

TO CONNECT MONITORING DEVICES TO PROCESSES

50 BILLION DEVICES BY 2016 THE INTERNET OF "BUSINESS THINGS" BRINGS NEW CHALLENGES & OPPORTUNITIES

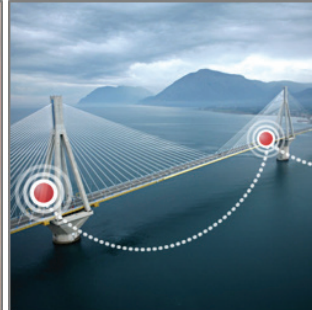


SOME USE CASES FOR "INTERNET OF BUSINESS THINGS"

- PROVIDE OPERATIONAL INTELLIGENCE
- INTEGRATE PROCESS WITH DEVICES
- MONITOR & CONTROL DEVICE REMOTELY
- GAIN COMPETITIVE ADVANTAGE
- CREATE NEW REVENUE STREAMS
- IMPROVE ASSET UTILIZATION



SMART HEALTH



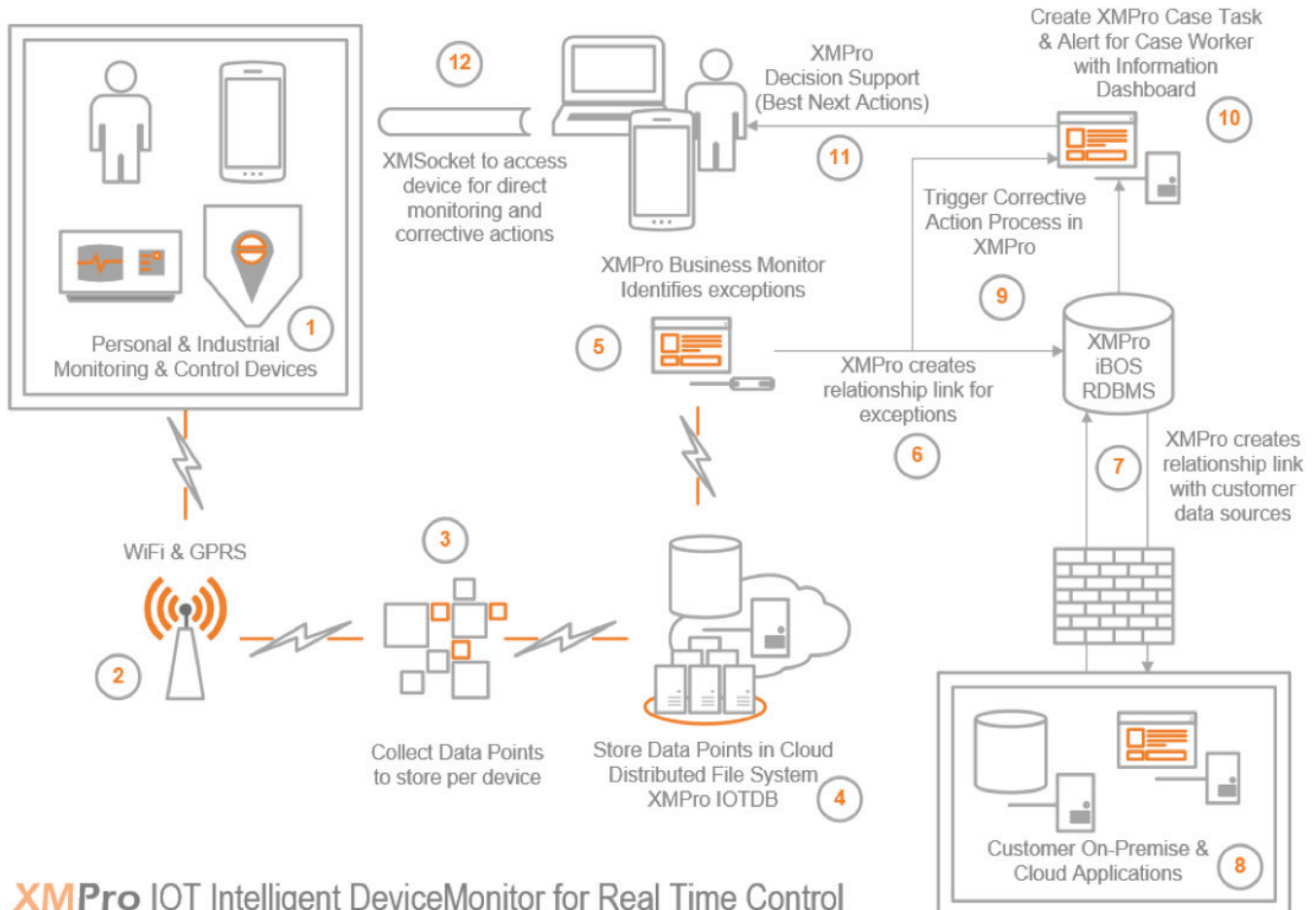
SMART INFRASTRUCTURE



SMART INDUSTRY

XMPRO DEVICE MONITOR

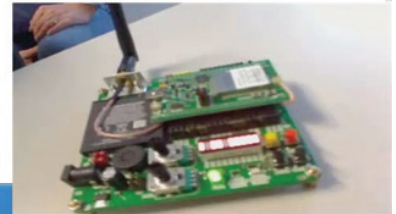
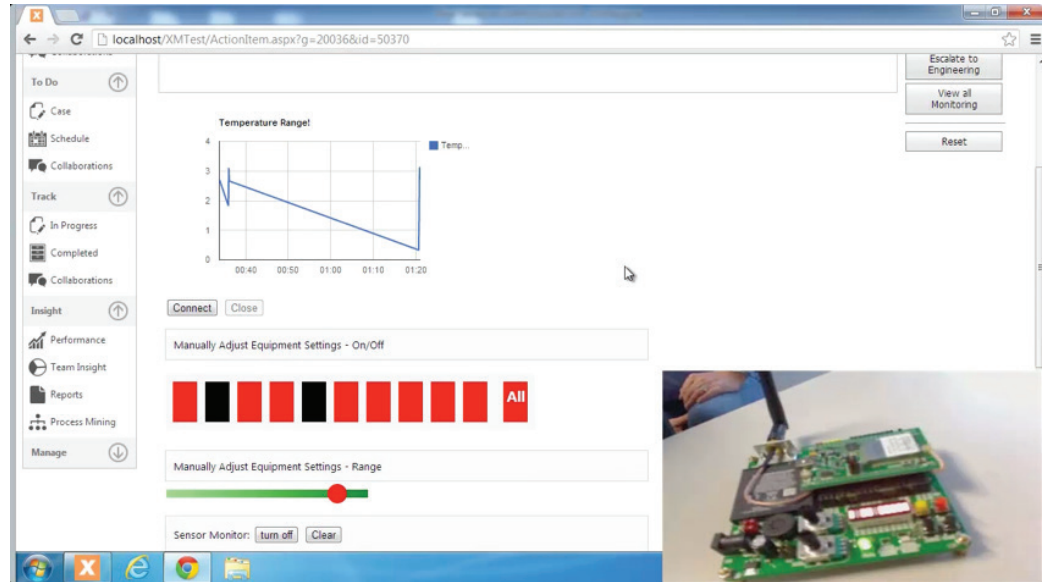
CONNECT SMART DEVICES & SENSORS TO EVENT-BASED BUSINESS PROCESSES



XMPRO IOT Intelligent DeviceMonitor for Real Time Control



THE SMART SENSOR ABOVE MONITORS AIR QUALITY FOR SMART CITIES.



The XMPRO screen example above right illustrates the practical implementation of the monitoring and response system shown in the XMPRO DeviceMonitor diagram on previous page. It shows how a device triggered an XMPRO process based on a temperature alert and in addition to managing an intervention process or workflow, engineers, doctors and service staff can, for example, access the device remotely from with their XMPRO work portal and make adjustments as necessary.

- VIEW MULTIPLE SENSORS ON 1 SCREEN
- ACCESS & CONTROL DEVICE REMOTELY
- OFFER NEW SERVICES TO CUSTOMERS

SMART HEALTH USE CASE

IF WE CAN DO THIS THEN JUST IMAGINE WHAT IT CAN DO FOR YOUR BUSINESS



Chronic Obstructive Pulmonary Disease (COPD) is estimated to cost \$29.5 billion in direct healthcare costs annually in the United States and is the 4th leading cause of death. Asthma is estimated to affect 1 in 12 Americans with 1 in 2 of those having preventable asthma attacks.

Both COPD and Asthma are chronic diseases and patient involvement in the management of the disease has a large impact on the likelihood of complications, unplanned hospital admissions, additional procedures and the patient's quality of life.

One of the most effective preventions for these respiratory diseases is the use of medication to control symptoms. The challenge however is ensuring that patients are using the prescribed medications since less than 50% of patients take medications as prescribed. It has been shown that increasing medication adherence results in better health outcomes for patients while reducing the overall spend to achieve these outcomes.

Smartinhaler enables home monitoring of COPD and Asthma medications and records the type of medication taken, when it was taken and measures the overall medication adherence. When combined with the ability of XMPRO to provide alerts and tasks that can be triggered enables Healthcare Payers and service providers to quickly identify patients who need the most support with their medications and conditions, to organize appropriate pro-active treatment and intervention and thereby prevent expensive hospital visits and procedures for emergency conditions.

Smartinhaler can identify at risk patients through indications such as low adherence to preventor medications and increased use of reliever medications. Using XMPRO to provide alerts and create case management tasks will enable Healthcare Payers and service providers to quickly identify members who are at risk and provide appropriate intervention services.

Using XMPRO longer term to combine the information from Smartinhaler with data sources that Healthcare Payers and service providers may have on members, such as previous unplanned admissions, co-morbidities or even the frequency of prescription refills, will enable Healthcare Payers and service providers to more accurately predict those members who may benefit from additional interventions. The interventions are based on the member profiles that would be built up over time.

The provision of this type of intervention will result in lower overall healthcare costs and improved health outcomes for members through the use of data based interventions.