Everyone Does Something Else Right: Underpinning Knowledge Sharing in Organizational Transformations

Jan van de Poll[1], Yang Yong[2] & Li Chen[3]

[1] Managing Director at Transparency Lab, Netherlands

[2] Chief Technology Officer at Transparency Lab, Netherlands

[3] Senior Consultant at Microsoft, Shanghai, China

Correspondence: Jan van de Poll, Managing Director at Transparency Lab, Netherlands. E-mail: jasnaduricic@hotmail.com

Abstract

In organizational transformations, it's usually the entire organization that has to change. Employee polls can be used to get an objective view of the state of the organization and help give managers and employees something back. Employee polls garner the crowd's wisdom, gauge the present energy, and help with strategic decision-making. Only a few studies have analyzed the translation of the overall organizational strategy into personalized advice for every manager and employee: What to improve, how to do it (best practices), and who can help (knowledge sharing). This article aims to address this research gap by using some latest developments in artificial intelligence. We quantified the possibilities for knowledge sharing in 325 organizational transformations covering close to 2,000 teams and over 20,000 employees. Roughly 96% of employees scored at least average on one or more parts of the transformation 'measuring rod.' And for 99% of these parts, it made sense to share knowledge among the employee polls' respondents. Potentially, an organization might score close to 10 out of 10; it's just a matter of connecting the dots. In summary: everyone does something else right.

Keywords: Employee polling, organizational transformation, Guttman-Poll, knowledge sharing, artificial intelligence

1. Introduction

Organizational transformation is a business strategy for change management to increase organizational effectiveness and strengthen the company culture that involves efforts focused on employees' knowledge sharing. According to consultancy firm Towers Perrin, it positively affects employee engagement by sharing knowledge. It encourages employees to feel personal satisfaction and a sense of inspiration and affirmation they get from work and being a part of the organization. Janus (2016) indicated that everyone in the organization needs to start sharing knowledge. This is rightly considered of critical importance and an integral part of a company's success. If employees lack knowledge sharing, they are like lone wolves rather than team players (Trammell, 2019). Fostering employee engagement leads to higher performance levels (Mone & London, 2010). An engaged employee is aware of the company context and works with colleagues to improve performance within the job for the benefit of the organization (Nadeem, 2021). However, Gallup, an analytics and advisory company known for its public opinion polls conducted worldwide, conducted a study showing that employee engagement in organizations is extremely low– among employees in the US and Canada: only 28% are dynamic, and 55% are not employed at all. Even worse, 17% are actively laid off – meaning they'll terminate a group of employees for business reasons, hence downsizing an organization (Bhardwaj et al., 2021).

Undoubtedly, it is of paramount importance to know what controls employee engagement. Employee engagement can be accelerated in various ways through rewards, employee wellness, empowerment, career growth, brand alignment, and social relations (Question Pro, 2021). Among those mentioned above, the cultivation of good social relationships at work might be considered the most remarkable example. As employees construct more relationships with each other, they have more tendency to work together and the less resistant to asking for help. Hence, they will cooperatively work together, maximizing the synergistic effect of their energy. According to Gallup, a highly engaged workforce generates 21% greater profitability. Another research by the Engagement

Institute claims that disengaged employees can cost companies up to $550 billion per year (Clack, 2020).

Ryba (2021) highlighted that management plays a substantial role in employee engagement and motivation. According to Gallup, "managers account for at least 70% of the variance in employee engagement scores across business units" (Beck & Harter, 2014). Managers who communicate transparently and continuously will boost employees' engagement with their work, enabling knowledge sharing. And this eventually leads to the organization's success in the long term. Recently, Mone and London (2018) defined essential employee engagement strategies that managers should follow. A similar study by Quantum Workplace implied three main ways managers could do better to boost employee intervention (Ryba, 2020). These are; 1) Internal growth and career development opportunities: Employees desire to see opportunities to grow and develop at the organization, 2) Recognition and appreciation: Employees would like their excellent work to be praised, 3) Communication and feedback: Sharing of ideas and feelings between employees and managers of an organization is vital for the organization to increase employee engagement. It usually appears verbally, electronically, or both on various tools such as emails, mobile applications, and collaboration tools.

Effective Knowledge Management (KM) is a significant factor in making sure that an organization employs its knowledge effects in gaining the highest performance of the organization. In researching knowledge sharing, proper and technical assessment factors are required to evaluate the strength of knowledge-sharing performance. Rad et al. (2014) conducted a literature review and identified the critical factors for measuring knowledge sharing performance. Relevant factors to the evaluation of knowledge sharing are rewards, reciprocal relationship, knowledge self-efficacy, trust, IT application usage, training & education, sharing culture, and leadership. Later, they evaluate the importance of those factors mentioned above for knowledge sharing. Based on their study, trust, rewards, and leadership become the most critical factors. In knowledge management (Liebowitz, 1999; 2000; Von Krough et al., 1999), metrics are needed to further convince management and stakeholders as to the value of knowledge management initiatives. The question arises here: How to measure knowledge sharing success? Caulier (2020) presented three most helpful measurements for all organizations, regardless of size or function. Those are usage rates, time spent, and knowledge quality score. Usage rates control how often employees interact with knowledge management solutions. The metrics like number of active users, number of views, and the amount of new content added might be used. Second comes time spent which is the most valuable asset in the organization. Time spent consists of three essential parts as time spent looking for information, time spent on unnecessary tasks, and time spent during training. Finally, the knowledge quality score gives numeric details on how many people are interested in the content, how many people have active discussions, or how often they share information.

Employee polls can be used to get an objective view of the state of the organization and help give managers and employees something back. Employee polls garner the 'wisdom of the crowd,' gauge the present energy and help with strategic decision-making. Those people implement the initiatives of superior authority and ultimately decide on the result of the activity. However, the capability to innovate, adapt, and develop may come from the superior authority. Recently, employee engagement software has been created, which can be employed to furnish engagement initiatives. Organizations who leverage these platforms can better practice the strategies that increase employee performance. The main advantage of these kinds of software is that they consider the engagement drivers for an employee who has recently joined the organization and those tenured ones.

This study makes a novel contribution by developing artificial intelligence (AI) techniques to translate the overall organizational strategy into personalized advice for every manager and employee as to what to improve, how to do it (best practices), and who can help (knowledge sharing). The sample for this study consists of employees of private and public sector organizations in Europe. The possibilities for knowledge sharing are quantified by studying 325 organizational transformations covering close to 2,000 teams and over 20,000 employees.

We aim to answer the following research questions:

1)   What framework could be used to objectively measure the transformation's progress and give information back on how to improve?

2)   How do managers/employees score on parts of the transformation?

3)   To what extent does that allow for knowledge sharing?

2. Method

2.1 Procedure and Participants

Knowledge sharing is about exchanging best practices to stimulate the implementation of an organizational transformation's improvement target. There is little use for employees sharing their feelings, agreement or opinions about the strategy. Hence, we did not use a survey based on Likert scales. Instead, we created a different survey

scale based on the Guttman survey scale (Stauffer et al., 1950; Diamond, McDonald, and Shah, 1986) better geared to objectively polling employees (Van de Poll 2018, 2021, and Van de Poll et al., 2022).

Next, we analyzed 325 different employee polls about various strategic issues requiring some organizational transformation. These employee polls covered 2,789 sub-topics. These employee polls showed a response from 20,276 respondents in 1,980 teams. We used PRAIORITIZE, an automated consultancy platform (www.praioritize.com), to perform the calculations about knowledge sharing.

2.2 Measures & Data Analysis

We designed an alternative survey format for objective employee polling based on the Guttman scale. The scale is ordinal and multiple-choice: every following answer is better than the answer before. Uhlaner (2002) calls these 'breaking points'. For example (from a team effectiveness poll):

Q. How do you celebrate successes?

1. We don't

2. When there is an apparent reason to do so, with whoever is involved

3. We make it a habit to celebrate successes with the entire team

Additionally, we reduced the respondents' self-reporting bias (Donaldson and Grans-Vallone, 2002) by adding "proof-words" like, e.g., 'periodically,' 'measurable,' 'described,' 'formally,' and 'documented.' Such "proof-words" reduce the emotional or cognitive meaning given by employees to the answers (Frese & Zapf, 1988). And we abstained from adjectives or adverbs that couldn't be verified (e.g., "good"). We considered this question format sufficiently verifiable (Ahrens & Chapman, 2006; Plewis & Mason, 2007) for application in maturity models.

Each question in a poll had three answers. The 'worst' answer scored 0 points, the middle answer 5 points, and the best 10 points. Scores were calculated per employee and sub-topic (a group of questions). These sub-topics were aggregated into a topic- and overall scores. And employee scores were aggregated into team- and overall scores. The scores per respondent, sub-topic, and topic were visualized in a Grid Map (a random example in Figure 1). "Setting objectives" is a sub-topic; "Objectives" is a topic. A color-coding was added to improve readability.
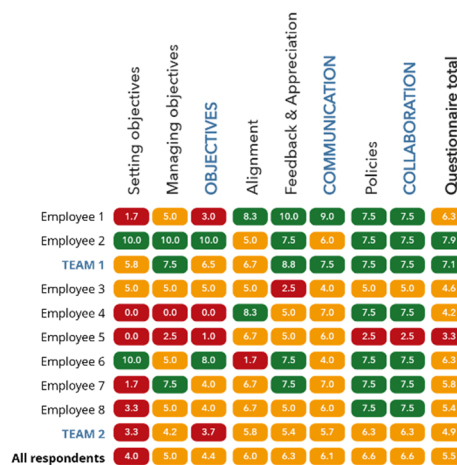

Figure 1. A grid map

Next, for each grid map, we calculated per row (only the employees) and per column (only the sub-topics) the lowest score and highest score and the resulting bandwidth (highest -/- lowest score). In figure 1, employee 1 has the lowest score of 1.7 and a bandwidth of 8.3 (a high score of 10 -/- 1.7). The sub-topic "Setting objectives" has the lowest score of 0.0 and a bandwidth of 10 (a high score of 10 -/- 0.0). The target setting (out of scope for this article) usually sets a target per sub-topic not higher than 7.0.

3. Results

First of all, Table 1 shows the composition of our database: 325 organizational transformation projects covering 1980 teams covering 20,276 respondents. The average lowest score for an employee was 2.8, with a bandwidth of 5.1. Both the minimum and maximum scores of 0 and 10 for both the lowest and highest score means that some employees only scored 0's and others only 10's.

When it comes to knowledge sharing, it's crucial to verify whether there is something to share. Hence, Table 1 shows the share of respondents having their maximum score in a specific bracket. Only 34 respondents had the highest score of not more than 1.0 (on our scale from 0 to 10). Yet, 69% of respondents scored a maximum of 7 or higher on one or more sub-topics. And 84% achieved a 5.0 or higher. Given an average target score per sub-topic of 7.0, this is an encouraging figure for knowledge sharing.

Until now, we can conclude that – as a rule of thumb – (roughly) everyone does something right. But if every employee does the same thing right there is, theoretically speaking, still no possibility for knowledge sharing. To verify whether every employee does something *else* right, there is a need to verify the bandwidth in the sub-topic scores. Table 1 shows that in 96% of the subtopics, there is a bandwidth of at least 3,0. That means that the lowest-scoring employee scores 3 points lower than the best scoring employee. In only 22 out of 2,789 sub-topics (less than 1%), the bandwidth was not more than 1,0, suggesting little opportunity for knowledge sharing.

Table 1. Sample size, score, and distributions

	N	Share%	Cumul.%	Min	Max	Avg.	StDev.
Sample size							
Number of questionnaires	325						
Number of teams	1,980						
Number of employees	20,276						
Number of topics	936						
Number of sub-topics	2,789						
Number of teams per questionnaire				1	80	6.1	7.6
Number of employees per team				2	226	8.0	20.5
Number of topics per questionnaire				0	15	2.9	2.1
Number of sub-topics per questionnaire				0	33	8.7	5.2
Employees' scores							
Minimum score				0.0	10.0	2.8	2.3
Bandwidth				0.0	10.0	5.1	2.6
Maximum score				0.0	10.0	8.0	2.0
Employees' distribution of their maximum scores							
0 - 1	34	0%	100%				
1 - 2	78	0%	100%				
2 - 3	223	1%	99%				
3 - 4	570	3%	98%				
4 - 5	1,582	8%	96%				
5 - 6	1,031	5%	88%				
6 - 7	2,690	13%	83%				
7 - 8	3,112	15%	69%				
8 - 9	3,455	17%	54%				
9 - 10	7,501	37%	37%				
	20,276						
Subtopics' distribution of their bandwidth scores							
0 - 1	22	1%	100%				
1 - 2	33	1%	99%				
2 - 3	59	2%	98%				
3 - 4	101	4%	96%				
4 - 5	220	8%	92%				
5 - 6	164	6%	84%				
6 - 7	332	12%	79%				
7 - 8	389	14%	67%				
8 - 9	408	15%	53%				
9 - 10	1,061	38%	38%				
	2,789						

Min.: lowest number. Max: highest number. Avg: average number. StDev: standard deviation.
Share%: percentage of respondents/sub-topics in that bracket
Cumul.%: cumulative percentage of respondents/sub-topics in that bracket

To deep-dive into these scores and bandwidths, Figure 2 provides additional insights. Here, respondents and sub-topics are compared on their lowest score (x-axis) and their scores' bandwidths (on the y-axis). Both axes range from 0.0 to 10.0. The red bullets indicate the additional insights.
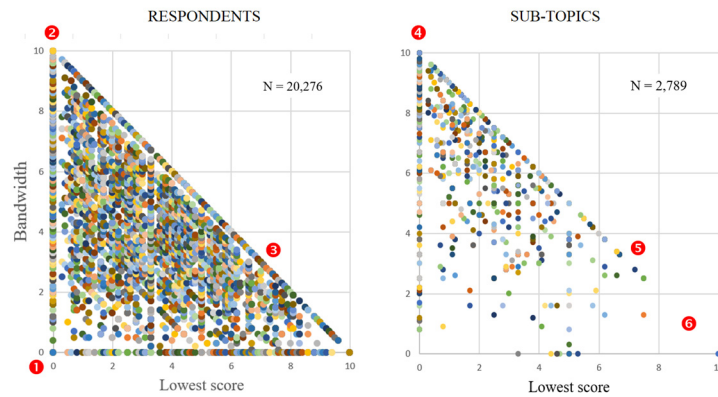
Figure 2. Comparing scores and bandwidths for respondents and sub-topics

1. Very few respondents score structurally low (low minimum score *and* low bandwidth)

2. While many respondents score a 0 somewhere on a sub-topic, they also score (much) higher on other sub-topics.

3. The diagonal shows the respondents that somewhere score a 10. Table 1 shows that 37% of respondents scored on/close to this diagonal.

4. On many sub-topics, some respondents score a 0 while others score (much) better (up to 10).

5. The diagonal shows the sub-topics where one or more respondents score a 10.

6. There are no sub-topics here. This means there wasn't a sub-topic in our sample where *all* respondents in that employee poll scored an 8.0 or more.

4. Discussion

Involving the wisdom of the crowd does not only help with better decision-making but can also be applied to support the implementation of that decision: knowledge sharing because everyone does something else right. So often did respondents score a 10 on a sub-topic that the transformations' improvement targets were overachieved. That is to say: only by a subset of the respondents. Hence, knowledge sharing: just connect the dots.

5. Conclusions

To perform better in this competitive world, managers are not confined only to motivating their employees, but they have to create a sense of engagement amongst the employees. Therefore, transforming an organization is of critical importance, requiring the involvement of the entire organization. Successful companies are those who not only earn money but also involve their employees at every level and win the faith of their employees to take them to the next level of success.

Our survey scale allowed us to get objective input and provide respondents with an improvement target. Our rule-of-thumb: everyone does something else right. That means that, in essence, the transformation is definitely on its way: just share the knowledge between respondents.

This article has underpinned the potential for knowledge sharing while implementing an organizational transformation. Further study into managing the actual sharing implementation and motivating employees to exchange knowledge will help organizations materialize said potential.

6. Limitations and Future Research

There are a few cautionary remarks to be made about our research. We have tried to vary the topics of the organizational transformations in our database. More than 300 polls with over 20,000 respondents are a large sample, yet different sub-topics and/or respondents from other industries may result in different outcomes. Our survey scale is likely to result in an objective base to start knowledge sharing from, but we haven't checked (for this sample) to what extent employees were telling the truth when answering their poll. We drilled down to the sub-topic level. These sub-topics scores were averages of the scores on the underlying questions. Therefore, if this research is repeated down to the level of individual questions, it's highly likely that even more respondents will score a ten somewhere with even more knowledge sharing. Finally, we have underpinned that there is a *potential* for knowledge sharing. We also realize that managing the actual sharing is a different chapter. It requires that every

employee be told (e.g., by handing out a dashboard) whom to contact for help. And even with that, it's is not a given that these employees will reach out to their colleagues.

References

Ahrens, T., & Chapman, C. S. (2006). Doing qualitative field research in management accounting - positioning data to contribute to theory. *Accounting, Organizations and Society, 31*, 819-841.

Beck, R., & Harter, J. (2014). Why good managers are so rare. *Harvard Business Review.*

Bhardwaj, A., Mishra, S., & Jain, T. K. (2021). Analysis of strategic leadership for organizational transformation and employee engagement. *Materials Today: Proceedings, 37*, 161-165.

Caulier, A. (2020). How to Know If Your Knowledge Sharing Efforts Are Working? Retrieved from https://elium.com/blog/how-to-know-if-knowledge-sharing-efforts-are-working/

Clack, L. (2020). Employee engagement: keys to organizational success. *The Palgrave handbook of Workplace Well-Being*, 1-28.

Diamond, I. D., McDonald, J. W., & Shah, I. H. (1986). Proportional hazards models for current status data: application to the study of age at weaning differentials in Pakistan. *Demography, 23*(4), 607-620. Htttps://doi.org/10.2307/2061354

Donaldson, S. I., & Grans-Vallone, E. J. (2002). Understanding self-report bias in organizational behavior research. *Journal of Business and Psychology, 17*(2), 245-260.

Frese, M., & Zapf, D. (1988). Methodological issues in the study of work stress: Objective vs subjective measurement of work stress and the question of longitudinal studies. In C. L. Cooper, & R. Payne (Eds.), *Causes, Coping, and Consequences of Stress at Work* (pp. 375-411). Wiley & Sons, Chichester.

Giles, J. (2005). Wisdom of the crowd. *Nature 418*(17), 281-281.

Guttman, L. (1950). Chs. 2, 3, 6, 8 and 9 in SA Stauffer, L. Guttman, EA Suchman, PF.

Janus, S. S. (2016). Becoming a knowledge-sharing organization: A handbook for scaling up.

Mone, E. M., & London, M. (2018). Employee engagement through effective performance management: A practical guide for managers. Routledge.

Nadeem, S. N. (2021). A study of impact on performance appraisal on employee's commitment in an organization.

Plewis, I., & Mason, P. (2007). What works and why: combining quantitative and qualitative approaches in large-scale evaluations. *International Journal of Social Research Methodology, 8*(3), 185-194.

Question Pro. (2021). Top 8 drivers of employee engagement. Retrieved from https://www.questionpro.com/blog/top-drivers-of-employee-engagement/

Ryba, K. (2020). Understanding the Manager's Role in Employee Engagement. *Quantum Workplace.* https://www.quantumworkplace.com/future-of-work/managers-role-in-employee-engagement

Ryba, K. (2021). How to use employee engagement to increase motivation. *Quantum Workplace*. Retrieved from https://www.quantumworkplace.com/future-of-work/how-to-useemployee-   engagement-to-increase-motivation

Surowiecki, J. (2005). *The Wisdom of the Crowds*. Anchor, New York.

Trammell, J. (2019). Motivation vs. engagement — Is there a difference? Khorus. Retrieved from https://www.khorus.com/blog/motivation-vs-engagement-is-there-adifference

Uhlaner, L. M. (2002). The use of the Guttman scale in development of a family business index. (No. H200203). *EIM Business and Policy Research.*

Van de Poll, J. M. (2018). Ambition patterns in strategic decision-making, Doctor of Philosophy, Industrial Engineering and Innovation Sciences, Technical University Eindhoven.

Van de Poll, J. M. (2021). An Alternative to the Likert Scale When Polling Employees. *International Journal of Business and Management, 9*(5), 239-244.

Van de Poll, J. M., Shamsi, A., Brouwer, A., & Miller, M., (2022) Operationalizing purpose between the actual situation and ambition. *International Journal of Business Management and Economic Review*, (5), 9-20.

Copyrights