



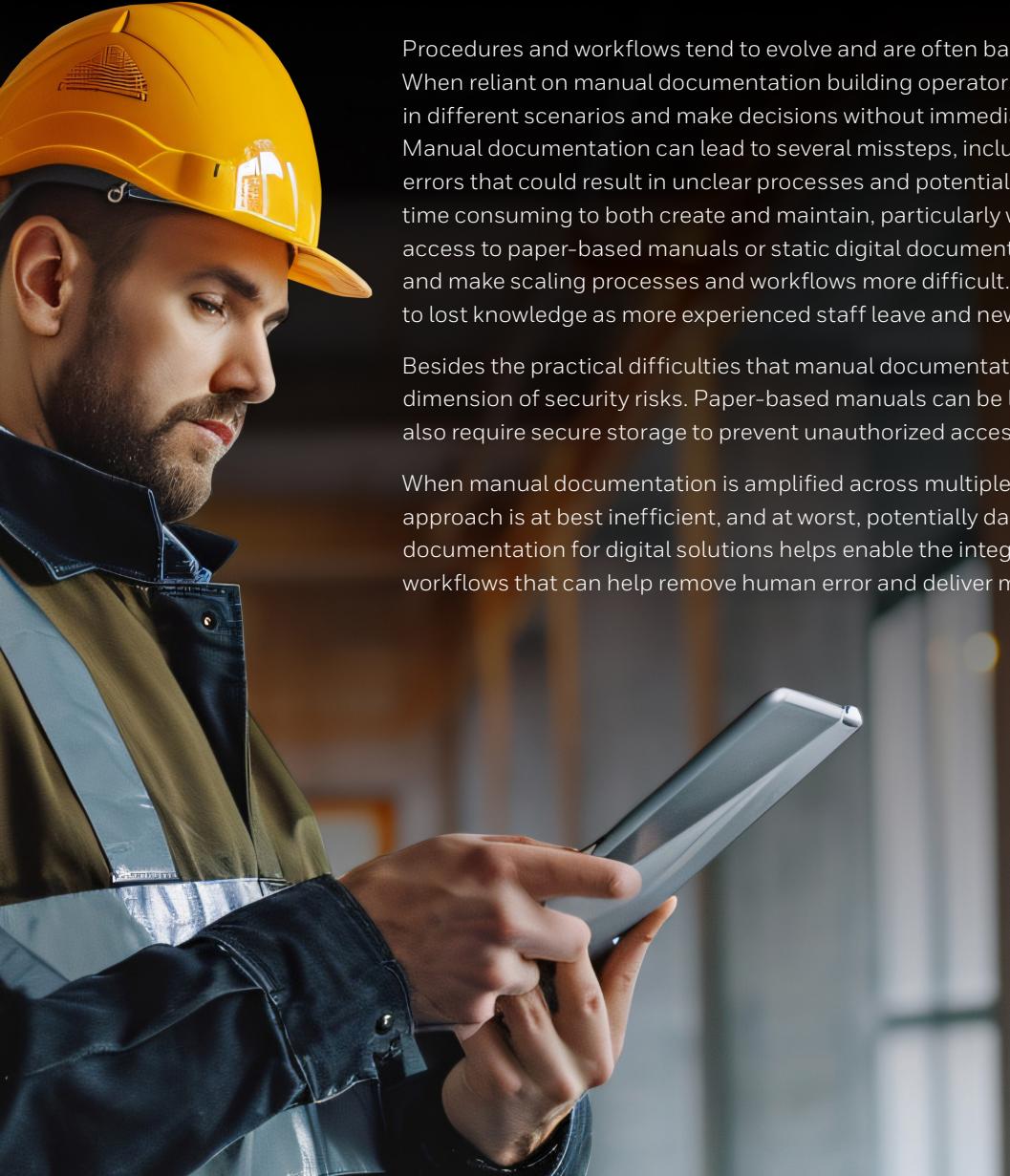
# SEVEN STEPS TO CREATING BUILDING EFFICIENCY

Honeywell

Aging building stock, a shortage of skilled workers, and continuing cost pressures are just three challenges that building owners and operators face daily. Reducing energy consumption to meet sustainability goals also adds to the complexity of maintaining operational efficiency. In this article, Honeywell offers guidance to help building operators on the path to more efficient building operations.

1

# UPGRADE TO DIGITAL DOCUMENTATION



Procedures and workflows tend to evolve and are often based on manual documentation. When reliant on manual documentation building operators must remember the steps to take in different scenarios and make decisions without immediate access to relevant information. Manual documentation can lead to several missteps, including inefficiency created by human errors that could result in unclear processes and potential safety hazards. It is also inherently time consuming to both create and maintain, particularly with complex workflows. Limited access to paper-based manuals or static digital documents can create ‘knowledge pockets’ and make scaling processes and workflows more difficult. Knowledge pockets can also lead to lost knowledge as more experienced staff leave and new employees join an organization.

Besides the practical difficulties that manual documentation brings with it is the additional dimension of security risks. Paper-based manuals can be lost, stolen or damaged. They also require secure storage to prevent unauthorized access to sensitive information.

When manual documentation is amplified across multiple workflows and procedures, the approach is at best inefficient, and at worst, potentially dangerous. Swapping manual documentation for digital solutions helps enable the integration and standardization of workflows that can help remove human error and deliver more consistent, secure results.

# **2** INTEGRATE SYSTEMS

Buildings contain multiple systems from heating and lighting to security and safety. Unless they work seamlessly together, inefficiencies will arise. Integrating multiple systems onto a unified platform, such as Honeywell's Enterprise Buildings Integrator, provides greater situational awareness to help improve operational response and staff productivity.

Accessing multiple building domains – including fire and life safety, security, building management systems and more – in one universal dashboard enables building operators and their teams to see everything at a glance, saving time and improving efficiency and remove the need to “swivel chair” from screen to screen to see the performance of different systems.



# **3** LEVERAGE EXISTING INFRASTRUCTURE

With multiple building systems in play, simplifying system design to make it easier to install, commission and maintain solutions is essential. Honeywell building management systems (BMS) are now designed to connect wirelessly or wired, using of twisted pair T1L technology which allows you to upgrade your building management system to IP without having to rewire your network. This means you can transfer your HVAC data without disruptive upgrades and combine older technology with IP controlled solutions.

# 4

# DEFINE OPERATING PARAMETERS

Building operators need insight into asset performance to recognize which equipment may be underperforming or causing issues. Defining clear operating parameters and leveraging sensors that identify anomalies help make troubleshooting easier. Predefined thresholds allow sub-optimal performance to be quickly recognized so that timely adjustments and repairs can be made before issues become downtime.





5

## BE PROACTIVE ABOUT MAINTENANCE

Clear operating parameters are also vital for predicting when maintenance interventions are necessary. Raising alerts as soon as an abnormal operation is identified helps enable a flexible and responsive approach to servicing and maintenance. Through an edge-to-cloud approach like Honeywell Forge for Buildings, data from multiple systems can be analyzed 24/7, with an alert raised if irregularities arise. These alerts can be prioritized and coordinated to minimize the number of callouts and reduce downtime. Performance data analysis tools enable timely and planned interventions that support a more proactive and predictive maintenance regime.

# 6

# CONSIDER THE OCCUPANT EXPERIENCE

Occupant needs must be considered when deciding what 'building efficiency' looks like. The exact requirements will depend on whether you are running an airport, a hospital, a factory, or an office space, but general levels of comfort and well-being are a minimum requirement. Aspects like indoor air quality, life safety and security expectations also need to be managed, while controlling energy costs and improving uptime. Select automation technologies and building service partners that can help you meet occupants' expectations as well as manage system performance to achieve optimum efficiency.



# 7

# TAKE A TOTAL TECHNOLOGY APPROACH

There is a wealth of technology available today that can help save time and money and deliver insights based on real-time data to improve overall building efficiency. Improved use of technology may be as simple as equipping operators with mobile tablets or could involve opting for a fully integrated building operations platform. These technologies are constantly evolving, so to maintain optimum efficiency it is essential for building operators to keep their technology stack up to date.

A holistic, technology-led approach, where IT and OT are brought together in a truly interoperable way is essential to effective building automation that can make vital information more accessible and allow faster, more accurate decision-making based on real-time data.



## CONCLUSION

The challenges facing building owners and operators are multifaceted, ranging from aging infrastructure to the need for greater energy efficiency and operational efficiency.

As buildings become more complex, owners and operators need better technology to deliver the insights they need to gain full visibility of how the building is performing. By embracing these principles and leveraging advanced technologies to better enable integration and connectivity across assets, devices and control systems and by choosing a partner that can support efficiency goals now and in the long term, building operators can not only meet the challenges of today but can also be future ready to be truly operationally efficient.