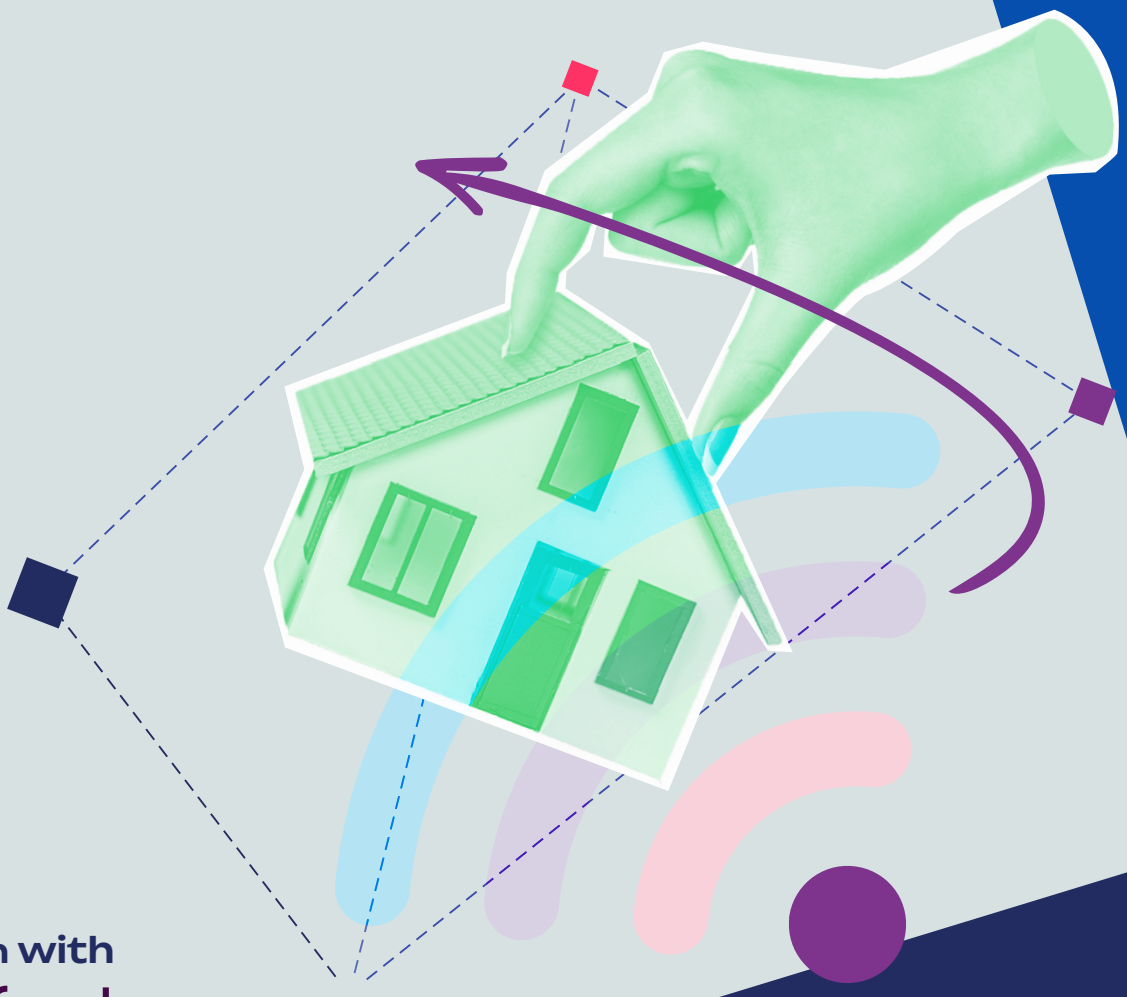
Disruptive Innovators Network

Connected Homes Research Project Interim report: Results of Maturity Assessment Questionnaires



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March 2025

Executive Summary

This interim report presents the findings from the **Maturity Assessment Questionnaire** conducted as part of the **DIN Connected Homes Research Project**. The research aims to assess how social landlords are engaging with and deploying **Internet of Things (IoT)** solutions across their housing stock. The questionnaire gathered responses from 31 individuals working within social landlords who had expressed interest in the project.

Key Findings

1. **Limited Strategic IoT Maturity**
   - Most organizations rate their IoT knowledge as **moderate** (mean 6.13/10), but deep expertise is lacking.
   - Awareness is concentrated in IT teams; broader organizational understanding remains **limited**.
   - Few organizations systematically **monitor IoT market trends**, leading to reactive rather than strategic adoption.
   - While many rely on **internal expertise**, this may **limit innovation** and strategic implementation.
2. **Lack of Formal IoT Strategies**
   - **41.4%** of organizations have no formal **IoT strategy** at all, and a further **27.6%** are still developing one.
   - The primary drivers for adoption are cost savings, compliance, **damp mould monitoring, and operational efficiency** rather than **competitive differentiation**.
   - IoT initiatives are often **opportunistic**, lacking alignment with broader business objectives.
3. **IoT Pilots Are Widespread but Scaling Remains a Challenge**
   - **86.2%** of organizations have undertaken IoT pilots, but only **24%** have scaled them to wider deployment.
   - Environmental sensors (damp, mould, CO2, energy efficiency) and smart thermostats are the most **frequently tested** technologies.
   - Perceived pilot success is moderate (mean 5.28/10), with **operational efficiencies** being the main observed benefit.
   - Barriers to full-scale deployment include **data management issues, tenant resistance, technical challenges, and uncertain return on investment (ROI)**.

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4. **Internal Barriers to IoT Deployment**
   - **Funding constraints** are the most commonly cited barrier to wider IoT adoption.
   - **Poor integration** of IoT data into existing systems reduces its impact on decision-making.
   - **Manual data handling remains prevalent**, with only 18.5% using **automated analytics**.
   - Organizations report **low competence** in using IoT data strategically, highlighting a **skills gap.**
5. **Tenant Engagement in IoT Deployment is Limited**
   - Tenant involvement in **planning and deployment** is **low** (mean 3.64/10).
   - While **40.7%** of organizations provide tenants with access to IoT data, a similar proportion **do not**.
   - Transparency in **communicating IoT-driven changes** is **moderate at best**, potentially affecting resident trust and engagement.
6. **Future IoT Expansion Plans**
   - Most organizations plan to **expand IoT deployment** over the next three years (mean likelihood score: 6.43/10).
   - **Funding remains the biggest challenge**, alongside **data management, training, and system integration**.
   - AI-powered analytics and **predictive maintenance** are emerging areas of interest, but current adoption is limited.

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Key Industry Recommendations

To accelerate successful IoT adoption and maximize impact, organizations should:

- ✔ **Develop formal IoT roadmaps** to ensure structured, long-term planning.
- ✔ **Improve funding models** by establishing clear ROI metrics and phased investment approaches.
- ✔ **Enhance system integration** by adopting standardized APIs and analytics platforms.
- ✔ **Upskill teams** in IoT analytics and strategic decision-making.
- ✔ **Engage tenants early** to improve trust, adoption, and transparency.

This report highlights that while IoT adoption is growing in the sector, a **lack of strategy, funding, integration, and skills** continues to hinder progress. Addressing these barriers will be critical for **scaling deployments** and realizing the full potential of IoT in social housing.