

REMOTE ADMINISTRATION OF REPERTORY GRIDS THROUGH MICROSOFT LIVE MEETING IN AN ORGANIZATIONAL CONTEXT

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Repertory grids are a flexible form of assessment that new web conferencing tools allow to administer at distance. This study refers to a specific experience in this direction conducted at Johnson & Johnson Medical Italy, where 12 managers have been exposed to the remote administration of repertory grids that were designed and managed through Idiogrid and administered via Microsoft Live Meeting. The experience was reported as highly positive by participants, both in terms of user-friendliness and with respect to the level of engagement and interest it generated. Ideas for further research and applications are presented at the end of the paper with some highlights and concerns on the application of this methodology in organizational contexts.

Keywords: *Repertory grid, Idiogrid, Insider Management Action Science, Microsoft Live Meeting.*

CONTEXTUALIZATION

This paper presents and discusses the results of a preliminary study conducted at Johnson & Johnson Medical Italy as part of a wider program named Value Driven Training. The program was launched early in January 2010 and concentrates on the investments that Johnson & Johnson Medical is making on the training of Area Sales Managers operating in Italy, where 70% of Johnson & Johnson Medical sales depend on tenders. An extensive use of repertory grids (Kelly, 1955) was planned, as part of the program and a pilot study was therefore conducted, to evaluate the possibility to administer repertory grids, leveraging on new technologies and reducing costs and time required by more traditional approaches.

While the overall objective of the Value Driven Training program is to identify areas of development, relevant to increase Area Sales Managers' capabilities to impact tenders outcomes – through key stakeholders' recognition of the quality of Johnson & Johnson products, the focus of the pilot study was to test a specific solution for the remote administration of repertory grids. The writing illustrates briefly this pilot experience and reports various considerations around the technological choice that was tested within this preliminary study. The experience

was conducted at Johnson & Johnson Medical Italy and involved the remote administration of repertory grids via a web conferencing system: both the description and the evaluation of such experience are detailed here below. Despite the heavy use of statistics that sustains the development and the analysis of repertory grids, this study is qualitative, both in its form (engaging a relatively small number of subjects) and in its nature (descriptive rather than predictive). The extensive use of numbers, graphics and quantitative jargon should not mislead readers in this respect.

The primary aim of the pilot study was to stimulate further ideas and to address areas of concern that the Company wanted to have cleared, before proceeding with the adoption of repertory grids as a tool of investigation on learning needs of Area Sales Managers. The analysis was in this sense exploratory and part of it converged on the level of acceptance that a peculiar web enhanced rep grid administration could encounter, within Johnson & Johnson Medical Italy. The pilot experience was driven by the Human Resource Department of Johnson & Johnson Medical Italy and it involved a panel of 12 employees: 3 Area Sales Managers, 3 Divisional Managers, 3 Key Account Managers, and 3 Managers in Business Support functions. The

panel was formed on the basis of the specific themes and aspects that the company intended to assess with reference to the applied methodology. External support was kindly guaranteed by Professor James Grice – University of Oklahoma (USA), Professor Susan Cartwright and Philip Gibbs – University of Lancaster (UK).

METHODOLOGICAL PERSPECTIVE

Management Action Science (Gummesson, 2000) is the general methodological perspective underpinning the Value Driven Training program and the related study here reported. Since their very beginning these initiatives shared the ambition to integrate practical problem solving with theory and change. They have leveraged on research to integrate the production and the use of organizational knowledge, through the direct involvement of employees whose roles appeared relevant, with respect to the themes under inquiry and the practical implications of findings.

Given the leading role that the HR of Johnson and Johnson Medical Italy played in this research, and considered the communalities of this experience with other studies, associated with Insider Action Research (Coghlan, 2001, 2005), the methodological approach here applied might be more appropriately and specifically renamed Insider Management Action Science.

There are three main factors that have influenced the research approach and could in fact substantiate the above renaming:

1. The pre-understanding – originating from the researcher being an insider (Coghlan, 2007) – that some meaningful organizational competences and knowledge were neither internally nor externally ready available;
2. the perfect matching between Johnson & Johnson Medical practice to rely on external experts when addressing knowledge shortages and the opportunity, through such external observers – as theorized by Management Action Science (Gray, 2009) – to address the ambiguity that may derive from the practitioner-researcher role duality (Coghlan, 2007);

3. some considerations on organizational culture and politics (Coghlan, 2007) that led to exclude unidirectional approaches, as well as Participatory Action Research – as the level of sharing of control, between researchers and participants, was judged insufficient in one case and too high and demanding in the other (Whyte, 1991).

Writings by Whyte (1991) on Action Science, by Gummesson (2000), Gray (2009) on Management Action Science and by Coghlan (2001, 2005, 2007) on Insider Action Research have been fundamental to define the general methodological framework of this study and in taking decisions on its design and implementation, as well as on methods that were used.

THE PILOT EXPERIENCE

Theoretical grounds and practical challenges

Repertory Grids date back to Kelly's (Kelly, 1955) application of the personal construct psychology in clinical and in teaching environments. As Gaines and Shaw (1992) already pointed out, almost a decade ago, Kelly's 'repertory grid' is a widely accepted technique for knowledge elicitation, and repertory grids have been often implemented as a major component of many knowledge acquisition systems that the two authors also contributed to develop significantly, with their work.

In the typical repertory grid, (Grice, 2002) individuals are asked to rate or rank a number of elements – usually people or tangible things – along a series of bipolar construct scales. The elements and constructs can be either directly elicited from the individual or provided by the Interviewer, and any number of elements or constructs can be included in a particular grid. Two-dimensional matrixes, formed by numerical values, result eventually from sets of standardized rating or ranking processes; these grids are then subsequently subjected to additional statistical analyses and graphing procedures that produce

pictorial representations of individuals and/or group psychological space.

While particularly appealing for the possibilities they offer, repertory grids have some peculiarities (Yorke, 1978), as a form of assessment, and their administration necessitates therefore close assistance. Preceding the administration of repertory grids with a presentation of the methodology to individuals, or groups, involved in assessment sessions is more the norm, than an exception. Even when computer aided solutions are implemented – either to support the elicitation, the collection and/or the analysis of responses – a form of guidance by trained facilitators is ensured and they frequently stay in the proximity, while participants complete their grids. Repertory grid administration in one-to-one and face-to-face sessions is so common that the methodology can be assimilated to a form of structured interview, and in fact some authors (Yorke, 1978) refer to this methodology as rep grid interviewing.

Unfortunately, the need of close supervision during repertory grid administration is not always compatible with the real life constraints that characterize some organizational initiatives, as it happens to be the case with the Value Driven Training program. At Johnson & Johnson Medical Italy repertory grids had to be administered to people part of the commercial field force; these individuals reside in different locations around the country and have very little possibility to leave their territories uncovered to undergo face-to-face sessions at the main company offices in Rome. Travelling costs restrictions and limited time availability indicated, since the very beginning, that a solution to enable a distance completion of repertory grids was to be found. At the same time, considerations on participants' academic backgrounds and variegated experiences made it very clear that adequate guidance, during repertory grid sessions, could not be skipped.

Technology enhanced solutions

Although they have been used since more than half a century, repertory grids are not very well

known, outside of the psychology assessment circuit. Within that specific environment though – particularly in the areas of psychotherapy and research on cognition – many computer based solutions have been developed during the last 50 years and these have simplified constructs elicitation, analyses and representation. Such computer programs can in most cases manage multiple grids at the same time, integrating these on the basis of different research purposes and choices.

The awareness of the above specific challenges and the decision to leverage on ready available technologies, led to compound two already existing software's – Idiogrid (Grice, 2002) and Microsoft Live Meeting – and test their synergic deployment within Johnson & Johnson Medical Italy.

As Grice (2002) summarized in his article dedicated to the presentation of Idiogrid, a wide variety of computer programs have been developed over the years to conduct analyses that are particular to repertory grid data and manage large numbers of grids simultaneously. Many of these programs though have become outdated, are limited with respect to their features, or are not available for the Windows operating system on the personal computer. On the other hand, Idiogrid is a computer program for analyzing repertory grids that runs under the Windows operating system and offers recently updated versions. Idiogrid – in its 2.4 version – was the software eventually used at Johnson & Johnson Medical Italy. Descriptive statistics, principal components analysis, grid comparison techniques, and coordinate grid analysis are all available in the software. A number of indices commonly applied to repertory grids are also computed by the software that also supports the production of text output as well as high-resolution graphics. Due to its full compatibility with the Windows environment, Idiogrid could be run with Microsoft Live Meeting, leveraging on all the options that this web conferencing service offers. Microsoft Live Meeting was used in this study in conjunction with Idiogrid to support the remote administration of repertory grids.

Live Meeting is a web conferencing service operated by Microsoft, and like Idiogrid it is available for free download on the web. For the pilot experience at Johnson & Johnson Medical Italy, both the softwares were installed on the Interviewer's PC, and from this they were operated. A feature that made the synergic use of the two solutions particularly attractive was the fact that Live Meeting is a form of convergence software and it allows full integration with audio conferences. Furthermore, in the use of standard features of Live Meeting, Interviewers can either maintain or delegate to participants the full control of sessions. Different degrees of autonomy can then be easily arranged by the Interviewer, on the basis of needs and/or requests of each participant, and changes, in this respect, can be made even during the session. In this specific pilot experience, individuals were involved in one-to-one sessions and they were granted with a full remote control onto Idiogrid. As a result each participant could work from her/his own location (either office or home) and use Idiogrid, as if this were installed on her/his PC, by being linked to the web in audio-teleconference. Idiogrid was in fact running out of the Interviewer's computer, and this could guide each participant, real time and step-by-step via audio inputs, while monitoring on his screen how the session was proceeding. In this specific case, participants had no cameras installed on their PCs, therefore the most complete video-teleconference feature, supported by Microsoft Live Meeting, was not tested. Thanks to the compounded use of these two softwares the interviewer could closely supervise and support each participant. At the end of the web sessions, grids were saved on the Interviewer's PC, and they were therefore immediately available for analysis within Idiogrid.

Experiencing remote administration of Idiogrid

A brief description of the pilot experience that Participants underwent and were subsequently asked to evaluate is summarized in its key phases here below. Screen shots of the compound use

of Idiogrid and Microsoft Live Meeting are also included as they facilitate the visualization of what each participant had to confront with, in practice, during each session.

Following the January launch of the Value Driven Training program, early in April 2010, the 12 employees involved in this study received an invitation via email, from the HR department of Johnson and Johnson Medical Italy, to participate in a one-to-one Live Meeting Session. Each participant had been previously informed – either via telephone or email of her/his inclusion in the experience, and when s/he connected to a web-conference, s/he was welcomed by the Company Human Resource Director, who acted as Interviewer. After having given the control of the session to the Participant, the Interviewer stayed on line for assistance until individual repertory grids were completed: being in full control of the sessions, Participants keyed their own responses directly into the system.

Out of the 12 participants, 5 were females and 7 males, 2 had only high school diplomas, 4 had a university degree in science or engineering, 6 had a University degree in Business Studies/Economics or related subject; the average and media age was 42, the youngest participant being 37 and the oldest 47. Seniority within Johnson and Johnson ranged from 1 till 19 years, the average being 11 and median being 13.

Each session lasted about 30 minutes and was run via the company standard web-conferencing system – Live Meeting. The phrase completion option (Grice et al., 2004) that Idiogrid offers among its standard selection was adopted as method for eliciting repertory grid's constructs. Elicited constructs were eventually complemented with two sets of objective reference achievements, namely the number of tenders won and the quality scores that Johnson & Johnson Medical products obtained during the past 3 years, in the territories that the above three Area Sales Managers had covered. Correlations between emerging constructs and objective achievements in tenders were then used to guide discussions on future possible developments of Area Sales Managers' training within Johnson & Johnson Medical Italy.

Remote administration of repertory grids

The welcome message (Figure 1), appearing on the screen as soon as Participants logged into the web conference, briefly explained the task and reassured individuals about the time and the assistance at their disposal as you can read from the extract here below:

“Take as much time as you need to work through each phase, and be as honest as possible with your thoughts and responses.

You will also find that the following procedures are novel. Do not be intimidated, however, by the program. As you progress you will get used to the procedures, and in several places you can go back and correct mistakes that you think you may have made. Nonetheless, if you become unsure of yourself in any phase, please stop and ask the assistant for help.”

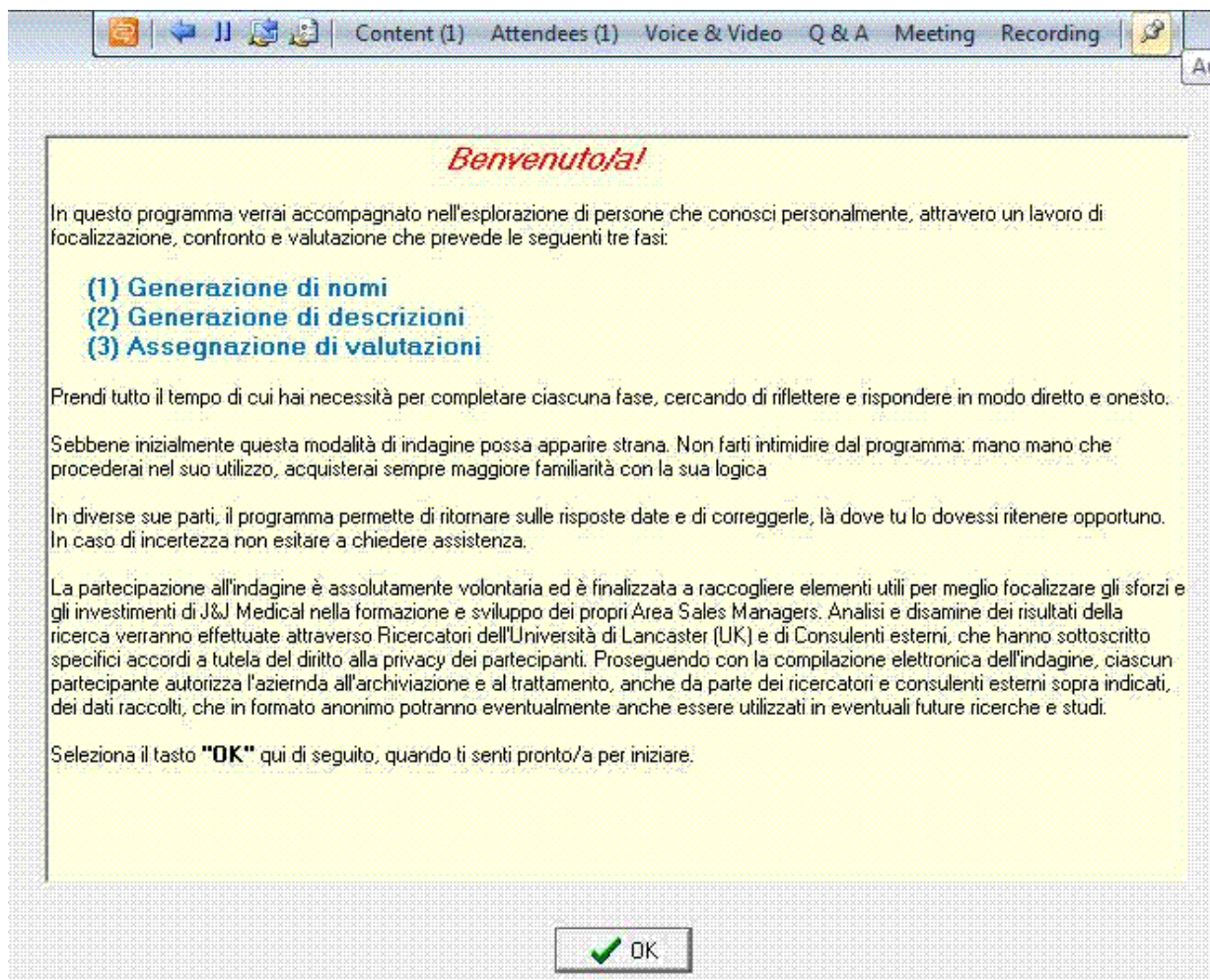


Figure 1

The welcome screen then introduced Participants to the following 3 phases:

1. Identification of Elements
2. Definition of Constructs
3. Evaluation of Elements on the defined constructs.

Despite the numerous variations in repertory grids application and the very many adaptations that followed Kelly's earliest discussions of the method, the above three phases seem to characterized most experiences. It must be said though that evidence exists (Neimeyer & Hagans, 2002) that even little variations, in the way each phase is dealt with, have significant impacts on the outcomes that the technique produces. For this reason, while presenting each phase that was followed in the pilot experience, a few words will be also spent on key choices that were made in the customization and preparation of Idiogrid for its application at Johnson & Johnson Medical Italy.

Phase (1) Identification of the Elements – Participants were asked to name either by First Name, Surname or Nickname three Area Sales Managers of Johnson & Johnson Medical Italy acting in defined regions.

The selection of elements is a critical component in repertory grid research, and as Stringer (1979) clearly pointed exhaustively, the use of particular individuals as elements in the grid produce greater differentiation than the use of more global role descriptions. This finding led him to conclude that “different forms of the grid . . . do not elicit the same kinds of construing” (p.96), and that “there were considerable alterations in the structure of their personal constructs when they moved from construing roles to construing individuals, or vice versa” (p. 98).

Although this option appeared sensible in Johnson & Johnson Medical pilot study, there are situations when this might not be the case. Wright and Simon (2002) affirmed in fact that in eliciting constructions of more complex managerial and organizational realities such as culture, appraisal systems, and the like a more heterogeneous set of elements will better demonstrate a fuller and more meaningful range of re-

presentativeness of such a domain of interest. The two authors affirm convincingly that focusing on the interaction and comparison between individuals limits the understanding of the system as a whole.

Phase (2) Generating Constructs – through a sentence completion exercise (Grice et al., 2004), each participant was then led through the elicitation of constructs (*Figure 2*).

The adoption of a sentence completion approach for eliciting constructs, followed the examination of literature that was produced in the early nineties and that has been more recently echoed and developed by Neimeyer and Hagans (2002), as well as Grice, et al. (2004). The latest authors, in particular, examined various procedures for eliciting personal constructs and proposed the approach that was eventually applied in this study. The sentence completion approach emulates with its narrative format a layout that results relative familiar to individuals and in this respect it come across as simpler and less confusing than traditional Kelly's triadic procedure.

Difficult to say what the situation would have been if a different elicitation methodology was applied and further research in this direction would certainly be an interesting next step. In the specific case Idiogrid was customized with reference to the needs that were expected to emerge with its administration within the Johnson & Johnson Medical environment. With the target participants to the study being all Managers, with little background on psychological themes, it appeared more appropriate to confront them with an elicitation procedure that, even in its format, facilitated their task. This decision proved very appropriate as the number of interventions and explanations required from the Interviewer during the pilot experience were indeed limited. All interactions with the Interviewer, in this respect, were real-time audio exchanges on technical issues: supporting Participants in their navigation of the system and/or in using Idiogrid options to amend/complete responses.

Remote administration of repertory grids

Instructions:

Considera la seguente frase: **Per valutare il contesto competitivo Mario spesso _____** .

Quale parola (o insieme di parole), pensi potrebbe completare meglio la frase? Per esempio "raccolge documentazione", "fa molte domande", o "agisce d'istinto" meglio potrebbero riempire lo spazio lasciato in bianco. Oppure potresti pensare a qualcosa di totalmente diverso. Qualunque cosa tu ritenga rispondere al quesito va bene: non esistono risposte giuste o sbagliate, a questo tipo di esercizio.

Quando pronta/o, scrivi la parola, o le parole, nella prima casella qui di seguito. Quindi inserisci il concetto opposto, nel secondo riquadro. Per esempio, se hai inserito "attua strategie di relazione" nella prima casella, nella seconda potresti inserire "si isola ed analizza i dati", oppure se hai messo "parla molto" nella prima, "ascolta molto" potrebbero essere le parole che inserisci nella seconda casella. Anche in questo caso, non ci sono risposte esatte e quello che interessa è il tuo punto di vista.

Per valutare il contesto competitivo Mario spesso _____

piuttosto che ... (parola o frase opposta)

[Previous](#) [Next](#)

Figure 2

Phase (3) Participants were asked to rate the elements, named in phase 1, along the constructs that they had defined in phase 2 and grids were then obtained as a result of the session (Figure 3).

This pilot study adopted a 7-points rating scale: this choice reflects Miller's (1956) experiments and recommendations when he identifies in the neighborhood of seven a clear and definite limit to the accuracy with which an individual can identify absolutely the magnitude of a unidimensional stimulus variable. Miller (1956) proposed to call this limit the span of absolute judgment and it is since the early studies, in the early fifties, that this span of absolute judgment and the span of immediate memory are taken by

social scientists as a reliable reference to account for the limitations imposed on individuals, by the amount of information that they are able to receive, process, and remember.

Each session ended with the Interviewer thanking the Participant and informing her/him that s/he would have been updated about the pilot study outcomes in a later stage. Before closing each session individuals were also invited to ask questions and/or make comments on the tool and the experience, but no question, doubts of fear emerged at this stage. The only queries were focused on to the next steps of the program and on the kind of involvement that these were expected to require from them.

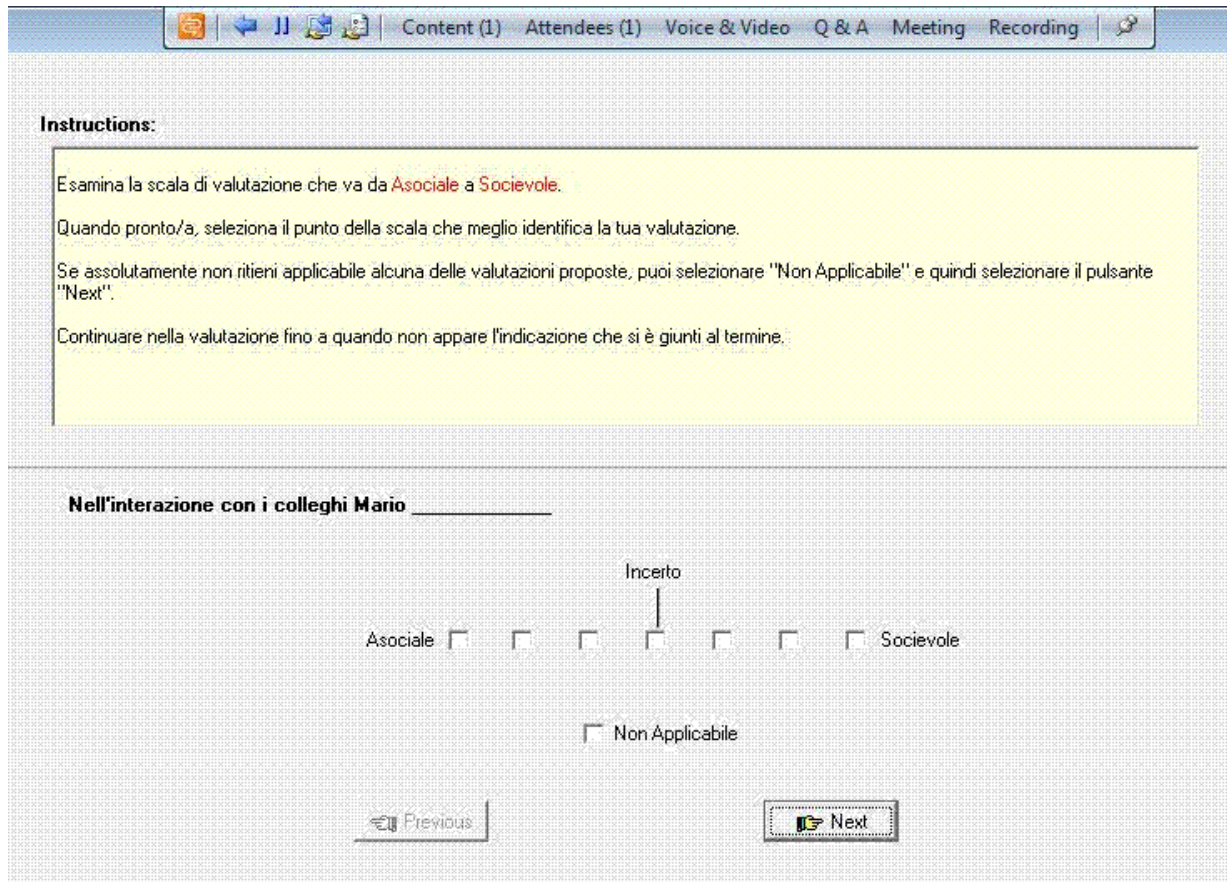


Figure 3

EVALUATIVE STUDY OF THE PILOT EXPERIENCE

Two weeks after their participation in the pilot experience, where they had been exposed to a remote Idiogrid session, the same 12 individuals were contacted, via email, and they were asked to respond to a questionnaire, that had been specifically designed to gather feedback on the pilot study. The questionnaire aimed at investigating how each individual evaluated the technology enhanced approach that had been employed, in terms of user-friendliness, overall accessibility and potential for future developments within Johnson & Johnson.

Focus of the inquiry and questionnaire design

Repertory Grids have been already used within learning contexts to define training needs and to assess training results (Smith & Ashton, 1975; Solas, 1992; Kreber, Castleden, Erfani, Lim, & Wright, 2003). What has limited their use in organizational contexts is the fact that their face-to-face administration is not very compatible with business constraints. The remote administration tested and assessed at Johnson and Johnson Medical Italy, in the pilot study above, demonstrated the technical possibility to leverage on web conferencing solutions to overcome some

Remote administration of repertory grids

limits, but it originated the following research questions:

How would Johnson & Johnson Medical Employees react to the remote administration of Repertory Grids?

- a. Would they be able to follow easily remote instructions?*
- b. Would they find the task sufficiently engaging?*

Alternative methods of enquiry were considered (interviews, ad hoc designed repertory grids, etc), but like in the case of the Pilot Experience the difficulty to reach a group of people dispersed on a large territory, with very busy diaries, imposed major constraints and guided the choice. A simple questionnaire addressing directly the areas of concern that the Company wanted to clear and capable to offer Participants an opportunity to express openly their thoughts and ideas appeared the most appropriate choice. Among the various on line possibilities to publish the questionnaire, gather and analyze responses, Google Docs, was eventually selected for its simplicity. It must be noted that although repertory grids could have been used for the same purpose, the circularity that their use would have originated in the study (the method assessed would have been used in the assessment) determined their exclusion from the possible alternatives.

Being all participants mother tongue Italian, this was the language used for the questionnaire that was titled 'Feedback on the Use of Microsoft Live Meeting to run Surveys within Johnson and Johnson Medical' to drive immediately the attention on the specific intent of the survey. A brief text introduced the questionnaire and addressed general consent and ethics matters, as imposed by the nature of the research and by the context where it took place. Please also note that, in respect to Johnson & Johnson business priorities and to the time availability of Participants, a clear decision was made to limit the questionnaire both in scope and in length. On this regard, the principle leading its design was that the compilation should not exceed 10 minutes.

Text used to introduce the questionnaire to participants

The following questionnaire has been sent to individuals who participated to the first phase of the Value Driven Training program. The questionnaire is meant to gather feedback on the remote administration of Repertory Grids via Microsoft Live Meeting.

The questions are designed to address the following key points:

- reactions to the specific way of data gathering as alternative to more traditional face-to-face approaches;*
- possible difficulties that might have been encountered in the experience;*
- opinions and suggestions about the possible use of the same approach in other circumstances.*

Participation in the survey is expected to take just a few minutes and results will allow a more effective use of tools like Live Meeting within Johnson & Johnson.

Participation to this survey is on voluntary basis. Analyses that may be part or follow this research will be conducted by people who have signed specific agreements to guarantee the participants' right to their privacy. By compiling this questionnaire, each participant agrees and authorizes the archiving and use of the deriving data also in future studies and by external researchers.

Participants' responses will be analyzed in anonymous format and only in such form they will be shared within and/or outside the organization. For further info please refer to the HR Department of Johnson & Johnson Medical Italy.

There were 4 core questions that Participants were invited to answer:

- 1. Have you ever participated in any kind of survey before the one that was recently con-*

ducted as part of the Value Driven Training program?

2. Have you ever been involved in a process of Training Need analysis, before the one you took part to with the Value Driven Training program?
3. How would you rate the **LEVEL OF DIFFICULTY OF THE EXPERIENCE** – for the definition of the training needs of Area Sales Managers – you recently did via Live Meeting?
4. How would you rate the **LEVEL OF ENGAGEMENT OF THE ABOVE EXPERIENCE**?

Each of the above was compulsory and closed but was accompanied by an open query that allowed participants to offer details, comments and suggestions. In the case of question 1, 3 and 4, discretionary integrations were prompted by a simple “Please offer further details” that led to an open text, in the case of question 2, on the other hand, Participants were invited to choose among 5 checkboxes (traditional face-to-face interviews, paper and pencil questionnaire, computer based tools, web based Systems, others) and Individuals could select more than one. In the summary of the results that follows in the paper such inputs and additions are fully reported.

It must be noted that while the first two questions allowed only yes/no answers, the last two asked the subjects to rate the difficulty of the experience and the level of engagements it generated, on a 7 points scale – where 1 corresponded to the most favorable rating (respectively: Very Simple and Engaging) while 7 was associated with the least positive assessment (Extremely difficult and Boring).

The invitation to participate to this study was sent via email with a link to a web based questionnaire developed, run and administered using Google Docs. The invitation was delivered via email to all 12 participants on May 3rd, 2010. Here below are some graphics that summarize the data collected since then (*Figure 4*).

Outcomes of the questionnaire

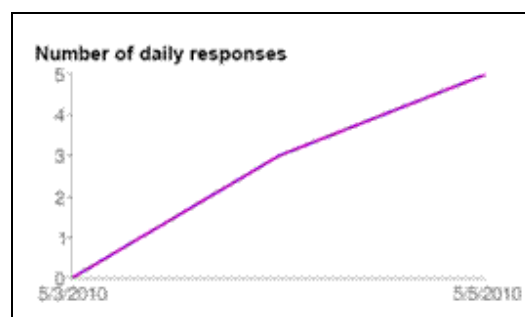


Figure 4

Out of the 12 subjects who were invited to participate, 8 almost immediately responded and did the questionnaire; all responses concentrated during the first two days from the receipt of the invitation. Considering the participation to the study was on a voluntary basis and the questionnaires were anonymous, the registered 67% response rate appears satisfactory.

Out of the 8 respondents, 3 declared they had taken part in surveys before and 5 affirmed they had not (*Figure 5*). This result appeared quite unusual as all Johnson & Johnson employees are periodically exposed to a climate survey – all climate surveys are anonymous and voluntary so, although it appears strange that 63% of our respondents never took part in such initiatives, the limited size of the sample and the fact that it was predominantly formed by people working in the field might explain this result.

Some more details were offered by two of the 3 respondents who replied affirmatively to this question.

- One subject quoted surveys on organizational climate and 360° feedbacks among her/his previous experiences.
- The other respondent specified that while most of her/his previous exposures were to pencil and paper formats, the few that made use of new technologies (computer and/or web based) were not characterized by a comparable level of interaction that s/he had experienced in this specific circumstance.

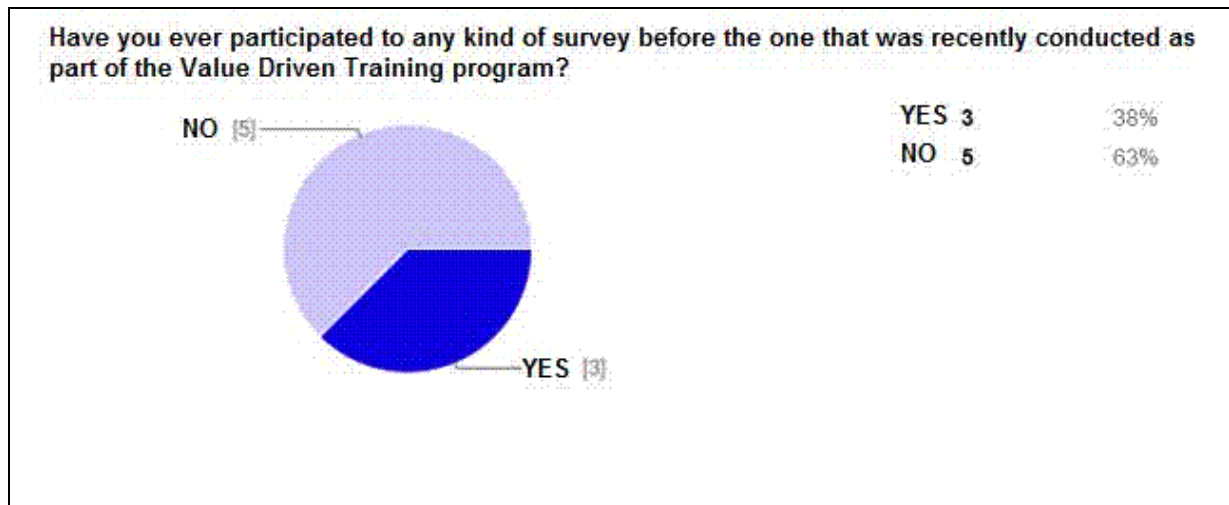


Figure 5

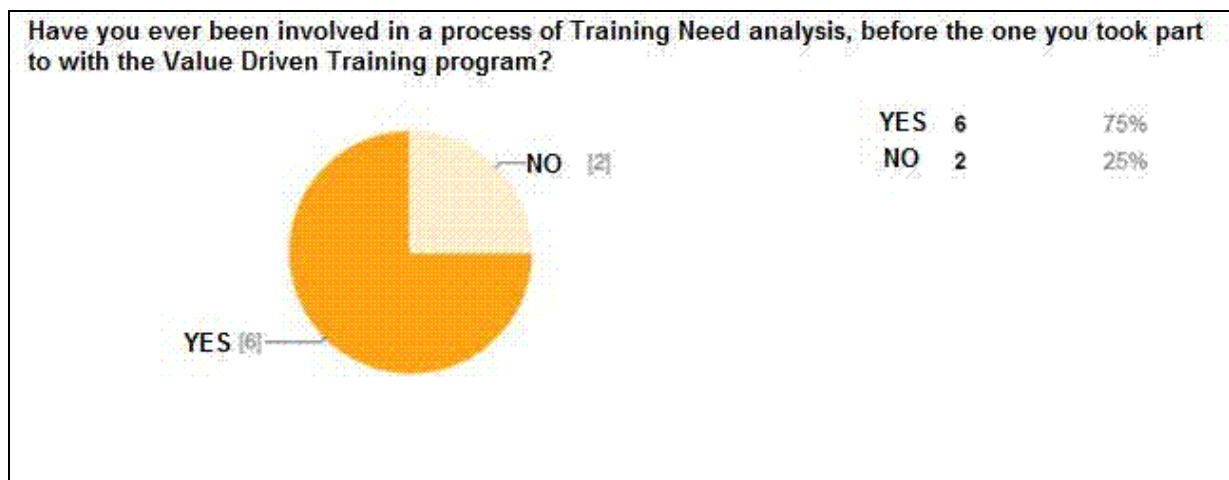


Figure 6

Significantly high is, on the other hand, the experience that respondents declared in terms of participation in training needs analysis processes (Figure 6). In this case in fact 75% affirmed that they had previously been involved in such activities. These were predominantly run through tra-

ditional methods (face-to-face interviews and pencil & paper questionnaires), but some have also participated in some form of technology enhanced (PC or Web based) surveys.

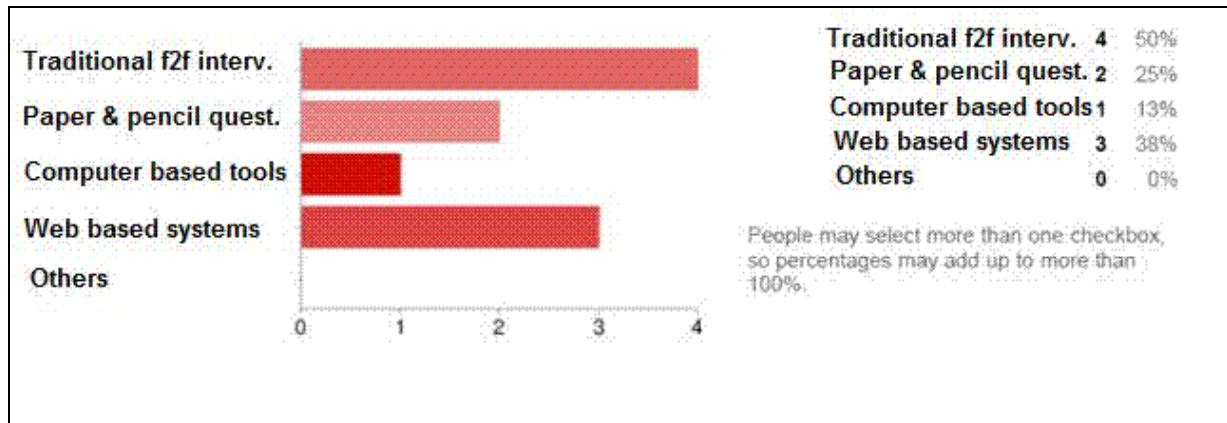


Figure 7

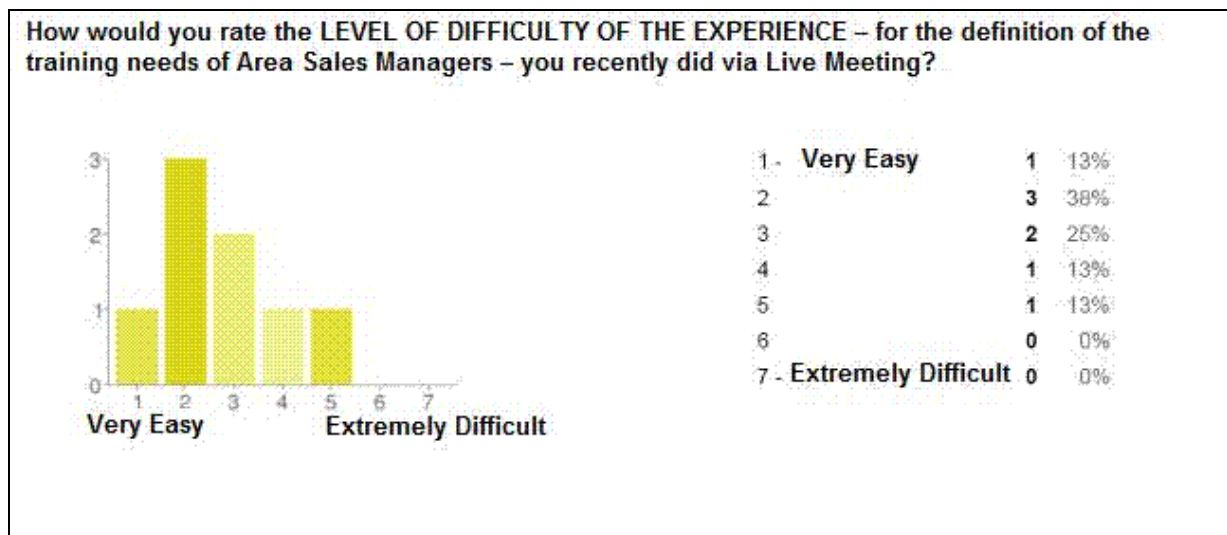


Figure 8

When it comes to the evaluation of their experience with the remote administration of Idiogrid, via Microsoft Live Meeting, the results appear very positive: the majority of respondents assessed this form of administration manageable and in most cases easy to use (*Figures 7 and 8*). Only one participant indicated a score higher than 4.

Additional comments were offered by three participants:

- A subject indicated that s/he found the methodology used very accessible from the

technology point of view and s/he had experience only some difficulty in responding some questions that s/he thought might have requested some more reflection.

- A second participant said that s/he did not experience any technical problem but suggests preceding Live Meeting sessions with pretest of web connections.
- A third respondent commented that s/he found the system simple but was not in the situation to evaluate the quality of the data provided/gathered through the administered grids.

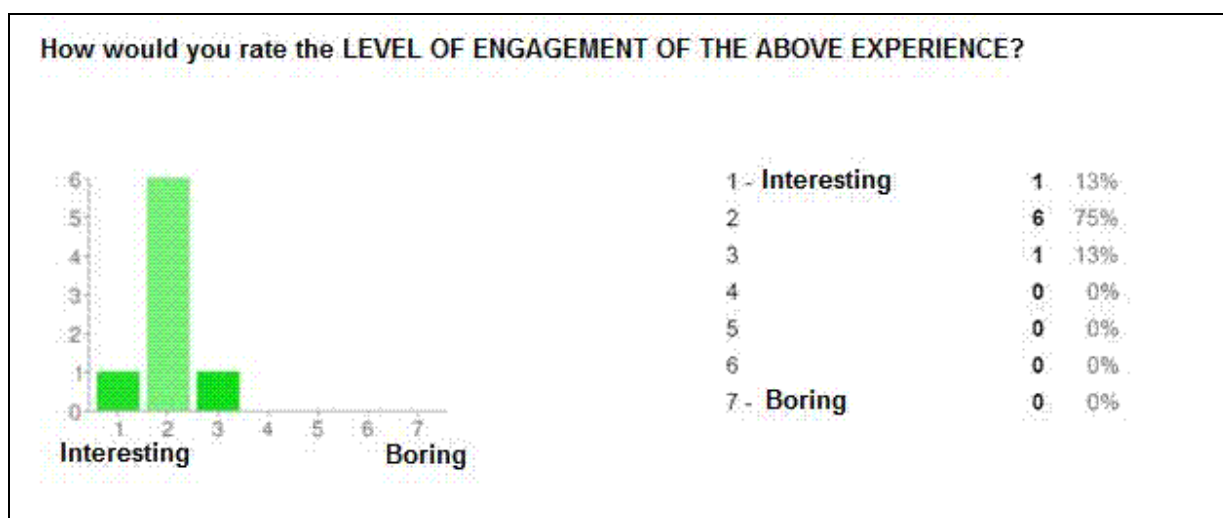


Figure 9

Even more positive were the responses in terms of engagement (*Figure 9*). No response higher than level 3 and the vast majority 75% rated the compound use of Idiogrid and Microsoft Live Meeting 2, which shows a high level of interest.

Overall the above results answer positively to the research questions that originated this study. In fact all responses indicate that the remote administration of repertory grids, employing Idiogrid via Microsoft Live Meeting, was well received: this technology enhanced solution was found easy and engaging. There does not seem to be any negative aspect – in terms participants’ feedback – that shadows the practical advantages this approach offers in those organizational contexts where Interviewers and Participants/Subjects do not reside in the same location and when face-to-face sessions are neither practical nor possible.

In addition to what was highlighted by the responses to the last two questions of the survey, there is an additional advantage with the technical solution adopted: it guarantees that repertory grids are produced, stored and analyzed on one single computer (in this case the Interviewer’s). This does not only speed up the processes of data collection and analysis, but it also responds adequately to the strict standards on pri-

vacy and data protection that are imposed by European laws and Johnson & Johnson regulations.

REFLECTIONS ON OUTCOMES AND IDEAS FOR FUTURE STUDIES

The most positive outcomes of this small-scale study, on remote administration of repertory grids, is that respondents appreciated and valued the possibility to get support from the Interviewer, each time they had doubts and/or encounter technical difficulties. This fact apparently influenced positively their perception of the entire experience and this element emerged quite clearly, both from the core responses to the questionnaire and from the side comments/integrations that some individuals wrote. The high response rate to the questionnaire could also be read positively, in this specific perspective: as a bad experience with Idiogrid via Microsoft Live Meeting would have naturally discouraged Participants from responding to the questionnaire.

Besides the above outcomes, additional elements emerged from the questionnaire and from direct observations by the Interviewer during the sessions. These suggest caution when extending

the above approach to different organizational contexts and circumstances. In fact, despite the written and verbal reassurance that they were not to worry about the time they needed to complete the exercise, some participants clearly rushed through the experience as if the presence of the Interviewer – although at distance – compelled them to perform efficiently. Such behavior might be ascribed to different and various causes but there are two synergic factors that might require a further attention and research:

- The audio conference option that was used in this study prevented the Interviewer from supporting Participants through non-verbal reassuring signals, and this silent waiting presence may well have induced some disturbing fantasies;
- The Interviewer was, in this case, the Human Resource Director – whose role in the western industrial imaginary is often associated with the metaphor of the “watchdog” of organizational efficiency.

Should the relevance of any of the above be confirmed and the inhibiting effect of a remote and non-directly-observable Interviewer be flagged by further research, a video rather than a audio web assistance could be alternatively tested and proposed, as effective substitute to traditional face-to-face repertory grids sessions.

There is also an Ethics dimension that requires some reflection. This study was conducted within an organizational context, where the Human Resource Director was directly involved in the research as the Interviewer and where Participants covered different jobs at different levels of the hierarchical ladder and also belonged to different functions. With the exception of what was already discussed in the previous paragraph, all the other factors just quoted did not seem to have significantly distorted either the dynamics or the results of this research. The very practical focus of the survey – that simply assessed the level of comfort of people with a specific technological option – has most probably limited the impact of status and power dynamics, on the responses that were eventually gathered. The impact of such dynamics would

have been presumably more relevant, should the study have focused on more delicate personal or career themes. In such cases the use of external Interviewers, as recommended by Polonsky (1998), would have been certainly more appropriate and advisable.

In this study Microsoft Live Meeting was used in its simplest form, during one-to-one sessions: more complex services can be leveraged through the same software. For example, it can be noted that in a more sophisticated approach, but always within the standard options offered by Microsoft Live Meeting, the Interviewer could have recorded each session and could have saved each recording – in the Windows Media Player format (.wma) – to either Live Meeting service conference center or on his own computer, for later analysis and research. The availability of recordings would have opened further and interesting opportunities of research: these could in fact enrich and extend the outcomes of repertory grid sessions, from a qualitative viewpoint. Repetitive observations of participants doing their grids are likely, on the other hands, to highlight their difficulties in completing the task; such difficulties, once computed and analyzed, would constitute valuable material to either refine grid elicitation procedures, or to guide more in-depth reading/understanding of grids outcomes.

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AUTHOR'S NOTE

The author thanks Professor James Grice – University of Oklahoma (USA), Professor Susan Cartwright and Philip Gibbs – University of Lancaster (UK) who encouraged the publication of the present article.

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Magni, L. (2010). Remote administration of repertory grids through Microsoft Live Meeting in an organizational context. *Personal Construct Theory & Practice*, 7, 49-64, 2010

(Retrieved from
<http://www.pcp-net.org/journal/pctp10/magni.pdf>)

Received: 12 April 2010 - Accepted: 25 July 2010 –
Published 7 August 2010