INTEGRATED CLOUD COCKPIT: MAKING SURVEILLANCE AND MAINTENANCE OF OIL PIPELINES PRACTICABLE

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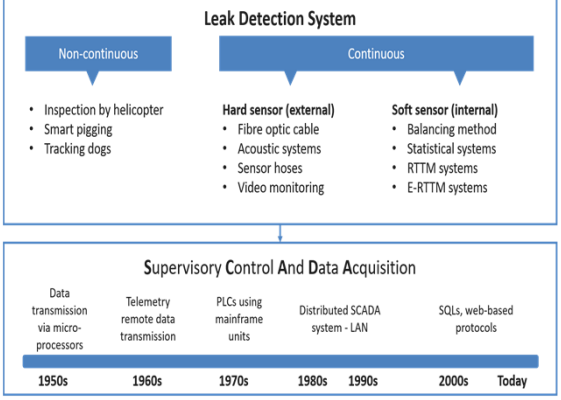
In this poster, we illustrate how an Integrated Cloud Cockpit can provide a seamless environment with services that facilitate development of next generation smart applications. We support this research by presenting an empirical study on how intelligent surveillance and predictive maintenance of oil pipelines is made practicable by using collaborative cloud services.

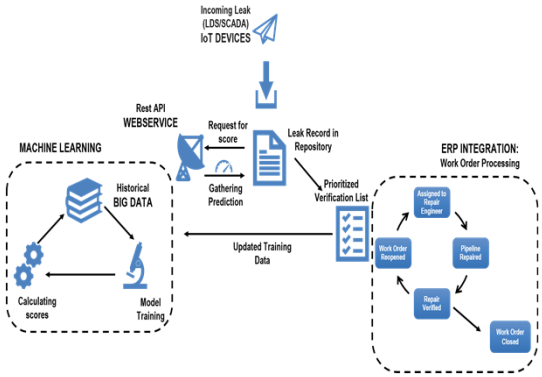
PIPELINE FAILURES ACROSS THE GLOBE

- Since 2010, over 5,000 incidents of crude oil and gas leaks or ruptures have occurred across the globe.
- Major incidents reported in USA and Canada
- Affected thousands of lives and resulted in damages worth billions.
- Caused severe environmental hazards by releasing toxic, polluting chemicals in soil, water and air.
- Most number of these incidents occurred on Oil and Gas Pipelines

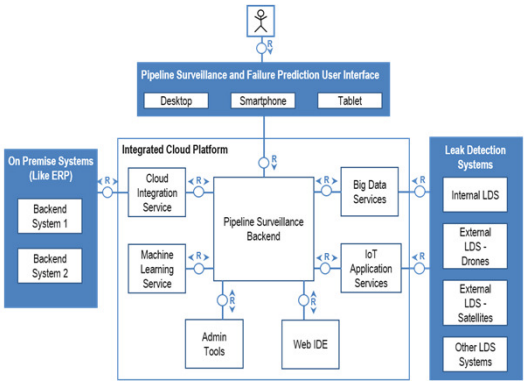
EXISTING WAYS OF OIL PIPELINE MONITORING



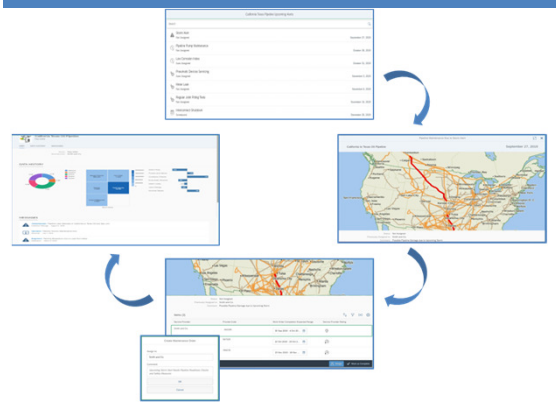
EMERGING TECHNOLOGIES SOLVING PROBLEM IN SILOS



INTEGRATED CLOUD COCKPIT – HIGH LEVEL DESIGN



INTEGRATED CLOUD COCKPIT – IMPLEMENTATION SNAPSHOTS



INTEGRATED CLOUD COCKPIT – MAJOR ADVANTAGES