Move-it Sticky Notes Providing Active Physical Feedback through Motion. Probst, et al. TEI. 2014.

What are the core research questions addressed by the work?

- Studies demonstrate the efficacy of the approach over traditional paper-based methods
    - Along with past studies, demonstrates the usefulness of an augmented-reality interface that enhances paper documents with digital information

What motivates the work?

- Use of post-it notes for feedback lacks active reminder functionality, while digital reminders are less intuitive & more disruptive

How does the work understand the usage, capabilities, and limitations of paper?

- Paper remains a frequently used medium that provides excellent affordances for fast and flexible capturing of information
    - Readily at hand, inexpensive, versatile, popular, plentiful in diverse forms
- Post-it notes are a popular medium for informal note-taking
    - Compact, adhesive
    - Used for capturing information that needs to be kept in mind, and stuck in prominent places as reminders
    - Physical presence provides excellent affordances for location sensitive, passive reminding
- Digital tools can provide active reminding functionalities

What is the target application domain of the work?

- Daily Post-it use

What are some proposed extensions to paper proposed by the work?

- Enable digital capture and synchronization with digital tools
- Physical actuation upon need determined by digital representation
    - ‘Wiggle’ action reminder

How are the proposed extensions implemented?

- Annotation capture with the Anoto pen, converted into text via software and synchronized with a PIM tool
- A custom clip that establishes a distinct association between physical and digital notes, same clip used actuate sticky notes with a SMA

What findings have been obtained from either the implementation process or an evaluation of the proposed system?

- Following affordances of prototype are listed:
    - Lightweight note capturing through familiar handwriting
    - Positioning in arbitrary places to provide permanent visibility, and location-based context information
    - Support for enrichment with context information through spatial arrangement or color coding
    - Digital processing of handwriting input and automatic integration with digital PIM tools

    - Ability to provide active motion feedback and attract users' attention once associated with a Move-it ioClip
    - Enables less intrusive reminding with subtle motion
- Limitations:
    - SMAs dependent on environmental parameters
    - Need for wiring to provide power supply for actuation
    - Need for custom paper for use of Anoto technology
    - Limited support for posterior correction or modification of handwritten annotations
    - Constraints of the form-based layout approach
    - Some participants perceived motion as too subtle