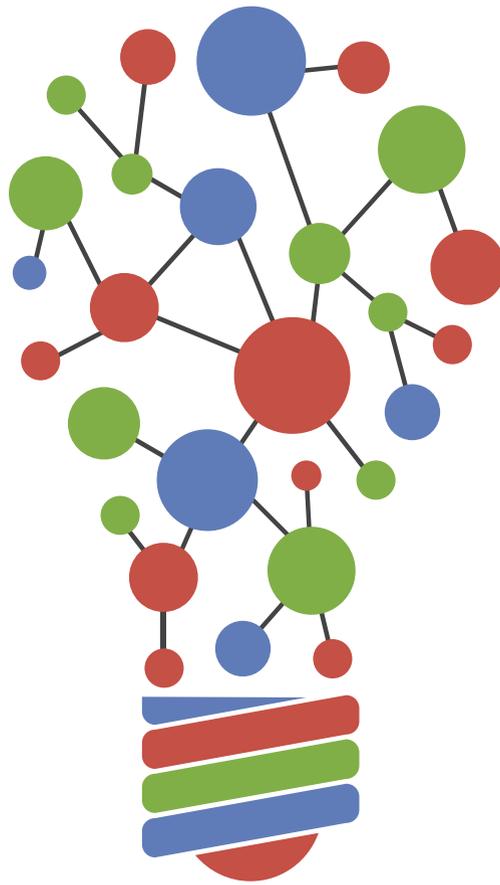


Innovation Booklet

Application of Red, Blue and Green in Innovation



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Diversity Icebreaker[®] is certified by DNV GL – a world-leading certification body – as a development tool used in workshops.

The tool satisfies requirements of the Certification Council for Test Use in Norway (in line with EFPA European standards).



Introduction

This booklet presents ideas on how to use Diversity Icebreaker (DI) in creativity and innovation processes.

The range of DI application has been expanding throughout the years. First, it was used to enhance understanding of oneself and others in communication. Later on, we started using the Red, Blue and Green as different perspectives in creative problem solving processes. In project management, the model was used in relation to different phases of the work. Lately, one of our clients applied the concept in one of the largest international mergers recently in order to secure integration and implementation of the change.

Now, we gradually understand also how the concept contributes to a learning culture in teams and organizations (a central component of learning organizations). By combining the aforementioned applications, and insights that came with them, we could scaffold a structure for how individuals, teams and organisations could use DI in creative and innovation processes. This booklet is an introduction to these combined ideas.

Innovation is a long and complex process, taking place on many levels. It often requires changes in teamwork organization, managerial practices and in individual attitudes; as well as the right organizational culture, inclusion and learning-oriented arenas for people to exchange ideas and interact with one another.

The Innovation Booklet is directed to facilitators and consultants, who would like to use the Diversity Icebreaker in organizational development work and workshops focused on innovation. It is also meant for leaders and teams, participants of the DI workshops, familiar with Red, Blue and Green who want to reflect upon and improve their practice of creating innovative solutions. It is also for individuals willing to reflect upon their own innovative practice when interacting with others.

This booklet does not pretend to give a prescription or ready-made, concrete solutions for innovation. It is meant as a source of ideas for workshops, meetings, creating learning communities, managerial practice, and planning for innovation, etc.

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Part 1 Introduction to Creativity and Innovation

Creativity and Innovation as Concepts

Creativity and innovation: what are they?

Creativity is creating a new idea, or a product, that is different from what existed before. Creativity can be understood as any idea, product, method or technique that is experienced as fresh and new for the user (Zaltman et.al, 1973). Innovation builds on these new ideas and products. Innovation is when new and different ideas are employed in a useful way, and utilised efficiently. The broad overview, is that it is not enough that the idea, product, method or technique is experienced as new. That means that if something is an innovation or not, has a lot to do with subjective experiences, and is not tied to objective measurable criteria (Gotvassli, 2015, s179). Innovation could be the use of new raw materials, new forms of organisation, new production processes, services and markets.

The terms innovation and entrepreneurship are often confused. Entrepreneurship is the development of new business: the conveyance and employ of an idea from the stage of conception, to operation – the implementation process. Innovation is about renewing or improving ideas to increase efficiency or functionality, while entrepreneurship is about developing a new avenue of business or a concept (Gotvassli, 2015, s179). With the increasing pace of change, continuous and systematic updates in organisational practice will be a prerequisite to the development of the competitive advantage. To this end, we will focus on exploring the innovation process itself, and the use of Diversity Icebreaker within these creativity and innovation processes.

Innovation requires implementation as a core element. For this reason, the implementation process, and stabilising solutions for success, are an integral part of innovation. Innovation often requires more time, more people involved, and improved structure, to carry individual creative ideas through into real world applications. This is hard work – and very often, you need to play with people with differing competences and qualities in order to succeed. In the language of Diversity Icebreaker, we normally hear people say, “You need people with Green preferences to come up with ideas, Blue to execute them, and Red to keep everybody together long enough to see the solution come to practice”. At the same time, we are keen not to make such clear distinctions between personal preferences and tasks. This is because we know that all people can contribute within all colours and that swapping tasks, sharing responsibilities and knowing another’s ways of thinking and working are important functions of teamwork when creativity and innovation are the focus.

At the EUROMED conference in Kristiansand, August 21st 2014, Rubel and Ekelund presented social psychological results implying that the DI workshop increases positive feelings and trust, as well as facilitating individual creativity. This is relevant for creativity and innovation in organisations. If a person gains ideas that are more original after a DI workshop, they can be used to initiate creativity processes in the group, and as building blocks for mapping challenges and solutions. At a workshop during this conference,



we presented what we as practitioners assume to promote innovation following Diversity Icebreaker workshops. These main points have varying levels of scien-

tific documentation. However, measuring increased trust and creativity, it is a relatively valid scientific conclusion.

The Knowledge Concept (Data, Information, Knowledge, Wisdom) and Different Forms for Knowledge Development

Exchanging Information

In the discussion about what knowledge is, the concepts of data, information, knowledge and wisdom, are often confused (Prusak, 1997, Gottschalk, 2004; Gotvassli, 2015). According to Gottschalk (2006:16 ff.) data is numbers and letters without meaning, while information is processed data. Knowledge is gained by combining information with experience, context, understanding and reflection. Knowledge becomes information again when it is articulated and communicated to others, made explicit. Knowledge can be understood both as a general, objective truth and/or as dependent of the situation, subjectively perceived and context sensitive. Today's understanding of knowledge is closer to the dependent of the situation than the general. Wisdom can be defined as knowledge connected to learning, insight and judgment. Knowledge can also become information again when communicated to others, made explicit, and this can also happen through information technology (Moe, 2007).

To understand what knowledge is, we can focus on the process of practicing knowledge. Knowledge can be considered as socially constructed and applied in practice. From dynamic terminology, to know something is more than just objectively strategic knowledge that a person possesses. The process of knowledge is just as important as the knowledge itself (Newell et al. 2002:7). There are different types of knowledge. The main divide

in the knowledge concept is between the structural perspective, and the socio-cultural perspective. Structural perspective maintains that knowledge is explicit, easily identifiable and an objective unit in the organisation. While the sociocultural perspective regards knowledge as bound to social and relational situations, and occurs when people work together. This can be extended with the notion that knowledge development also happens through intuition and feelings (Gotvassli, 2015).

Further, we can talk about tacit and explicit, individual and collective knowledge. Management of knowledge elevates context and situation over information. The process perspective suggests that knowledge is based on action and social practice. Knowledge does not have a value in itself, but is embodied with value when it is created and designed for special tasks and results (Moe, 2007).

Knowledge is created in practice when people are trying out new ideas, when people share ideas and reach conclusions, and when people reflect over their experiences.

Pragmatic learning is about development of individual and collective experiences, where critical and reflexive thinking is a central approach in the face of uncertain situations (Moe, 2007).





Even though the processes of knowledge development used in Diversity Icebreaker do not follow a recommended design from a research point of view, they are valid processes for knowledge creation. Below, you see some of the statements that were presented at the EUROMED-conference

(Rubel and Ekelund, 2014), and how they integrate solid scientific documentation with aggregated assumptions obtained through good conversation and reflection. The focus has been to illuminate how DI-workshops contribute to creativity and innovation.

Creativity at an Individual Level

Unpublished experimental research indicates that individuals create more ideas that are original after a Diversity Icebreaker workshop. This may be due to the increased experience of psychological safety, positivity and trust, which lowers the stress level and reduces inhibitions that block new ideas. This can allow the individuals access to more subconscious ideas.

In the Diversity Icebreaker workshops, the participants are rewarded for sharing information. If they apply the information to their own understanding, they can also develop knowledge in extension of the information exchange. This reward process has the following components:

"I/we do not know how to understand the result of the questionnaire – the categories – and it is uncomfortable not knowing. But then we talk and exchange ideas; insights emerge for all of us and a relief occurs and functions as a reinforcement of sharing information." This happens three times: first at the individual level, then in exchanges between groups, and finally at the end, when the participants share the overall learning points. This theoretical understanding is based upon the repeated observations of numerous workshops, as well as explained through the explicit use of learning theories (classical and operant conditioning, as by, respectively, Pavlov and Skinner).

Perceptual Filter

Red, Blue, and Green are three different perspectives, value systems and ways of working together when problems are discussed and solved. After a workshop, we see that the participants use these categories in the descriptions of tasks, information and people. Red, Blue, and Green become language categories that impose perspectives. The categories are integrated in language, both as perceptual filters as well as functional categories for communicative practice. This is partially documented in scientific correlation studies.

Positivity

The Diversity Icebreaker workshop itself creates a lot of positivity and humour. It leads to an experience wherein the desire of more interaction increases, which is important for more complex decision making, as well as following up creative ideas in practice – the innovative result. The categories themselves have positive qualities, like complementarity (they both diversify and unify at the same time), equality (no category is elevated above another), and a common understanding that all perspectives are needed when people interact. When some elements of the colours' descriptions are coined negative, it will often be seen as the necessary flip side of the positive qualities, which is important to be aware of, treat with care, and to take into consideration when distributing tasks, etc. This has been documented in both empirical and theoretical literature.



Acknowledgement

Being acknowledged in a positive way by others leads to openness for change. This is a well established truth among therapists building on a humanistic tradition.

Dialogic Curiosity

Increased awareness of individual perspectives, the sharing of information, and the positivity and acknowledgement of others, awakens “dialogic curiosity” among the participants. This communication form leads to a better understanding of each other’s background, perspectives and interests. Awareness of the knowledge, perspective, and values of others is an important premise for creating better solutions together.

Tacit Knowledge



Epistemology is the theory of knowledge and knowledge acquisition. We can have a different view on which knowledge is relevant, and what we can know something about (Nyeng, 2011, s. 209). To understand the knowledge concept, it is expedient to separate the different forms of knowledge, especially explicit and tacit knowledge. According to von Krogh, Ichijo and Nonaka (2005) we have on one side the procedure, documents, databases and guidelines – explicit knowledge. On the other side we have the employee’s excellence, experiences and expertise – tacit knowledge. It can be challenging to transfer individual knowledge into organ-

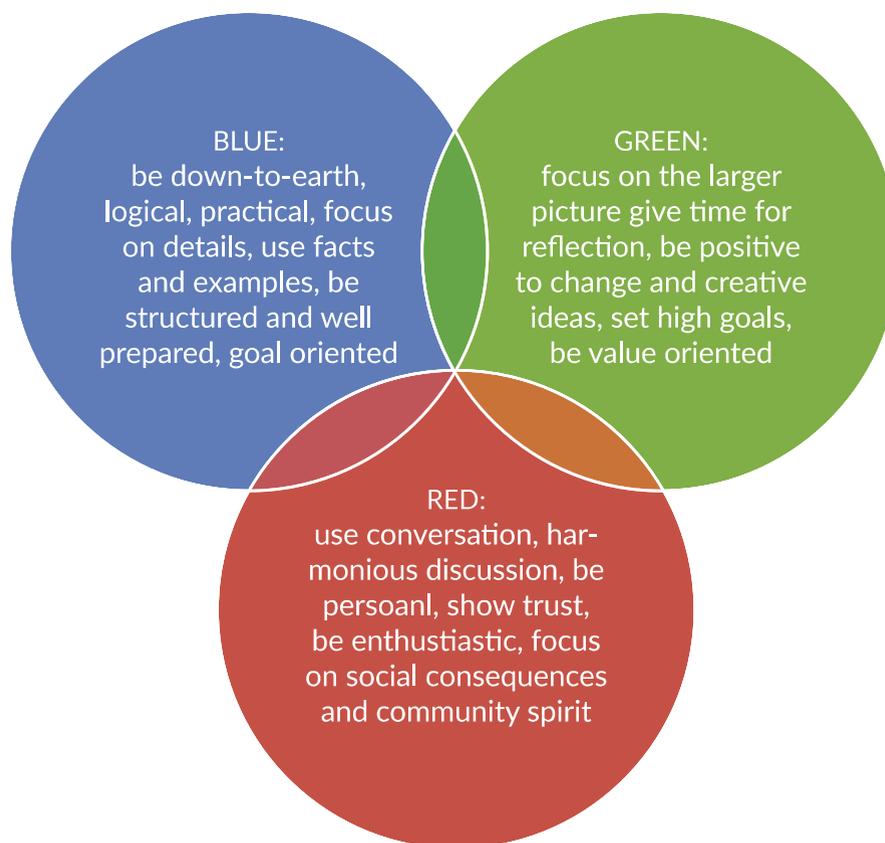
isational knowledge, through the interactions of explicit and tacit knowledge, and ubiquitously within an entire organisation. It was Polanyi who first used the concept tacit knowledge when in 1966 he wrote, “The Tacit Dimension – an introduction to tacit knowledge”. Polanyi’s base is that “...we know more than we can tell” (Polanyi 2000:16). We can recognise a human face among millions of other people, but it is difficult to formulate how. Tacit knowledge is the experience-based knowledge (know-how) about how tasks are solved. It is personal, relative to context, and often based on experience, ideas, values and emotions (Gotvassli, 2015).



Introduction

This booklet describes approach and ideas for work following the classic Diversity Icebreaker workshop. The workshop itself and the meaning of Red, Blue and Green, are well described in the Profile Folder and other materials available from Human Factors AS.

Only a brief illustration of the qualities of Red, Blue and Green is given here with some simple statements, which often emerge in the workshops with participants.



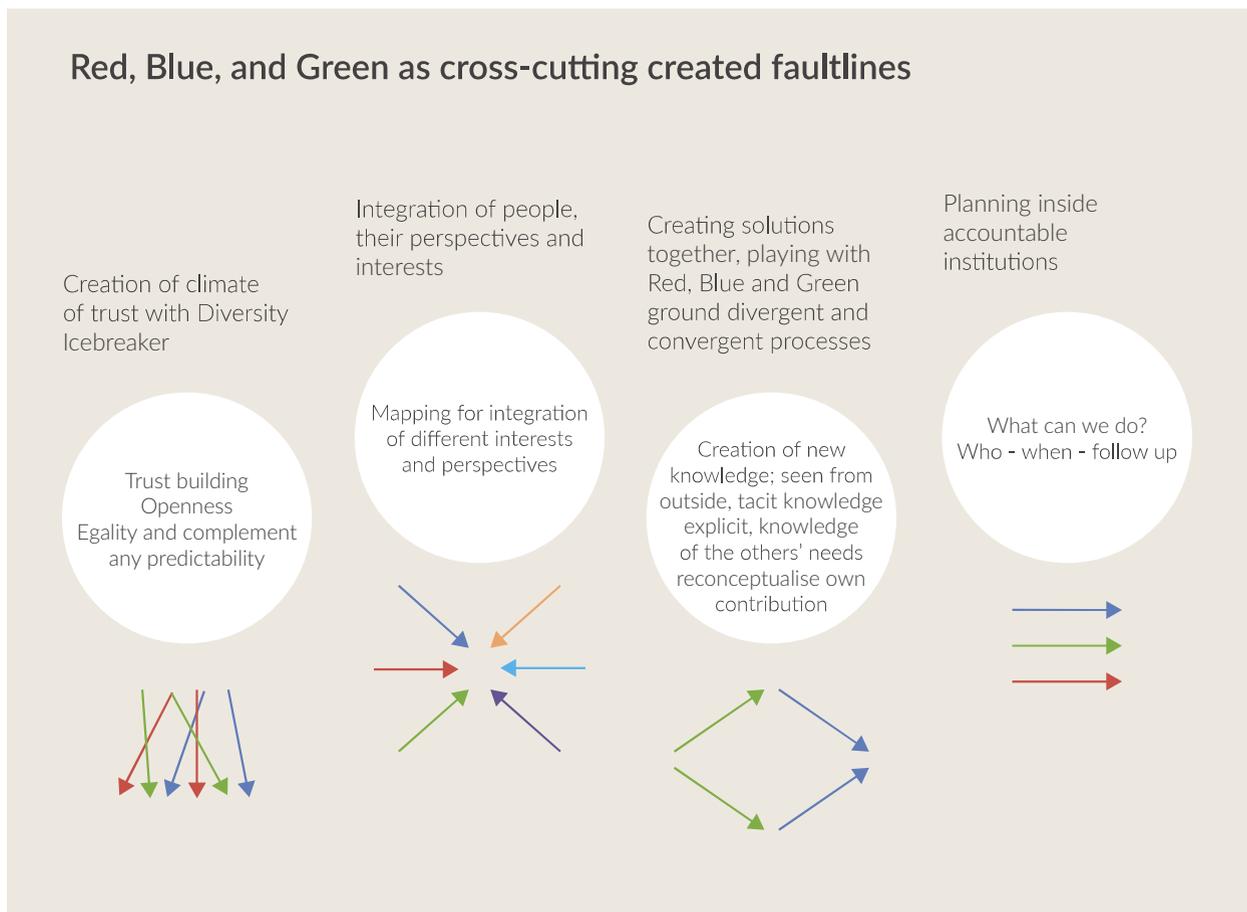
We now present the guidelines of facilitating creativity and innovation with Diversity Icebreaker when the workshops are completed, and the participants have a common understanding of Red, Blue and Green. We will do this with a description of five different steps:



Overview over the five main steps

1. Diversity Icebreaker as trust-building from the start
2. Creating a shared contextual knowledge of yourself and others
3. Communicative practices promote new knowledge, which is a contribution to more integrated ideas
4. High quality creative problem solving with Red, Blue and Green ideas being integrated
5. Implementation and follow up as a joint collective reflection for learning

An illustration of these different phases which we have used in large group processes looks like this:



Note: in Step 2, "Integration of people, their perspectives and interests", the other colours used for the arrows symbolize the perspectives and cognitive styles that are not captured by the Red, Blue and Green model.





Establishment of an environment characterised by trust in Diversity Icebreaker can also be seen as an arena for good communication and reflection over practice. The knowledge spiral of Nonaka and Takeuchi (1995) emphasises both explicit and tacit knowledge. Here, the use of Diversity Icebreaker can be a part of developing Ba-spaces for knowledge development.

The sociocultural perspective will be concerned with facilitating knowledge development in practical situations and efficient autonomy in work situations (Gotvassli, 2015). Emphasising of intuition and feelings will also be important to the establishment of an environment characterised by trust with Diversity Icebreaker.

Step one: Diversity Icebreaker as a Trust-Builder Contributing to Open Communication

In DI workshops, participants create a shared understanding of Red, Blue and Green, which combines elements from the questions in the questionnaire, personal experiences, and the conclusions one reaches through conversations in the divided groups. The elements in Red, Blue and Green, and the application of these, become for this reason the aggregate of research knowledge, individual personal experiences, and the context that brings people together for a common discussion. This is what we call the contextualised understanding and application of the categories. More of this will be presented later.

The documentation from different types of research on the effect of the Diversity Icebreaker workshop clearly indicates that positivity and trust are psychological states that emerge during and following the DI workshop. A more recent theoretical understanding on the behaviour of information sharing creates a more precise understanding of why people seem to go into a self-reinforcing cycle of information sharing and learning. The ideas look like this:

After DI-workshops, we see that participants share more information relevant for the cooperation and problem solving than they normally would. An example of this is when a person shares knowledge that

is new, seen from the others perspective. The new knowledge can be a piece of information that can be combined with other participants' knowledge. However, the increased openness can also include sharing of frustrations and needs, opportunities discovered, market information, network possibilities, etc. In the DI workshop, we see that positive reinforcement happens when talking with each other to reduce uncertainty. Application of learning theory to explain the increased dialogue curiosity has not been explicitly addressed before. Moreover, since learning theory is a robust model for explaining behavioural change, we will use this theory as an important explanatory factor for the increased communication and therefore increased insight and new knowledge formation. We think that this happens three times at three different levels.

The first uncertainty appears when the participants are asked to fill in the DI questionnaire and do not know what the answer will be, nor understand the meaning of the categories. The first relief from anxiety emerges when participants are grouped together with others sharing the same qualities, and when they come into a productive group that easily finds an insightful, shared and positive understanding of themselves (the first question of the group discussions).

