

Wrap-up and Conclusions

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What is Evaluation?

- Evaluation is the reasoned consideration of how well project goals and objectives are being achieved
 - To cause changes in the project so that it eventually meets or exceeds its goals and objectives
 - An essential ingredient of good project management

Why do Evaluation?

- Why undertake evaluations?
 - Essential element of good project management
 - Enables the optimisation of applications
 - Justifies public expenditure and represents good value
 - Demonstrates the benefits (technical, financial and socio-economic) of individual applications
 - Enables lessons to be learned for the future – evaluation reports are resources supporting outreach to other planning/considering deployment

It adds value to the investments being made

Process

1. Form an evaluation team
2. Develop an evaluation strategy
3. Develop an evaluation plan or plans
4. Develop test plans
5. Perform Data Collection and Analysis
6. Reporting

How much Evaluation?

How much evaluation do you do?

Level of evaluation required dependant on:

- Maturity of technology
- Objectives of the evaluation
- Scale of the project
- Requirements of the Government or funding agencies

Importance of Strategy

- You need to develop a strategy
- Elements of the Evaluation Strategy
 - What is the problem to be addressed?
 - What are the project objectives?
 - What are the evaluation objectives?
 - What is the general evaluation approach?
 - Technical Analysis
 - Impact Analysis
 - Institutional Analysis
 - Economic Analysis

Who does it?

- Who does evaluation?
- The TEAM
- But, you need an evaluation champion



What to Evaluate?

- Remember, there is NO right or wrong answer as to what to evaluate ... just guiding principles...
- But consider:
 - Technical Analysis
 - Impact Analysis
 - Institutional Analysis
 - Economic Analysis

When to Evaluate?

- Before implementation
 - To justify expenditure and to measure baseline conditions
 - Establish improvement goals
- After implementation
 - To provide evidence of the impacts of the application
 - Demonstrate trends across time
 - Obtain feedback from users, operators, Public administrations and funding agencies

The duration needed is dependant on the requirements for robustness of results / statistical significance

Where to Evaluate?

- Need to consider the sphere of influence of the application concerned
- Technical assessment focuses on the application
- Impact assessment focuses on the area and users affected by the application

Support and Outreach - 1/4

- US ITS Program Evaluation
 - Support and outreach activities
- US web sites for further information
 - Evaluation section of Joint Program Office web site
www.its.dot.gov/eval/index.htm
 - Web site has section entitled “Evaluation Guidelines”
www.its.dot.gov/itsweb/EVAL/eguide_resguide.htm.
 - Products available now or planned for the future
www.its.dot.gov/eval/Documents/orderform.pdf
 - ITS Benefits and Costs Databases: impacts of ITS report and provision of unit costs of ITS components
www.benefitcost.its.dot.gov

Support and Outreach - 2/4

- EU TEMPO Evaluation Expert Group
 - Support and outreach activities
- European web sites for further information
 - TEMPO website
www.tempo-sec.org/
 - ERTICO website
www.ertico.com/its_basi/benefits.htm
 - UK ITS Assist support activities and website
www.its-assist.org.uk/
 - FITS (Finnish Research and Development Programme) on ITS Infrastructures and Services
www.vtt.fi/rte/projects/fits/indexe.htm

Support and Outreach - 3/4

- Conferences: ITS America Annual Meeting, ITS World Congresses, TRB, European Transport Conference, etc.
- Resource material (books, publications, etc)
 - Past/current guidelines/model evaluation plans from US & Europe
 - ITS Handbook 2000: Recommendations from the World Road Association (PIARC)
 - Intelligent Transportation Systems Primer (ITE/USDOT/ITS America)
 - Introduction to Transportation Systems, by Joseph Sussman
 - Intelligent Transportation Systems Architectures, by Bob & Judy McQueen

Support and Outreach - 4/4

- Update underway of PIARC ITS Handbook, by Dr John Miles
- International Benefits, Evaluation and Costs (IBEC) Working Group:
 - Important resource for participating in evaluation activities and contacting evaluation specialist world-wide
 - IBEC has 177 members from 28 countries
 - Questions to IBEC's 177 members can be sent via ibec-its@yahoogroups.com
 - To join IBEC, send an email message to ibec@trl.co.uk

It is important to share experiences and learn from others...

Conclusions - 1/2

- We hope that this Training Course has enabled you to:
 - Recognise the importance of evaluation
 - Identify the major elements of an evaluation
 - Select appropriate performance measures for evaluation
 - Select appropriate evaluation techniques and available tools
- Evaluation is an on-going process and should be part of a project from the initial conceptual phase through development & design to on-site implementation

Conclusions - 2/2

- Evaluation has been a driving force for the development of ITS over the years and will continue to be so
- But ... predicting the future in ITS is never easy
 - Some past predictions/forecasts have not panned out
 - Need to reflect and respond to ever changing aspects of society and the environment

Where would we be now, if people had not evaluated ITS products and services?

Thanks & Goodbye

- Gracias por escuchar
- Gracias a Madrid por un congreso excelente del mundo
- Adiós

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Thank you

Any questions?