



POWERING THE INDUSTRIAL APP

Industrial Software must learn from the rapid development of Consumer Apps. To drive faster and cheaper innovation, Industrial Software platforms must create ecosystems that leverage a global community of software developers creating industrial apps – making platforms more dynamic and more valuable to Industry.



Consumer Apps

vs

Industrial Software



300,000 app developers globally - most work alone or in teams of 2-3



2 million apps distributed via app stores

App store

\$25B market, with apps generally costing only \$15-200k to develop



Platform convergence speeds development (90% of tablets and smart phones are iOS/Android)



Publicly available, high quality tools help 3rd party developers code



Constantly improving security and anti-virus software increases user comfort level



Large quantities of online data– mostly free, accessible and standardized



A few firms with large (1000-10,000) software departments



Software often custom built, sold direct to customers

\$22B market, with projects costing millions



Different software platforms and hardware form factors across companies and industries



Systems are proprietary, and lack public access to development tools



Limited cybersecurity because systems were historically offline - majority of US energy sector experienced cyber-attacks in 2012



Massive amounts of offline data – highly sensitive and not all digitized

The Path to Industrial Apps



Developer + Domain:

Creating useful industrial apps will require pairing development skills with domain expertise. Industry leaders can facilitate these connections by hosting developer + domain expert sessions where experts explain industrial processes and share pain-points with app developers.



Developer tools:

As with consumer app systems, industrial platforms must become more developer friendly by publishing Software Development Kits (SDKs) and providing access to Application Programming Interfaces (APIs) and libraries for 3rd party developers.



Industrial security, cloud connectivity:

Developing industry-wide “prevent-and-detect” security systems for critical infrastructure platforms will allow data to be captured and securely piped to the cloud for analysis



Training datasets:

Publishing large, non-confidential, scrubbed datasets will allow developers to create and train new applications and algorithms

