ARTICLE
Honey! I Shrunken the Space__ Planning in the Information Age.

After globalization of the world, the use of latest information technology has been using primarily for large-scale applications such as regional, environmental, ecological, natural resources planning and management. We should have the concept of information in this stage.

What is an information system?

A collection of procedures, activities, people and technology set up for the collection of relevant data is storage until it is required, its processing to help provide answers to a specific set of questions, and the communication of the resulting information to the people who need to act upon it.

Managing the Project

There is large amount of literature about implementing information systems in a narrow sense. There has been less said about implementing information systems in the wider sense we have just defined. As a starting point, though we can consider the narrow definition: how to implement an IT/IS project, comprising computer hardware, telecommunication system, software and other arcane matters which the IT professionals understand and we don’t.

DRAWING IT TOGETHER: THE ACTION PLAN

It helps to coverage your thinking about information management to produce your action plan which is right for you and your organization.
PLANNING FOR ACTION:

For each problem, consider carefully what are the:

1. Impelling forces: the factors, people or situations which make a solution to the problem easier.
2. Impeding forces: the factors, people or situations, which make a solution more difficult.
3. Which impeding forces you can take advantage of in driving towards a solution to the problem.
4. Which impeding forces you will need to counter, or avoid, in driving towards a solution.

This process in turn will identify:

5. Personal Actions, which you must take yourself. Some of these actions be wholly yours, but more often you action will be to initiate something to be done by others.
6. Team Actions, where you will share the action and the responsibility with others. The team might be yours senior colleagues, a project team, or any other management grouping appropriate to this purpose.

There are plenty of academic and proprietary methodologies for implementation projects. For example, David and Olson, Burch and Grudnitski (1986) and Danicles and Yeates (1988). The essential steps of most approaches are reflected in the six-phase approach of fig.6.2.
There are three phases:

### STRATEGY

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### DESIGN

- Phase 1 Analysis; feasibility study
- Phase 2 Detailed requirements analysis
- Phase 3 System Design

### IMPLEMENTATION

- Phase 4 Production of new system
- Phase 5 Testing and Implementation
- Phase 6 Operation and Maintenance, and Modification.

associated with project design, and three associated with project implementation. Together they make up the project life –cycle. Let’s look briefly at the six phases.

Phase 1 is an analysis of the situation which the IT/IS project is intended to support. It will include consultation with the management responsible for that business function and the people who would be the users of the system if and when it is implemented. It will identify the type of functionality when they will require from the system to support their work o best effect. When this is clear to the analysts, they can see whether the project is feasible, and if so, prepare an outline specification with appropriate cost. This phase is often called feasibility study.

Phase 2 is the detailed requirement analysts. Here is the business situation and the functionality required by the users are defined in closer detail. The analysis provides the specification or user requirements for the system. It is very important document. The users (collectively and individually) and the IT professionals must sign it off as the agreed statement of the requirement.; it will require several iterations, as users moderate demands or consider new options and IT professionals get to understand better the nature of the business problem their system ha to support.

Phase 3 is connected with systems design which is mainly the responsibility of the IT professionals. It translates the functionality
specified in the user requirement into the detailed hardware, software and the other technology, which should provide that functionality. The design will take account of existing systems and policies defined in the company’s information strategy concerned for example with Infrastructure, adoption of standards, and computability with existing systems when the design work is complete.

Phase 4 starts the process of implementation. It concern with the production of new system, to the specification formalize in phase 3. Production will usually comprise procurement or manufacture of hardware, procurement or development of software and the systems integration which make sure that the various elements work together effectively.

Phase 5 comprises testing and implementation installation at the users locations, installing supporting equipment connecting team to each other and the existing systems and testing the testing out against the user requirement. The users are begin consulted to see that correct interoperation of the user requirement is given.

Phase 6 happens after such formal acceptance of the system by the users. It is concerned with the operation maintenance and modification of the system to ensure its successful operation and evolution to meet changing user needs.

1. Where are we now?  
2. Where do we want to be?  
3. How will we get there?

**Fig: STRATEGY**
Issues in using the Internet to Undertake Questionnaire Surveys

There are several issues which must be addressed to determine the validity of using the Internet as medium to undertake a visually based preference questionnaire, including the sample of respondents, the medium of display, monitor and color resolution, hardware and software issues, and questionnaire design issues.

**SAMPLE OF RESPONDENTS**

In traditional paper-based or face-to-face surveys, the sample is often sought out by the questionnaire manager. In the alternative approach used here, this was not possible. Respondents for surveys were found in two manners: first, a number of interested people from a variety of subject areas were e-nailed and requested to take part in survey; second, the Universal Resource Locator (URL) of the questionnaire was submitted to a large number of search engines of the internet. It was therefore not possible to control the respondent sample.

However, socio-economic information gathered from the respondents enabled examination of any difference caused by their age, gender or geographic location.

**MEDIUN OF DISPLAY**

In recent work undertaken by Daniel (1997), a correlation of 0.95 was found between 45 slides and scanned images viewed on a 27-inch monitor. This result suggested that it was valid to gather preference scores using a large visual display monitor in place of a photograph; however further research was required to validate the use of small screens. The use of photograph as compared to actual landscapes, has been validated by several authors (e.g. Dunn 1976, Shuttleworth 1980).

**QUESTIONNAIRE DESIGN ISSUES**

It is important to recognize that many respondents will not access to higher-powered computing facilities, and that a questionnaire must be tailored so as not to exclude these people. The time required for the client’s computer resource to process each page must also be considered; graphically intense pages may take an extremely long time to load onto a PC with 386 processing using a modem, but may be almost instantaneous on a network Sun Workstation. Therefore the design and content of www page, coupled with power of both the server and client computer, may test the tolerance of the user to delays during the completion of the questionnaire. A consequence of poorly designed
questionnaire would be a low response rate and potentially changes in preference as the respondent became tired or irritated. Two separate techniques were used to normalize the scores gained from the preference survey giving, similar, but not identical, ranks to the questionnaires. These techniques were used to remove any differences in the ranges of scores given by respondents. It has been noted by many authors and respondents of different ages, genders of cultural backgrounds may score on different personal ranges.

The two techniques will be referred to as normalize per questionnaire

(Equation 1; Machenize, pers.comm.)

\[
\text{Score} = \frac{\text{sum (Photograph mean-questionnaire mean)}}{\text{(count of respondents} \times \text{mean square error form ANOVA)}}
\]

\[
\text{Score} = \frac{1}{\text{Number of respondents}} \sum \frac{(\text{photograph score-respondent mean})}{\text{respondent standard deviation}}
\]

**GIS IN URBAN LAND SCAPING**

While the use of Geographical Information System has become common place in large scale urban and regional planning, it has been used far less frequently in neighborhood planning and design projects. There are perhaps several reasons for this. The most obvious obstacle is lack of data at the local level. The GIS data that are usually available tend to be at much broader scale. Another reason is that citizens do not usually interested in local land use maps until an immediate event (e.g. rezoning request or a propose road building projet.) threatens. Information application (GIS) is explored for the smaller scale urban landscape of communities and neighborhoods. The case study of Village Noorpura (Satiana Road) Faisalabad Pakistan reflects on the experience of a design team, that induction of latest technology was highly useful for urban landscape and design particularly when augmented with a variety of other computerized and non-computerized techniques. In the case of free hand sketching by a trained artist and three-dimensional software that could present representation of the design as they were in process were incorporated. The combination of tools provided effective for increasing community understanding and participation in the designing and revitalization of their planned tasks.

The use of the Internet to collect data for predictive landscape preference models is described and tested, including the issues involved in using such a method for data collection and the functionality of the questionnaire.
Planning in the Information Age.

Flow Diagram describing Internet Questionnaire

1. Introduction
2. Instruction and screen size choice
3. Practice page for small, medium or large size screen
4. Respondents sent random version of the questionnaire
5. First browser page
   - First scoring page
6. Second browser page
   - Second scoring page
7. Socio-demographic information gathered
8. Preference scores submitted by e-mail
9. Feedback page
References:

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  • Creating landscape preferences model using Internet Survey Techniques by Jo Anna Ruth Wherrett
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