	B	C	A	B	C
1	3,7	SAP	Jennifer Morgan	+	-	++	+	-	++	++	-	++	++	--	++
2	2,7	VW	Herbert Diess	++	-	++	☒	☒	☒	+	o	+	☒	☒	☒
3	2,6	SAP	Christian Klein	+	+	o	+	+	+	☒	☒	☒	☒	☒	☒
4	2,2	Allianz	Oliver Bäte	+	o	++	☒	☒	☒	☒	☒	☒	+	o	+
5	1,8	Deutsche Telekom	Timotheus Höttges	++	-	++	☒	☒	+	☒	☒	☒	☒	☒	☒
6	1,7	Siemens	Joe Kaeser	++	+	-	++	+	+	☒	☒	☒	☒	☒	☒
7	1,6	Merck	Stefan Oschmann	++	-	++	☒	☒	☒	☒	☒	☒	☒	☒	☒
8	0,6	BMW	Oliver Zipse	☒	☒	☒	☒	☒	☒	+	o	++	☒	☒	☒
9	0,2	Bayer	Werner Baumann	☒	☒	☒	☒	☒	☒	-	++	-	☒	☒	☒
10	0,1	Vonovia	Rolf Buch	☒	☒	☒	--	+	+	☒	☒	☒	☒	☒	☒
11	-0,4	Deutsche Post	Frank Appel	o	++	-	☒	☒	☒	-	--	--	☒	☒	☒
12	-0,8	Infineon	Reinhard Ploss	-	++	--	☒	☒	☒	☒	☒	☒	☒	☒	☒
13	-1,0	Covestro	Markus Stellemann	-	-	o	--	+	+	☒	☒	☒	☒	☒	☒
14	-1,2	Wirecard	Markus Braun	--	o	-	++	o	+	☒	☒	☒	☒	☒	☒
15	-1,4	Munich RE	Joachim Wenning	--	++	--	☒	☒	☒	☒	☒	☒	☒	☒	☒
16	-1,5	Fresenius Medical Care	Rice Powell	--	+	-	☒	☒	☒	☒	☒	☒	☒	☒	☒
17	-2,9	Daimler	Ola Källenius	+	o	o	--	--	--	--	--	--	--	++	--
18	-4,6	Beiersdorf	Stefan de Loecker	--	--	--	☒	☒	☒	☒	☒	☒	☒	☒	☒

RATING: ☒ (no activity); Rating Scale from -10 to +10
A: Audience
B: Buzz
C: Commitment

Figure 4: Overall ABC analysis and ranking of DAX30 CEO's (own elaboration, 2020)

Key Findings

Regular communication with engaging content leads to a high score, with LinkedIn being the most significant platform

- The overall social media activity of the DAX 30 CEO's is rather low. 13 of 31 CEO's do not communicate at all on social media platforms, and the ABC score of only 10 CEO's is above average.
- Activities and appearance of the CEO's differ clearly on the distinct platforms, with only a few CEO's using more than two platforms. The CEO's with a regular frequency in their communication in combination with engaging content that is creating buzz, have a higher ABC score, whereas CEO profiles without active and regular usage lead to a low score.
- Most of the CEOs from both DAX 30 and DJI companies communicate via LinkedIn, followed by Twitter and Facebook, while Instagram is the least used platform.

Further Research

- **Further iterations of ABC analysis**

- Second wave of ABC analysis, to generate deeper insights on the communication of the CEO's (also in their development across time).
- Usage of the methodology to evaluate social media communication of other groups/persons, e.g., sports clubs, sports personalities, or politicians.

- **Derivation of a typology of communication styles based on content analysis**

- Creation of a scheme to explain the distinct personas/ communication types on different platforms, with earlier research (Deiser & Newton, 2013; Malhotra Kubowicz & Malhotra, 2016) as a starting point.

- **Second survey among corporate communications departments on their CEO's social media communication**

- As only nine out of 30 companies responded in a survey preceding this pilot ABC analysis, with only four out of the nine responding companies providing some insights, a second iteration will challenge the departments with the results of this pilot. The survey should generate insights on how the CEO's social media communication is seen strategically and how it is orchestrated in the context of other corporate communications activities.

Bibliography

- Deiser, R., & Newton, S. (2013). Six social-media skills every leader needs. *McKinsey Quarterly*, (1), 62–75. Retrieved from <https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/six-social-media-skills-every-leader-needs>
- Foreman, J., & Argenti, P. A. (2005). How Corporate Communication Influences Strategy Implementation, Reputation and the Corporate Brand: An Exploratory Qualitative Study. *Corporate Reputation Review*, 8(3), 245–264. <https://doi.org/10.1057/palgrave.crr.1540253>
- Gräve, J. F. (2019). What KPIs Are Key? Evaluating Performance Metrics for Social Media Influencers. *Social Media and Society*, 5(3). <https://doi.org/10.1177/2056305119865475>
- Jeffrey, A. (2013). Social Media Measurement : A Step-By-Step Approach Using The AMEC Valid Metrics Framework. *Institute for Public Relations (IPR)*, (June), 1–37. Retrieved from www.instituteforpr.org/wp.../Social-Media-Measurement-Paper-Jeffrey-6-4-13.pdf
- Lah, M., Sušjan, A., & Redek, T. (2016). Corporate Communication and Economic Theory: An Institutional Perspective. *Journal of Economic Issues*, 50(1), 121–144. <https://doi.org/10.1080/00213624.2016.1147908>
- Lawrence, T. (2015). Global Leadership Communication: A Strategic Proposal. *Creighton Journal of Interdisciplinary Leadership*, 1(1), 51. <https://doi.org/10.17062/cjil.v1i1.8>
- Löwstedt, M., & Räisänen, C. (2018). CEOs narrating leadership: Constant gardeners, team players, actionable pragmatists and business directors. *Proceeding of the 34th Annual ARCOM Conference, ARCOM 2018*, 687–696.
- Luxton, S., Reid, M., & Mavondo, F. (2015). Integrated marketing communication capability and brand performance. *Journal of Advertising*, 44(1), 37–46. <https://doi.org/10.1080/00913367.2014.934938>
- Malhotra Kubowicz, C., & Malhotra, A. (2016). How CEOs Can Leverage Twitter. *MIT Sloan Management Review*, 57(2). Retrieved from <http://0-eds.b.ebscohost.com.pugwash.lib.warwick.ac.uk/eds/detail/detail?vid=0&sid=4a00945d-da71-460d-89b1-6d7a07e79b61%40sessionmgr101&bdata=JnNpdGU9ZWRzLWxpdmU%3D#AN=112007100&db=bth>
- Manson, B. M., & Kristula-Green, N. (2019). *C-Suite Execs' Imperative to Find Their Own Digital Voices with Investors: 88 % of Investors Make Decisions Based on Information from Digital Sources*. Retrieved from <https://www.brunswickgroup.com/media/5266/digital-investor-survey-overview-feb-2019.pdf>
- Mayfield, J., & Mayfield, M. (2017). Leadership communication: Reflecting, engaging, and innovating. *International Journal of Business Communication*, 54(1), 3–11. <https://doi.org/10.1177/2329488416675446>
- Murtarelli, G. (2017). The Role of Corporate Communication in the Digital Age: An Era of Change for the Communication Profession. In J. Klewes, D. Popp, & M. Rost-Hein (Eds.), *Out-thinking Organizational Communications: The Impact of Digital Transformation* (pp. 73–84). https://doi.org/10.1007/978-3-319-41845-2_6
- Swaminathan, V., Sorescu, A., Steenkamp, J. B. E. M., O'Guinn, T. C. G., & Schmitt, B. (2020). Branding in a Hyperconnected World: Refocusing Theories and Rethinking Boundaries. *Journal of Marketing*, 84(2), 24–46. <https://doi.org/10.1177/0022242919899905>
- Tsai, W. H. S., & Men, L. R. (2017). Social CEOs: The effects of CEOs' communication styles and parasocial interaction on social networking sites. *New Media and Society*, 19(11), 1848–1867. <https://doi.org/10.1177/1461444816643922>
- Weber Shandwick. (2012). The Social CEO : Executives Tell All. Retrieved January 11, 2020, from <https://www.webershandwick.com/uploads/news/files/Social-CEO-Study.pdf>
- Zerfass, A., Verčič, D., & Wiesenberg, M. (2016). Managing CEO communication and positioning: A cross-national study among corporate communication leaders. *Journal of Communication Management*, 20(1), 37–55. <https://doi.org/10.1108/JCOM-11-2014-0066>
- Zerfass, A., & Viertmann, C. (2017). Creating business value through corporate communication: A theory-based framework and its practical application. *Journal of Communication Management*, 21(1), 68–81. <https://doi.org/10.1108/JCOM-07-2016-0059>



macromedia university
of applied sciences



Recommended Citation:

Hellriegel, O., Kolo, C., et. al. (2020). CEO Communication in Social Media: Derivation and Pilot Application of a Methodology Based on “Audience”, “Buzz”, and “Commitment” (“Social Media ABC Analysis”). Macromedia Study Report sr-2020-01. Munich: Macromedia University of Applied Sciences.

Full list of authors: Hellriegel, O., Kolo, C., Arnold, Y., Kowalski, S., Küppers, A., Labus, M., Matt, S., Poupunthong, S.

Special thanks to the following students, who also contributed to the overall project:
Betancourt, J., Dietz, A., Dobi, I., Engl, C., Harth-Brinkmann, T., Lemarron, P., Lula, I., Mukundan, A., Muzi, C., Ovchinnikova, O., Pappa Rivera, T., Rippl, L., Siegl, H., Singh, N., Speckbacher, E., Vznuzdaeva, M.

For more information www.macromedia-university.com

