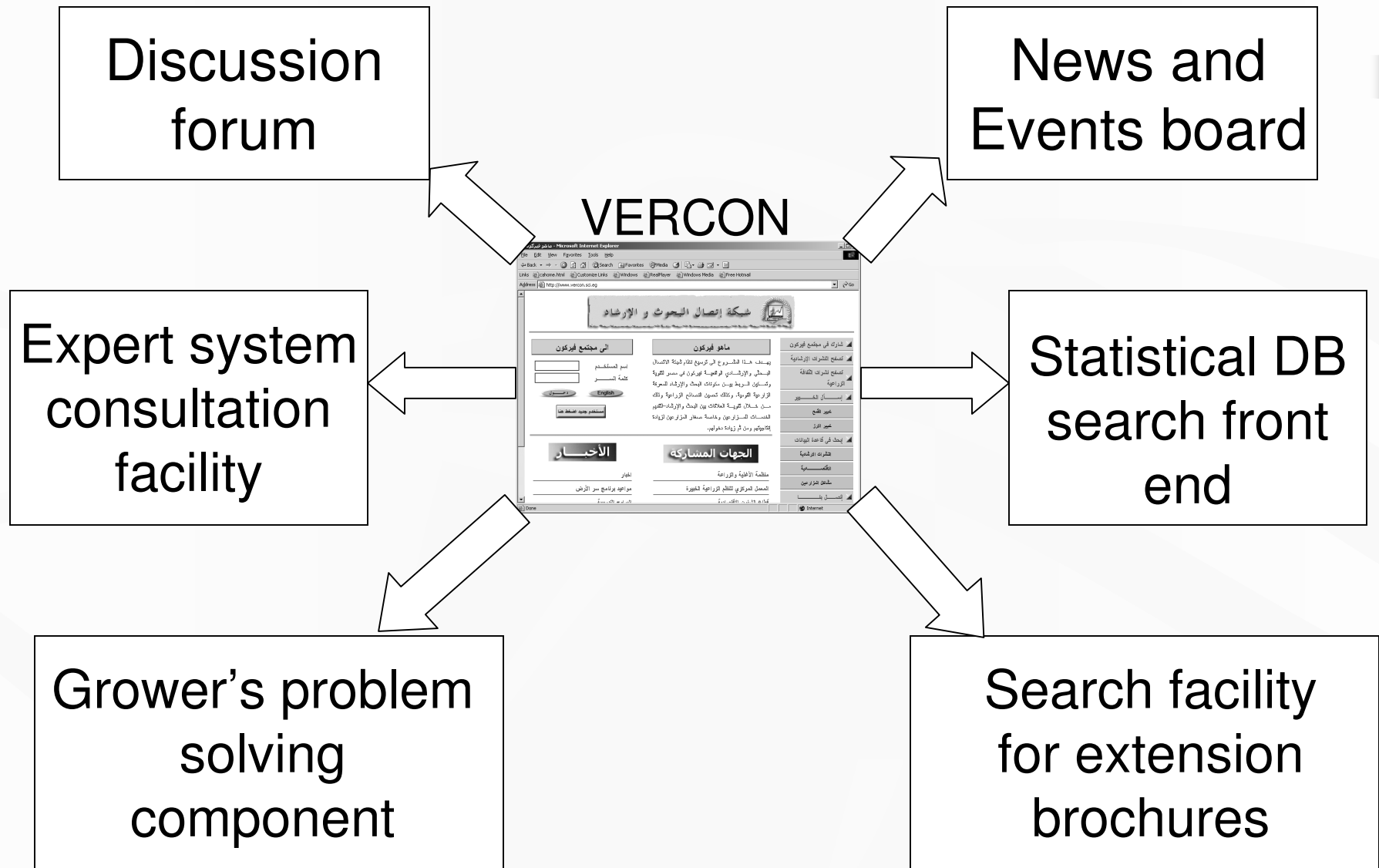


**VERCON: Lessons Learned
& Proposed Future Enhancements**

**Presented by:
Dr. Samhaa El-Beltagy**

VERCON Components



Technologies and Tools Employed

- The web server for the site is an IIS server running on a windows 2000 advanced server platform, and on a Dell dual processor workstation.
- Development was carried out within a windows platform, and using various software such as Dreamweaver, MS FrontPage, MS InterDev, and Adobe Photoshop
- SQL Server was the DBMS employed for all components.

Technologies and Tools Employed

- ASP was the language used to develop the VERCON web pages.
- Cascading style sheets and HTML templates were used to develop the VERCON “look”
- A number of other technologies were used for components that required a sophisticated backend. These include C++, Java, and COM object technology.

Development Methodology

- Different teams were assigned the task of developing each of the VERCON components
- As it was difficult to predict shared data from the onset of the project, each team developed its own system independently, and integration was achieved at a later stage in the project.
- A unified “look” was developed by one of the teams and later applied to all developed components.

Lessons Learned

- The sooner integration issues can be identified and settled, the less effort it takes to resolve them.
- Relying completely on web log access statistics for the purpose of acquiring usability indicators, is not enough. This can not be used for example, to correlate viewed pages to users so as to know which type of users are interested in what.
- Targeted search is a very useful facility, that should not be only implemented for extension documents, but for all useful agricultural documents.

Lessons Learned

- Designing a well defined “look” for the site using CSS and HTML templates, saves a lot of effort and time in the long run.
- It is important to improve the site’s search facility in order to be able to search all individual components, or user selected components.
- Relying on a service, that is seldom used, and that is running on a server different than that on which the site is deployed, or which is not guaranteed to be continuously up, should be avoided whenever possible.

Lessons Learned

- COM object technology offers a viable solution for the problem of developing expert systems on the WEB.
- Interface development for an expert system would be a time consuming activity if performed for each required input/output screen. The employment of a parameterized template has been found to be good solution to such a problem.

Lessons Learned

- For the Extension Document indexing utility, simple formatting guidelines need to be followed in order for the system to work. While the formatting guidelines are straight forward, they are error prone.
 - ⇒ Editors for any data that requires special formatting should always be provided instead of relying on human compliance to a set of formatting guidelines.

Future Site Enhancements

- Improve site search facilities.
- Improve logging mechanism
- Strengthen the link between the Expert System consultation facility and the extension search facility.
 - Substitute the primitive way in which both systems are currently integrated, with a better one.
 - Create a bi-directional link between the two systems, instead of the current uni-directional one.

Future Site Enhancements

- Add more criteria for the specification or retrieval of grower's problems.
- Allow users more control over the reports generated from the Economical and Statistical Statistical DB, and provide some graphs to represent the data retrieved.
- Create a tool that allows the indexing/searching of any document in a manner similar to that employed by the Extension Document search facility.
- Develop an editor for extension document authoring
- Develop a tool for specifying XML input to an ES's parameterized template