



INSURANCE REPORT





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SMARTER ASSESSMENTS. LOWER RISKS. STRONGER ASSETS.

This report outlines the relationship between Building Information Modelling (BIM), digital asset management, operational risk management, and the insurance sector within the built environment.

Accurate digital information, structured asset data, and BIM-enabled workflows support improved insurance assessments, risk evaluation, compliance management, and lifecycle asset protection.



IMPROVE RISK VISIBILITY
Understand and reduce asset-related risks



ENHANCE ACCURACY
Reliable, up-to-date operational information



SUPPORT COMPLIANCE
Meet regulatory and insurance requirements



DRIVE BETTER DECISIONS
Data-driven insurance assessments



PROTECT VALUE
Strengthen lifecycle asset protection



REDUCE LOSSES
Lower operational and insurance risks

1 PURPOSE OF INSURANCE-FOCUSED ASSET MANAGEMENT

Improve how asset information, operational risks, and compliance data are managed and shared between stakeholders involved in asset ownership, facilities management, and insurance services.



BIM and digital asset management systems improve transparency and reduce uncertainty in insurance-related evaluations.

KEY OBJECTIVES

- ✓ Improve visibility of asset-related risks
- ✓ Enhance accuracy of operational information
- ✓ Support digital risk assessment processes
- ✓ Improve lifecycle asset protection
- ✓ Strengthen compliance and governance
- ✓ Reduce operational and insurance-related risks
- ✓ Support data-driven insurance decision-making

2 IMPORTANCE OF ACCURATE ASSET INFORMATION

Maintaining accurate and continuously updated asset information is essential for operational and insurance-related decision-making.



Incomplete or fragmented asset information can increase operational uncertainty, delay claims processes, and create difficulties in evaluating risk exposure.

Accurate digital records improve both operational management and insurance-related decision-making.

3 ROLE OF BIM IN INSURANCE AND RISK MANAGEMENT



- CENTRALIZED INFORMATION MANAGEMENT**
Access coordinated asset specifications, maintenance, inspections, and safety-critical information in one environment.
- IMPROVED RISK VISIBILITY**
Digital models improve understanding of asset conditions, dependencies, and infrastructure vulnerabilities.
- BETTER LIFECYCLE TRACKING**
Maintain continuous records of modifications, refurbishments, inspections, and maintenance throughout the asset lifecycle.
- SUPPORT FOR COMPLIANCE VERIFICATION**
Demonstrate compliance with operational standards, fire safety requirements, and regulatory obligations.

BIM provides a shared digital environment that improves visibility, coordination, and risk-based decision-making.

4 OPERATIONAL RISK AND INSURANCE CONSIDERATIONS

Key operational risk factors include:

- Fire and life-safety risks
- Maintenance failures
- Aging infrastructure
- Incomplete compliance documentation
- Operational downtime
- Asset degradation
- Data quality issues



Improved digital visibility allows organizations to identify and manage risks proactively before failures or incidents occur.

Insurance and operational strategies are increasingly moving toward predictive and preventative approaches supported by real-time data and digital monitoring systems.

5 DIGITAL TRANSFORMATION AND EMERGING TECHNOLOGIES

- Digital twins
- IoT-enabled monitoring systems
- AI-supported analytics
- Predictive maintenance platforms
- Common Data Environments (CDEs)
- Automated reporting systems
- Real-time operational dashboards



Integrating live operational data with BIM environments improves asset transparency and supports more informed risk evaluation processes.

6 CHALLENGES IDENTIFIED

- FRAGMENTED INFORMATION SYSTEMS**
Information is managed across disconnected systems, limiting visibility and coordination.
- POOR DATA QUALITY**
Incomplete or outdated asset records reduce confidence in risk assessments.
- LACK OF STANDARDIZATION**
Missing or inconsistent naming, classifications, and governance processes.
- INTEGRATION DIFFICULTIES**
Connecting BIM, operational platforms, and insurance workflows can be complex.
- SKILLS AND CULTURAL BARRIERS**
Challenges adapting to digital workflows and data-driven operational processes.



Improving digital maturity is essential for achieving long-term operational and insurance-related benefits.

7 COMPLIANCE, GOVERNANCE, AND ACCOUNTABILITY

- Reliable audit trails
- Structured operational documentation
- Clear ownership and responsibilities
- Controlled information access
- Consistent operational workflows
- Continuous monitoring and review



8 BENEFITS FOR STAKEHOLDERS

- More accurate risk assessments
- Faster claims processing
- Improved premium outcomes
- Better transparency and trust
- Stronger asset protection
- Reduced downtime and losses
- Improved compliance and reporting
- Enhanced operational resilience

- ASSET OWNERS**
Protect assets and reduce risk exposure
- FACILITY MANAGERS**
Improve operational efficiency and decision-making
- INSURERS**
Make more accurate, data-driven risk evaluations
- CONTRACTORS & PARTNERS**
Improve coordination and information reliability

9 END OUTCOME

A digitally connected, risk-aware, and insurance-ready asset management environment that improves safety, reduces uncertainty, and protects value across the entire asset lifecycle.



BIM-INTEGRATED INFORMATION



DIGITAL ASSET MANAGEMENT



RISK & INSURANCE INTELLIGENCE



OPERATIONAL EXCELLENCE



COMPLIANCE & GOVERNANCE



DATA-DRIVEN DECISIONS



SUSTAINABLE ASSET VALUE

Insurance Report

Introduction

This report outlines the relationship between Building Information Modelling (BIM), digital asset management, operational risk management, and the insurance sector within the built environment.

Accurate digital information, structured asset data, and BIM-enabled workflows support improved insurance assessments, risk evaluation, compliance management, and lifecycle asset protection. Digital transformation is increasingly influencing how insurers, asset owners, and operational teams manage risk and make informed decisions throughout the lifecycle of built assets.

1. Purpose of Insurance-Focused Asset Management

Insurance-focused asset management aims to improve how asset information, operational risks, and compliance data are managed and shared between stakeholders involved in asset ownership, facilities management, and insurance services.

Insurance providers increasingly require reliable and traceable asset information to assess risk exposure, validate compliance, and support operational resilience.

Key objectives include:

- Improving visibility of asset-related risks
- Enhancing accuracy of operational information
- Supporting digital risk assessment processes
- Improving lifecycle asset protection
- Strengthening compliance and governance
- Reducing operational and insurance-related risks
- Supporting data-driven insurance decision-making

BIM and digital asset management systems improve transparency and reduce uncertainty in insurance-related evaluations.

2. Importance of Accurate Asset Information

Maintaining accurate and continuously updated asset information is essential for operational and insurance-related decision-making.

Insurers and operational stakeholders rely heavily on reliable data to assess:

- Building conditions
- Fire and safety systems
- Maintenance histories
- Operational risks
- Asset performance
- Compliance status
- Refurbishment and modification records

Incomplete or fragmented asset information can increase operational uncertainty, delay claims processes, and create difficulties in evaluating risk exposure.

Accurate digital records improve both operational management and insurance-related decision-making.

3. Role of BIM in Insurance and Risk Management

BIM acts as a centralized platform for improving operational visibility and supporting risk-based decision-making.

It provides a shared digital environment capable of integrating operational, maintenance, safety, and compliance information into a single coordinated system.

Key BIM-related functions include:

Centralized Information Management

BIM environments allow operational teams and insurers to access coordinated information related to asset specifications, maintenance activities, inspections, and safety-critical systems.

Improved Risk Visibility

Digital models improve understanding of asset conditions, operational dependencies, and infrastructure vulnerabilities.

Better Lifecycle Tracking

Continuous records of modifications, refurbishments, inspections, and maintenance activities can be maintained throughout the lifecycle of assets.

Support for Compliance Verification

BIM systems assist in demonstrating compliance with operational standards, fire safety requirements, and regulatory obligations.

4. Operational Risk and Insurance Considerations

Digital asset management plays a significant role in operational risk assessment within the insurance sector.

Key operational risk factors include:

- Fire and life-safety risks
- Maintenance failures
- Aging infrastructure
- Incomplete compliance documentation
- Operational downtime
- Asset degradation
- Data quality issues

Improved digital visibility allows organizations to identify and manage risks proactively before failures or incidents occur.

Insurance and operational strategies are increasingly moving toward predictive and preventative approaches supported by real-time data and digital monitoring systems.

5. Digital Transformation and Emerging Technologies

Emerging technologies are significantly influencing insurance and operational asset management practices.

Technologies increasingly being adopted include:

- Digital twins
- IoT-enabled monitoring systems
- AI-supported analytics
- Predictive maintenance platforms
- Common Data Environments (CDEs)
- Automated reporting systems
- Real-time operational dashboards

Integrating live operational data with BIM environments improves asset transparency and supports more informed risk evaluation processes.

6. Challenges Identified

Several challenges continue to affect the adoption of digital insurance and risk management practices.

Fragmented Information Systems

Operational and insurance-related information is often managed across disconnected systems, limiting visibility and coordination.

Poor Data Quality

Incomplete or outdated asset records reduce confidence in operational and risk assessments.

Lack of Standardization

Standardized naming conventions, classifications, and information governance processes are often missing or inconsistently applied.

Integration Difficulties

Connecting BIM systems, operational platforms, and insurance workflows can create technical and organizational challenges.

Skills and Cultural Barriers

Organizations may face difficulties adapting to digital workflows and data-driven operational processes.

Improving digital maturity is essential for achieving long-term operational and insurance-related benefits.

7. Compliance, Governance, and Accountability

Strong governance, accountability, and traceability are critical components of effective insurance-focused asset management.

Key governance requirements include:

- Reliable audit trails
- Structured operational documentation
- Clear ownership of asset information
- Continuous maintenance tracking
- Standardized operational workflows
- Secure information environments

Information management standards such as ISO 19650 support structured BIM workflows and operational governance processes.

8. Operational Benefits

BIM-enabled asset management practices provide several operational and insurance-related benefits.

These include:

- Improved risk visibility
- Faster access to operational information
- Better compliance tracking
- Enhanced maintenance planning
- Improved operational resilience

- Greater transparency for insurers and asset owners
- Reduced operational uncertainty
- Better lifecycle asset management
- Improved audit readiness and accountability

Accurate digital information also supports faster and more reliable insurance assessments and claims management processes.

9. End Outcome

The intended outcome is the creation of a digitally integrated, risk-aware, and operationally resilient asset management environment that supports both operational performance and insurance-related decision-making.

The desired end-state includes:

- Centralized and continuously updated asset information
- Integrated BIM and operational risk management systems
- Improved visibility of asset conditions and compliance
- Enhanced operational resilience and lifecycle planning
- Better coordination between insurers, asset owners, and operational teams
- Reduced operational and insurance-related risks
- Improved auditability and information traceability
- Stronger predictive and preventative maintenance strategies
- Greater confidence in operational and insurance assessments

BIM-enabled digital asset management is becoming increasingly important for improving operational transparency, reducing risk exposure, and supporting modern insurance and asset protection strategies within the built environment sector.

Participants

Thanks to all the contributors who helped in creating this report.

Andy Burns	SCANLANS PROPERTY MANAGEMENT LLP
Bex Gibson	Rider Levett Bucknall
Bola Abisogun	Digital Twin Skills Academy CIC
Gary Watts	BuildingSafe
Gordon Pringle	HASL
Grant Bezuidenhout	42 Digital Consulting Ltd
Mark O'Reilly	The Skills Factory
Nurudeen Saka	Arcadis
Pav Singh	Arcadis
Pierre Venter	BIMinitiative
Tom Oulton	East Riding of Yorkshire Council