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## ***Buildwise – Energy & environmental management in buildings***

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<b>Summary</b>	<p>The specification, design, and validation of an information management technology platform to support holistic energy &amp; environmental management in buildings using a combination of wireless sensor network technologies, integrated data modelling and data mining methods &amp; techniques.</p> <p>The project is supporting the development of an integrated software tool which supports the design and deployment of wireless sensor networks for buildings, including power, signal strength, network protocols &amp; interfaces to existing building management systems.</p>
<b>Key attributes</b>	<p>The key attributes of the Buildwise project are:</p> <ul style="list-style-type: none"><li>• Ability to gather data from 100's of in-building wireless sensors to augment data from traditional wired systems</li><li>• A data transformation process which uses the gathered building sensor data to populate a Building Information Model system and data warehouse</li><li>• A performance framework tool which uses the processed data to provide a basis for in-building holistic environmental and energy performance improvement</li><li>• Ability to provide asset &amp; performance rating, e.g. provision of a “green screen” in reception to demonstrate efficient energy use &amp; environmental performance</li></ul>
<b>Potential opportunities</b>	<p>The Buildwise project improves building and environmental management in the commercial building space, by:</p> <ul style="list-style-type: none"><li>• Adding extensive wireless sensor capability to traditional BMS &amp; EMS systems</li><li>• Delivery of improved information processing and building performance tools to make use of the wireless sensor data</li><li>• Improved User Interfaces for building operators and to communicate with various building stakeholders that include building occupants</li><li>• Provision of tools to plan and manage the use of wireless sensors integrated with traditional wired building management systems</li></ul>
<b>Possible application areas</b>	<p>The Buildwise approach is applicable to a range of building and environmental management market segments, including:</p> <ul style="list-style-type: none"><li>• Management of commercial and public sector buildings</li><li>• Extending Buildwise to support multi-site and multi-tenant occupancy, and providing specific support to address the important retrofit market</li><li>• Tailoring a solution for the “mid-sector” market, for example smaller retail premises</li><li>• Addressing residential markets, potentially via a service-based model (similar to an alarm installation/service company)</li></ul>

### **CONTACT**

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