The symbiotic age - a man and technological infrastructure increasingly become in...

Technology, Information Technology



Slide 2: Conversational user interfaces (CUI)

So what exactly is CUIs? A simple definition would be to refer to CUIs as technologies that shall enable us to use our natural communication modes such as gestures and speech to communicate with computers and other digital systems. This would naturally eliminate the need for users to frequently undergo special training as newer technologies emerge because the future gadgets will be tuned to comprehend our voice, gestures and even intent.

Slide 3: CUIs: where are we?

CUIs are currently categorized into three. The most common ones that we use on a daily basis are the directed dialogue CUIs such as the automated customer care machines that are typical of mobile phone providers. Here our options are restricted through guided dialogue. We also have free-form CUIs and mixed-initiative or mixed dialogue systems. free-form CUIs are where humans have full control and mixed dialogue systems resemble face-to-face conversations, where both machines and humans are equally empowered (Glass et. al., 2005).

Slide 4: Education & training

To comprehend the relevance of CUIs in education and training we must appreciate the changes that are currently taking place within this sector. We can provide evidence on:

Growth of online teaching & learning

Increased emphasis on the interaction of learners with one another

Increased government spending on educational technologies

Promotion of Computer-Supported Collaborative Learning (Chen & Wang, 2009).

Slide 5: Role of CUIs in e-learning

With increasing emphasis on online and e-learning, we find that conversational interface technology would facilitate personalization of learning communication which is essential for student-based learning. A renowned scientist and expert in human cognitive development, Vygotsky's stated that more learning takes place outside the classroom and in an era of increased social networking, we are of the opinion that CUIs could be used to promote collaborative learning through such social sites.

Slide 6: CUIs & education: where are we?

However, a survey conducted by Rossett and Marshall in mid-2009 in the US informs us that we still have a long way to go. Use of online discussions, Web 2. 0 tools, and e-learning to support knowledge transfer from the classroom is still low.

Slide 7: Conclusion

In summary what we are saying is that CUIs will play a big role in the coming Age through enabling human-computer communication to be natural, flexible and intelligent. Also, by facilitating interactive education and collaborative research we expect CUIs to increase man's advances in science & technology.

Slide 8: References

This is the works cited in this presentation.

Slide 9: The End

Thank you for listening and that is the end of my presentation. You are now free to ask any questions. You are also allowed to support me with providing adequate answers especially if you have special knowledge in this field of conversational user interfaces.