

Decision Making – A Uniquely Human Experience

Computers v. Human Intelligence

Decisions drive businesses. Every day, millions of employees make the trillions of decisions that drive organizational processes, productivity and profits.

To meet more demanding business requirements requires a new software paradigm, a new strategy for aligning technology with the needs of the business world.

At Acappella Software, that new paradigm begins with an understanding that technology must support the decision making experience within the business setting.

To understand this statement, we need to differentiate between what technology can do versus what people can do.

Technology is good at

- Storing and moving data
- Manipulating data
- Creating visual representations of data
- Following rules

People, and human intelligence, are good at

- Recognizing relevant information
- Finding new sources of information
- Understanding the context for information
- Bringing together information to form judgments
- Making decisions

By delineating these differences between computer and human intelligence, and by recognizing that computer intelligence and its strengths can be used to support human decision making (rather than replace it), Acappella Software has laid the foundation for a significant paradigm shift.

A Uniquely Human Ability

Our innate human intelligence drives us to gather and categorize information so we can make decisions and establish our competence (expertise) in the world.

From birth on, children learn what constitutes words such as blue, red, green, daddy, mommy, dog, cat, etc. As their knowledge becomes more complex, they classify these concepts into categories – colors, parents, people, animals, etc. These categories and the information that comprise them are then used to make decisions about what belongs to a category and what does not, and what actions to take when dealing with something from within that category.

At a more sophisticated level, expertise is defined by the categories known within one's field of specialty or knowledge. An expert has a mental map comprised of a set of categories, or topics, and realizes what information is being looked for within each category.

For instance, a restaurant critic gathers information about ambiance, service, cleanliness, and, most importantly, the quality of the food. As information is gathered in a situation, an expert develops opinions or judgments within each category. The restaurant critic may therefore ask, "How elegant is the décor?"

“How prompt is the service?” and “How good is the food?”. Opinions or judgments are then brought together to make bottom line decisions about the situation. For the restaurant critic, there is one bottom line: “Should I recommend this restaurant to my readers?” The final step in this process requires the taking of action on the decision. For the critic, this means writing and publishing the restaurant review.

Every human decision making process follows this pattern:

- Gather either new information or information based on questions for which answers are being sought
- Form opinions/judgments based on the information and categories
- Make decision(s) that flow from the information and judgments
- Communicate decisions and take action

And it must be recognized that decision making processes and knowledge evolve and change over time.

The Acappella technology reflects this fundamental human process in a manner that naturally supports the human decision making experience.

Technology in Support of Business Decisions

Businesses have been searching for a technology that improves decision making productivity.

Databases are used to capture decision data. Spreadsheets are used to manipulate that data into information in service of decision making. Decision support software goes one step further and mines data for the best information. Word processors are used to share information and communicate decisions in words. Graphics programs communicate information visually. Hardware has been instrumental in speeding information. Custom software systems and integration technologies are used to connect the parts so information can flow freely.

Artificial Intelligence systems try to determine when to perform certain actions. They capture and calculate the rules that exist between data points and information elements, assuming that those rules reflect decision making. But rule based computer intelligence only works when the factors involved are well defined and highly controlled, and when there is an extensive historical data record to work with.

Despite or perhaps because of these tools, the business professional is overwhelmed with information and work. The challenge remains getting the right information to the right people at just the right time so decisions can be made as quickly as possible.

Each of these technologies isolates and supports some aspect of decision making. But decision making is more complex than the sum of its technologically isolated parts. And that complexity lies within the subjectivity that is inherent inhuman decision making processes.

It is this subjectivity that sets human intelligence apart from computer intelligence. It is this subjectivity that is encouraged with the Acappella technology. And it is this philosophical foundation that embraces the humanness in decision making processes that sets Acappella software apart from all other technologies.

©2006 Acappella Software Inc. All rights reserved.

Acappella is a registered trademark of Acappella Software Inc. Telamon is a trademark of Acappella Software Inc. The Telamon Platform is a patented technology in the U.S. Patent #6,529,889 and #6,910,027. Additional U.S. and corresponding foreign patent applications are pending.