



# Redstart Systems

making speech fly

## Utter Command

Fast, hands-free computer control by speech

## Redstart Report Method

Fast, efficient, consistent reports by speech

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# Disabled Users as Speech Testbed

- Many people in the accessibility community depend on speech input
- Many have also been frustrated by it
- This community can provide valuable insights into what's needed

# Desktop Speech Interface Study

Users who needed speech because they couldn't use keyboard and mouse.

45% abandonment rate after one year

Main complaints:

- Frustration
- Vocal fatigue
- Couldn't use in a group setting

# Users

- Jill – painful to use the keyboard and mouse because she has repetitive strain injuries
- Don – cannot use a keyboard and mouse at all because he is paralyzed
- Jason – mild hand injury and memory issues from traumatic head injury

# Speech Interface Issues

- Focus inconsistencies (Jill cheats, Don gets frustrated, Jason gets confused)
- Speech feedback needs are different
- Perception the computer is stupid – makes obvious mistakes repeatedly
- How do you remember commands?

Same issues for disabled and able users.

# Needed Abilities

- Consistent focus and needed feedback
- Let users anticipate a problem and avoid it
- Discovery, adjustment, organization and sharing

## Another Thought

- Correcting vs. changing