



FM Data Analytics



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Facility Management

- Asset Management:
 - Extend end of life.
 - Reduce maintenance cost
 - Improve sustainability criteria.
 - Who has energy risks
 - Return on investment is important.
 - Client's like to see quick tangible results. Investment greater than 3 years need stronger business case.
 - What are the risk involves.



Effective Data Analytics

- Alarms and rules
- Asset migration and Tracking
- Prescriptive FM – maintenance logs
- Predictive Maintenance – sensors and smart analytics.



Alarms

PROS

- Faster response and correct response. Which alarm type, what asset and location.
- Maintaining an optimal plant will translate to better energy efficiency and higher occupant satisfaction.
- Rules can be set up for pre-alarm or a series a rules for smarter alarming.



CONS

- Different IT integration across different platform.
- BMCS, helpdesk, lobby vision, fire control panel all have to have same consistent language
- Nuisance alarms: Streamlining only to critical ones.
- Temperature High and Low and mis-matched alarms.
- We have sensors to provide smart alarms but no alarms when sensors are out of calibration.



Asset Management

- 92,000 Furniture, Fixtures and Equipment
- 68,000 Hard Assets
- Integrated with Helpdesk functionality

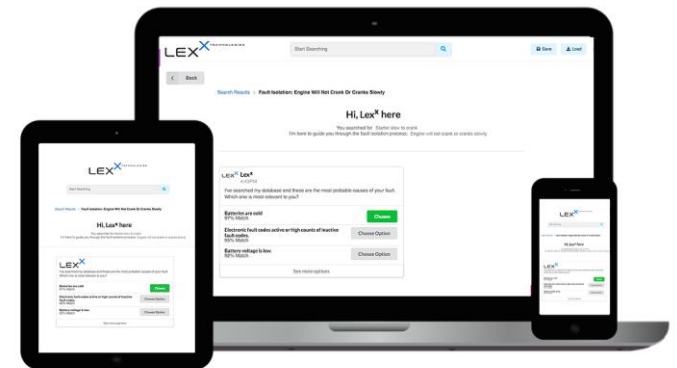
- Asset tagging to assist helpdesk with reactive maintenance and asset history.
- Condition reports
- Automatic PPM generated associated to individual asset
- Quicker response to reactive maintenance.





Prescriptive FM analytics

- **Prescriptive FM analytics** utilize previously collected data and forecasting to identify “What you should do,” suggesting options to resolve potential issues.
- Each asset reactive log and the operational manual for each asset is migrated into a common platform with logs of faults creating a maintenance bible of common faults.
- Provides intelligent by bringing the relevant information to the technician.





Cloud and IoTs analytics

- **Internet of Things**
 - network connection of series of digital information to communicate and interact over the internet.
 - Collecting the data on its own doesn't provide much value and doesn't differ much from traditional Building Management Systems (BMS) data.
 - Only when the data is overlaid with algorithms that highlight trends and give you insights, does the real value start to emerge
 - Create sophisticated benchmarking, across portfolios or city wide e.g. Chillers should all behave similarly in same climate zones for each building type.
 - Using sensors and alarms, assets moving from traditional PPM to reactive / predictive.
 - Moving data through the cloud creates the opportunity for critical asset to be monitored by a team 24/7.



Questions

