Mark Weiser's Vision of Future Computing

Rahat Hasan Akanda
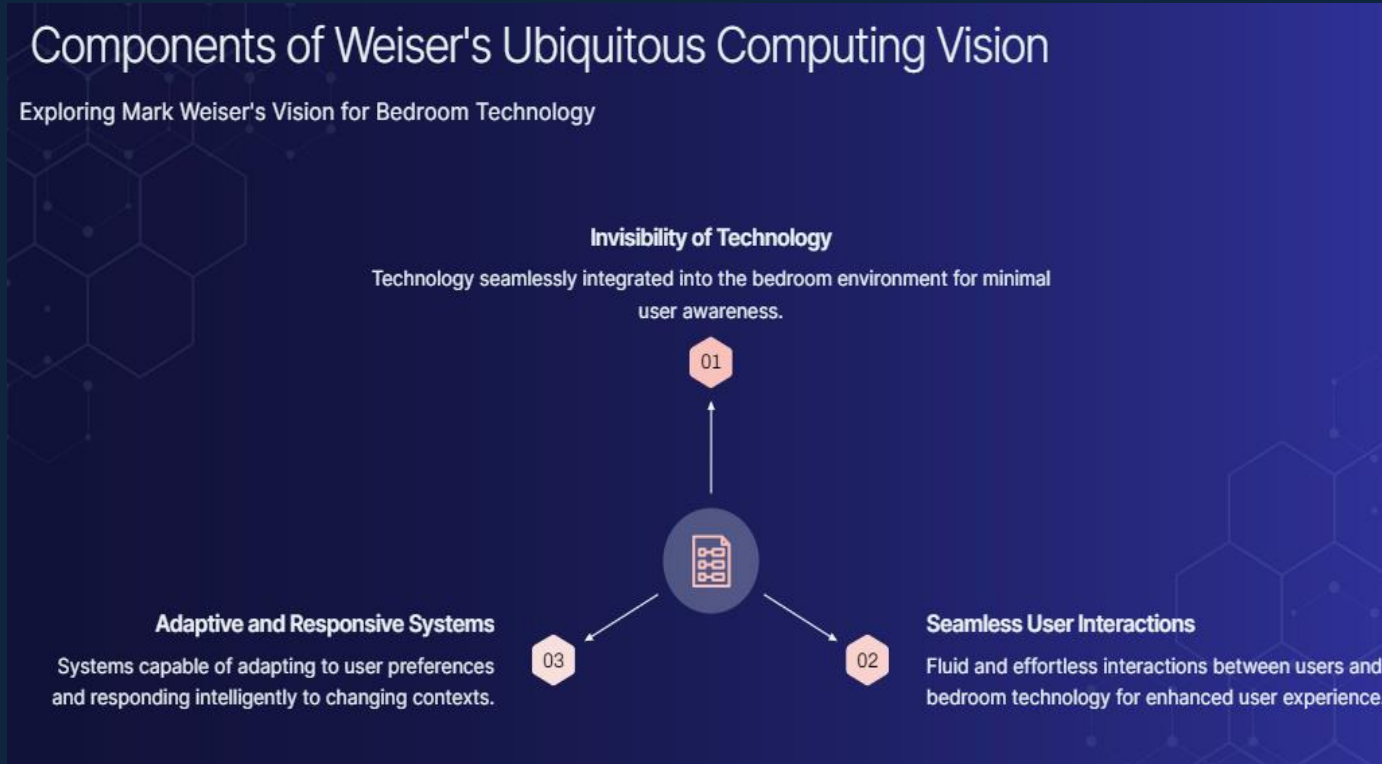
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Dept. of CSE
AIUB

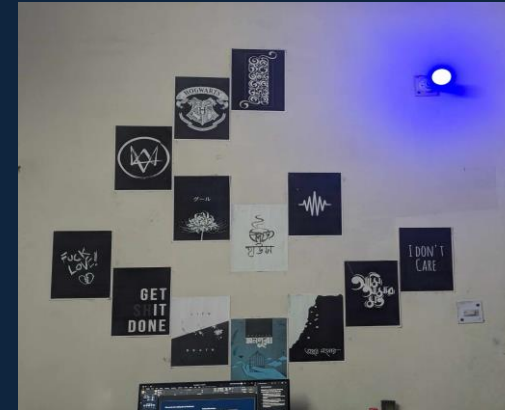# Ubiquitous Computing: Weaving Technology into Everyday Life

• Mark Weiser, the father of ubiquitous computing, envisioned a world where technology seamlessly integrates into our daily existence.

• Unlike traditional desktop computing, ubiquitous computing occurs using any device, in any location, and in any format.

• Our bedroom can be transformed into a smart, ambient space where technology recedes into the background.

Components of Weiser's Ubiquitous Computing Vision

Exploring Mark Weiser's Vision for Bedroom Technology

Invisibility of Technology
Technology seamlessly integrated into the bedroom environment for minimal user awareness.
01

Adaptive and Responsive Systems
Systems capable of adapting to user preferences and responding intelligently to changing contexts.
03

Seamless User Interactions
Fluid and effortless interactions between users and bedroom technology for enhanced user experience.
02

Elements of a Ubiquitous Bedroom

Calming Illumination

- Soft, ambient lighting that adjusts automatically based on preferences and time of day.
- Wall panels or smart bulbs emit gentle hues, promoting relaxation and aiding sleep.
- my room I was implement smart In bulbs and wall panels

Intelligent Temperature Control

- Regulated room temperature through sensors embedded in walls or furniture.
- Seamless adjustment of heating or cooling based on comfort .
- May I should upgrade my room temperature control because I am using fan for room cooling

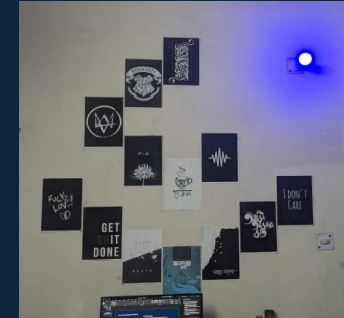For upgate my room to ubiquitous badroom need chabge the cooling system

Smart temperature controller

3

Interactive Surfaces and Smart Furniture

Interactive Wall Displays

- bedroom walls serve as interactive screens.
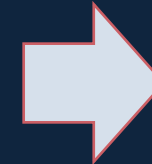- Visualize personalized art, weather updates, or even virtual windows displaying serene landscapes.

Adaptive Bed

- bed senses your sleep patterns.
- It subtly adjusts firmness, incline, and temperature for optimal rest
- But it is not adaptive bed . Need to change the bed for Ubiquitous Computing .

My bad

Adaptive bad

Privacy, Biometrics, and the Future

Privacy and Security

- Privacy-preserving technologies ensure data confidentiality.
- Smart locks and surveillance systems protect without compromising comfort.
- In my bedroom need to change the door look

My badroom look

Smart look

4

Thank you

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