





"Eyeglasses are a good tool—you look at the world, not the eyeglasses"

- "World is not a desktop", Mark Weiser, Xerox PARC 1994

Working with complex mathematical equations with apps



Imagine this scenario:

On a slightly chilly October evening in Berkeley, Jamie is sitting in their dorm, slightly panicked about the upcoming Engineering Mathematics midterm.

Deeply engrossed in solving the calculus problems, they have their phone face down. Jamie needs to use a scientific calculator to solve the problem and reference some notes on the L'Hôpital's rule.

They take out their phone to make the calculations and see the notes, but before they can do that, they're greeted by notifications of their friend liking thier instagram post. Two hours later, they've forgotten about L'Hôpital's rule.



Why we use computers?

Our circumstances, environment & experiences

shape our wants and needs

that help us form thoughts and ideas

which we then communicate with people around us, or computers

who then infer our communication to

formulate a plan to generate a response

the response brings about a change in our *environment, experiences* and circumstances

that further shapes our wants and needs ...

WE USE COMPUTERS TO FULFILL OUR WANTS & NEEDS (i.e. GOALS)

COMPUTERS ARE TOOLS THAT HELP US ACHIEVE OUR GOALS FASTER.



THE FOCUS IS ON THE ACT OF USING THE MEDIUM LAPPS) THAN THE ACT OF ACHIEVING THE GOAL



WE NEED TO FOCUS ON THE ACTION OF PURSUING THE GOAL . & MAKE IT FASTER.

The Action Centered Design Framework

aims to help people fulfil their wants and needs through thoughtful interventions that make help them achieve their goals without being consumed by the medium of interactions.

So people focus on their "action" rather than the tool that helps them complete it.

INTRODUCING THE ACTION CENTERED FRAMEWORK

() FOLUS ON THE ACTION

2 ACTIONS EMBODY SPACES & OBJECTS TO MEET PEOPLE WHERE THEY ARE

BECAUSE THEY ARE NOT RESTRICTED BY SCREENS ACTIONS CAN CONVEY INFORMATION THROUGH MORE SENSES LIKE SMELL, TOUCH, TASTE... CREATING A MORE HOLLISTIC COMPUTING ENVIRONMENT

What is an action?

action | 'akSHən | noun • the fact or process of doing something, typically to achieve an aim

The dictionary definition of an action is a fairly accurate representation of what I mean by an action. An action is the process of doing something to fulfil a person's want or need (a.ka. achieve an aim).

An action is the smallest unit of a person's quest to fulfil their needs. To fulfil their needs, a person can perform, one or many actions. To not act, is also an action.



To perform an action effectively, a computer requires communication of the user's needs and an understanding of their environment, circumstances and experiences, to form a limited, yet adequate context of their situation. So that the person can achieve their needs without having to be verbose in their communication.

An action's response contains two parts. First, the response itself, and second the medium of conveying that response.

Traditionally responses have only utilized our visual and auditory sense organs, however, just like the real world, an effective communication of the response would mean an effective utilisation of all our senses as potential media of conveying a response to us.



It's time to engage all our senses, including smell, taste, and touch, rather than just the sight and sound

Actions can be chained together

Actions can be chained together like lego bricks. The output of one action becoming the input of another, together forming a chain of actions.



Complex tasks require chaining more than one action together



The "Call to Action" exhibit presents a system of artifacts that work together to crealte a computing experience that embodies the action centered design framework