Abstract

This paper explains the method followed for assessing e-Government projects under CSI-Nihilent e-Governance Awards 2007-08. This is built on the learning from the earlier experience of Ashok Agarwal and his team (see Ashok Agarwal et al. (2007)) in evaluating e-Government projects for CSI-Nihilent e-Governance Awards 2005-06 and the previous attempt by the team for CSI-Nihilent e-Governance Awards 2006-07.

The exercise of assessing e-Government Projects for the awards is a great experience, where a great deal of learning by doing happens. The framework for evaluation adopted in the previous year awards exercise has been changed to accommodate an easier process for input giving from the project owners’ and a greater scope for self-assessment has been provided for. The meta-theoretic thinking follows the thought process of last year’s assessment process. For the benefit of the reader, this paper contains that as well. The assessment framework is based on the research in progress by the authors.

1. Introduction

Electronic Governance (e-Governance) has received a tremendous fillip in India since the Govt. of India announced National e-Governance Plan (NeGP). Significant amount of money is being pumped into making NeGP a reality, towards which each of the states of India has started making its own e-Gov Roadmaps. A number of e-Government Projects are being taken up at various levels. It therefore becomes imperative to be able to make reasonable means of judging whether the projects taken up are on course to achieve (or have achieved) the objective for which they were taken up. If the projects are on track to achieve the objects, what is it that can be learnt from them, and if they are not on track, then what kind of changes need to be made for the necessary course correction, assuming the project is still underway. If the project is already shelved, it becomes a source for learning for what needs to be avoided in the process of conceiving, designing as well as implementing the e-Gov projects. It is with this interest that the Dept. of IT, Govt. of India, with the help of IIM-A and NISG, worked out the E-governance Assessment Framework (EAF 2.0).

*This chapter is re-produced with permission from the book "Transforming Government, eGovernance Initiatives in India.", Editors: RK Bagga, Piyush Gupta, Published by The Icfai University Press, 2009
While one can say that the EAF 2.0 acts as a good beginning to start moving towards having a structured manner of Assessment, it was well acknowledged by the authors who made EAF 2.0 that it needs improvement. Though this remains the broad concern for a thorough research, our interest currently has been to find ways and means to come up with a good project assessment framework for the CSI-Nihilent e-Governance Awards. The assessment framework for the year 2006-07 was drafted with an approach which centered around “Results-Enablers” (the details of which are also part of this paper), and this year, the approach has been continued but with an implementation that is different from the previous one, in some respects.

For the previous years’ awards, an improvement made is to have nominations through an online form. The design of the form was inspired by the models followed in CII-Exim Bank Award for Business Excellence which works using a Results-Enablers based classification of the criterion for evaluating businesses and from the internationally well-known Stockholm Challenge. The previous year had three stages of inputs received from the project owners’ nominating their projects – 1) Filling an online form that would be used for preliminary screening; 2) Data submitted for “Results-Enablers”; 3) A paper which went into the creation of a Compendium on e-Governance Initiatives edited by the authors. This is cumbersome and it is felt that the relevant data can be captured in one go, which is what is the design of the form this year, which asks the nominees to fill the data for questions in a manner where the collection of the answers of all the questions shall make a paper on the project concerned. This data was split into relevant Indicators of Results and Enablers and is used for evaluation.

Thomas Saaty’s Analytic Hierarchy Process (AHP) is applied on two hierarchies – one each for Results and Enablers. The implementation strategy used is to the previous year’s approach and is also explained here, in this paper with a running example. This book also contains the data received from the nominations and is compiled as papers in the rest of the chapters.

2. Requirement of Frameworks for Assessment under Constraints

As mentioned in the previous section, the increased focus on realizing the NeGP, where there is a huge outlay of over Rs. 35000 crores over the next span of years, emphasizes the need for having frameworks that provide accurate appraisals about the e-Government projects, to avoid diversion of scarce resources to unfruitful directions. Further, since replication of similar kinds of projects has to be undertaken across the country, it calls for a greater need for the assessment frameworks that help one to learn the factors resulting in the success or a failure of a project. This also provides for a feedback to the stakeholders involved in the project regarding the health of the project.

Assessment exercise involves a tedious process if the intention is to assess an e-Government project thoroughly, meeting the desired objectives, like: the success as defined by the extent to which it achieved the purpose it was designed, whether the project is replicable or not, among others. This is because each of the e-Government
projects involves a number of stakeholders from whose perspectives the project needs to be looked at, and further it involves a number of parameters and attributes which adds to the amount of effort required in order to make for a reasonably comprehensive assessment. With this in mind, a detailed assessment (DA) framework was envisaged by the EAF 2.0. In the EAF 2.0, the e-Gov projects with large outlay are characterized into categories - G2C (U/R), G2B, and G2G – in order to make way for separate and customized assessment frameworks for the apparently different motivations that the projects in each of these categories have. So, for a comprehensive assessment as per the EAF 2.0, there were frameworks given for the each of the categories, like the DA for G2C (U/R) among others.

It may not necessarily be required to make a DA of projects in all cases, and it may not always be possible to have sufficient resources to do a DA – so there was another tier of assessment in the EAF 2.0 – a Summary Assessment (SA). SA is done using a subset of assessment parameters and attributes from the DA. The SA is to be conducted using data collected from secondary sources, which help form a base for evaluation. Further, it suggested that inputs from small representative sample involving all the stakeholders of the eGov project be taken, in order to arrive at the desired outcome, which is to provide “broad insights into the ground realities of the project and provide inputs to sharpen the understanding of the project objectives, identification of stakeholders, control groups, affected groups, etc., and help us refine the data collection instruments.” The point of interest as far as SA as envisaged by the EAF 2.0 is that it could be completed within 2-5 days per project, whereas a DA would require around 4-6 weeks per project.

Now, consider the case that there are around 100 e-Gov projects across the country to be evaluated and rated. The time allocated for assessment exercise is around 4 months and assuming that a team of 10 people are involved apart from some more people helping them – it is clear that the format to be used, given the EAF 2.0, would be some kind of a SA. In such a situation a DA is not possible within the said constraints. Further, if there is another constraint that there is not a possibility of taking the views of the representative sample of all the stakeholders and one is to make an evaluation out of the information and inputs from only one of the stakeholders – and that too the project owners – this presents a tricky position. An SA should be so designed so that its results are not in contradiction to the results of a DA. Slight deviations may be held acceptable.

Therefore, there is a need for assessment frameworks which provide tractable means of assessment that gives an “acceptable” assessment specific to the features chosen to be assessed in spite of constraints such as the ones mentioned above. It is to be noted that while the original problem of assessment itself is not studied in detail and there is a lot that requires to be done – we would like to posit that it makes sense to look at this problem of assessment under constraints because that is a matter of reality faced by the teams which work on giving Annual Awards for e-Gov projects. Any progress in arriving at what is “acceptable” above would be desirable. This shall be obtained from the learning from the experience. CSI-Nihilent e-Gov Awards offer a nice platform to learn from the experience of assessing e-Gov projects.
3. Types of Assessment

Assessment of e-Gov projects can be of various types. Each assessment begins with an outline as to the intent behind the assessment. It is this intent which results in the differences in the kinds of assessment. The type of assessments which could be visualized can be of a variety of forms – and most of which could be in terms of different descriptions to the same kind of assessment (in reality) – but the manner in which one puts it – makes the sense of assessment different – hence we have mentioned them separately.

One could think of different assessments depending on the extent of detail one would go in order to assess, as we see in the differentiation between DA and SA in the EAF 2.0. On the other hand, difference in assessment could be attributed to the manner of going about assessing – that is to say, assessment could be done by the use of questionnaires, through statistical methods, or use historical analyses or by identifying best practices or a combination of all these methods. Assessments could be, as shall be detailed in the next section, in terms of the manner in which various stakeholders look at the project, or consider a combination of all or a section of the stakeholders. Assessments could be different in terms of who is doing the assessment – one could have a self-assessment done by the project implementation team, or through an independent third-party assessment or a self-assessment done using the framework suggested by a third-party. Assessments could be different in terms of the aspect of the project that is being assessed – one may assess – say, the service component of the project, or from the overall impact that the project has resulted in, or solely from an economic perspective – which is more on the lines of return on investment or a multi-criteria approach which factors in each of these aspects.

Assessment of e-Gov projects might have to consider some of the aspects which are external to the projects but which are extremely important for the success of the projects – such as the e-Readiness component. In a sense, assessment of an e-Gov project should give sufficient weight to the e-Readiness factor as well, without which it may not make much sense to assess the project. This becomes necessary in order to identify the exact causes of successes or failures of a particular project. This brings another aspect which differentiates an assessment – the reason as to why an assessment is being done – one could do an assessment for the sake of identifying how the project could be replicated in a different environment, or one could do an assessment in terms of identifying whether the project is worth pursuing or not.

Since e-Gov projects come in various flavors, assessment cannot be in one-size-fits-all mode. A uniform assessment framework cannot be applied to a new project, say 6 months old and a 2 year old project. Both would have different dimensions, even if it has to be assessed from the same stake holder’s perspective. At the same time a uniform framework will not be able to assess G2C, G2B, G2G and G2E projects along with the Urban and Rural implementation dimensions. As such assessment needs to done differently, keeping the domain specific indicators and attributes into consideration.
4. Study of Existing Frameworks

The team as part of another research work, studied various assessment models, however for purpose of this paper three are discussed here, viz. CSI-Nihilent eGov Awards 2005-06, Stockholm Challenge and CII-Exim Bank Award for Business Excellence.

The approach used for the CSI award for previous year used a framework of AHP (see Thomas L Saaty (2005)). AHP is a powerful and flexible decision making process to help in setting up priorities and arrive at best decision where both qualitative and quantitative aspects are needed to be considered. Specific parameters have been finalized using EAF 2.0 as a base and suitably modified based on the feedback received and learning achieved during the assessments done earlier. The following observations were found with respect to the existing model are listed here:

- Goal oriented approach not followed while factors for assessment are chosen.
- Few of the factors are not measurable and are based on perception of the assessor.
- Few of the sub-factors require the end beneficiary consultation; otherwise it only gives project owner perspective.
- The assessment is constrained by time & resources to capture all aspects of eGov project and carry out detailed assessment. Therefore the manner of assessment does not justify ranking.
- Scope for objective self assessment was not there.
- Most of the data collected was only in form of supporting documents, which made it difficult to extract relevant information.
- There needs to be structured format for collecting data from the project applicants, so that maximum data is captured from original sources.

Stockholm Challenge is an internationally reputed ICT awards for best ICT applications for people and society. They follow a nomination procedure for the Awards that make use of online forms with questionnaires which are to be filled. The nominations are then evaluated by a distinguished set of experts from various domains from across the globe with dedicated set of evaluators for each project category. One of the significant aspects here at Stockholm Challenge is that they assess only those projects that “show measurable outcomes and impact”. The jurors look at criteria such as the empowerment of people by their increased role in democratic governance, creation of equal opportunity, sustainability of the project, impact on the project target groups, promotion of entrepreneurship by the project, and the no. of features that inspire replication. An added criterion for the latest awards is the presence of multi-stakeholder partnerships and their successful running. The nomination form asks for basic information about the project by requesting for targeted information which shall be processed to shortlist a set of projects for further scrutiny.

CII-Exim Bank Award for Business Excellence has a Business Excellence Model which is based on universally accepted standards and practices that are found in the European Quality Award, US Malcom Baldrige National Quality Award, Japan Quality Award and Australian Quality Award. The model conveys that excellent Results with respect to
Performance, customers, people and society are achieved through Enablers - leadership, policy & strategy, people, partnerships & resources, and processes. The model has the logic known as RADAR (Results, Approach, Deployment, Assessment & Review) of the EFQM Model at its heart. This logic expects that once the required Results are determined through the policy and Strategy, one has to plan and develop approaches to deliver the Results and deliver them by deploying the approaches, following which one has to assess and review the approaches as well as their deployment to learn from what more can be done and in the process determine the Results for the next cycle.

5. Approach used for CSI-Nihilent eGovernance Awards 2007-08

Assessment Framework for the CSI-Nihilent e-Gov Awards 2007-08 follows the lead of previous year’s framework which is primarily inspired from few of the major existing models for awards and assessment, such as CII-Exim Bank Awards for Business Excellence, Stockholm Challenge Awards, UK e-Government National Awards, e-Governance Assessment Framework (EAF Version 2.0). The Assessment Framework builds on the framework worked out for the CSI-Nihilent Awards 2005-06 which is detailed in Ashok Agarwal et al(2007). The assessment is done in the following sequence in four steps as detailed in this section:

Submission of project information through an online form → Clubbing the relevant data into various Indicators under Results and Enablers → Preliminary Scoring for the Data submitted for screening projects → Field visits to short listed projects → Scoring of Result-Enabler indicators after field visits → Project Presentations of further shortlisted projects → Consolidation and final rankings based on the Result-Enablers scoring before and after field visits + Presentation scores

5. 1 Step I

The first step is the data collection part, where a website was created to provide for online submission of data for nominations. All projects were to be submitted through an online form provided with a questionnaire. The questionnaire is inspired by Stockholm Challenge, which tries to incorporate some of the values that we have stressed on – in terms of providing a platform for self-assessment for the project owners who nominate their project. It also has a self-assessment statement which requires to be submitted as to why this project is worth receiving an award. The Online Form which was used for the data collection is given in the Appendix A. The Online Form is divided into three parts – Part A: Result Indicators; Part B: Enabler Indicators; Part C: Self Assessment Statement.

The online form limits the answers provided for each of the question by setting an upper limit on the number of characters within which the answer is to be provided. This results in condensed input on the project as a part of nomination and it puts the onus on the nominee to provide with the relevant data so as to go through the Step I of evaluation. It also gives a way of considering the completeness of information provided by the nominee, thereby eliminating entries of all those projects which have not taken sufficient interest in filling the online form. This way of extracting just the relevant information for
evaluation has been a recommendation provided from the experience of work on the previous year awards. This year, the attempt has been to provide with a form which caters to capture the relevant information regarding the project in a single shot.

Once the data is received, there is a preliminary scoring of the data received on the basis of interest shown in filling the form, the correctness and the relevance of the data provided to the questions posed. This method is definitely not fool proof to capture only the good projects from the list of nominations. There were definitely cases where a couple of projects were found to be below-par and have become part of the second phase evaluation of the assessment exercise. But the fact that majority of the projects thus selected for phase II evaluation makes us conclude it to be a good way to begin with – to bring down the total number of projects for greater scrutiny from the total number of nominated projects.

The rest of the chapters in this book give a glimpse of the short listed project information submitted as part of the project nominations. For the purpose of the readers of this book, the information under the Result and Enabler indicators has been taken.

5.2 Step II

In the second step of assessment, the data submitted to the questions under Part A and Part B of the Online Form have been regrouped into four Results and four Enablers each. This Results-Enablers approach is inspired by the model used for the CII-Exim Bank Awards for Business Excellence. In step II, evaluation of the information provided was done, independent of verification of the ground situation about the project. Before we elaborate on this, we give the Results-Enablers approach first.
There are significant deviations from the manner in which we shall be using the Results and Enablers as opposed to their use in the model of CII-Exim Bank Awards for Business Excellence. To begin with RADAR logic does not apply to the e-Government projects as most projects do not undergo the process specified, to provide for ways and means to have a well-defined assessment procedure, and for review of what has happened. The idea of Results as what is achieved and Enablers as what is done to achieve Results is the core idea which is taken. This aspect is combined with the plan to apply AHP on hierarchies built on Results’ and Enablers’ Indicators.

The notion of a division on the lines of Results and Enablers gives a meta-theoretic justification of the kind of indicators chosen, e.g. in the EAF 2.0, for evaluating e-Gov projects which otherwise may not be easily justified, other than by empirical or other experiential means. Though it might be difficult in the beginning to get a global common picture of seeing things in terms of Results and Enablers, we feel that it inculcates a structured way of looking at indicators and their attributes, so as to move towards a better assessment framework. This method may not be sufficient to answer all the concerns and issues pointed out in an earlier section of this paper, but could act as a good beginning for a model that builds on earlier framework. The empirical reason to feel that Results and Enablers shall be a beginning is that viewing the various aspects required to be assessed as the Results or expectations of each of the stakeholders’ from the project and what is to be done to achieve those results as the Enablers can form a strong base for assessment. In the evaluation – both what has been done, and what is the outcome of what has been done is of equal importance with respect to the view on the project from the perspective of the various stakeholders. Hence, scores for both Results and Enablers as achieved by a project are evaluated out of 100 and added up to get the final score for a project. That is to say, that equal weights are given to Results and Enablers. Further, as we stated earlier, as opposed to the approach used in the previous years’ awards, the data collection process for project evaluation has changed this year and by having a Presentation from the user, we intend to allow for a greater scope for self-assessment as the Presentations are expected to justify the Self-Assessment statement.

An AHP framework with separate hierarchies for Results and Enablers has been identified and the scores are weighed separately and added up to get final scores. The hierarchical frameworks for Results and Enablers are then summed up in the end to arrive at the final scores to arrive at the standings of the various projects. The process of implementing the AHP on Results and Enablers is similar to what has been explained in Ashok Agarwal et al (2007).

The Result and Enabler indicators respectively were further re-classified into four sets of attributes for the purpose of applying the AHP model.

**Attribute sets under Result indicator**

1. Goals and Objectives
2. Beneficiaries, Services Provided, Geographical Spread, Project Milestones/Roadmap
3. Time & Cost Savings
4. Project Outcomes, Lessons learnt, Scope for Replication

**Attribute sets under Enabler indicator**
1. Implementation Model - Technologies, Project Financials/Sustainability.
2. Capacity Building, change management, project ownership by the departments, Leadership, Governance structure, Project Teams (dedicated full time)
3. Process or legal Reforms
4. User Feedback mechanism, Project Documentation, Implementation Challenges

The hierarchies for Results and Enablers are given in the figures Figure 1 and Figure 2 below. The explanation of each of the Indicators of Results and Enablers is given in the Online Form in Appendix A.

**Figure 1**

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Results

Goals & Objectives  Project Specs*  Time & Cost Savings  Project Outcomes, Lessons, Replication
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* Project Specs include Spread of Service Users, Services Provided, Geographical Spread, Project Timelines/ Milestones

**Figure 2**

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Enablers

Implementation Model -Technologies, Project, Financial Sustainability  Capacity Building & Project Teams / Leadership  Process Reforms  Feedback & Project Documentation Implementation Challenges
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One important consideration to be seen is that the Enablers cited here do not talk of e-Readiness quotient. E-Readiness could be looked at as a first level enabler for the
conception of projects to be built over it, whereas the Enablers considered here are with respect to and specific to the success of the project concerned.

As has been noted earlier, the attempt has been to consider a set of *measurable attributes* and do the evaluation. Unlike the previous years’ awards, the attributes for each of the Indicator under Results and Enablers have not been fixed for this year’s evaluation. In some cases for the above indicators, such as Time & Cost Savings, one may consider Time Savings and Cost Savings as two different attributes, but that may not be so for all the Indicators, e.g. Process Reforms. Last year, we tried fixing the attributes, with the knowledge that they may not capture all the different dimensions of the project concerned and by deliberately narrowing down the scope of assessment. This year, by not doing so, we wanted to see the difference in terms of the data that shall be submitted for assessment. By not giving the attributes, and leaving it at the Indicators level, there is a scope now for the project owner to submit the various interesting aspects of the project concerned under the various broad heads of Indicators. This year’s approach may be, in a sense termed as hybrid approach, for we can indicate attributes considered, but they are not treated as such, as part of the hierarchies for the Results and Enablers as is evident from the Figures 1 and 2.

The interpretation of what Results are and what Enablers are with respect to a particular project has not been fixed, and was left open for interpretation. This has resulted in information received on the Results and Enablers from the project owners which is of varying degrees of satisfaction. Sometimes, it turns out that the information provided may not be appealing, but the actually project is, and this could also be attributed to the fact that the official providing the information has not perceived the Results and Enablers as is suitable to the project properly in the case. To the extent possible, we are trying to explore ways to make the perception of Results and Enablers simpler. This year’s attempt at not going down to the attributes may be considered one such attempt. It is a genuine possibility that the information provided may not capture the imagination of the expert evaluating it, for - the expert cannot comprehend the reason why a provided piece of information was cited as a Result or an Enabler.

5.3 Step III

Step III of evaluation was a Field Visit to the projects by a team of experts to validate the information provided by the project owners and score them on the Results and Enablers.

For the reasons provided in the previous section, the Results and Enablers model requires active intervention of the experts to provide for an accurate assessment of the project, despite the fact that the project owner may not be able to put things in perspective about the Results and Enablers or the case where the information provided itself is not easily comprehensible. In order to simply the evaluation process during the field visit, the re-classified Result and Enabler indicators used in Step II were used. The list is given below with a brief explanation of the expectation.

1) Goals and Objectives
(Preferably, measurable/time bound goals. What are the success factors for the project?)

2) Beneficiaries, Services Provided, Geographical Spread, Project Milestones/Roadmap

3) Time & Cost Savings
   (All savings are with respect to the end users and to Government in delivering the said services in the project.)

4) Implementation Model
   (Technologies, Project Financials/Sustainability, Budget and recurring expenses)

5) Capacity Building, change management, project ownership by the departments, Leadership, Governance structure, Project Teams (dedicated full time)

6) Process or legal Reforms
   (Reduction in the process steps for delivering particular service from the previous process. Legal reforms brought in, maybe through Government orders or change in Act’s)

7) User Feedback mechanism, Project Documentation, Implementation Challenges

8) Project Outcomes, Lessons learnt, Scope for Replication

Though the process of Field Visit was initially thought to be a validation process of the information received for Results and Enablers, it is much more than that, as the experts’ get to interact as well as directly meet the important stakeholders of the project and find out their views on the projects. The experts may have to exercise their imagination and judgment to capture the project’s worth within the framework.

The scoring for the Results and Enablers, was by applying AHP, and shall be discussed in the next section. The AHP implementation strategy, as mentioned earlier, is similar to that detailed by Ashok Agarwal et al.

5.4 Step IV

Final Step in evaluation is that of Project Presentations of the projects which are short-listed following the scores obtained in the Steps II and III including the score for the Self-Assessment statement.

For the project presentation, the scoring is done on the Results-Enablers Indicators as well as that of the Self-Assessment statement that shall be defended by the project owners during their presentation. The scoring of Self Assessment Statement is done straight out of 25 points in each case.
6. Implementation Strategy for AHP

Having formed the respective hierarchies for Results and Enablers, a team of experts were requested to assign weights to each of the indicators of Results and Enablers out of 100. This was factored down to 20 to suit the scale which was prepared by Ashok Agarwal et al. for scoring in AHP.

Using this, the relative weights table of AHP is obtained, following which normalization is done on the table by dividing each cell by the sum of the elements of the column in which they are present. Then the weights are obtained by averaging out each row of the normalized matrix.

Having obtained the weights for the Indicators of Results and Enablers, scoring of each project is done by asking the experts to rate the relevant project with respect to the data submitted for the corresponding Indicator. This scoring was done by using grading scheme where the grading is as follows:

- A+ = 10 pts; A = 8 pts; B+ = 6 pts; B = 4 pts; C = 2 pts.

Once the letter grades are received, they are converted to the corresponding points and then each of these scores of the indicators is multiplied by the weights for the corresponding indicators obtained by applying AHP to get a score for each of Results and Enablers out of 100. Sum of the scores of Results and Enablers is taken and factored down to 100 to get the final scores for the project on applying the Results and Enablers framework.

7. Illustration of AHP Scoring Method

Initially the experts are asked to give weights to each of the Indicators of Results and Enablers out of 100.

*Figure 3 Sample Weights for Results*
Corresponding to the scores received (scaled down to 20), the following pair-wise comparison among the Indicators of Results is obtained; this is done so as to use the same measuring scale as was used for AHP implementation used the previous year. The weights are computed and are shown towards the right. The manner in which this is come about is shown below.

The pair-wise comparison of indicators is brought out based on the measuring scale. This is computed by taking the scores given by the experts (out of 20) and by taking differences of between them two at a time starting from the first indicator – Goals and Objectives.

A table of differences is computed, which is later transformed to the table with pair-wise comparison of indicators by changing the differences to the corresponding weights as per the table in next page.

The measuring scale is as per the following table 1, where for each of the difference of values from -20 to 20 Corresponding weight is given.

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* Project Specs include Spread of Service Users, Services Provided, Geographical Spread, Project Timelines/Milestones
### Table 2 Pair-wise Comparison among Results-Indicators

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</tr>
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<td>Project Outcomes, Lessons learnt, Replication</td>
<td>$\frac{1}{4}$</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

From the above matrix, we obtain a normalized matrix by dividing each element of the above matrix by the sum of the elements of the column to which they belong.

### Table 3 Normalized Matrix for the Results-Indicators and Weights

<table>
<thead>
<tr>
<th></th>
<th>Goals &amp; Objectives</th>
<th>Project Specs</th>
<th>Time &amp; Cost Savings</th>
<th>Project Outcomes, Lessons learnt, Replication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goals &amp; Objectives</td>
<td>0.571429</td>
<td>0.571429</td>
<td>0.571429</td>
<td>0.571429</td>
</tr>
<tr>
<td>Project Specs</td>
<td>0.142857</td>
<td>0.142857</td>
<td>0.142857</td>
<td>0.142857</td>
</tr>
<tr>
<td>Time &amp; Cost Savings</td>
<td>0.142857</td>
<td>0.142857</td>
<td>0.142857</td>
<td>0.142857</td>
</tr>
<tr>
<td>Project Outcomes, Lessons learnt, Replication</td>
<td>0.142857</td>
<td>0.142857</td>
<td>0.142857</td>
<td>0.142857</td>
</tr>
</tbody>
</table>

The corresponding weights of each of the Indicators for Results are given in the last column in the above matrix. The weights are an average of the values of each row of the Normalized matrix.
We now repeat the same procedure with the Enablers to give a glimpse of how the sample weights look.

*Figure 4 Sample Weights for Enablers*

**Weightages for Indicators of Enablers**

<table>
<thead>
<tr>
<th>SI. No</th>
<th>Indicators</th>
<th>For 100</th>
<th>For 20</th>
<th>Weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Implementation Model - Technologies, Project Financials/Sustainability</td>
<td>25</td>
<td>5</td>
<td>20.54101</td>
</tr>
<tr>
<td>2</td>
<td>Capacity Building &amp; Project</td>
<td>25</td>
<td>5</td>
<td>20.54101</td>
</tr>
<tr>
<td>3</td>
<td>Process Reforms</td>
<td>15</td>
<td>3</td>
<td>8.666667</td>
</tr>
<tr>
<td>4</td>
<td>Feedback &amp; Project Documentation +</td>
<td>35</td>
<td>7</td>
<td>90.25939</td>
</tr>
</tbody>
</table>

Current Sum: 100, 20

Sum Should Be: 100, 20

Corresponding to the scores received (scaled down to 20), Table 4 shows the pair-wise comparison among the Indicators of Enablers.

*Table 4 Pair-wise Comparison among Enablers-Indicators*

<table>
<thead>
<tr>
<th></th>
<th>Implementation Model - Technologies, Project Financials/Sustainability</th>
<th>Capacity Building &amp; Project Teams / Leadership</th>
<th>Process Reform s</th>
<th>Feedback &amp; Project Documentation + Implementation Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation Model - Technologies, Project Financials/Sustainability</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1/3</td>
</tr>
<tr>
<td>Capacity Building &amp; Project Teams / Leadership</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1/3</td>
</tr>
<tr>
<td>Process Reforms</td>
<td>1/3</td>
<td>1/3</td>
<td>1</td>
<td>1/4</td>
</tr>
<tr>
<td>Feedback &amp; Project Documentation +</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>
From the above matrix, we obtain a normalized matrix by dividing each element of the above matrix by the sum of the elements of the column to which they belong.

Table 5 Normalized Matrix for the Enablers-Indicators and Weights

<table>
<thead>
<tr>
<th>Implementation Model - Technologies, Project Financials/Sustainability</th>
<th>0.1875</th>
<th>0.1875</th>
<th>0.272727</th>
<th>0.173913</th>
<th>20.541</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity Building &amp; Project Teams / Leadership</td>
<td>0.1875</td>
<td>0.1875</td>
<td>0.272727</td>
<td>0.173913</td>
<td>20.541</td>
</tr>
<tr>
<td>Process Reforms</td>
<td>0.0625</td>
<td>0.0625</td>
<td>0.090909</td>
<td>0.130435</td>
<td>8.6586</td>
</tr>
<tr>
<td>Feedback &amp; Project Documentation + Implementation Challenges</td>
<td>0.5625</td>
<td>0.5625</td>
<td>0.363636</td>
<td>0.521739</td>
<td>50.2594</td>
</tr>
</tbody>
</table>

The corresponding weights of each of the Indicators for Enablers are given in the last column in the above matrix. The weights are an average of the values of each row of the Normalized matrix.

Once the scores are received, the weighted scores for each of the Indicators of Results and Enablers are obtained. Note that the scores arrived for each of Results and Enablers’ Indicators is by applying the corresponding weights for the points given to them and by going up the hierarchy created for each of them. (See Fig.1 & 2)

The overall weighted sum of Results and Enablers is added to get the final scores on applying the Analytic Hierarchy Process (AHP). This score forms the maximum share of the final scoring.

8. Final Scoring

The final scores of the projects assessed was made by giving major weight to the Results and Enablers scores before and after the Field Visit, and Project Presentations and a fixed weight for the Self-Assessment statement before and after project presentation.

The final weighs are as follows:
Table 6 Weights applied for Overall Project Assessment.

<table>
<thead>
<tr>
<th>Category</th>
<th>Nomination Details in Online Form</th>
<th>Field Visits</th>
<th>Presentations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weightage</td>
<td>30</td>
<td>35</td>
<td>35</td>
</tr>
</tbody>
</table>

The final scores were arrived at by taking a sum of the 3 set of weightages.

Having obtained the final scores, the scores were extensively deliberated over two days meeting amongst the Selection Committee members and a consensus was reached before finalizing on the award winners.

An important point that was thought of, but could not be done in the process of the assessment exercise was to normalize the scores provided by different experts. Owing to practical constraints, different experts have visited different projects and their scoring patterns were not the same. It is suggested that during field visits, having one expert common to all projects would be a suitable way for ensuring there is no skewed scoring, as that can help in normalizing the scores given by different experts.

This concludes the overall assessment process adopted for the CSI-Nihilent e-Governance Awards 2007-08.

9. Concluding Remarks

Having set out with a broad set of meta-theoretic considerations and following the previous years’ CSI-Nihilent e-Governance Award experiences, we have tried to work towards addressing some of the issues in the e-Gov project assessment exercise. Here we shared our experiences on the project assessment methodology adopted for the CSI-Nihilent e-Governance Awards 2007-08.

Given the constraints of man-power, time, as well as financial considerations, we had to lace our effort with a number of decisions which were not in line with our initial set of considerations. One definite positive point that we felt, and is as well being acknowledged by some of the project owners is that the process of working for the CSI-Nihilent e-Governance Awards 2007-08 – be it the online form filling, or coming up with a write-up or providing information for the Results and Enablers has resulted in creation of good documentation which was not earlier present. The field visits by the experts was seen as a value addition to the overall evaluation process and validated the information submitted by project owners. In addition, it provided an opportunity to get a first hand feedback on the on the project impact from is stakeholders. However, the challenge remains the time and resource constraints for these field visits.

The Results and Enablers model was felt to be easy to perceive, and this requires to be put for wider discussion. One of the observations for most of the nominated projects was lack of clarity on the goals to be achieved, and there were no clear measurable goals. Our
ongoing work is to enlist attributes that may come under each of Results (what is achieved) and Enablers (what is done to achieve) so as to characterize the assessment criteria for projects of different kinds and from different stakeholders’ perspective. The same approach for assessment based on the key Results and Enablers has been extended to other award categories viz. State and Department. However, much will depend on the extent of clarity and awareness to be developed amongst the Government officials and consultants who are involved in e-Government project conceptualization.

10. References

4. E-Governance Assessment Frameworks (EAF 2.0)
5. URL: Stockholm Challenge Award 2008 www.stockholmchallenge.se
6. URL: www.csinihilent-egovernanceawards.org
7. URL: IIMA 1,2 http://mit.gov.in/default.aspx?id=853#assment
   These inputs are based on reports submitted to eGovernance Practice Group of the Information Systems Division, World Bank, Washington DC and Department of Information Technology, Government of India and shared by IIM-A at the Workshop on Building Capacity for Impact Assessment held on February 26-27, 2007
9. CII Exim-Bank Award for Business Excellence Application Brochure 2006
### APPENDIX A

**Project Nomination Form**

<table>
<thead>
<tr>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part A – Result Indicators</strong></td>
</tr>
<tr>
<td>1. Goals &amp; Objectives</td>
</tr>
<tr>
<td>(List measurable goals and objectives, especially in terms of duration in which the expected goals are to be achieved)</td>
</tr>
<tr>
<td>2. Spread of Project service users</td>
</tr>
<tr>
<td>(List all users who are intended to be benefited from this project - internal and external)</td>
</tr>
<tr>
<td>3. Services provided</td>
</tr>
<tr>
<td>(List total no of services provided by the department as part of its responsibility; Categorize all services delivered by the eGov project to specific users; and the growth in no. of services over a period of year/s)</td>
</tr>
<tr>
<td>4. Geographical spread of project implementation</td>
</tr>
<tr>
<td>(This is in terms of offices, departments, districts, state level and Service Centers; as part of project plan also indicate overall total geographical spread to be finally covered verses covered as of now)</td>
</tr>
<tr>
<td>5. Project Timelines and milestones</td>
</tr>
<tr>
<td>(These may, preferably be given from project design to implementation, pilot to roll out, highlight the achievement of key milestones)</td>
</tr>
<tr>
<td>6. Direct cost savings to avail services</td>
</tr>
<tr>
<td>(This refers to the direct costs incurred by the users for availing selected services in the existing system as compared in the manual system. In case a 3rd agency study has been done, kindly attach the said report as reference documents)</td>
</tr>
<tr>
<td>7. Direct cost savings to deliver services</td>
</tr>
<tr>
<td>(This refers to the direct costs incurred by the Government to deliver selected services to the users in the existing system as compared in the manual system. In case a 3rd agency study has been done, kindly attach the said report as reference documents)</td>
</tr>
<tr>
<td>8. Direct time savings to avail services</td>
</tr>
<tr>
<td>(This refers to the actual time spent by the users for availing selected services in the existing system as compared in the manual system. In case a 3rd agency study has been done, kindly attach the said report as reference documents)</td>
</tr>
<tr>
<td>9. Direct time savings to deliver services</td>
</tr>
<tr>
<td>(This refers to the actual time spent by the Government to deliver the selected services to the users in the existing system as compared in the manual system. In case a 3rd agency study has been done, kindly attach the said report as reference documents)</td>
</tr>
</tbody>
</table>
10. Replication
*(within the state/any other part of the country)*

11. Key project Outcomes
*(Outcomes need to be listed in terms of (a) Sustainability (b) Usage (c) Usefulness (d) Satisfaction (e) Empowerment)*

12. Key Lessons learnt
*(These could be referred as project improvements)*

**Part B – Enabler Indicators**

1. Implementation model
*(This refers to the whether the project is Government owned, PPP, any other model)*

2. Technologies
*(High level technology architecture)*

3. Capacity building
*(Governance structure, project teams, training, change management, policies, standards)*

4. Process Reforms
*(process related back-end/front-end; legal reforms)*

5. Project Financials/Sustainability
*(Capital, and annual recurring expenditures & business model, funding, revenue generation, if any; indicate nos.)*

6. Project Teams and Leadership
*(List the Governance structure; list full time and part time project teams; top leadership support)*

7. Service users Feedback
*(Indicate the type of service users feedback mechanism)*

8. Project Documentation
*(List of project documentation available to the Project owners)*

9. Implementation Challenges
*(List key Challenges and how were they addressed)- 50000 words*

**Part C – Self Assessment Indicators**

• Why this project should be selected for the Award? – 2500 words