

# Integration of Digital Forms For Improved Safety Tracking and Quality Control: A Case Study

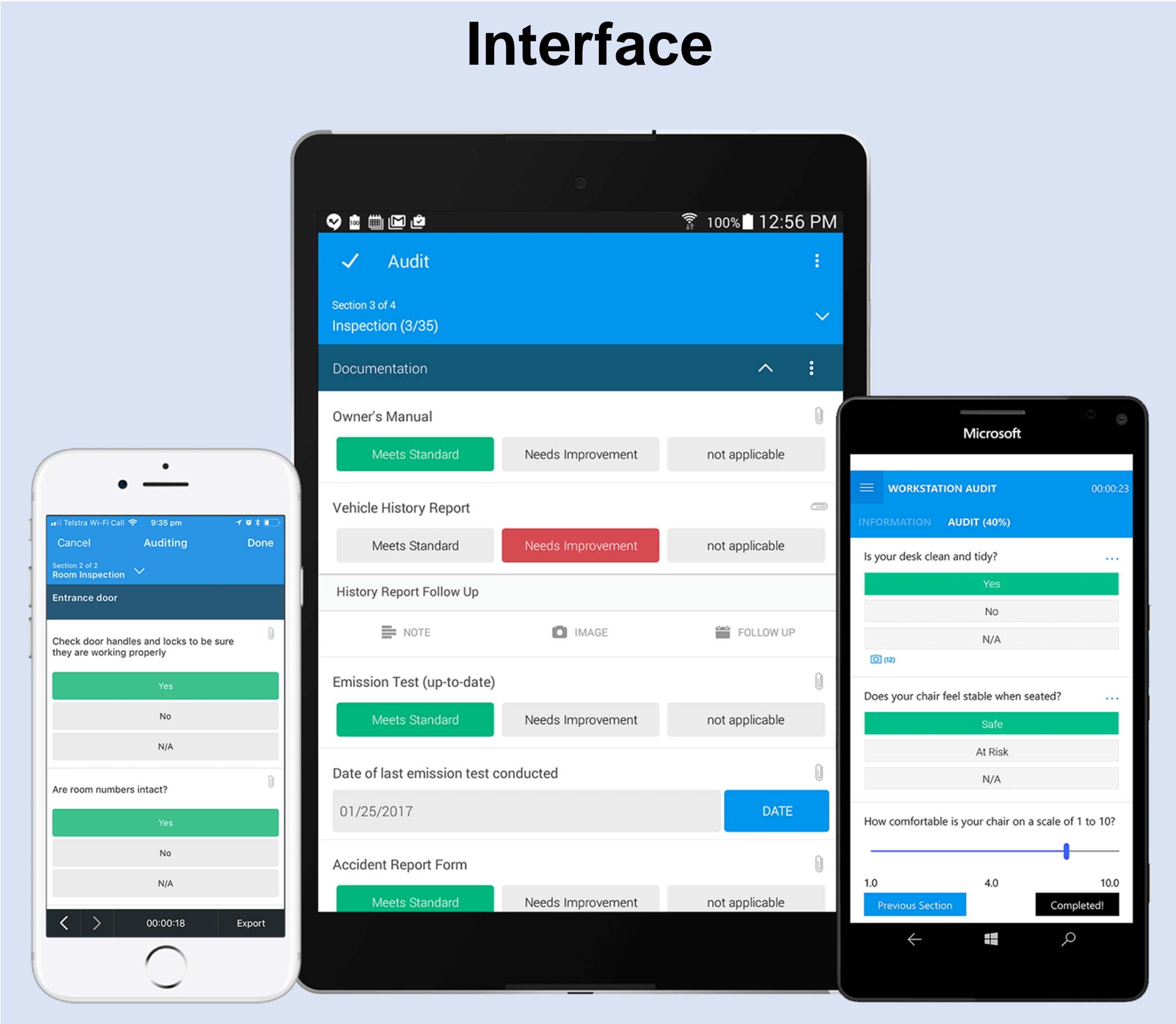
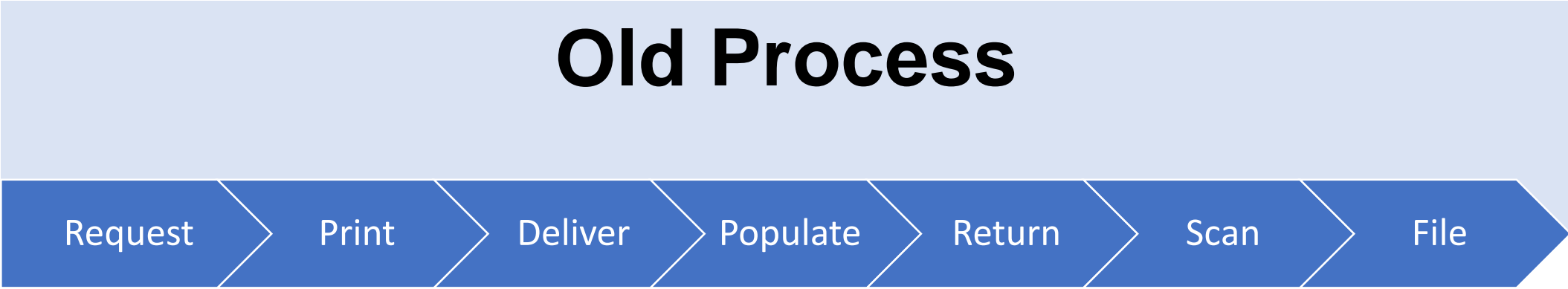
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Old System: Paper Forms	
Advantages	Disadvantages
<ul style="list-style-type: none"><li>- Familiarity</li><li>- Easy to fill out paper documents</li></ul>	<ul style="list-style-type: none"><li>- Inefficient</li><li>- Lengthy filing and document control process</li><li>- Historical data can be difficult to access</li></ul>

**Abstract**

The integration of new technology into the construction industry is commonly practiced in an attempt to improve standards and quality. iAuditor is an inspection checklist app which provides clients with the tools to build custom and dynamic forms to fit the needs of its client base. This paper examines the effectiveness of integrating this new software and observe the difficulties of integrating such new practices into a company's safety and quality control programs. Additionally, this paper evaluates ways the aforementioned software could be improved to better meet the needs of its users as well as assess ways it could be better utilized by companies. In addition to an extensive literature review, research was conducted through a series of interviews with the initiator of this change in practice, the head of safety, and a pilot group of personnel who use the new program on a daily basis on a job site using exclusively paperless forms created through iAuditor. The conversion to paperless forms was found to have numerous benefits in the case of this company; improving safety, quality, productivity, and efficiency.

New System: Digital Forms	
Advantages	Disadvantages
<ul style="list-style-type: none"><li>- Easy to pull up forms in the field on command</li><li>- Saves time by streamlining related processes</li><li>- Can attach photos to forms</li></ul>	<ul style="list-style-type: none"><li>- Limited number of devices</li><li>- More traditional industry personnel sometimes are resistant to new technologies</li></ul>



**Key Words:** Paperless Documents, Safety Tracking, Quality Control, Behavior-Based Safety, Safety Culture

System Selection	
Goals of New System:	Selection Criteria For New Software:
<ul style="list-style-type: none"><li>- Eliminate tedious paperwork</li><li>- Improve safety</li><li>- Improve quality</li></ul>	<ul style="list-style-type: none"><li>- Flexibility to create custom forms</li><li>- Cost</li><li>- Data output</li><li>- Easy to use interface</li><li>- Automatic document retention</li></ul>

