Assignment

**Gephi ONLY**

Students will finish an assignment using ONA and relevant analytic strategies to analyze people related data obtained from 200 employees in a department at an IT company. Students will need to diagnose people related problems with the current department and provide data backed recommendations and action plans to the management team. Please follow the “*Guidance and Grading Criteria for PA Projects*” to complete the project. The project will be due on April 26.

Background of the project

* The management team feels that the department performs at a satisfactory level. However, the company is in a fast development mode and the management teams want to further enhance the department’s productivity, adaptability, and innovation. At the same time, the management team observed some people related problems such as some employees are disengaged. It takes longer time for newcomers to perform at a satisfactory level. Many employees are unwilling to speak up and voice their suggestions.

Data explanation

* The company conducted two surveys, including a perception survey based on Google’s Project Aristotle (<https://rework.withgoogle.com/print/guides/5721312655835136/>) and a network survey to get information of how employees seek information from one another and how they learn from each other regarding the culture norm.
* There are three datasets
  + Original network survey results, including advice network and value network
  + Employee survey scores and network scores (see below variable dictionary)
  + Employee basic information including their personal and employment information, job performance (task performance and value performance)

Variable dictionary

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| --- | --- |
| Variable | Meaning |
| team interdependence | An individual’s understanding of job expectations, the process for fulfilling these expectations, and the consequences of one’s performance are important for team effectiveness. |
| team effort | On dependable teams, members reliably complete quality work on time |
| impact | The results of one’s work, the subjective judgement that your work is making a difference, is important for teams. |
| psych safety | Psychological safety refers to an individual’s perception of the consequences of taking an interpersonal risk or a belief that a team is safe for risk taking in the face of being seen as ignorant, incompetent, negative, or disruptive. In a team with high psychological safety, teammates feel safe to take risks around their team members. They feel confident that no one on the team will embarrass or punish anyone else for admitting a mistake, asking a question, or offering a new idea. |
| meaning | Finding a sense of purpose in either the work itself or the output is important for team effectiveness. The meaning of work is personal and can vary: financial security, supporting family, helping the team succeed, or self-expression for each individual, for example. |
| OutDeg\_advice | To what extend the focal employee seeks advice from others |
| Indeg\_advice | To what extend others seek advice from the focal employee |
| Between\_advice | To what extent the focal employee serves as a broker to connect diverse coworkers |
| OutDeg\_value | To what extend the focal employee consider others as role models and learn from others regarding the culture value |
| Indeg\_value | To what extend others consider the focal employee as a role model and learn from the focal employee regarding the culture value |

Tips for the project

* Follow the “*Guidance and Grading Criteria for PA Projects*” and consult showcase reports
* Use both descriptive and predictive analyses
* Creatively slice the data based on some key personal information (e.g., level of the positions, employee type – new vs. experience, different groups, etc). note the data was collected in 2018.
* Connect ONA with other analytic strategies
* You don’t need to be comprehensive, but to focus on a few key issues and tell some cohesive stories