Assessing the Performance of e-Facilitators

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ABSTRACT

With the development of technology in the field of electronic communications groups have started to form a new way of interaction. Electronic collaborations have been used to enable teams to collaborate dispersed or virtually using the web. Virtual collaboration and facilitation are widespread in organizations. However, delivering appropriate electronic or virtual facilitation is a complicated task to achieve and hence the evaluation of these services is a challenge. The paper delivers an assessment framework to address the evaluation of virtual facilitation services and describes the use of the framework in the field. The framework is structured in a way to map the facilitation service goals into evaluation objectives, metrics and measurements. The framework consists of a structure and a process which facilitators use to apply the framework to alternative scenarios. Finally, the framework is evaluated by experts in the field.

Keywords: Facilitation, Virtual Worlds, GQM, Assessment Framework, Team Collaboration

1. INTRODUCTION

Since the very early research on the concept of groups and communication most social scientists believe that to be a member of a group, individuals should be able to share their ideas, collaborate and structure their relationship in a specific way. With the development of technology, especially within the field of Information Systems (IS) and Information Communication Technology (ICT), groups have started to form a new way of interaction. Electronic communication has been used to enable teams to collaborate virtually. The classical face-to-face collaboration has changed into the form of a virtual relationship using the web. Virtual teams explain a complex method of interaction that defines a culturally diverse, geographically dispersed electronically communicating group [1].

The decision making groups have become larger and globally distributed. While team efforts can be beneficial to many organizations and be successful, group work is always facing challenges that can lead to unproductive processes and failed efforts. Many teams therefore rely on professional facilitators to design and conduct high value or high-risk tasks. [9][3].

A facilitator does not have any stake in the proposed system but does possess the required skills to guide the group towards the goal [3][9]. Facilitators coordinate different activities of virtual teams to ensure that members work together and follow up the sequence of activities according to the agenda of work [6]. Griffith et al. describe the facilitator’s role as one of “improving a group’s communication and information flow…to enhance the manner in which a group makes decisions without making those decisions for the group” [7].

The importance of virtual team facilitation is noted in the literature [42]. Authors describe major contrasts between face to face and virtual interaction and facilitation. Virtual team facilitation and virtual teamwork is “more than technological substitution for traditional face-to-face collaboration” because of “interpretative barrier” that is formed as a consequence of diversity among virtual team members [8][17]. There are many issues mentioned in the literature that act as barriers toward team facilitation [1]. Virtual teams suffer from the absence of a high-quality facilitation service [2] but sustained use of facilitation service is supposed to be limited [10]. Research has indicated the added value of facilitation. Authors such as Pauleen et al. [12] describe the problem with raising questions in terms of choosing the appropriate facilitation method in order to build desired relationship with virtual or dispersed team members. Hertel et al. believe that conflicts exist in group collaborations especially in virtual teams. These conflicts are believed to be rather due to misunderstandings and reduced communication instead of uninhibited aggressive acts. This issue indicates that timely detection and reaction to conflicts in virtual teams by facilitators defines another barrier into the facilitation of virtual collaborations [13].

The complexity of delivering an appropriate and effective facilitation services especially in virtual worlds makes it difficult to assess the facilitator’s performance in any facilitated session. Researchers have studied different approaches to make assessment...
frameworks in order to measure the quality of collaborations [14] [15]. Also there is criteria (i.e. knowledge, experience and demonstration of skills) [18] used to certify and standardize the facilitator’s competences but there is much less attention paid to the assessment of the facilitator’s performance in alternative scenarios.

In this paper we describe an assessment framework we have developed to assess the performance of the facilitator in virtual worlds. We deliver a framework which allows us to define metrics and measures in the context of facilitator’s goals and evaluation objectives. Further in the paper the framework is applied to a case scenario and the outcome of framework application is described by the experts in the field.

2. BACKGROUND
During the facilitation process a person referred to as the facilitator intervenes to help improve the way the group solves problems and makes decisions. Facilitators run the meeting and correct any deviation in group dynamics. Facilitator should notice if the group is steering away from its objectives and try to get the group back on track. The benefits of facilitation have been recognized in face-to-face as well as distributed meeting [35].

Guidelines required for facilitators to understand what tasks they should do in the meetings and how to perform those tasks. Facilitator’s competencies and roles address this issue and are described next.

2.1. Facilitator competences
The Facilitator Competency Model is an aid to understanding the facilitation values and what facilitators do. In order to be competent, facilitators should have requisite, adequate ability or qualities. To be more precise, competencies are defined as the knowledge and skills which are key to producing critical outputs. Basically, competency can be referred to as the ability to use skills and knowledge for effective results. [39]

Many researchers have studied facilitator’s competencies [40] [41]. Facilitator competency and skill has been investigated by researchers and members of the International Association of Facilitators (IAF) [18] as well as the Institute of Cultural Affairs (ICA) [16]. Facilitator competencies have been discussed by these groups at informal meetings, conferences, and workshops since 1990.

In this research we use the competency model developed by International Association of Facilitators (IAF™) and published in February 2003. The competencies reflected in the document and assessed in the Certification Process form the basic set of skills, knowledge, and behaviors that facilitators must have in order to be successful in a wide variety of environments [18]. Using this model, the areas of competency and skill will begin to define the profession of facilitation for facilitators and the participants. The competencies identified in this model are a result of strategic approaches and desired positive outcomes experienced by many facilitators and practitioners [39].

The IAF facilitator competency model identifies eighteen core facilitator competencies grouped into six categories. There are three competencies under each category. The skills, knowledge, or attitudes which illustrate the demonstration of each six category of competency are described as follows [18]:

- **Create Collaborative Client Relationships**
  Professional facilitators need to recognize and analyze the complex organizational culture, business, technologies, and issues and transfer them to different clients in a comprehensive way. Professional facilitators understand the value of knowledge and experience in the client organization and help them to have a clear view of this knowledge and experience together to meet their objectives [39].

- **Plan Appropriate Group Processes**
  A facilitator need to understand the variety of ways people process the given information. A facilitator should engage participants through their preferred modes of thinking and learning. [39].

- **Create and Sustain a Participatory Environment**
  A facilitator should be aware of the environment settings and take advantage of those settings in a way to improve the group collaboration. Increasing active listening, clarifying conflict resolution, consensus building among team members are all tasks that can be achieved by creating a participatory environment. A facilitator need to welcome the group diversity; honour individual differences, and develop a safe collaboration environment [39].

- **Guide Group to Appropriate and Useful Outcomes**
  The facilitator needs to take clear decision actions in order to be able to mix the contributions of each individual into a unified group process. The facilitator is always aware of the participants’ experiences, the effectiveness of processes, and the group dynamics [39].

- **Build and Maintain Professional Knowledge**
  The facilitator is required to have basic knowledge in disciplines related to each group facilitation process.
A facilitator needs to create and reinforce an open, positive, and participative environment [25] [29]. This issue becomes more complex when the sessions are facilitated dispersed or virtually over the net.

- **Technology**

Choosing the right technology to support collaborations is addressed in the literature many times [26] [28]. De Vreede et al believe that the facilitator should select and prepare appropriate technology and understand the technology and its capabilities. A facilitator needs to create comfort with and promotes understanding of the technology and technology outputs. [30] The appropriate technology chosen and used by facilitator can be a white board, flip chart, and blue tack or Group Support Systems (GSS) which are mostly used in dispersed and virtual collaborations [19].

- **Activities**

A facilitator needs to take care of the certain activities in a team i.e.: Set the stage, Keep group outcome focused, manage the meeting, Manage time, Evaluate and redesign the meeting process. A facilitator should take control of recording outcomes, Make summaries at appropriate points [29] [19].

- **Method**

A facilitator is an expert in terms of selection and transferring the execution of defined methodologies to participants. Methods such as RAD, JAD, QFD, Participant Design PD Workshops, ETHICS or CRC are different alternatives a facilitator considers [32].

- **Personal**

Facilitators develop self-awareness that they themselves are an important instrument in getting a group facilitated. This issue means they must also develop personal qualities in order to help groups achieve their purposes [18]. Demonstrating self-awareness, self-expression and flexibility can fit into this category [30]. A facilitator can increase the team effectiveness using some verbal techniques. Also using some non-verbal techniques such as having an appropriate level of voice or facial expressions can be useful methods to be used by facilitators [38].

- **Social**

A facilitator in a group should be aware of social aspects of team facilitation. As an example, he/she should be sensitive to verbal and non-verbal cues. Understanding cultural and learning differences, individual and socio-emotional problems, or identifying human communication problems are issues a facilitator need to consider [30]. Pitfalls of anonymity including the facilitation of social loafing (which refers to when members feel less accountable for their actions) and increased patterns of flaming other group

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### 2.1. The Seven Layer Model of Facilitation

The seven layer model of facilitation delivers a precise and comprehensive description of a facilitator’s role in a team. The facilitator operates at a number of different levels at the same time. However, these levels are not necessarily independent of each other and can be described as a number of levels built on the top of each other. There are a number of activities that the facilitator needs to engage in at each layer. These activities are actually carried out concurrently by the facilitator [5]. The seven layer model of facilitation provides a full picture of the role of the facilitator. The model is shown in the figure below [19]:

<table>
<thead>
<tr>
<th>Facilitator’s Competencies</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create Collaborative Client Relationship</td>
<td>Working Partnership Development</td>
</tr>
<tr>
<td>Planning Appropriate Group Processes</td>
<td>Selecting Clear Methods</td>
</tr>
<tr>
<td>Create and Sustain Participatory Environment</td>
<td>Preventing Time and Space to Support Group Processes</td>
</tr>
<tr>
<td>Guide Group to Appropriate and Satisfactory Outcome</td>
<td>Building Groups’ Self-awareness about the Task</td>
</tr>
<tr>
<td>Build and Maintain Professional Outcome</td>
<td>Managing A Range of Facilitation Methods</td>
</tr>
<tr>
<td>Model Positive Professional Attitude</td>
<td>Self-awareness and Self-Awareness</td>
</tr>
</tbody>
</table>

![Fig (1): IAF Facilitator’s Competencies and the Indicators [18]](image)

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### 2.2. The Seven-Layer Model of Facilitation

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<table>
<thead>
<tr>
<th>Facilitation Model Layers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political</td>
</tr>
<tr>
<td>Social</td>
</tr>
<tr>
<td>Personal</td>
</tr>
<tr>
<td>Method</td>
</tr>
<tr>
<td>Activities</td>
</tr>
<tr>
<td>Technology</td>
</tr>
<tr>
<td>Environment</td>
</tr>
</tbody>
</table>

![Fig (2): Seven-Layer Model of Facilitation [19]](image)
members as a consequence of anonymity should also be identified by the facilitators [27].

- **Political**

It is important for facilitators to understand and work in a committed way with political complexity [33]. Many authors such as Bentley have addressed political issues such as power importance and dependency in relationships between groups and facilitators. As an example, Bentley describes one of the ways in which a group is disempowered is to offer the group help in advance of them requesting it. Some other facts also mentioned about political role of the facilitator such as: development of learning and empowerment, understanding of the organizational experience, and the creation of new and different power relationships within society [34].

3. RESEARCH METHODOLOGY

The assessment framework was developed to bring together the two main concepts of facilitator roles and competencies. Competencies describe the skills, knowledge and behavioral aspects of the facilitator, while role describes the tasks the facilitator should perform in a meeting.

3.1. The Framework Structure

The framework structure is developed in two stages:
1) Stage-one: Formulating facilitator’s goals when performing in a meeting and delivering the service
2) Stage-Two: Translating the facilitator’s goals into measurements for evaluation purposes.

- **Stage-One: Formulating the facilitator’s goals**

Facilitator’s goals in a meeting can be described according to a logical combination of facilitator’s roles and competencies. The facilitator’s competencies describe how the facilitation tasks are performed while the roles describe what a facilitator does in a meeting. In this research a facilitator’s goal is determined according to his/her roles and competencies. A facilitator’s goal is satisfied when he/she can best use his/her competencies to perform the required role in the meeting [11]. Figure-3 positions the facilitator’s goals with respect to “what” he/she should contribute in meetings (roles) and “how” he/she performs to achieve them (competencies). Figure-3 illustrates a high-level overview of the framework in the form of a table. The table rows refer to facilitator’s competencies and the columns refer to the facilitator’s roles. Each cell inside the table is a logical combination between roles and the competencies and thus refers to a goal of the facilitator. Facilitator’s roles are derived from the seven layer model of the role of the facilitator in meetings [19] and the competencies are described by IAF [18]. Both concepts were reviewed in section-2 of this paper.

<table>
<thead>
<tr>
<th>How</th>
<th>What</th>
<th>Facilitator’s roles (What to perform)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency (x)</td>
<td>Goal (i)</td>
<td>Goal (j)</td>
</tr>
<tr>
<td>Competency (y)</td>
<td>Goal (j)</td>
<td>Goal (m)</td>
</tr>
<tr>
<td>Competency (z)</td>
<td>Goal (k)</td>
<td>Goal (n)</td>
</tr>
</tbody>
</table>

Fig (3) A High Level Overview of Framework Structure
Once the roles and competencies are positioned according to the above structure, the framework that refers to facilitator’s goals in a meeting is structured. However, at this certain stage the framework appears to be too large and contains conceptual overlaps between the rows and columns and therefore the framework needs to be refined in a way to minimize the number of overlaps. The framework structure was refined in three phases:

**Phase-1**: There are a number of tasks a facilitator does before, during and after the meeting [5]. The framework was refined in a way to only reflect on facilitator’s goals “during” the meeting.

**Phase-2**: It is believed that the participants’ perspective on facilitation provides a key insight into the success of a meeting [31] and the participants’ opinion is used in this research to evaluate the facilitator’s performance. The framework should only focus on tasks of the facilitator that can be evaluated from the “participants” point of view.

**Phase-3**: Some rows and columns of the table are conceptually overlapped so need to be removed e.g. “Selecting clear methods” was removed because of the conceptual overlap with the role listed in column named “method At the end of phase-3 the framework structure table is created and is illustrated in Figure-4.

<table>
<thead>
<tr>
<th>Competency</th>
<th>Role</th>
<th>Political</th>
<th>Social</th>
<th>Method</th>
<th>Person</th>
<th>Activity</th>
<th>Technology</th>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective multi task management</td>
<td>1</td>
<td>9</td>
<td>17</td>
<td>19</td>
<td>27</td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparing Time and Space to Support Group Processes</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Effective Participation and Interpersonal Communication Skills</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diversity Recognition and Encouraging Inclusion</td>
<td>3</td>
<td>11</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group Conflict Management</td>
<td>4</td>
<td>12</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ending Group Creativity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24</td>
<td>29</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Tailor Group IA Awareness about the Task</td>
<td>5</td>
<td>13</td>
<td>31</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Build the Group toGenerate and Decide Outcome</td>
<td>6</td>
<td>14</td>
<td>25</td>
<td>26</td>
<td>32</td>
<td>35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Act with Integrity</td>
<td>7</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Group Potencies and Model Facilitator</td>
<td>6</td>
<td>16</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fig (4) Facilitation Assessment Framework Structure

- **Stage-Two: Translating the goals into measurements**
There are a variety of methods for translating goals into measurements that have been described in the literature (i.e. “top-down” approaches [22], The Quality Function Deployment (QFD) [21], Goal-Question-Metric (GQM) [20] and Software Quality Metrics (SQM) [23]).

In this research the GQM [20] approach is used. Evidence shows sizeability and adaptability of GQM methods in different environments. GQM can be used for process quality measurements while being used for the purpose of product quality assessment, whereas SQM and QFD are limited to product quality [15]. GQM defines three levels: Conceptual (Goal), Operational (Questions) and Quantitative (Metric) level.

Using GQM at Conceptual Level a facilitator’s goal of performing in a meeting is defined using the table illustrated in figure-4. Operational Level a set of questions is used to characterize the way the achievement of a goal is going to be performed by the facilitator. At the Quantitative Level a set of collectable data is associated with every question in order to quantitatively answer them. Using GQM in this research there is always an association between data, metrics and goals.

The below example describes the facilitator’s goal (Cell-1 in Figure-4) which is in normal font and the question derived from the goal which is in italic. The metric is on the scale of 1 to 5 where 5 is the highest. The participants who attend the meeting would rate the facilitator on the mentioned scale.

1. To take care of political aspects (i.e. dealing with internal power struggles, preventing group domination, etc.) of multi-session meeting facilitation. How would you rate facilitator’s political skills (i.e. dealing with internal power struggles, preventing group domination, etc.) in managing the meeting sessions?

3.2 Framework Process for Application

The steps below should be followed by the facilitator to apply the assessment framework in a meeting or a workshop which he/she facilitates.

- **Before the meeting:** Using the database of evaluation questions, the facilitator selects the ones he/she would like to include in the assessment questionnaire. At this stage the following steps should be followed by the facilitator:
  - **Step (1) – Understanding the facilitation case scenario:**
  - **Step (2) – Highlighting the Facilitation Roles:** using the assessment framework table, reflect on and on each role (the columns). Identify the ones that are most important to the case in hand and try to document the highlighted roles for further reference in the next steps.

- **Step (3) – Highlighting the Competencies within each Role and Defining the Goal:** using the assessment framework table, for each chosen role identify the competencies of the facilitator that are most important in order to achieve that role. These competencies are shown within the table rows. By doing this you automatically select a cell inside the assessment framework table that refers to the goal of the facilitator.

- **Step (4) – Deriving the Questions from the List:** The number of the selected cell inside the table corresponds to the number of the question in the list.

- **Step (5) – Prepare the Final Assessment Sheet:** Prepare the final assessment sheet or the questionnaire to be presented to the participants in the meeting. Since the collaboration happens in a virtual world environment the questionnaire needs to be uploaded online.

- **During the meeting:** The facilitator administers the chosen questions to the participants in the meeting by referring them to the correct URL address where the assessment questions are uploaded.

- **After the meeting:** The facilitator analyses the data received from the participants to assess his/her performance in the meeting.

4. EXAMPLE OF A CASE

To evaluate the framework it was firstly decided to recruit 150 evaluators. The target evaluators were mainly expert facilitators who were certified by Association of Facilitators (IAF) [18] or they were experienced facilitators certified by International Cultural Affairs (ICA) [16]. The recruited evaluators were contacted through e-mail correspondence and were sent a survey which was previously designed and uploaded online. The evaluators were firstly asked to read a given facilitation scenario and then they had to apply the framework to the scenario. Twenty-three of the target evaluators responded to the survey and evaluated the framework. The scenario is described below:

The postgraduate administration department of a UK university has submitted a proposal to the Director of the School. The proposal suggests a need for change in the design and structure of the university website so that it can satisfy the needs of any potential user of the website. A group of stakeholders from different divisions in the university will attend a facilitated meeting to collaborate and come up with the right requirements to make the change. The stakeholders
collaborate in a Virtual Worlds environment called Second Life. All the stakeholders including the facilitator need to make their own "avatars". The facilitator should make sure to have an avatar with an appropriate appearance and take control of the avatar so that it behaves according to the correct Second Life code of conduct. The facilitator should also transfer the instructions to the participants in the meeting while guiding them through collaboration tasks. The stakeholders use collaboration tools in the virtual environment such as whiteboards, flip charts, video screens, etc. They need to be guided by the right facilitation method to know how to collaborate in a virtual environment and how to use the tools provided in this environment to achieve successful collaborations. The overall goal of the session is to generate a list of requirements for making changes to the website.

The evaluators were given the list of all 35 evaluation questions derived from the framework and they had to choose which ones they would like to document as their chosen evaluation questions that can be applied to the given case scenario. Once they applied the framework to the facilitation case scenario they were asked to answer three open questions and freely comment on the framework. The evaluators' response to the questions was qualitatively analyzed. The overall evaluators' opinion about the framework structure and application in terms of its usefulness is described and analysed in this section.

The strength of the framework

According to the results, most of the evaluators agreed that the framework is useful in assessing the facilitator. The evaluators believed that the framework is based on a strong theoretical background and important competencies of facilitators that are crucial to successful collaborations are taken into consideration. Also the framework has the potential to contribute to the evaluation of the facilitator’s effectiveness in meetings. The framework is appropriate to evaluate novice facilitators because it does focus on the right method, activities or technologies which are important in the beginning stage of being a facilitator. It is also appropriate for evaluating experienced facilitators since it focuses on some political awareness and rule setting in order to invoke effective participation which is important for more experienced facilitators.

Framework weaknesses

The assessment questions derived from the framework are repetitious and procedural. The framework lacks appropriate phrasing and language in terms of describing assessment questions for evaluating the facilitator and this can be a conflicting issue for the participants. Another point is that the phrasing of questions is more complex when it gets to the questions related to social and political aspects of facilitation.

Areas for further improvement

Although the framework was evaluated to be appropriate for novice facilitators it still requires more background information and explanation of key terms for in-experienced or novice facilitators. It is recommended that the facilitator’s behaviour is the key which covers all social and political issues of facilitation and that the social and political skills of the facilitator should not be directly referred to as criteria for evaluation. One overall question about the facilitator’s behaviour can be asked instead of asking the questions referring to social and political aspects of facilitation. A large number of evaluators believed that the framework needs to be improved and simplified in terms of phrasing and structuring the evaluation questions. Another option is to provide a glossary of terms. A further comment was to remove the overlaps; for example those references to facilitator’s skills might overlap with social and political aspects of facilitation.

Some evaluators believed that a number of questions should be added to the list of assessment questions. For example, questions focusing on psychological and metaphysical aspects of facilitation should be considered; and it should be questioned whether or not the facilitator has been successful in making a safe space for collaboration or how well the facilitator could manage to make the group process unfold. It is important that the focus is on the meeting outcome since in business a focus on outcomes is essential and also achieving the meeting’s aims means that the facilitator has performed his/her job appropriately. It was also recommended to add some open questions at the end of the questionnaire, such as: “What could the facilitator have done to make the overall meeting more successful?” and “How well has the facilitator performed to meet the meeting aims?”

5. Discussion

Using the framework, the facilitator’s performance is meaningfully assessed. However there is still future work to further improve the structure and the application of the framework. Future research can be focused on simplifying the framework’s structure and application. The variables we defined to build the assessment matrix are limited to facilitator’s roles and his/her competences which we found in the literature. More supporting theories and evidence is required to actually certify the fact that no other variables exist in the literature which affect the quality of facilitation services. Moreover, in order to have better evaluation
of the framework, more attention can be paid into quality attributes such as reusability, usability and adaptability [24]. Future investigation might involve experimental work using real-life facilitation scenarios and consider comments and arguments from real users and practitioners, i.e. collaborating stakeholders or facilitators. Long-term future work includes the use of data-mining techniques to further develop the framework, enabling the facilitation assessment criteria to be stored in a dataset. Criteria for assessment would be chosen by facilitators who wish to evaluate themselves in alternative facilitation case scenarios. Data-mining techniques help to uncover patterns in data stored in the dataset. Next, machine learning techniques can be used to eventually develop a business intelligence tool for the purpose of evaluation different facilitation services.

6. CONCLUSION

Developing maps, matrices, and models of facilitation expertise, roles and competences is an initial stage toward assessing a facilitated session and the level of quality of these meetings. In this research both facilitation roles and competences were used to assess the facilitated services. The competency model which was used as a part of the assessment framework captured collective energy and work of a variety of individuals and has got the potential applications in the development of standards for facilitation competency, certification, and recognition of excellence among practitioners. Clearly, these qualities of the facilitation competency model that are described by Pierce et al. [39] make it as an appropriate structure to be used as a part of the facilitation service assessment framework. Besides the assessment framework adds a new dimension- the seven layer model of the role of the facilitator- to the IAF facilitation competencies that has been used over years to certify facilitators. Therefore the assessment framework introduces a more complete, in-depth and procedural framework to evaluate facilitators.

The goal oriented evaluation framework includes the system goals, evaluation objectives, metrics and measures. As a result, there are a number of benefits expected from the use of the framework: 1) Assessment of facilitation service quality with respect to both facilitator’s role and competences that is delivered in any environment, 2) Assessment outcome data will be more efficiently and effectively tied to the goals since the measurement data are tied to the facilitation service main goals and objectives 3) Data collection efforts are focused since the required data elements are specified 4) Defining the level which different services could satisfy the facilitation service goals and recognizing the strength and weaknesses of these services 5) Strategy making by designers who seek making change in facilitation services for future improvements becomes easier to achieve. These benefits can be realized by using the framework in assessing any facilitation service.

7. REFERENCES

[29] M. den Hengst, and M. Adkins; “The Demand Rate of Facilitation Functions” Proceedings of the 38th Hawaii International Conference on System Sciences; 2005
[29] M. den Hengst, and M. Adkins; “The Demand Rate of Facilitation Functions” Proceedings of the 38th Hawaii International Conference on System Sciences; 2005