

The “Nordic Gaming” Dataset

Research Article

Starling David Hunter*

London Business School, London, UK

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Abstract: This article presents attribute and relational data for 427 employees of a state-owned, Nordic gambling and gaming company. All data were collected from August to September 2020 as part of a management consulting project focused on the re-design of physical and organizational space at the company's headquarters. Attribute data consist of gender, tenure, formal role, place of work, departmental membership, subunit (formally defined units within departments), location (building and story/floor within the building), and response status. Relational data were collected for the formal reporting relationship and three instrumental informal relationships – expertise-seeking, idea-sharing, and information-seeking.

Keywords: *Organizational network analysis • Social network analysis • Scandinavia • Nordic • Public sector • Hierarchy • Organizational structure • Organization design • Covid-19*

1. Overview

The Nordic Gaming dataset consists of relational and attribute data collected from and about 427 employees of a gaming/gambling company located in Scandinavia. Founded in the late 1940s, Nordic Gaming is government-owned and administered by the nation's Ministry of Culture. The company produces and distributes a broad range of instant, sports, and lottery games for the national market. Since its inception, all profits from the gaming and gambling operations are used to support the nation's cultural and sports sectors.

The attribute and relationship data were collected as part of a consulting engagement involving a firm in which the author was a principal. Working alongside a major architecture firm, which Gaming had engaged, the consultants' job was to provide insights into the relationship between physical space, formal organization structure, and informal social structure. The 427 participants at Gaming worked in five departments – Strategy and Business Development, Finance and Administration, Research and Development, Information Technology, Operations and Sales and Marketing, the heads of which reported to the Office of the CEO. All data were collected between late August and early September 2020, during the Covid pandemic.

* E-mail: shunter@london.edu

2. Relationship data

The relationship data are of four kinds: reporting, expertise-seeking, idea-sharing, and information-seeking. While information on formal reporting relationships was provided by a member of the organization's Human Resources department, data on the three informal instrumental relationships were collected by way of a proprietary, web-based, survey tool developed by the consultants expressly for the purpose of conducting organizational network analyses.

Two survey questions were posed for each of the three informal relationships – one to establish a respondent's contacts and one to measure the weight or strength of the tie. Below are English translations of the questions, but with the word “Gaming” substituted for the organization's actual name.

2.1 Expertise-seeking ties

- *Which colleagues do you seek out when you need to solve an important (work-related) problem?* Choose from 1 to 7 people among Gaming employees. You must choose a minimum of one person to progress. You can also add up to five external employees that you work with (e.g., a consultant or freelance employee). Select ADD A NEW

PERSON and enter their name and email. If you do not have any people you want to add, find your own name and add it to continue.

- How *VALUABLE* is this competence/expertise to you in your job? Scale: 0 = No value; 10 = Very valuable.

2.2 Idea-sharing ties

- Which colleagues do you seek out when you want to put forward a job-related proposal or have a good idea? Choose from 1 to 7 people among *Gaming* employees. You must choose a minimum of one person to progress. You can also add up to five external employees that you work with (e.g., a consultant or freelance employee). Select ADD A NEW PERSON and enter their name and email. If you do not have any people you want to add, find your own name and add it to continue.
- How *IMPORTANT* is this relationship to process and further develop relevant and feasible ideas? Show on a scale from 0 to 10 how valuable that knowledge is. Scale: 0 = Not important; 10 = Very important.

2.3 Information-seeking ties

- Which colleagues do you seek out when you need work-related information? Choose from 1 to 7 people among *Gaming* employees. You must choose a minimum of one person to progress. You can also add up to five external employees that you work with (e.g., a consultant or freelance employee). Select ADD A NEW PERSON and enter their name and email. If you do not have any people you want to add, find your own name and add it to continue.
- Show on a scale from 0 to 10 how often you are in contact during a week. Scale: 0 = Rarely; 10 = Every day or more often.

3. Data files and format

All data are provided in one Excel spreadsheet entitled “Nordic Gaming.” *Sheet 1 (Attributes)* contains attribute data while *Sheet 2 (Edges)* contains all relationship data. The attribute data include gender, tenure, leader role, place of work, departmental membership, subunit (i.e., formally defined unit within a department), location (building and floor within building), and response status.

Sheet 1 (Attributes), Column A: “Unique ID”

- This variable is the unique identifier for each of the 427 employees. The numbers range from 7 to 1,706 and were provided by HR. While their exact meaning is unknown,

it is notable that these values are very negatively correlated with tenure ($\rho = -0.92$). Thus, high numbers are associated with lower tenure.

Sheet 1 (Attributes), Column B: “Tenure (Years)”

- These data were provided by the HR department as whole numbers representing years, rounded up or down at the half-year mark, e.g., 3 months of tenure = 0 years while 9 months = 1 year.

Sheet 1 (Attributes), Column C: “Gender”

- Coded “1” for Male and “0” for Female

Sheet 1 (Attributes), Column D: “Leader”

- Coded “1” if the employee was a formal leader, i.e., had at least one direct report and coded “0” otherwise.

Sheet 1 (Attributes), Column E: “Working at Office”

- Below is an English translation of a multiple-choice question in the survey concerning an employee’s place of work during Covid-19 restrictions.

“In the current situation, how often will you be physically present at Gaming’s offices?”

The options were:

- o Not at all
- o A few hours every day
- o 1–2 days per week
- o 3–4 days per week
- o Every day/unchanged

Sheet 1 (Attributes), Column F: “Department (English)”

- This column contains the English translation of the names of the six departments to which an employee was assigned: *Office of the CEO*, *Sales & Marketing*, *Information Technology & Operations*, *Research & Development*, *Finance & Administration*, and *Strategy & Business Development*. Information on departmental membership was provided by a representative of Gaming’s HR group. All employees were assigned to one and only one department.

Sheet 1 (Attributes), Column G: “Subunit”

- This column contains the English translation of the names of 37 subunits across the six departments defined in Column F. Note that in small departments such as the *Office of the CEO* (4 members) and *Strategy & Business Development* (10 members), subunit names are the same as the departments in which they are found.

Sheet 1 (Attributes), Column H: “Building”

- This column contains the building number in which each employee worked: Building 1, Building 1N (North Annex), Building 2, Building 3, or Building 4.

Sheet 1 (Attributes), Column I: “Story”

- This column indicates the floor or story within the building where an employee worked. As is common in most, if not all, of western Europe, the first floor (Story 1) is the first one above the ground floor. The ground floor

here is referred to as “Story 0.” Buildings 3 and 4 were single story and thus everyone is shown as working on “Story 0.” In Building 2, everyone worked on Story 1. The building coded “Building 1/2” indicates a floor that connected Building 1 on one end and Building 2 on the other. In Building 1 and Building 1N, employees worked on stories 1 and 2. There is a strong relationship between location (building and/or story) and department/subunit.

Sheet 1 (Attributes), Column J: “Response Status”

- This variable is coded “1” if an employee responded to the survey and “0” if he/she did not.

Sheet 2 (Edges), Column A: “Source”

- This variable indicates the Unique ID of the source or sender of the tie.

Sheet 2 (Edges), Column B: “Target”

- This variable indicates the Unique ID of the receiver or target of the tie.

Sheet 2 (Edges), Column C: “Type”

- This variable indicates the type of tie. Four types are included: expertise-seeking, idea-sharing, information-seeking, and reporting.
- The dataset contains 795 directed ties for the expertise-seeking relationship, 641 directed idea-sharing ties, and 1,088 directed information-seeking ties.
- Ordinarily one would expect to find 426 reporting ties for 427 employees operating under the principle of Unity of Command (Fayol, 1916). However, there is one additional tie here – a self-report of the CEO to herself. Her Unique ID is 1580.

Sheet 2 (Edges), Column D: “Weight”

- This variable indicates the weight or strength assigned to the tie by its sender. All informal ties are scaled from 0 to 10. As noted above, in the case of expertise-seeking ties, weight indicates how valuable the target’s competence or expertise is to the sender in the performance of their job. Here “0” = “No value” while “10” = “Very valuable.”
- In the case of idea-sharing ties, weight indicates how valuable or important the relationship is “to process and further develop relevant and feasible ideas.” Here “0” = “Not important” while “10” = “Very important.”
- And in the case of information-seeking ties, the weight indicates the frequency of contact. Here “0” = Rarely; “10” = “Every day or more often.”
- Reporting ties have no assigned weight.

4. Respondent bias

Of 427 employees, 232 (54%) responded to one or more of the three relationship questions in the survey. The table contains response rates for various subsamples.

Subsample	Response rate (%)
Department = Office of the CEO	25
Department = Finance & Administration	79
Department = Information Technology & Operations	58
Department = Sales & Marketing	51
Department = Research & Development	54
Department = Strategy & Business Development	50
Gender = Male	55
Gender = Female	53
Tenure = <1 year	40
Tenure = 1–5 years	52
Tenure = 6–10 years	59
Tenure > 10 years	54
Role = Formal Leader	71
Role = Individual Contributor	53
Building = Building 1	55
Building = Building 1N	70
Building = Building 2	67
Building = Building 1/2	48
Building = Building 3	58
Building = Building 4	23

Two subsamples stand out for their low response rates – the Office of the CEO (25%) and Building 4 (23%). The former comprised just four employees, of whom only one responded to the survey – one of the CEO’s staff who herself had no direct reports. The latter was Building 4, which housed two subunits within Sales & Marketing – Customer Service Team 1 and Customer Service Team 2. Together these two teams had 40 employees. Notably, the formal leaders of those two teams were not co-located with their subordinates. Rather, both leaders worked in Building 1.

5. Data details: Summary

Response rate	54% (See Section 4 for detailed discussion)
Non-responder bias	Yes. (See Section 4 above for detailed discussion)
Publications using these data	None
Data context	Data collected as part of a consulting project; certain Covid-19 related restrictions were in place nationally and at the offices of the organization
Sample	427 employees of a state-owned gaming/gambling company in the Nordics
Time period	Collection occurred during late August to early September 2020
Analytical or pedagogical utility	• The relationship between formal organizational and informal social structure (Brennecke et al., 2025; Hunter et al., 2020; Tasselli & Caimo, 2019) • Modularity and silos in instrumental work relations during Covid-19 (Zuzul et al., 2025) • Correlation of formal structure and physical co-location of employees (Allen et al., 2008; Sailer & McCulloh, 2012) • Interrelationships of social relations (Cross et al., 2001), as well as multiplexity (Ertug et al., 2023) • Distinctive characteristics of Nordic/Scandinavian leadership, organization, and business culture (Torgersen & Steiro, 2018)
Known issues	None

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Author contributions

The paper has a single author who was responsible for all data collection and all writing.

Conflict of interest statement

The author states no conflict of interest.

Data availability statement

The data are available as part of the published dataset.

References

- Allen, T. J., Tomlin, B., & Hauptman, O. (2008). Combining organisational and physical location to manage knowledge dissemination. *International Journal of Technology Management*, 44(1–2), 234–250.
- Brennecke, J., Coutinho, J. A., Gilding, M., Lusher, D., & Schaffer, G. (2025). Invisible iterations: How formal and informal organization shape knowledge networks for coordination. *Journal of Management Studies*, 62(2), 706–747.
- Cross, R., Borgatti, S. P., & Parker, A. (2001). Beyond answers: Dimensions of the advice network. *Social Networks*, 23(3), 215–235.
- Ertug, G., Brennecke, J., & Tasselli, S. (2023). Theorizing about the implications of multiplexity: An integrative typology. *Academy of Management Annals*, 17(2), 626–654.
- Fayol, H. (1916). *General and industrial management*. Institute of Electrical and Electronics Engineering.
- Hunter, S. D., Bentzen, H., & Taug, J. (2020). On the “missing link” between formal organization and informal social structure. *Journal of Organization Design*, 9(1), 13–32.
- Sailer, K., & McCulloh, I. (2012). Social networks and spatial configuration – How office layouts drive social interaction. *Social Networks*, 34(1), 47–58.

- Tasselli, S., & Caimo, A. (2019). Does it take three to dance the Tango? Organizational design, triadic structures and boundary spanning across subunits. *Social Networks*, 59, 10–22.
- Torgersen, G. E., & Steiro, T. (2018). Defining the term samhandling. In *Interaction: Samhandling Under Risk*. Cappelen Damm Akademisk/NOASP (Nordic Open Access Scholarly Publishing).
- Zuzul, T., Cox Pahnke, E., Larson, J., Bourke, P., Caurvina, N., Parikh Shah, N., Amini, F., Weston, J., Park, Y., Vogelstein, J., White, C., & Priebe, C. (2025). Dynamic silos: Increased modularity and decreased stability in intraorganizational communication networks during the COVID-19 pandemic. *Management Science*, 71(4), 3428–3448.