



# QueryLens: Information Sharing in a Ubiquitous Computing Environment



**QueryLens @ Grocery Store**

When GUI (Graphical User Interfaces) became popular in the 1980's, people never imagined the large quantity of information that today's computers must handle. As Norman (1999) discusses, GUI-based systems may break down when they must deal with such a vast array of data as we have today.

The notions of Ubiquitous Computing and Augmented Reality that view "the world around us" as user interfaces have received much attention in recent years. However, these new concepts have not yet revealed a solution to the problem caused by the very large quantity of information. We should keep in mind that a person can acquire only a certain amount of information throughout his/her life. The challenge in an information-rich world is to provide users with the "right" thing at the "right" time in the "right" way (Fischer, 2000).



**QueryLens @ Library**

to various physical objects.

The challenge is to design an environment that can serve small amount of useful information according to an individual's specific needs and his/her situation.

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In recent years, small powerful gadgets such as PDAs (Personal Digital Assistants) and Internet mobile phones have been rapidly pervading our environments. Feature-rich computing devices are already abundant in the world around us. However, this phenomenon by itself does not necessarily improve the quality of life.



**QueryLens @ Music CD Shop**



**PDAs communicate with smart radio tags that are embedded in various physical entities.**



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