


DATA-DRIVEN LEADERSHIP DEVELOPMENT

Exploring Post-Pandemic Challenges With
Artificial Intelligence

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INTRODUCTION

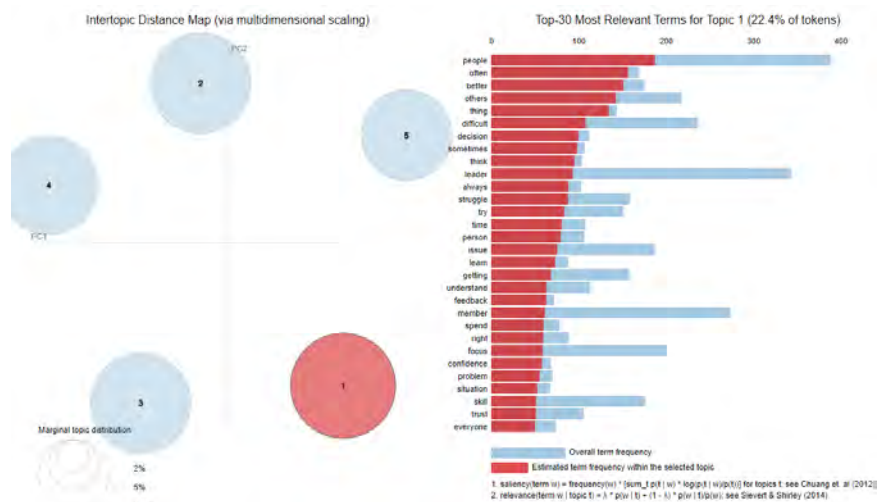
Using an AI machine learning algorithm, the Center for Creative Leadership leveraged its database of 34,000 leaders and 100,000 challenges obtained through open-ended text to understand the challenges faced across four leader levels. We used data from 2010 to 2020 to describe challenges generally faced by leaders of tasks, teams, departments, and organizations. Using that topic model, we investigated whether the change in prevalence of those topics occurring from 2020 and 2022 could tell us more about the challenges leaders faced in the wake of the pandemic. Then, we conducted a follow-up study for a deeper dive into the challenges facing leaders of managers with a sample size of 1,463 from 2020-2023. To do this, we created a new model based entirely on post-pandemic data, which yielded five categories, some of which have significant overlap with the pre-pandemic model. This brief summarizes the preliminary results of the post-pandemic model for leaders of managers.

Method

We used Latent Dirichlet Allocation (LDA) topic modeling analysis to create the post-pandemic model for leaders of managers. This is the same method used to create the pre-pandemic model, which is explained in detail in the [Leadership Challenge Ladder Technical Report](#) (2020), to be consistent between the pre-pandemic and post-pandemic samples for this analysis. We also used the same methods and statistics to evaluate the model prior to engaging with subject matter expert reviewers, who we employed to make sense of the topics.

Review Process

Replicating the process for creating the pre-pandemic model, we asked two reviewers to name and describe the topics. The reviewers used sample challenge data and the five-topic model Inter-topic Distance Map (see below image) to come up with names and descriptions independently. They then met to settle disagreements and discuss whether the new topics represented a significant shift from the previous model. In two follow-up meetings, we met as a large group with researchers and reviewers to discuss the differences between the new and old models and insights from the new model.



Results

The reviewers agreed that the topics uncovered in the post-pandemic model did not represent a major shift from the pre-pandemic model. However, the salience of some topics and overarching themes were more prominent in the post-pandemic model. For example, two themes arose across all five topics, with participants mentioning the need to maintain a functional workforce and adequate staff while strategically influencing decisions at a systemic level as a result of the changing business context.



Post-Pandemic Challenges of Leaders of Managers

1. *Competing People and Task Priorities (Prevalence: 21.4%)*

Challenge of both leading people and managing the work. This includes leading people by connecting with, motivating, and developing direct reports and holding them accountable, while connecting and communicating well with others throughout the organization, and also managing one's own pressing task, team and project responsibilities. These competing demands on one's time can be particularly difficult when new to a role or when managing a new, inexperienced, or large team.

Thematic Overlap with Previous Model: All of the "People and Task Demand" meta-category challenges show up in the sample responses at varying frequencies: New or Ambiguous Responsibilities, Accountability for Others' Work, Competing People and Project Priorities, Development Gaps: Yours and Others, Staffing Issues.

2. *Staffing Issues (Prevalence: 17.9%)*

Challenge of recruiting, retaining, developing, and motivating qualified staff, while maintaining morale and engagement on teams that are understaffed. This challenge occurs in the midst of broader business challenges, such as labor shortages, mergers and acquisitions, supply chain issues, and other marketplace disruptions.

Thematic Overlap with Previous Model: “People and Task Demands - Staffing Issues” directly overlaps, with overtones of “Working Within a Larger System - Challenging Business Context” as an underlying theme impacting staffing. As well, two challenges at a higher leadership level (Leaders of Functions) were indicated in the responses within this topic: “Working Within a Larger System - Resource Constraints and Financial Instability” and “People and Task Demands – Talent Pipeline Issues”.

3. Strategic Impact in the Organization (Prevalence: 21.1%)

Challenges of leading and influencing others to advance strategic opportunities and meet future organizational goals. This is achieved through increasing lateral and upward influence in the organization, taking strategic actions that position the organization for the future, and developing engaged and high-performing teams.

Thematic Overlap with Previous Model: Broadly overlaps with “Working within the Larger System – Cross Functional Influence” and “People and Task Demands: Developmental Gaps (Yours and Others)”.

4. Personal Limitations (Prevalence: 19.4%)

Challenge of overcoming personal tendencies in order to create one’s desired impact on others. These internal struggles are experienced as needing to work in ways that “go against your grain” and to overcome your own doubts or those of others about your ability to lead. More commonly noted inadequacies are related to visibility, voice, and assertiveness; communicating and listening; delegating to, motivating, and developing others; and approaches to problem solving and conflict management.

Thematic Overlap with Previous Model: Broadly overlaps with “Personal Growth – Personal Limitations” and “Personal Growth: Ineffective Personal Style”.

5. Culture and System Development (Prevalence: 19.9%)

Challenge of changing “the way we do things around here” to achieve better organizational results. This includes changing or evolving the organization or department culture, developing talent systems, and adapting to organizational changes and external pressures.

Thematic Overlap with Previous Model: Broadly overlaps with “Working within a Larger System – Adverse Work Environment” and “Working within a Larger System – Challenging Business Context”. As well, two challenges at a higher leadership level (Leaders of Functions) were indicated in the responses within this topic: “Working Within a Larger System – Changing Internal and External Environment” and “People and Task Demands – Talent Pipeline Issues”.

Discussion

The purpose of this study was to inductively investigate whether new or fundamentally different leadership challenges may have evolved in the wake of the pandemic, limiting our focus to a level of leadership for which we had the most post-pandemic data. Therefore, our method and results are influenced by two major limitations: sample size and sample shift. Our pre-pandemic model is based on several years of data from several thousand participants, while this post-pandemic study relied on a little over a thousand participant responses, and then only from participants who were able to continue attending our leadership development programs during and in the aftermath of the pandemic. Given those limitations, our next steps are to take a closer look at the changes in the available demographic data during our timeframe of interest, as well as the key words used by participants to describe their challenges.

Our initial results demonstrate that Leaders of Managers likely didn't experience fundamentally different leadership challenges from our original model during our timeframe of interest, but rather, they likely experienced an increase in certain challenges over others (i.e., challenges having to do with personal limitations), or had a different way of framing their challenges. For example, we found evidence that the participants attending our programs during this timeframe took a more systemic view of their challenges or presented them in such a way that suggested they were considering strategic impact across the organization, which previous program participants at that level may not have stated in the same way. With further research, we hope to uncover additional context for that finding and consider its implications for how we think about leaders' vertical development at that level and others.

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