

This changes everything

# Every once in a while something happens that changes the world

- > Electricity
- > Jet engine
- > Penicillin
- > Silicon chip
- > iPhone
- > Sergeant Pepper
- > EMMA

And nothing is ever the same again

# Disruptive change: AI in energy management

- It isn't a better mousetrap
- It's different way of looking at the world (or mice)
  - 'No Normal' starting point
  - No embedded rules; the system learns from being tutored and from its own experience
  - Uses the characteristics of the data to identify the issue
  - Applies these data 'shapes' to become predictive
- Redefines the role of the Energy Manager

# The history of automation in energy management

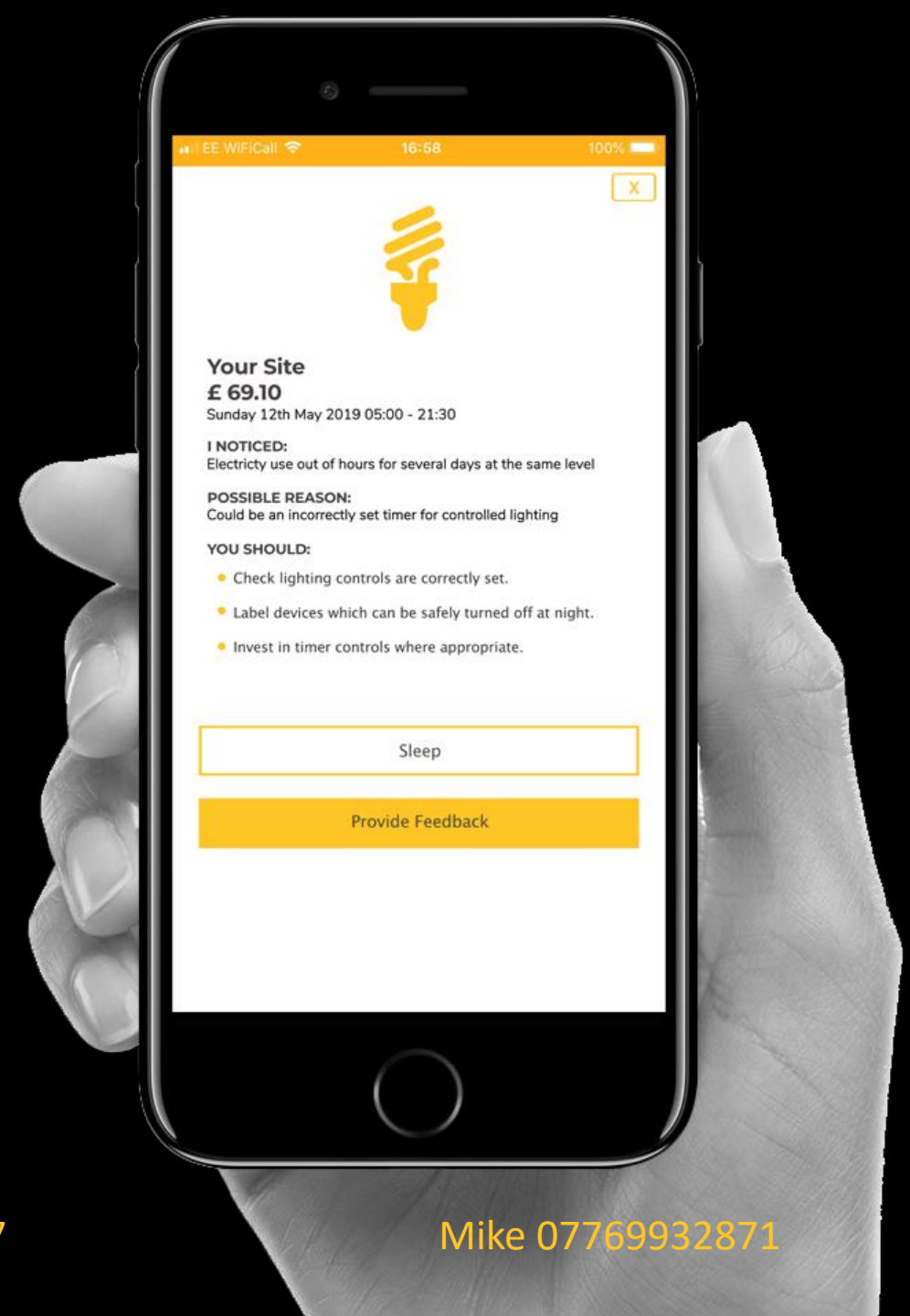
- You get the same mess you always had but much faster...
- The problems are and always have been
  - Easy access to reliable data
  - Using the data to properly identify the root cause of the problem or opportunity
  - Finding the time to do something about it
- EMMA makes the first two go away

# yeah, yeah but they'll still need people

- True, but not doing the same things
- AI will be fast and accurate in identifying energy usage anomalies, where they are and what to do about them (That's half of a traditional energy managers job done)
- It will be cheap – around £20 per meter, per annum (so for an average energy manager on £50k per year you could monitor 2,000-2,500 meters – you can see the wheels grinding in the finance guys' heads now)
- It will see problems before they actually happen so it will become preventative
- It will be always on, 24/7/365. No sick days, holidays, personal time

# KISS

- A simple tick system delivers
  - What happened
  - Likely cause
  - What to do about it
- Access via an APP and/or email
- Feedback in plain English
- Tickets delivered to those with the skills to resolve



# In the Loop

- > Access to estate wide KPI's
- > Estate performance reporting in one place
  - > Who needs help
  - > Target greatest opportunities
  - > Low effort continuous improvement
- > Customised to your objectives

PERFORMANCE REPORT				£790
				£258
				Per Month
<b>Estate Date</b>				
Savings So Far	£1,590		Average Fix time	7 days
Missed Savings	£920		Feedback	3 of 16
Issues Reported	16		Issues Solved	10
<b>Status</b>				
	Start	New	Closed	End
Issues	2	1	1	2
Value	£140	£32	£90	£58
<b>Site Performance</b>				
	Savings	Issues Solved	Savings Missed	
Site C	£620	7 of 8	£120	
Site B	£490	5 of 5	£400	
Site A	£480	1 of 3	£400	
<b>Site A To Date</b>				
Savings So Far	£490		Average Fix time	3 days
Missed Savings	£120		Feedback	2 of 8
Issues Reported	8		Issues Solved	7
<b>Status</b>				
	Start	New	Closed	End
Issues	2	1	1	2
Value	£140	£32	£90	£58

# Don't Panic

- Energy Managers will have to evolve
- Jury's still out but it looks like energy management, building maintenance, M&E replacement will all fall under the same 'ownership' because the stream of rich data and information coming from an AI energy management system will see all of this
- Energy Managers will become infrastructure or ecosystem managers
- So, in the best traditions of Junior Common Room debates



This House believes that Energy  
Mangers will have to evolve or  
die

(but into what?) Discuss