The *MiProfile©* Survey and Interactive Rapid Implicit Methodology - *iRI©*

(Commercial-in-Confidence)

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Interactive Rapid Implicit Methodology
***iRI*© and the *MiProfile*[1] Survey**

1.0 Introduction and Overview

The purpose of this paper is to provide an overview of the interactive Rapid Implicit Methodology *iRI*© and *MiProfile*© developed by Dr Robert Long). The paper articulates the methodology and research methods incorporated in *iRI* and *MiProfile* which is a multi-method approach to research, targeting socio-political and psychosocial-cultural relations in organisations. MiProfile is also integrated with a range of common psychological profiling tools (eg. MBTI, DiSC and HBDI). The discussion of *iRI* and the *MiProfile* Survey demonstrates the robustness of this multi-method approach to research and its utility in providing analysis and critique on organisational culture, implicit knowledge and psychosocial dynamics in organisations. The research uses synchronous survey and focus group process with opportunities for individual reflection with the aid of Keypad technology and provides and intense learning event to participants.

Results of the *MiProfile* Survey are published on screen for participants in real time and visualised results used to trigger focus group discussion and individual reflection, this is the first stage of the survey process. The second stage of the process incorporates unique sub-cultural analysis and interrogation of data. Analysis occurs at four levels and uses a range of tools (demonstrated at Appendix 1) to evaluate hidden sub-cultural drivers and socio-political and psychosocial values in the organisation. the following diagram uses an iceberg metaphor to explain the depth of analysis.

This paper explores the nature of iRI methodology, MiProfile Survey and interrelated research methods, discusses the strengths of qualitative research and sets out the framework for effective focus group implementation.   The discussion highlights the strengths of a qualitative multi-method research process, the capacity of rapid implicit technology and the value of the multi-layered analysis process. The rapid implicit method is a key factor in the integration of the methodology with research method particularly, in getting to the heart of psychosocial and organisational cultural *mentalities*[2]. The paper concludes by providing an outline of the quantitative methods in *iRI* and the qualitative tools used for analysis of the *MiProfile* Survey.

What proceeds (in response to analysis, speculations and recommendations) from a comprehensive organisational cultural analysis is the responsibility of each client organisation. The *iRI* methodology and the *MiProfile* Survey provide a reliable and trustworthy evidence-based approach to develop individual and systematic actions in organisational change, performance, leadership development, culture change and position, for organisational futures.

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[1] The "I" in iRI and MiProfile indicates "interactive and implicit"

[2] To be discussed more fully in this paper, *Mentalities* are the psychosocial mindsets present in a culture, as articulated by Annales History.

2.0 Methodology

It is important to understand at the outset the distinction between a methodology (the ideology and philosophy) and its "mode" or methods (knowledge development and acquisition tools). In other words, the conceptual framework or driving ideas for a research study drives the choice of the research method (Maxwell & Loomis, 2003; Smyth, 2004).

The choice of analytical tools, whether qualitative or quantitative measures, should be consistent with the philosophical and theoretical underpinnings of the study, as developed in the conceptual framework. Using both qualitative and quantitative methods enables a researcher to corroborate data from different sources, enhance the richness of the investigation, and meet the challenge of considering views that might not have been considered or encountered. This is the strength of the multi-methods approach. The ontological, epistemological, and methodological assumptions expounded by constructivist researchers provide an apparently secure philosophical tether for many mixed-method approaches (Guba & Lincoln, 1994), illustrating a researcher's freedom to use appropriate tools to make meaning from inquiry (Johnson & Onwuegbuzie, 2004).

The dominant philosophy behind *iRI* and *MiProfile* is founded in Critical, Cultural[3] and Constructivist theory which is based on a relativist view of being (ontology) that holds as fundamental the premise that there exist multiple "socially constructed realities, ungoverned by any natural laws" (Guba & Lincoln,1989, p. 84). Such a premise is fundamentally consistent with Habermas'[4] declaration that knowledge does not exist in isolation to be discovered. Rather, it is constructed by people as they engage in daily life (Grundy, 1987b). Habermas' framework provides a bridge between knowing what knowledge is (epistemology) and the nature of reality (being). It also provides a philosophical framework for investigations using mixed methods.

Historically, methodology in the social sciences, has long been equated with a positivist philosophical paradigm[5] and that limited portion of scientific inquiry that dealt only with quantitative procedures. These so called "scientific" methodologies (Kuhn, 1970) were based on the assertion that "there exists a single reality that is independent of any observer's interest in it and which operates according to immutable natural laws, many of which have a cause-

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[3] The first meaning of the term critical theory was that defined by Max Horkheimer of the Frankfurt School of social science in his 1937 essay Traditional and Critical Theory. Critical theory is social theory oriented toward critiquing and changing society as a whole, in contrast to traditional theory oriented only to understanding or explaining it. Horkheimer wanted to distinguish critical theory as a radical, emancipatory form of Marxian theory, critiquing both the model of science put forward by logical positivism and what he and his colleagues saw as the covert positivism and authoritarianism of orthodox Marxism and communism.

[4] Habermas proposed that the dominant view of knowledge formation held by different individuals and groups appears to cause them to act in quite distinctive ways that can be identifiable using his analytical framework.

[5] Researchers who use logical positivism or quantitative research employ experimental methods and quantitative measures to test hypothetical generalizations and they also emphasize the measurement and analysis of causal relationships between variables.

effect form" (Guba & Lincoln, 1989, p. 84). In contrast, Critical and Cultural Theory has an emphasis on practical interest, which emphasises meaning making, collaboration, and the social good, and provide an appropriate philosophical basis for the analysis of the social world because it reflects the purpose of human speech and communication as the means of deriving rational, moral consensus.

There is a dissonance between positivist language and qualitative methodologies where the terminology of "reliability" and "validity" is used to describe so called "scientific" inquiry. This is often surprising, because the language of constructivist approaches has the vocabulary to account for inconsistency and variability in human behaviour within the process of analysing human actions. Expressions of consistency, consensus, and trustworthiness can replace traditional positivist stridency of validity, reliability and proof.

It is a researcher's task is to develop and communicate a clear understanding of complex concepts by constructing knowledge about interrelated issues.   It is critical that the researcher have the experience and skills to record, code, search, condense, and link data authentically, so that their deep structures are revealed[6].   The extent of the task will be determined by the level of descriptive and narrative data generated during qualitative research, whereas the depth and breadth of meaning making that is possible will be influenced by the researcher's ability to interrogate data effectively.

A researcher's task is to establish trustworthiness, by providing evidence that the study is appropriate, comprehensive, and significant. This is usually done by establishing the conditions that provide interconnectedness between philosophical foundations, theory, investigation, and interpretation that are the foundations for establishing and reporting the trustworthiness of a study. The researcher demonstrates credibility by:

• understanding the cultural context of the participants,
• identifying and focusing on salient issues, and
• testing emergent conceptualisations in the environment

As a part of the research process, interpretations made from coding can be supported with *iRI* descriptive statistics about coded data. These statistics allow a researcher to gauge the extent of commonality between respondents expressing opinions similar to each other but not necessarily part of a researcher's tentative conceptualisations.

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[6] An example of an *iRI©* Survey and its embedded analysis map is at Appendix 2. The *MiProfile* Survey is Commercial-in-Confidence and not for replication or dissemination.

3.0 Qualitative and Quantitative Research Methods

iRI is a mixed methodology utilising quantitative and qualitative research methods. A mixed-method approach has strength, because it allows a researcher to combine the best of both qualitative and quantitative worlds with the scope to avoid the weaknesses of both.

In the *iRI* model the established mechanism of *triangulation* (Jakob, 2001) is used to increase the reliability of data as an additional strength of mixed method research and analysis. By combining multiple observers, theories, methods, and empirical materials, social science researchers can overcome the weakness or intrinsic biases and the problems that come from single method, single-observer, single-theory studies. Often the purpose of triangulation in specific contexts is to obtain confirmation of findings through convergence of different perspectives. In the case of *iRI* research method there are sometimes more than three perspectives on the study. Typically the following model (Figure 1) is followed in *iRI* research:

Figure 1.
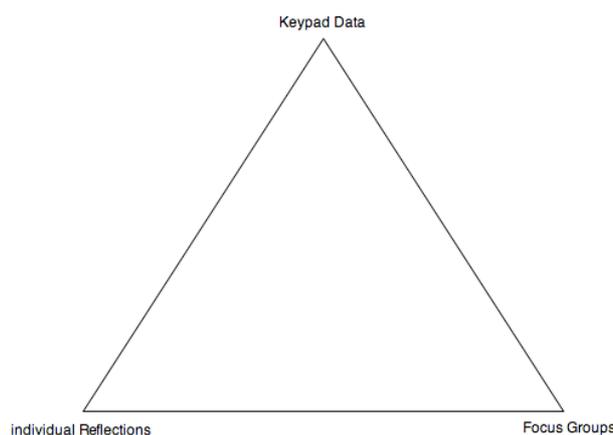
Validity, in qualitative research, relates to whether the findings of the study are true and certain. "True" in the sense that the findings accurately reflect the real situation. "Certain" in the sense of the findings can be strongly supported by evidence, that the weight of evidence supports the conclusions of the study.

Qualitative analysis results in a different type of knowledge than does quantitative inquiry because one party argues from the underlying philosophical nature of each paradigm, enjoying detailed interviewing and the other focuses on the apparent compatibility of the research methods. This means such methods like interviews, focus groups and observations are dominant in the constructivist, and critical theory (interpretive) paradigm and supplementary in the positive paradigm, where the use of survey serves in opposite order. It has been a traditional argument that quantitative researchers attempt to disassociate themselves as much as possible from the

research process[7]. Those who advocate qualitative research methodology have come to embrace their involvement (participation) and role within the research as a positive, supporting the notion that the researcher's involvement and immersion into the research environment is advantageous providing forms of knowledge which are excluded in quantitative research. This is a critical part of the MiProfile process. The expertise of the researchers in participant and confirming observation is as important as the method of data collection itself.

Both qualitative and quantitative researchers need to test and demonstrate that their studies are credible. While the credibility in quantitative research depends on instrument construction, in qualitative research essentially, it is the researcher who is the instrument[8].

Peer review of research ethics are a key part of qualitative academic research. Thus when quantitative researchers speak of research validity and reliability, they are usually referring to research that is deemed credible within itself, while the credibility of a qualitative research depends on the ability and effort of the researcher in relationship with others. Although reliability and validity are treated separately in quantitative studies, these terms are not viewed separately in qualitative research.

In qualitative research the term "rigor" and "robustness" appears in reference to the discussion about reliability and validity (Golafshani, 2003). The application of the notion of rigor in qualitative research should differ from those in quantitative research by "accepting that there is a quantitative bias in the concept of rigor, and "movement" to develop our reconception of rigor by exploring subjectivity, reflexivity, and the social interaction of interviewing" (Davies & Dodd, 2002 p.281).

Lincoln and Guba (1985) argue that sustaining the trustworthiness of a research report depends on the issues, quantitatively discussed as validity and reliability. The idea of discovering truth through measures of reliability and validity is replaced by the idea of trustworthiness which is defensible in the light of the evidence and established confidence in the findings (Lincoln & Guba, 1985).

The *MiProfile* has been conducted Nationally and Internationally with more than 65 companies and 30,000 participants. At no time has the trustworthiness of the data and reporting been questioned by any client.

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[7] Argued strongly by in the tradition of Kuhn, ethnographic and later by the postmodernist schools that such disassociation is not possible. Postmodernists researchers argue that the notion of objectivity and disassociation is disadvantageous to fully understanding the subject.
[8] This is most pronounced in the research method of in-depth interviewing which has its own particular strengths and access to knowledge not possible in quantitative research. Please refer to the expertise of the researchers at Appendix 3. Dr Long's direct experience in the psychology of risk is extensive.

4.0 Qualitative Focus Group Methodology

Focus group research involves organised discussion with a selected group of individuals to gain information about their views and experiences. The benefits of focus group research is discovered in the extra insights gleaned from people's shared understandings and the capacity to extract qualifying responses.

Focus group research within an Annales or *Mentalities* methodology[9] enables an understanding of "the mind" and values of participants and organisations. *Mentalities* methodology allows an interrogation of focus group data and activity through the prism of relationships, history, cultural theory, psychosocial dynamics, values development and contextualisation.

There are many definitions of a focus group in the literature, but features like organised discussion (Kitzinger 1994), collective activity (Powell et al 1996), social events (Goss & Leinbach 1996) and interaction (Kitzinger 1995) identify the contribution that focus groups make to research.

Kitzinger (1994, 1995) argues that interaction is the crucial feature of focus groups because the interaction between participants highlights their cultural view, the language they use about their culture and their values and beliefs about a situation. In such a setting the qualitative researcher is able to "listen" to psychosocial qualities in the group such as: doubts, confusion, priming, power dynamics, dissonance, anchoring, framing, cognitive biases, heuristics, hubris, attribution and anxiety (Plous, 1993)[10].   It is also important for the researcher to understand how these psychosocial dynamics are present in the *MiProfile* survey (and indeed all surveys) itself.

Interaction in focus groups also enable participants to ask questions of each other, as well as to re-evaluate and reconsider their own understandings of specific experiences. Another benefit is that focus groups elicit information in a way which allows researchers to find out why an issue is salient, as well as what is salient about it (Morgan 1988). As a result, the gap between what people say and what they do can be better understood (Lankshear 1993). If multiple understandings and meanings are revealed by participants, multiple

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[9] The notion of a "mentalitie" originates in the *Annales* school of history and refers to the psychological realities underpinning human relationships, basic habits of mind, long term trends and analysis of attitudes. It is a purpose of a Human Dymensions organisational psychological analysis to uncover the mentalitie or psyche of a group and to use the uncovered knowledge to motivate and stimulate learning, reflection and develop insight. The "history of mentalities"[9] is associated with Lucien Febvre, Georges Lefebvre and Marc Bloch. For *Annales* analysts, problems of culture are essentially problems of worldviews and their interpretation. The *Annales* school of history tends to focus on the shaping and development of ideas in a specific context, on analysing the "mental equipment" available to people in their time and place.

[10] Plous' work is particularly helpful in understanding the psychological and sociological cautions in question and focus group construction and the possibility of data distortion. Plous' work also summarises the considerable research undertaken by Kahneman and Tversky the Nobel Prize winning developers of Prospect Theory. The work of Plous, Kahneman and Tversky were used to develop *iRI* Methodology.

explanations of their behaviour and attitudes will be more readily articulated.

The opportunity to be involved in the decision making processes and to be valued and given the chance to work collaboratively with the researcher can be empowering experience for many participants. If a group works well, trust develops and the groups even explore solutions in their discussions rather than as individuals. There are also many ways in which focus groups can also be cathartic, helping participants to explore problems and issues as a group which are often not discussed in informal group settings. In this way participants are helped in a structured way to consider ways in which they can both assess an issue but also be triggered to understand that they are part of the solution.   However, not everyone will experience these benefits (hence the strength of the multi-methods process), as focus groups can also be intimidating at times for certain personality types, especially for inarticulate or shy members.

The strength of the *iRI* approach is how keypad technology helps overcome many of the personality-based reservations regarding the dominance of extraverted participants and, some reluctance of introverted people to participate. Hence focus groups using keypad technology and focus group structure can be empowering for all participants[11]. One of the strengths of the keypad focus group strategy is that participants feel actively involved in something which they feel will make a difference, and focus group research is often of an applied nature, empowerment can realistically be achieved.

The *iRI* focus group methodology developed by Dr Long is a qualitative tool used to triangulate data using an integration of qualitative and quantitative tools (including focus groups) to validate findings.

5.0 *iRI* Methodology and the Nature of Learning

The *MiProfile* is both a survey and, a learning event.   It is important to acknowledge how people learn through the *MiProfile*.

There are several layers on which participants in *iRI* methodology and a *MiProfile Survey* learn as they participate in the process. Learning is implicit in the process and explicit in the outcome of the process as *MiProfile* is essentially about a change in one's thinking, knowledge, behaviour, values, skills or capability. Implicit learning is much deeper a learning process than just responding to what is overtly "taught" (surface learning) but includes the "hidden curriculum", what was referred to in the introduction as learning "below the line" or "implicit" in learning.

Learning is essentially about change: in one's thinking, knowledge, behaviour, values, skills or capability. Learning is not just about a response to what is overtly "taught" (surface learning) but also includes response to what may

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[11] It is important to note that qualitative research methods particularly help overcome the cultural and personality "blindness" of quantitative research methods, as if the subjectivity of participants and their humanness can be somehow disconnected from responses to the quantitative tool.

seem hidden (what education experts call the "hidden curriculum"). So, learning can occur on several levels, this is sometimes referred to as, "below the line" or "implicit" learning. Sloan (2006) calls this "surf and dive" learning.

5.1 Formal Learning

Formal learning is structured, planned, programmed and often institutionally sponsored. It is often classroom based and "constructed" where, a trainer, teacher, manager, professional educator of professor is responsible for planning, implementing and evaluating a curriculum delivered through a didactic pedagogy . Formal learning is intentional in its design and tends to focus on specific learning outcomes, skills and competencies which are as a matter of course, assessed.
Most people who have progressed through the school system or training system have fully experienced the formal, traditional approach to teaching and learning. The formal approach to learning is essentially an "injection" approach, experts teach and the learner "receives", "imports", understands, translates and changes (in thinking, or practice).

5.2 Informal Learning

The informal approach to learning essentially "extracts" or facilitates learning. Informal learning is learning that is predominantly experiential, self-directed, non-institutional, non-routine and is often undertaken as a "spin off" or "by-product" from structured or unstructured and planned or unplanned activities. Informal learning often happens unconsciously and in everyday situations and occurs through a dialectic pedagogy (teaching style). Further to this discussion the following describes three highly effective methods of informal learning.

5.3 Implicit, Incidental Learning

Implicit learning results in what Polanyi (1967) calls tacit knowledge, that which we know but cannot tell at the moment but which can be made explicit later. It may be that no knowledge is totally implicit or explicit. iRI engages interactively with the participant in a 'non-formal' mode of learning which is evident in the *MiProfile* method, in which tacit knowledge may be gained or used (simultaneously or otherwise). Six forms of knowledge are encouraged by iRI:

* knowledge acquired by implicit learning of which the knower is unaware of what is aquired;
* knowledge constructed from the aggregation of experiences in long-term memory through interaction with visualised data;
* knowledge inferred by observers to be capable of representation as implicit theories of action, personal constructs, schemas, through focus group discussion;
* knowledge that enables rapid, intuitive understanding or response;

- knowledge entailed in transferring knowledge from one situation to another;
- knowledge embedded in taken-for-granted activities, perceptions and norms in group interaction

Tacit knowledge provides much of the basis for the way we interact with people and situations. *iRI* methodology and the *MiProfile* Survey and its interactive technology encourages an 'unthinkingly' or reactive engagement of assumptions, values and knowledge through the rapid implicit of statements and visual representation.

5.4 Situated Learning

Informal learning is also an important part of situated learning The notion of situated learning takes us beyond understandings of learning as being internal, or "within the skin", of individuals towards an understanding that takes in the social, contextual and" distributive" world.

Much of the experimentation and theorizing concerning cognitive processes and development has treated cognition as being possessed and residing in the heads of individuals.   Those interested in distributed cognition have looked to the tools and social relations 'outside' people's heads. They are not only 'sources of stimulation and guidance but are actually vehicles of thought. In this way one can speak of not only living in community and experiencing community but "learning through community".   It is not just the individual who learns cognitively, but the community can also learn as a whole system of interrelated factors. People think in relationship with others and use various learning tools in context which stimulate learning. Different cognitions therefore emerge in different situations.

So it is that we can talk of 'situated learning'. It can be seen as involving participation in communities of practice. Situated learning involves the whole person; it implies not only a relation to specific activities, but a relation to social communities – it implies becoming a full participant, a member, a particular kind of person in context. In this view, learning only partly – and often incidentally – implies becoming able to be involved in new activities, to perform new tasks and functions, to master new understandings. Activities, tasks, functions, and understandings do not exist in isolation; they are part of broader systems of relations in which they have meaning.

New people in a social context enter at the edge – their participation is on the periphery. Gradually their engagement deepens and becomes more complex. They become full participants, and will often take on organizing or facilitative roles. Knowledge is, thus, located in the community of practice. Furthermore, in this view it makes little sense to talk of knowledge that is decontextualized, abstract or general as in the way people often refer to the notion of "common sense".

Four propositions are common to the range of perspectives that now come together under the banner of situated learning:

1. High-level or expert knowledge and skill can be gained from everyday experiences at work, and in community or family.
2. Domain-specific knowledge as necessary for the development of expertise (i.e. much of expertise relies on detailed local knowledge of a workplace, locality or industry).
3. Learning as a social process.
4. Knowledge as embedded in practice and transformed through goal-directed behaviour.

In *iRI* methodology and *MiProfile* Survey analysis implicit learning occurs at two levels: the first is during the survey process and the second is through the analysis using tools which are not known or understood at the time of surveying.

From the above we can see how discussions of incidental learning becomes linked with situated learning. The focus on communities of practice rather than a dedicated learning environment engages implicit learning through relationship and conversation. Critical components need to be addressed in enabling the *iRI* and *MiProfile* process to assist learning, these are:

5.5 Experiential and Immersion Learning

Experiential learning and immersion learning involve the use of simulations and activities where people learn through participation and doing. Outcomes need not be explicitly stated or strived for, they are embedded in what the person experiences as part of playing the game or role playing in the simulated drama/situation.

A number of theories underpin experiential and immersive learning:

- Active learning
- Cognitive load theory
- Flow theory (Csikszentmihalyi)
- Game impact theory
- Zone of proximal development (Vygotsky)
- Situated learning
- Scaffolding (Bruner)
- Social networking theory
- Social constructivism (Vygotsky)

5.6 eLearning

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5.7 Essentials in Learning

5.7.1 Trust

There can be no change, development or transition without the establishment of trust. To establish trust takes significant time and skill. The emphasis here is on relationships, what Martin Buber called the I-Thou in meeting. In the psychosocial approach to learning the development of the dynamic community is central to the establishment of trust. Each participant group becomes that dynamic community through the interaction of shared visualised and conversational (focus group) knowledge.

 5.7.2 Climate (Ethos, Place and Space)

The rate and pace in embracing change will be limited unless people come into an atmosphere (climate) which generates trust, engagement, motivation, recognition, resilience and learning. A climate of acceptance and respect is foundational to establishing a positive climate.   The importance of confidentiality in Keypad response is important in this regard.   Whilst respondents can see the groups response they cannot know how any individual has responded to any particular statement.

5.7.3 Structure

Change relies upon a structure (providing a degree of certainty, security and meaning) which demonstrates through the methodology of organisation that people are valued and supported. A structure which disempowers people and limits freedoms and choice is essentially de-motivating.

5.7.4 A Change Culture

The essence of all change requires the inclination to change, the "want" or "will" to change. Recognition and reward in a measurable form are critical to this process, as is the methodology as to how people are engaged.

5.7.5 Engagement

The key to engagement is acceptance of "the other" and valuing people's contribution despite circumstance and history. The role of the moderator in iRI methodology is critical.

5.7.6 Meaning and Purpose

People will not change unless they see sense in the change and some positive outcome for themselves. The change management process needs to be a "sensemaking" process which is intertwined with other key change elements such as trust, motivation and engagement. It is meaning and purpose which drives the development of resilience.

5.7.8 Ability and Capability

Change will not be effective unless the change agent has the ability to drive and direct change (without overpowering others) and unless the participant has the capability/capacity to change.

6.0 *iRI* Methodology and the Unconscious

In order to effectively research in a psychosocial methodology the researcher needs to be aware of the importance of the cognitive unconscious. People operate at two different levels, the conscious and unconscious. It is in the unconscious that the most of our implicit decision making occurs (Bargh, 2007, pp. 194ff, Claxton, 2005, 190ff). It is in the unconscious that implicit knowledge is formulated and retained (Polyani, p. 111ff, Claxton, 2005, p. 201ff). One part of us manifests "implicitly" what we know arationally and the other what we think and perceive rationally.

There is little doubt that the mind is an amazing organ in the body. Some people can manage pain, depression, anxiety and addictions through simply training the mind to think a certain way. The proponents of the power of positive thinking say that even thinking positivity can bring opportunities and that negative thinking pushes opportunities away. Millions of people read their horoscope each week, millions of people practice the fundamental idea of prayer, many people experience dreams, can be hypnotised and manage pain through meditation. Much of the power of such subconscious activity is through the power of autosuggestion. The evidence for the power of the subconscious is extensive. The very terms "self awareness " and "metacognition" affirm the awareness of the unconscious.

The *MiProfile* survey by attempting to draw out implicit beliefs, utilising *iRI* methodology, seeks to tap into the subconscious for implicit attitudes and beliefs. The experience of the conscious will is a construction of the unconscious. Indeed, the sheer demand for speed in decision making shows that much of our judgements are automatic processes, leaving the idea of "agency" way behind.

It has been my experience in 25 years of observation of people and risk that most decisions are "last minute", unconscious and rapid. The reality of this observation has led scholars like Weick (theory of enactment) (2001, pp. 195ff) to state that we don't know what we believe until we see what we do. In various crises in which I have been involved, access to rapid and seemingly inexplicable decisions have often been rationalised but were in the moment, entirely arational. This is what scholars like Plous (1997), Bargh (2007) and Slovic (2010) call "automaticity". This is the knowledge which the *MiProfile* seeks to extract, the same knowledge which is used in the "heat of the moment".

MiProfile does not seek to know well thought out, politically correct and rational responses. It doesn't want the tidy thinking necessitated by reflective consideration over time. *MiProfile* wants to know much more about what kind of (implicit) knowledge is most likely to be accessed when there is stress, pressure and time constraints.

MiProfile seeks to extract subconscious knowledge through "construct activation". It does this mostly without awareness or intent by the participant indeed, this is why some key statements in the *MiProfile* are intentionally ambiguous. The answer to the statement itself is not that important but rather the ability of the participant to entertain doubt in the face of uncertainty. This is evidence of hubris, a major cause of "risk arrogance" and complacency. When trends of hubris are present in the *MiProfile*, one experiences what Glaser (in Hassin et. Al., pp. 173ff) calls "compensatory automaticity". These are strategic unconscious compensations for unintended thoughts, feelings and beliefs. This is also why statements in the survey are varied from negative to positive intent so as to trigger this automaticity.

Another key strategy of the *MiProfile* is the use of "contrast effects" (Glaser in Hassin et. Al. 2010, pp. 174). Contrast effects result from overgeneralisations in attempts to counteract the biasing influence of priming stimuli. The evidence shows that distracted subjects indicate assimilation towards primed concepts. Subjects who are reminded of the priming effects of a procedure show contrast effects, whereas subjects who are not reminded of priming stimuli exhibit assimilation. Glaser found that extreme primes yield contrastive judgements and moderate primes led to assimilative judgements of an ambiguous target. Contrast effects occur especially when the perceiver is aware of the potential biasing of the prime. This is why the expertise of the researcher in communication, pre-survey information and priming is so critical to the integrity of the process.

7.0 Keypad Technology and Data Collection

Individual and Interactive Rapid Implicit Methodology (iRI) uses keypad technology (survey and polling), focus group and individual feedback responses in a combined multi-methods approach to gathering research data.

The fundamental tool of the *iRI* and *MiProfile* is the use of the 10 button remote Keypad (Figure 2). The keypad is held in the hand of the participant

and is used to respond to questions or statements projected on to a screen interacting with the Microsoft application Powerpoint.

Figure 2. Keypad.

The Keypad registers interactively and remotely with a computer and cumulative results are instantly calculated, graphed and projected for all participants to see. In this way the Keypad technology enables participants to view quantitative results within a qualitative process as well as gain a confidential sense of position in relation to the group. The participant instantly views the cumulative result and learns the view of the group and the nature of their response in relationship to the collective result. The confidential and anonymous nature of the process enables people to challenge values and beliefs in a climate of comfort and exploration. All statements are viewed "blind", that is, statements are not able to be viewed ahead of time.

The focus group method is as follows:

1. The Keypad technology is explained to focus group participants.
2. Participants practice using the Keypad to mock statements to ensure understanding of procedure and process.
3. Familiarity with the process assists the speeding up of responses.
4. The focus group participant responds individually to a statement or collection of statements which are read out and read inaudibly (to compensate for the possibility of differential literacy levels)[12]. At this stage participants are able to seek clarification about terminology before registering their vote. The technology allows for the capacity to chop and change voting to register the final and intended result.
5. Responses are instantly recorded in the computer, collated and projected by the facilitator on the screen in graph form (eg. Figure 3).
6. General some plenary responses are sought by the facilitator but this is not necessary.
7. Sometimes statements are collated in themes and discussed thematically rather than individually.
8. Targeted follow up statements and questions can also be used in follow up if time permits.

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[12] This unique facility is often not available in quantitative surveys which assume a certain level of literacy.

9. Participants are then broken up into smaller focus groups where more detailed discussion eschews. At this stage (other than registering "undecided" in the survey) participants are able to use the focus group to clarify statements, meanings and discuss their understanding of the statement.
10. Responses to the reflective session is recorded (by a scribe) and critical discussion is used to interrogate the quantitative result. At this stage participants are also able to register individual feedback which is also collated in the overall data.
11. Participants return to the larger group with yet another follow up plenary response and progress on to the next theme or set of statements.
12. As new statements are introduced the procedure is repeated.
13. The Keypads can also be used at the conclusion to collect demographic data.

Figure 3. Possible Graphed Result.
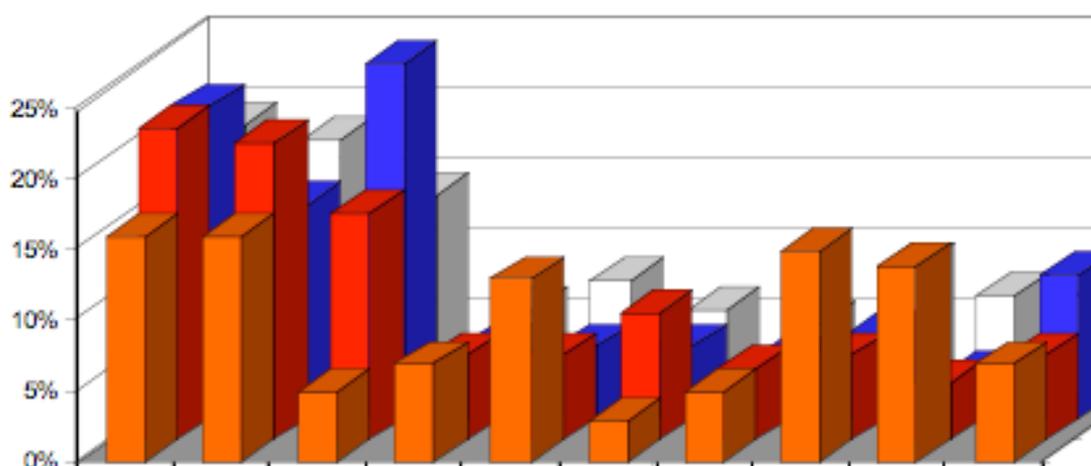
All responses using the Keypads guarantee complete anonymity and confidentiality which is always a concern about quantitative surveys. Participants can respond using the Keypads under cover if necessary so that noone knows the nature of their response. This level of confidentiality and anonymity ensures the highest integrity in the process and enables the greatest possibility of frank and honest responses. The psychological effect of being able to view the thinking of the group creates its own effect and assists discussion and sense of position.

Once findings from a Keypad session are known they have to be analysed, comprehended, absorbed, critiqued and validated by a reflective process carried out by the researcher. At this stage further cross checks of the data are also possible which allow for detecting significant differences in immediate Keypad data results. The structure and strategy of the Keypad focus group reflection session is contingent on the nature of feedback to real time data presentation. In this sense the methodology is fluid, innovative and creative

because noone knows what the result is until it is viewed on the screen. The result is just as much a surprise to the researcher/facilitator as it is to the participants.

Following and as part of the reflection/feedback stage, the development team (lead by a qualitative/ethnographic expert) constructs the focus group questions using cross-factor analysis and arrangement of analysis tools developed by the researcher (see Appendix 2). Cross factored statements should also be built into the first stage of the survey process. The example of analysis tools at Appendix 2 requires significant knowledge in a range of psychological and sociological tools. The researcher is able to use these tools to interrogate the data, map trends, cross factor embedded cross checked statements, examine psychological dominant types and sociocultural trends embedded in the data.

Additional analysis tools such as NVIVO7 or Xsight[13] may be used. This has implications for the recording of focus group information and is at the discretion of the client. Xsight is a computer coding program which tracks and cross examines key words and concepts in transcripts extracted from the reflective/feedback focus group session.

The information gleaned from the focus group and feedback data does not stand in isolation rather, the "moderator" (researcher) notes key viewpoints, insights, perspectives and thought patterns of the participants and participant groups (this even allows for detection of different trend between groups). The role of the moderator/facilitator is most significant. Good levels of group leadership and interpersonal skill are required to moderate a group successfully.   During the focus group moderators promote debate (as well as promoted by the polemical nature of the statements themselves) by asking open questions.

The researcher and statement structure is intended to challenge participants, especially to draw out people's differences, opinions and to tease out a diverse range of meanings on the topic under discussion. Sometimes moderators need to probe for details, or move things forward when the conversation is drifting or has reached a minor conclusion. Moderators also have to keep the session focused (and not be distracted by the frustration and confusion of sceptical and negative participants) and are conscious that they may deliberately have to steer the conversation back on course. Moderators also have to ensure that as many as possible participates[14] and has an opportunity to communicate their view[15].

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[13] http://www.qsrinternational.com/

[14] The validity of sample size and reliability is determined in consultation with Human Dymensions associate Dr Christopher Barnes, further see Appendix 2.

[15] At the same time moderators are encouraged not to show too much approval so as to avoid favouring particular participants or perspectives. They must avoid giving personal opinions so as not to influence participants towards any particular position or opinion.

8.0 *iRI* Methodology and Priming

Priming refers to the sometimes passive, subtle and subconscious "shaping" of people's thinking to receive information. People are influenced by a range things which affect behaviour and decision making such as: environment, language, social behaviour of others, peer pressure, fear and order of events. The interesting thing about priming is, we are mostly unaware of the way our mind is shaped and influenced by things external to us.

Anything which stimulates our senses can influence the way we are "primed", a scene of a quiet running stream, gentle nature sounds, soft waves caressing the sand, all have a way of de-stressing us, helping us calm down. The colour of a room, the tone of voice, atmospheric temperature, scratching sounds, thrash metal music, the feel of softness on our face, a gentle breeze on a hot day and the noise of screaming children, all affect our mood and decision making. Any research or survey researcher, should recognise the way in which framing and priming affect knowledge acquisition and response.[16]

Ambrose Bierce said in his Devil's Dictionary (1906): to decide, was to succumb to the preponderance of one set of influences over another. This is why we change when we go on holiday, when we sit in a lounge chair after a hard days work and enjoy a drink and when we hear "musak" in shops with their subliminal messages. If these things didn't change mood and behaviour, why do we do them? All the subliminal messages in shopping centres which stimulate our senses to "buy" and "stay", have been carefully worked out to intentional "prime" our subconscious. The words, the signs, the personal greetings when one enters a shop, all influence our decision making just as an unwelcoming, unfriendly shop doesn't influence us to stay and buy.

The experimental evidence for the priming of goals, decision making and memory recall is overwhelming (Moskowitz, 2009., Hassin, 2005., Claxton, 2005., Wegner, 2002., Fine, 2006., Slovic, 2010 and Plous, 1993) show that mood and hence decision making, can be easily influenced simply by holding something hot or cold. In a famous experiment Bargh "set up" people for a job interview and unbeknown to the interviewee they had a chance meeting with a person in the lift. The encounter in the lift experiment (Hallinan, 2009) involved a person with a cup of hot coffee or ice cold coke and their hands full of folders and bags. The unsuspecting interviewee was asked for a favour, to hold the cup whilst the person juggled and better managed their belongings. In a post experiment interview it turns out that the hot or cold temperature had radically influenced their perception of the interviewer. In another experiment the scent of cleaning fluid was put in the air conditioning system of an office which influenced people to tidy up the place when eating at their desk. In a prison dilemma game, the presence of a brief case on a table or a back pack, influences the level of competitiveness in the game.

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[16] This is what quantitative researchers often neglect in their quest for scientific objectivity and validity, they fail to acknowledge the subjective primed acquisition of all knowledge.

A wide variety of environmental triggers have been demonstrated to show that verbal stimuli semantically "prime" an audience as well as physical stimuli of individuals (Bargh in Moskowitz, 2009, pp. 132ff.)

It is a peculiar contradiction that people in the construction industry build structures with careful aesthetic considerations and design of how a building will affect behaviour, how space will distribute power, how colour and shape will influence organisation and security yet, they work in cluttered site sheds and bare tin huts and don't think this has any part to play in how workers behave (are primed) on the job? And then Managers wander about the job with punitive gaze and language negatively priming the way workers view risk and hazards and, corporate messages of zero, lost time and lost framed messages also have their affect. This contradiction is not dissimilar to the positivist survey scientist who deliberates extensively on survey design and validity constructs only to ignore the priming of space and place, question framing, learning design and the unconscious-in-situation in the administration of data collection.

What becomes accessible (primed) in the mind is partly determined by what a participant has been exposed to in their environment. There is no neutral environment for surveying or research, the "push" of the environment is the "pull" of the motivational system that specifies what Lewin (1936) called "valence" and what Macarthur and baron (1983) called "affordance". Moskowitz (2009, p.209) states: "such faster reaction times are evidence of the goals accessibility being heightened by subliminal exposure to the means". The evidence of *MiProfile* shows that goals and memory can be primed for the extraction of implicit knowledge. The *iRI* process of subliminal priming (relaxed interactive rapid exchange) activates implicit perceptions and excites unconscious recall in response to stimuli. It is important that *MiProfile* takes ownership of this method as a means for extracting the *mentalitie* of the participants.

9.0 Question/Statement Selection

As previously discussed, the purpose of Keypad Focus Groups is to generate discussion across a range of issues which are prioritised by the responses of the audience. The visual nature of the Keypad response process either confirms or surprises the participants in such a way that either silence or discussion provide valuable information for the researcher.

A broad range of statements for selection are helpful because of their suggestive (positive priming) influence. It is also important to provide the opportunity to select "undecided" as a category. In the face of an intentionally ambiguous statement "undecided" is perhaps the best answer.

Human Dymensions Keypad Methodology uses a Likert[17] or multifactorial response to assess a diverse range of responses to statements.

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[17] The Likert Scale was developed by Rensis Likert in the 1920's in an attempt to improve the levels of measurement in social research through the use of standardized response

In Human Dymensions Keypad Focus Group strategy it is just as important to understand what is **not** selected as much as, what **is** selected[18]. It is also important for discussion to have competing values/subjects (Competing Values Framework) embed in the question structure so as to create a climate for values clarification and a dual values imperative dilemma in discussions[19]. Another strategy in structuring statements is to have closely structured questions so as to differentiate between key qualitative issues within a topic. The repetition of similar topics/key words and concepts/issues also assists cross validation across and within statements.[20]

The anonymity of the Keypad format allows participants to interrogate their own responses and see where they are positioned in relation to responses for the whole group.

10.0 Themes

The best way to select statements is through a pre-scoping process where a select number of group (usually key stakeholders) trial draft statements are tested within a range of agreed themes. In this way the client group gets to experience the keypad technology and see practiced outcomes. The next step is to build a set a statements around key themes of importance to the group/organisation and then to hand over the technical design to the moderator/researchers so that the methodology is consistent, reliable and trustworthy.

The building of themes and statements in the survey is generally undertaken with key stakeholders in the sponsoring agency. Similarly the structure of focus group sessions are developed by the researcher in consultation with the sponsoring agency. The participation of stakeholders in statement structure ensures that statements are targeted and conform to what the sponsoring agency wants to know[21].

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categories in survey questionnaires. Likert-based questionnaires are now one of the most frequently used attitude measure in social sciences.

Compared to a simple yes/no or true/false approach to questioning, the Likert scale measures a range of responses to a question enabling a degree of response to be determined on any single issue. This corresponds much closer to how we view reality in neither black or white but in degree of agreement or disagreement. When countered by questions which cross-check responses for changes in attitudes and psychological characteristics embedded in the questions then an even more powerful range of perspectives can be compared.

An advantage of the Likert scale is that the data can also be assembled into yes/no categories if so desired. The numerical values of the items on the scale can also be summed to arrive at an overall score for those items considered as addressing the same underlying construct. For those items that have been summed (or averaged) a validity analysis can be used to demonstrate that they are associated with the same underlying construct.

[18] Just as the presence of negativity, scepticism, pessimism, authoritarianism, cognitive dissonance and attribution also communicate vital information for the analysis of survey results.

[19] Further see Appendix 4. Human Dymensions Competing Values Framework

[20] For a complete understanding of statement structure and building in checks and balances for distortion see Plous (1993).

[21] It is generally helpful if the sponsoring group and statement structure committee can run pilot checks for statement implementation. This helps refine the process and helps the

11.0 Rapid Implicit Research

The quantitative data component of the *iRI* multi-methods approach uses keypads and a rapid response method to gather data.[22] The rapid response method intentionally limits the amount of time given to participants to provide a response (usually 5 seconds). *The rapid response method seeks to directly access implicit knowledge which is well documented by work undertaken at Harvard University, University of Virginia, and University of Washington*[23].

The purpose of the rapid response method is to assist the examination of thoughts, *mentalities*, emotions and implicit knowledge that exist either outside of conscious awareness or outside of conscious control. This process is enhanced by the structure of the questions in a polemical style which intend to excite the emotions into response and provoke discussion in the second focus group stage of the research process.

At a deep level *iRI* challenges the positivist notion of epistemology particularly, the idea that only quantitative research is the only way to possess valid knowledge. The idea that one can have knowledge through such activities as contemplation, community and spirituality is foreign to the positivist materialist approach to research (Polanyi, 1962).

One of the key philosophical assumptions behind *iRI* is that there are clear limits to the positivist mindset associated with scientific modes of knowing which only validate positivist associated forms of knowledge. Unfortunately the tradition of positivist research has made people generally suspicious of rapid unconscious cognition.

Gladwell's (2005) research demonstrates the validity of rapid implicit methodology by demonstrating the way humans make snap judgments by 'thin-slicing' events. Thin-slicing refers to the ability of our unconscious to find patterns in situations and behaviours based on our narrow-based slices of experience. When the extravert blurts out the first thing which comes into their mind (sometimes Freudian) they are "thin-slicing". People take in a small slice of phenomena they observe and associate the information in those slices with other measures. People make these snap judgments constantly on the basis of experience, stimuli and history. This kind of knowledge is sometimes called "intuition" and is respected by *iRI* methodology and *MiProfile* Survey.

Research by Iyengar and Fisman (2006) found that when people are given time to explain themselves something quite confusing happens. Under implicit

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researcher undertake preliminary analysis to determine if the statements provide the required data.
[22] It should be noted that each of the methods of gathering evidence in the multi-methods approach is given equal weighting, no one type of evidence is prioritised over another.
[23] Some information about the project and methodology are available at
http://www.projectimplicit.net/
A full bibliography of research in the validation of implicit research is at
https://implicit.harvard.edu/implicit/demo/background/biblioresearcher.html

(thin-slicing) response respondents are quite clear about their view, transparent and clear. When they are given to time to tidy up their thinking and in response to the influence of other factors their responses become more confusing. Similarly Schooler's research (http://www.lrdc.pitt.edu/faculty/Schooler.html) shows that even a simple task such as facial recognition are distorted when greater time is allocated for deliberation to clarification of detail.

Gladwell (2005) documents many psychological experiments which demonstrate that rapid implicit research, targeting thin slicing of memory, extracts reliable "gut" reactions and opinions which are normally hidden in extended interview and longitudinal research methods.

What *iRI* methodology is able to do is capture the thin slicing thinking of participants and understand better their deeper *Mentalitie.* This is either confirmed or explained by further investigation through focus groups and individual feedback response.

12.0 Data Analysis, Quantitative Validation and Reporting

The *MiProfile* quantitative data is instantaneous using the Keypad technology. The report can be grouped in themes or by statement within minutes of completing the session. A full and more critical analysis is only possible after a longer period of time where the full implications of cross-factored statements and "cubing" of data has been undertaken. The complicated process of structuring the report for complete analysis is conducted by Human Dymensions Associate Dr Christopher Barnes (see Appendix 3).

Dr Barnes is an associate of Dr Long and Human Dymensions and is the lead on mathematical modeling, statistical data, data validity and quantitative research methods. Dr Barnes works with Dr Long on all quantitative methodological design and analysis in the Rapid Implicit Research Methodology. Amongst the methods of Dr Barnes Cronbach Alpha and Kolmorogov Smirnov Statistic is used to validate both quantitative design and data reliability. Dr Barnes undertakes extensive validation work on the structure and analysis of Human Dymensions research projects which involve quantitative elements. Reliability regarding sampling[24], margins of error and non-completion of statements are cross-checked by Dr Barnes.

12.1 *Validation testing - Cronbach Alpha Test*

The Cronbach Alpha Test is used in survey design validation and also post aggregation to double check survey consistency. Cronbach's alpha measures how well a set of items (or variables) measures a single unidimensional latent construct. When data have a multidimensional structure, Cronbach's alpha will usually be low. Technically speaking, Cronbach's alpha is not a statistical test - it is a coefficient of reliability (or consistency).

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[24] Further on sampling and research ethics see: Neuman, W. L., (2000)   *Social Research Methods: Qualitative and Quantitative Approaches.*   Allyn and Bacon, Boston.

Cronbach's alpha can be written as a function of the number of test items AND the average inter-correlation among the items. Below, for conceptual purposes, is the formula for the standardized Cronbach's alpha:

$$\alpha = \frac{N \cdot \bar{r}}{1 + (N-1) \cdot \bar{r}}$$

Here N is equal to the number of items and r-bar is the average inter-item correlation among the items.

One can see from this formula that if you increase the number of items, you increase Cronbach's alpha. Additionally, if the average inter-item correlation is low, alpha will be low. As the average inter-item correlation increases, Cronbach's alpha increases as well.

This makes sense intuitively - if the inter-item correlations are high, then there is evidence that the items are measuring the same underlying construct. This is really what is meant when someone says they have "high" or "good" reliability. They are referring to how well their items measure a single unidimensional latent construct.

Thus, if you have multi-dimensional data, Cronbach's alpha will generally be low for all items. In this case, run a factor analysis to see which items load highest on which dimensions, and then take the alpha of each subset of items separately.

12.2 *Calculation of Kolmorogov Smirnov Statistic - Execeeding 99% confidence level*

The Kolmogorov-Smirnov (K-S) test was originally proposed in the 1930's in papers by Kolmogorov (1933) and Smirnov (1936). Unlike the Chi-Square test, which can be used for testing against both continuous and discrete distributions, the K-S test is only appropriate for testing data against a continuous distribution, such as the normal or Weibull distribution.

The Kolmogorov-Smirnov test is used to decide if a sample comes from a population with a specific distribution. The Kolmogorov-Smirnov (K-S) test is based on the empirical distribution function (ECDF). Given *N ordered* data points $Y_1, Y_2, ..., Y_N$, the ECDF is defined as:

where *n(i)* is the number of points less than Y_i and the Y_i are ordered from smallest to largest value. This is a step function that increases by 1/*N* at the value of each ordered data point.

The graph below is a plot of the empirical distribution function with a normal cumulative distribution function for 100 normal random numbers. The K-S test is based on the maximum distance between these two curves.
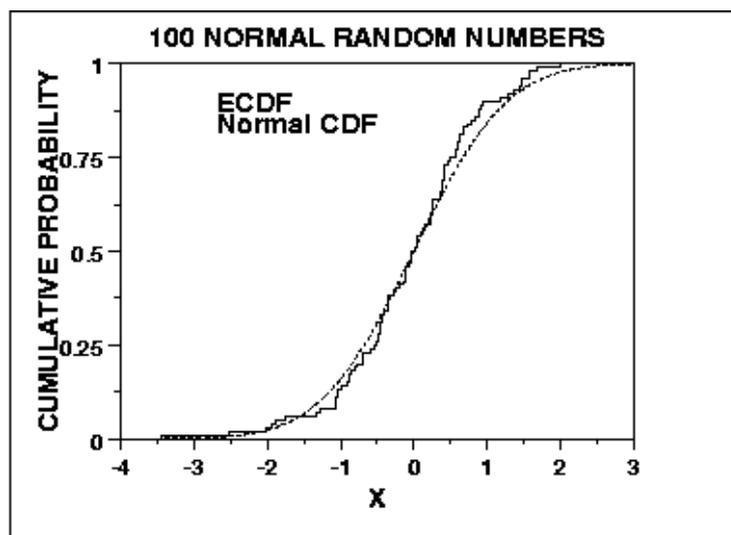
Excel Data Representation Development

The representation of data is a critical part of the analysis process. Whilst initially the data is presented in cumulative/partial empirical distribution function form a range of other presentations are possible. Survey data is presented by statement, company, division, country, site, age, gender, occupation and specialisation.

13.0 Qualitative Analysis Tools

A range of qualitative analysis tools are embedded in the iRI research structure which are not detectable to the participant. These analysis tools are used by the researcher to investigate underlying *mentalities* of the participants in the iRI research process. These tools include:

- Competing Values Framework[25]
- Myer-Briggs Type Indicator
- DiSC
- Cross Factored Statements
- Conflict Pair Analysis
- Organisational Psychological Dynamics and,
- Organisational Cultural Drive Analysis (Schein, 2004 and Weick, 2001).

These tools and their links are demonstrated at Appendix 2.[26]

14.0 Conclusion

This paper has discussed "individual Rapid Implicit Methodology" iRI© and *MiProfile* Survey developed by Dr Robert Long. The paper demonstrates the

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[25] Further, see Appendix 4

[26] It is not the purpose nor, does space suffice, to discuss the ways in which these tools are used to interrogate the data and research process.

robustness of the methodology and research methods incorporated in *iRI* and *MiProfile* which is a multi-method approach to research. The discussion of *iRI* and *MiProfile* demonstrated the strengths of this multi-methods approach to research and its utility in providing analysis and critique on organisational culture and the psychosocial dynamics of organizations.

The paper discussed the nature of *iRI* methodology and *MiProfile* research methods, the strengths of qualitative research, the framework for effective focus group implementation and triangulation.   The discussion highlighted the dependability of a qualitative multi-method research process and the capacity of rapid implicit technology to add value to the analytical process in the light of Critical Theory and Annales methodology. Discussion of the rapid implicit method demonstrated the integration of the methodology with research methods particularly, in getting to the heart of psychosocial and organisational cultural mentalities. The paper concluded by providing an outline of the quantitative methods in *iRI* and the qualitative tools used for analysis in the *MiProfile* Survey.

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Appendix 1. Example Survey

1   Management's leadership has my confidence

     o Strongly Agree
     o Agree
     o Undecided
     o Disagree
     o Strongly Disagree

2   The leadership in this organisation model core values

     o Strongly Agree
     o Agree
     o Undecided
     o Disagree
     o Strongly Disagree

3   Integrity is a core value in my work team/business

     o Strongly Agree
     o Agree
     o Undecided
     o Disagree
     o Strongly Disagree

4   I am confident in the vision of the organisation

     o Strongly Agree
     o Agree
     o Undecided
     o Disagree
     o Strongly Disagree

5   Management is ready to deal with something if it goes wrong

     o Strongly Agree
     o Agree
     o Undecided
     o Disagree
     o Strongly Disagree

6   Adequate time is spent identifying potential management risks

     o Strongly Agree
     o Agree
     o Undecided
     o Disagree
     o Strongly Disagree

7   People are free to speak up in my team about business concerns

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

8   Sometimes problems and mistakes are covered up

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

9   Political pressures affect key priorities

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

10   People are encouraged to express divergent views in the organisation

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

11   Management take all concerns in communication seriously

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

12   Organisational pressures affect mission priorities

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

13   Commitment to mission is evident at all levels of the organisation

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

14   People talk about teamwork but don't follow what they say

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

15   The organisation is characterised by cooperation and consideration

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

16   If people speak up about problems they get victimised

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

17   Our vision, mission, policy and procedures are good

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

18   Internal cohesion comes second to operational issues

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

19   Mistakes are dealt with fairly by management

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

20   Policy and procedures take into account the possibility that things can go wrong

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

21   Bureaucratic processes engender team indifference

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

22   Committees deliver effective outcomes

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

23   Organisational processes effectively manage people

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

24   Communication processes are good

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

25   Not all polices and procedures have to make sense

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

26   People don't really come first in the organisation

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

27   I am content and fulfilled in my work

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

28   The job has to be done regardless of relationships

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

29   Management will not allow flexibility in the way we work

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

30   If a problem crops up I can respond to it how I like

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

31   We always find a way around problems

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

32   Management discipline you harshly for minor mistakes

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

33   I just do my job, there is no reward for extra effort

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

34   People help each other out when they are under pressure

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

35   Management are often visible about the place

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

36   There is not enough time to really do things properly

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

37   If there is a problem my work team meets and deals with it properly

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

38   I get appropriate feedback from management

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

39   We regularly review procedures to accommodate change

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree

40   Fall out in relationships at work are inevitable

- o Strongly Agree
- o Agree
- o Undecided
- o Disagree
- o Strongly Disagree