

TALKINGPAPER™

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A permit approval delay can translate into significant financial and business losses. One way to accelerate the permit process is through improved communication among the stakeholders engaged in the development, design, and construction of facilities. The project will focus on *synchronous, collocated, multi-stakeholder permit approval project meetings sessions*. TALKINGPAPER™ will facilitate capture and sharing of content created during such sessions, i.e., *dialogue* and *paper & pencil sketching* and *joint annotation of one or multiple shared paper documents* (e.g., blueprints), through *digital processing, correlating, and indexing* of the content. These *digital audio-sketches* will be *synchronized with corresponding project documents stored in a corporate database*. We propose to study and model such a *collaborative, multi-participants, and multi-document paper-digital* scenario that represents a dynamic and complex environment. This project proposes to explore methods for unique identification of participants and documents to be synchronized and indexed with the *digital audio-sketches*. This will allow future contextual search, retrieval/replay, and re-use based on sketch, annotation of document, keyword, and/or participant who represents a specific domain expertise or perspective. The TALKINGPAPER™ prototype will provide an analog-to-digital bridge that will transform the *dialogue* and the *paper & pencil sketch* inputs into digital audio and digital sketch objects, respectively. This knowledge capturing, indexing, and sharing process will take place in real-time, with high fidelity, and least overhead to the participants. This rich, contextual content will be streamed on-demand over the Web to all project stakeholders for rapid knowledge transfer and decision-making.