

Centre for Organisation Development

Project report on CSC's Narrative Capture Pilot Project

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Aim :

These guidelines aim to provide knowledge to public service officers, especially OD practitioners on the assessment of the narrative capture method and its delivery approach based on our experience from the CSC pilot project.

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Aim

The report covers the background, key lessons learnt as well as the assessment on the narrative capture method and its delivery approach based on our experience from the CSC pilot project.

Background

2. This aim of this pilot project was to trial test Cognitive Edge's narrative capture method as a diagnostic tool for OD practitioners to assess the state of the organisation's performance.

3. The key objectives of the pilot project are as follow:

(i) Assessment of Cognitive Edge's method: Narrative Capture

- a. To gain first hand experience in using the method by developing operational appreciation of the design and implementation of the method. Part of this was achieved through capability transfer via close involvement and observation of how the Cognitive Edge consultants executed the project.
- b. To evaluate and assess the applicability of the method in soliciting and analysing data

(ii) Development of CSC's Employee Value Proposition

- a. To aid CSC in uncovering the factors that attract and retain employees in the College, which in turn can be incorporated into the Employee Value Proposition.

4. The key phases of the project are as follow:

(i) Phase 1: Conduct of workshops

As part of phase 1, three workshops were conducted by Cognitive Edge consultants to facilitate the project team in developing the mechanics of narrative capture which included prompting questions, modulators, filters, data collection approach and multi choice questions¹.

(ii) Phase 2: Narrative Capture

In this phase, narratives were collected through interviews, hardcopy questionnaires and online questionnaires.

(iii) Phase 3: Sensemaking and Analysis

¹ See Annex A for definition on the mechanics of narrative capture

During this phase, data was analysed using the Sensemaker software provided by Cognitive Edge and a report providing the key insights, findings and recommendations was generated.

Key lessons learnt

5. The key lessons gleaned from the assessment of narrative capture are:

(i) Narrative capture's strength lies in detecting weak signals or outlier data

Despite the fact that narrative capture allows quantitative analysis, its statistical rigor pales in comparison to the traditional survey method. For example, in the pilot project, the criterion that defines filters that deviate within five points are considered as good scores is arbitrary.

In addition, getting a large pool of quantitative data points to establish comparative norms for narrative capture will be a challenge. Unlike in surveys where questions are scalable, questions in narrative capture are customised to the specific needs of the sponsoring organisation. However, narrative capture's strength lies in surfacing weak signals because respondents provide the context to the outlier data in each of the filters, a feature that is not common in surveys.

Recommendations: The implication of this learning point is that narrative capture's strength lies not in its statistic rigor but in its ability to surface weak signals. Hence for organisations wanting to use narrative capture, they need to recognise that narrative capture cannot be a direct substitute to the use of surveys. They should consider using narrative capture to complement surveys as a means of seeking out weak signals (i.e. outlier data), which provide clues to address deeper issues that would otherwise have been ignored.

(ii) Sharing of narratives by respondents is challenging

Narrative capture focuses on seeking narratives from people. One of the key assumptions of the method is that humans convey complex knowledge through narratives. The method further assumes that people are able to write or tell narratives easily. However, from the results of the pilot project, this may not be the case. It was observed that most respondents more naturally shared opinions rather than narratives. This has implications on the richness of the data collected since opinions unlike narratives do not encapsulate real experiences which provides important contextual data.

Recommendations: The learning point here is that we should not assume that it is very intuitive for people to share narratives. There is therefore a need to help respondents understand what constitutes a narrative² as opposed to an opinion. To do this, guidelines need to be provided to respondents for them to articulate narratives rather than opinions.

² A narrative has components such as characters, time marker and place marker

(iii) Translation of modulators from concept to application is challenging

During the course of translating the modulator to filters, it was challenging to ensure that the actual meaning of the modulator was not lost during the translation. For example, leadership as a modulator was phrased in broad terms but was subsequently translated into the following filters: “direction provided by the leader to staff” and “leader’s ability”. Currently, translation of modulators from concept to application remains very much a challenge to the design of narrative capture.

(iv) Choice of participants to determine the modulators is crucial

The modulators were designed by the collective wisdom of the participants who were involved and hence it was crucial to choose the right participants. The quality of the design of the modulators is crucial to the method. For example, if the area of study is risk scanning which requires a certain degree of technical knowledge, getting all participants who are not involved in this area of work to develop the modulators would not be a wise choice. They may not be able to design good modulators, impacting the quality of the entire study as a result.

Recommendations: To address this issue, criteria must be set to determine the choice of participants to develop the modulators. In cases where the area of interest requires a lesser degree of technical knowledge, selection of participants may be less crucial. In cases whereby the area of interest requires a greater degree of technical knowledge, it is suggested to have a mix of participants who are experts in that area as well as include participants who are not involved in the area of work to provide fresh perspectives.

(v) Richness of data gathered depends on how narrative capture is conducted

Just like any other data collection methods for e.g. surveys and focus group discussions, the richness of data collected depends heavily on whether the respondents are able to understand the mechanics of the method. Narrative capture is more complicated and less intuitive as compared to more traditional and established forms of data collection. For example, in narrative capture, the participants are required not only to share a narrative and are also required to tag a set of responses in relation to the narratives. This is especially true when narrative capture is conducted via questionnaires as participants require the additional motivation to read through the instructions carefully and understand them correctly before providing the responses. This was less of a challenge when data was collected via interviews or anecdote circles, because there would be someone to explain the instructions and answer queries. Having respondents tag the narratives accurately is key to proper analysis. Hence, it is important that the respondents have proper understanding of the instructions.

Getting respondents to relate their narratives via written form may pose a challenge to some respondents. For respondents who find it difficult to write their account of their narratives, the richness of the data will suffer. From the narratives gathered in our project, narratives that were conducted via interviews seem to provide richer data as compared to narratives solicited via questionnaires.

Recommendations: It would be easier to administer the narrative capture method via anecdote circles or interviews. Recognising the complicated nature of narrative capture, data collected would be more accurate if instructions could be delivered face to face through anecdote circles or interviews. During anecdote circles and interview sessions, ample time needs to be provided for them to formulate their narratives rather than getting them to come up with the narratives instantly. In the event where narrative capture needs to be conducted using questionnaires due to resources constraints, a briefing session to explain the mechanics of narrative capture must be conducted.

(vi) Data analysis of weak signals is done in an integrated approach involving quantitative and qualitative analysis but the same cannot be said when analysing mainstream data

Narrative capture promises to integrate quantitative and qualitative analysis into one single approach. From the pilot project, in the data analysis of weak signals, analysis was done by browsing through all the narratives focusing on the 'outlier data' of the narratives. Analysis of weak signals was also done by looking at the factors that have substantial differences in their means between the two groups of respondents (CSC officers and general public service officers) followed by examining the weak signals present in the factors.

Analysis of mainstream data is less integrated as compared to analysis of weak signals. Quantitative analysis is done by looking at statistical measures (mean, median) and relationship of filters whereas qualitative analysis of mainstream data was not evident.

Recommendations: Recognising that the strength of narrative capture is not on analysing mainstream data, narrative capture should focus on analysing weak signals and looking into providing a thematic approach in its analysis.

Assessment of method and delivery of narrative capture

6. The effectiveness of the method³ is assessed through observations and inferences made by the project team based on two key areas:

(i) Design of narrative capture

³ Refer to Annex B for more details pertaining to the assessment of the method

This involves examining the design of narrative capture which is made up of components that include modulators, filters, multi choice questions and prompting questions to ascertain the extent to which they have achieved their purpose.

(ii) Data analysis

This involves examining the method used to sense make the data to draw conclusion

7. To assess the delivery of narrative capture, the delivery will be assessed in accordance to the implementation during the different project phases through observations and inferences⁴.

Conclusion

8. Through this pilot project, we have found that the narrative capture method was useful but there were challenges in terms of both the method and its delivery. Recognising the fact that narrative capture is a very new data research method as compared to other well established research methods, it is understandable that further refinements need to be made. Narrative capture has the potential to be an effective method that integrates both quantitative and qualitative analysis but would need to address the limitations faced.

9. Through this pilot, we have learnt that use of this method would be most optimal if implemented under the following conditions:

(i) Identifying weak signals

Narrative capture should be used to identify weak signals or outlier data rather than analysing mainstream data or verifying knowledge that we already know. The method allows a systematic way of detecting weak signals through narratives and examining the outlier data of the narratives.

(ii) Using it for the purpose of exploratory research rather than causal research

Recognising that narrative capture's strength lies in identifying weak signals, it is clear that would be best employed for exploratory research to provide insights into an issue or situation. With narrative capture's lack of statistical rigour, it should not used for the purpose of causal research which looks into the effect of one variable on another.

(iii) Using anecdote circles or interview sessions to collect data

Narrative capture could provide richer data if it is conducted via anecdote circles or interview sessions. Doing so gives respondents a chance for clarification or explanation about the mechanics of narrative capture. Anecdote circles or interview sessions will be especially useful for respondents who jump straight into answering the questions without

⁴ Refer to Annex C for more details pertaining to the assessment on delivery of narrative capture

reading the instructions, which is essential for narrative capture, given the complicated nature of the method.

(iv) Having a large sample size

One of the key attributes of narrative capture is to tap on the distributed cognition of the respondents. To do this, a large sample size is needed to tap on the distributed cognition of respondents which will optimise the effectiveness of narrative capture.

(v) Applying to complex issues

Issues that are suitable for using narrative capture should be of a complex nature which has the following characteristics:

- a. Cause and effect relationships cannot be established.
- b. Belong to the realm of 'unknown-unknown' where there are no well established methods to solve these issues. Such issues require a need to probe to detect weak signals, before making sense of it and responding to the issue.

10. Taking into account the conditions stated in the prior paragraph, narrative capture can be considered for use as an OD diagnostic tool in surfacing unknown factors (i.e. the unknown-unknowns) that can influence employee behaviour⁵. For example, narrative capture could be employed in the identification of 'potential' engagement drivers (i.e. 'weak signals') that may have a bearing on employee engagement levels. Possessing such information would then allow OD practitioners and organisational leaders to preemptively address employee engagement issues.

11. This paper is submitted for information, please.

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⁵ The assumption here is that employee behaviour is a complex phenomenon and cause-effect relationships can be unpredictable.

Annex A

Definition on the mechanics of narrative capture

Source: Obtained from Cognitive Edge's Index Design Workshop conducted by Cognitive Edge on 28 and 30 January 2009 and presentation to CMM on 9th October 2009.

Term	Definition
Narrative capture	Refers to collection of data in the form of narratives from the respondents.
Prompting Questions	Refers to open ended questions created to elicit anecdotal experiences from participants, in the form of fragmented narrative.
Filters	Refers to the primary unit of analysis and measures the strength of a modulator within the story Example of naturally opposite filter: What triggered the shop theft crime? Economic Need \leftrightarrow Pure Greed Example of double negative filter: How would you describe the decision process? Rigid Bureaucracy $\leftarrow \rightarrow$ Total Anarchy
Modulators	Refers to forces or factors which triggers a change in a property of a phenomenon.
Multi choice questions	Refers to questions that cover a range of demographic details about the respondent and details about narratives

Assessment on the method: narrative capture

Key Components	Purpose	Observations	Inferences	Recommendations
Narrative capture design				
Modulators	To identify factors that impact the area of interest in the study.	Modulators are not described at a granular level.	This may imply that during the translation of modulators to filters, it may be challenging to ascertain the specific dimension that is to be measured.	Context needs to be provided when describing the modulators at the broad level to allow its translation to filters
Filters	Refers to the primary unit of analysis and measures the strength of a modulator within the narrative.	Each question comes with a customised filter unlike conventional questionnaires which use common scales for most questions.	Having unique filters for different questions may allow more accurate measurement and in-depth analysis. However, this could be challenging when comparing results across different filters as there is no standardised scale used.	-
		Each of the filters comes with an eleven point scale.	An eleven point scale allows a greater spread of answers and provides more accurate measurement as compared to conventional five or seven point scale used in questionnaires.	-
Multi choice questions	To slice the data and look at patterns based on demographics and narrative attributes	Respondents have no problem responding to the multi choice questions	Respondents may able to relate to multi choice questions as it is similar to the demographic related questions found in surveys.	-
Prompting questions	To elicit narratives from respondents that convey complex knowledge through their experiences expressed in narratives	Qualitative data is absolutely dependent on the narratives contributed.	Quality of narratives is influenced by the design of the prompting questions.	Prompting questions given to respondents must be designed around a context to which respondents could relate to.

	To provide a safe environment for the respondents by allowing prompting questions to be answered from the third person's perspective	Most of the narratives were positive in nature	- Respondents may still feel unsafe to talk about negative experiences despite being able to conceal the source of the narratives. -It could also be due to the fact that respondents are very much engaged by the organisation	-
	-To address the project issue without revealing the area of interest in the study	The degree of granularity in the prompting questions will determine whether the area of interest can be detected.	The greater the degree of granularity in the prompting question, the greater the likelihood of knowing the area of interest in the study.	-
Data analysis	- To integrate quantitative and qualitative analysis into one approach	Most of the modulators are measured by one item.	Lacks rigor in quantitative analysis as compared to surveys where several items are used to measure a single factor	-
		Filters are measured using two dimensions.	Difficulty in determining the ideal response if the two dimensions are not seen as negative opposite extremes.	
		Tagging of filters to narratives allow integration of both types of analysis.	This would be useful only if respondents' narratives provide the context to the filters that are tagged.	
		Filters that deviate more than five points away from the mean are included in the conclusion	The five point criterion is subjective and has no statistical significance.	
		Some of the modulators that were less than five points away from the ideal mean were included in the conclusion as well.	Conclusion of the findings was not done in a systematic manner.	

Annex C

Assessment on delivery of narrative capture

Project phase	Observations	Inferences	Recommendations
Phase 1: Conduct of workshops	Facilitation methods required participants to be frequently swapped between groups during the workshops	This allowed richer insights and greater diversity of views exchanged between groups.	-
	Identification of modulators is determined by the inputs of the workshop participants.	This meant that the choice of participants will impact the quality of modulators	-Criteria must be set to determine the choice of participants to develop the modulators. -In cases where the area of interest requires a lesser degree of technical knowledge, selection of participants is less crucial. -In cases whereby the area of interest requires a greater degree of technical knowledge, it is suggested to have a mix of participants who are experts in that area and participants who are not involved in the area of work to provide fresh perspectives
	Clustering of factors into the different categories was challenging due to the lack of context of the different categories.	This could impact on the quality of the modulators as some of the factors may have been wrongly clustered as a result.	More sophisticated facilitation methods could be employed in the process of clustering the factors such as ToP.
	Translation of modulator to filter is challenging as modulators were grouped in broad categories.	This meant that the specific dimensions of the modulators were not easily identifiable and would pose difficulty in the development of the filters	Context needs to be provided during the formulation of the modulator to ensure that the translation to filters is accurate and meaningful. For example, if leadership was a modulator, context has to be provided: whether is it leading the organisation in terms of organisational systems or leading the people in terms of guiding and connecting to people.
	Criterion does not	This could result in the	-

	provide a clear definition of what makes a good filter.	filter not being able to accurately measure the modulator's strength.	
Phase 2: Narrative Capture	Narrative capture using online questionnaire requires respondents to spend considerable time to complete it.	Respondents may be put off by the amount of time needed to fill up the questionnaire.	Anecdote circles or interviews should be used to collect data.
Phase 3: Sensemaking and Analysis	Sensemaker software does not capture the number of respondents who have participated.	This may limit the way the findings are reported as knowing the number of respondents will be important for the report findings	The design of the online survey and software should allow for the tracking of respondents.
	A substantial amount of narratives do not tally with the filters tagged to them.	<ul style="list-style-type: none"> - This most important benefit of narrative capture may not be achieved unless efforts are put in place to ensure that respondents understand that they need to index the filters to the narratives. - Respondents may not have totally translated their thoughts into the narratives 	Anecdote circles or interviews should be used to collect data with clear instructions stressing the fact that only relevant filters should be tagged to the narratives.
	Some of the respondents answered in response to all the filters despite the fact that their narratives did not cover all the filters	<ul style="list-style-type: none"> - Respondents may not cognizant of the fact that they were responding to the filters in a typical survey fashion despite being reminded that they were to tag the relevant filters based on the context of the story. - Respondents do not understand the instructions of narrative capture. 	Anecdote circles or interviews should be used to collect data with clear instructions stressing the fact that only relevant filters should be tagged to the narratives.

For more information on the use of narrative capture for diagnosing employee engagement,
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