ANALYTICS DRIVEN DESIGN USING
SPACE SENSING TECHNOLOGY

FD.
forward thinking design

Honeywell

BETTER OUTCOMES FOR BUILDINGS

Summary: Space sensing technology allows businesses to optimise their spaces to drive efficiency, improve business performance, and better understand the patterns of their people and customers. With Honeywell Vector Space Sense, businesses can utilise IoT technology and a simple user interface to engage with their building occupancy information to inform business decisions.

Awareness: IoT-connected sensors provide data on space usage for any given building, floor, room or desk. The sensors can integrate with smart lights and Bluetooth beacons as part of a digital ceiling infrastructure.

Analysis: Thousands of data record collected from the range of IoT sensors in place are then analysed using customised algorithms based on sophisticated space utilisation models.

Action: Meaningful and actionable insights are presented in sophisticated yet intuitive dashboards and reports, including maps, usage profiles, trends, and other metrics. These show where and how space is used, and where opportunities exist to optimise both operational costs and the real-estate footprint.
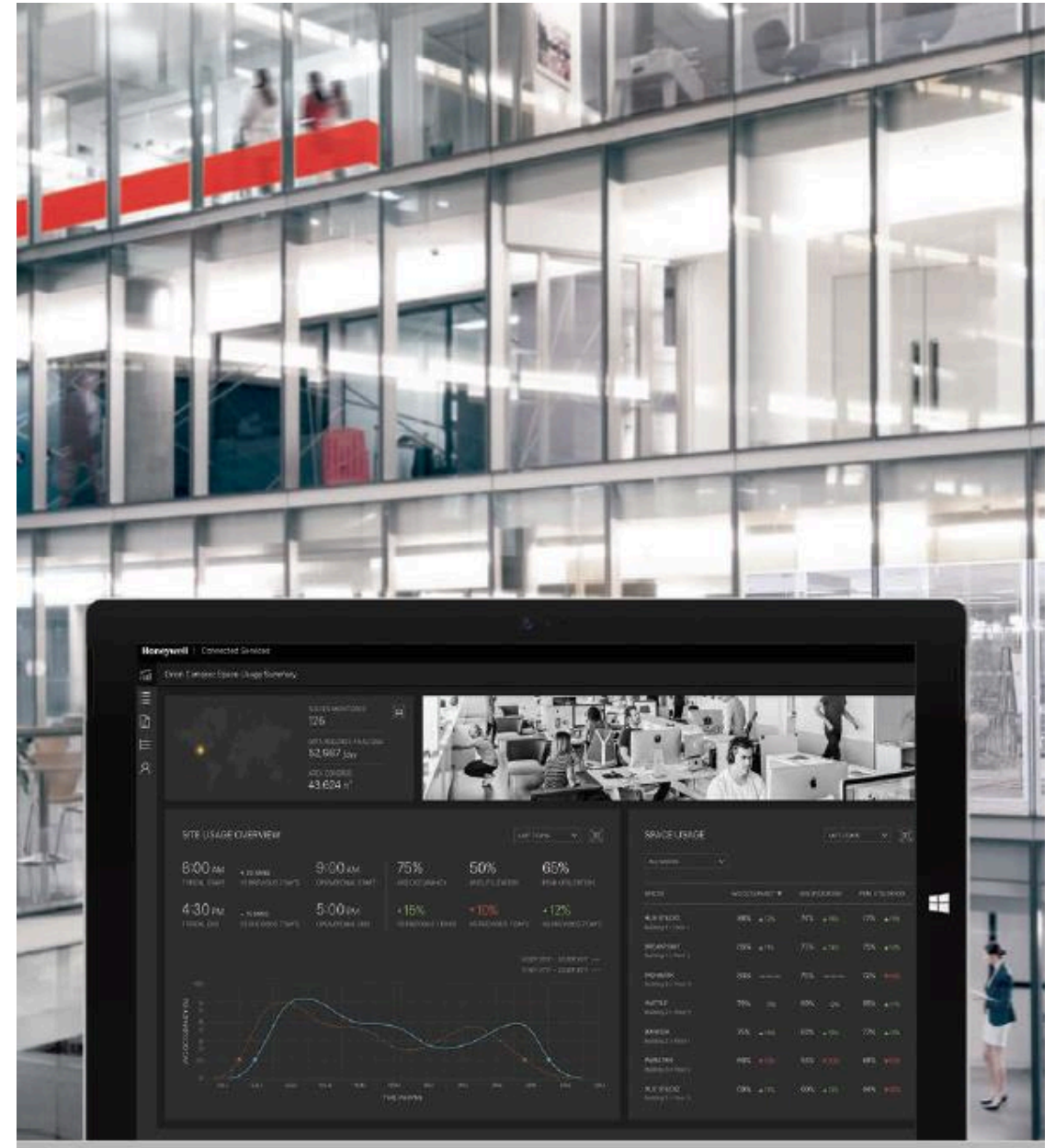
SPORTING AND RSL CLUBS

Relevant tech/solution options: Passive Infrared (PIR) and/or Infrared (IR) installed on roof through key areas such as: Gaming, Open Areas, Office Areas and Arcade, along with Honeywell Space Sense analytics. This will give the most insight for the lowest upfront expense. Option to integrate into a finance system or have data shared as csv to correlate utilization/ occupancy with revenue.

Costs of purchase, install and ongoing: Site and project dependent, number of sensors, analytics package coverage and duration, preference for ongoing maintenance (wired or battery) and ongoing consultation sessions

Relevant case studies to show benefits/improvements: A Large National Museum is the closest reference for its design, to enhance occupant experience and better understand usage. This project is still in progress.

Sizes and images of sensors and infrastructure needed to support your systems: Sensors are generally 5cm – 10cm in diameter and are paired with a number of gateways to transfer data to the cloud. They require an internet connection or the ability to add one. We recommend a secure level of cybersecurity be implemented (Honeywell can provide).

Time and trades required for install, staff training/monitoring and defit: Sensor type dependent. A typical installation of up to 200 wireless sensors could be physically installed in 2-3 days, or a wired solution is likely to need 6-9 working days for Electricians and Engineers to complete the installation. Configuration for that size is one to two weeks, and then we recommend one day for user training.
Total typical time = 15 business days (wired solution).

After sales support and warranties for our clients should they proceed with your systems: Software as a Service (SaaS) model supports software, which can be supplemented with an on-site maintenance package for complete hardware and software support.
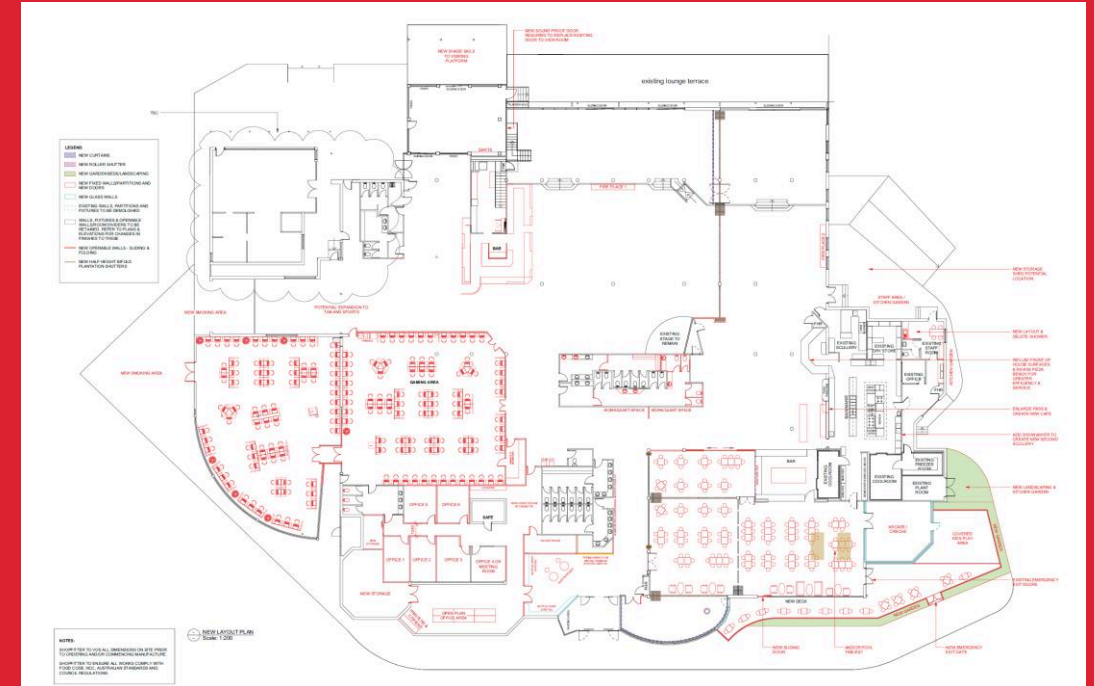
Image provided by *Forward Thinking Design*

CAFES AND RESTAURANTS

Relevant tech/solution options: Passive Infrared (PIR) and/or Infrared (IR) installed on roof/ tables along with Honeywell Space Sense analytics. Could utilise a people counting devices for assessing time of day patronage, staffing and trade matrixes focus. Option to integrate into finance system or have data shared as csv to correlate utilization/ occupancy with revenue.

Costs of purchase, install and ongoing: Site and project dependent, number of sensors, analytics package coverage and duration, preference for ongoing maintenance (wired or battery) and ongoing consultation sessions.

Relevant case studies to show benefits/improvements: Large University or office space currently analysing desk usage to determine desk and space arrangements. Future case study may be completed.

Sizes and images of sensors and infrastructure needed to support your systems: Sensors are generally 5cm – 10cm in diameter and are paired with a number of gateways to transfer data to the cloud. People counters vary in size and requirement – minimum is power over ethernet (PoE). They require an internet connection or the ability to add one. We recommend a secure level of cybersecurity be implemented (Honeywell can provide).

Time and trades required for install, staff training/monitoring and defit: Sensor type dependent. 50 wireless sensors could be installed in a day, or a wired install is likely to need 2 or 3 days for Electricians and Engineers to complete the installation. Configuration for that size is about 3-4 days, and then a half-day for training is recommended.
Total typical time = 5 business days (wireless solution).

After sales support and warranties for our clients should they proceed with your systems: Software as a Service (SaaS) model supports software, and can be supplemented with a maintenance package for on-site support.
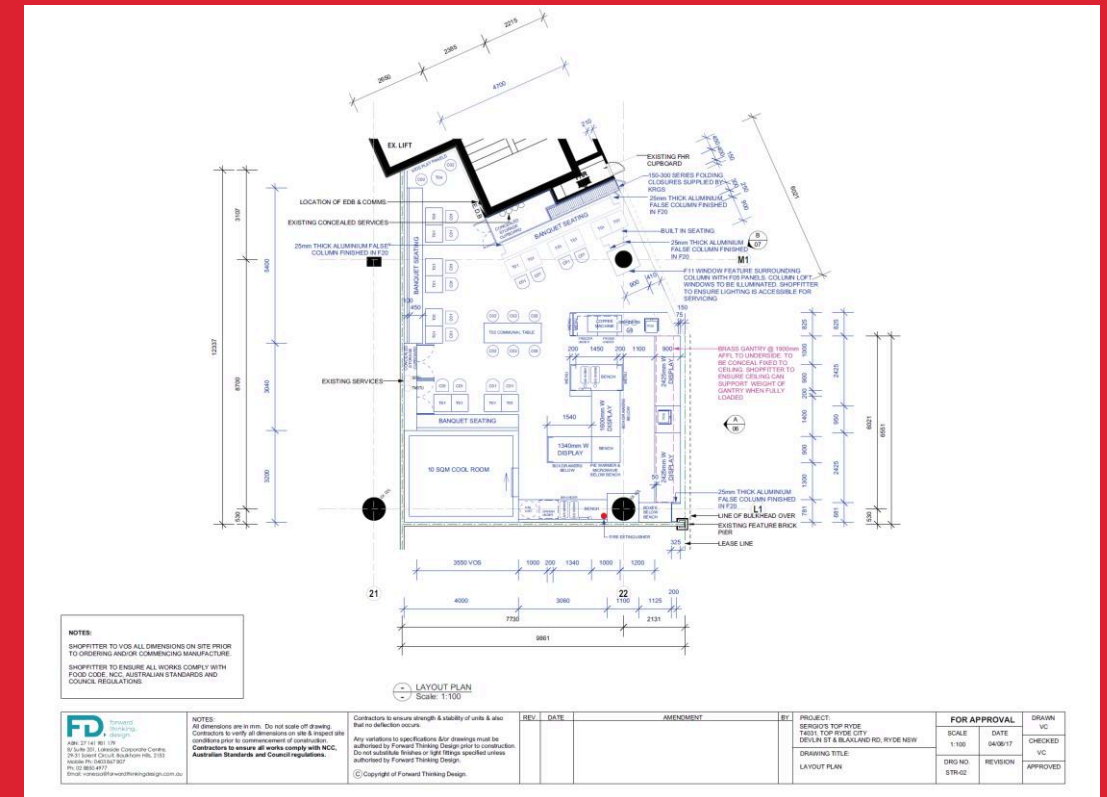

Image provided by *Forward Thinking Design*

RETAIL – SMALL & LARGE

Relevant tech/solution options: Passive Infrared (PIR) and/or Infrared (IR) installed on the roof, along with Honeywell Space Sense analytics. This will give the most insight for the least upfront expense. Option to integrate into finance system or have data shared as csv to correlate utilization/ occupancy with revenue.

Costs of purchase, install and ongoing: Site and project dependent, number of sensors, analytics package coverage and duration, preference for ongoing maintenance (wired or battery) and ongoing consultation sessions

Relevant case studies to show benefits/improvements: Honeywell partnered with a sensor company specialising in retail along with display analysis at National Museum. Case study not yet released.

Sizes and images of sensors and infrastructure needed to support your systems: Sensors are generally 5cm – 10cm in diameter and are paired with a number of gateways to transfer data to the cloud. They require an internet connection or the ability to add one. We recommend a secure level of cybersecurity be implemented (Honeywell can provide).

Time and trades required for install, staff training/monitoring and defit: Sensor type dependent. A typical installation of up to 200 wireless sensors could be physically installed in 2-3 days, or a wired solution is likely to need 7-10 working days for Electricians and Engineers to complete the installation. Configuration for that size is one to two weeks, and then we recommend one day for user training.
Total typical time = 10 working days (large retail, wireless solution)

After sales support and warranties for our clients should they proceed with your systems: Software as a Service (SaaS) model supports software, which can be supplemented with an on-site maintenance package for complete hardware and software support.
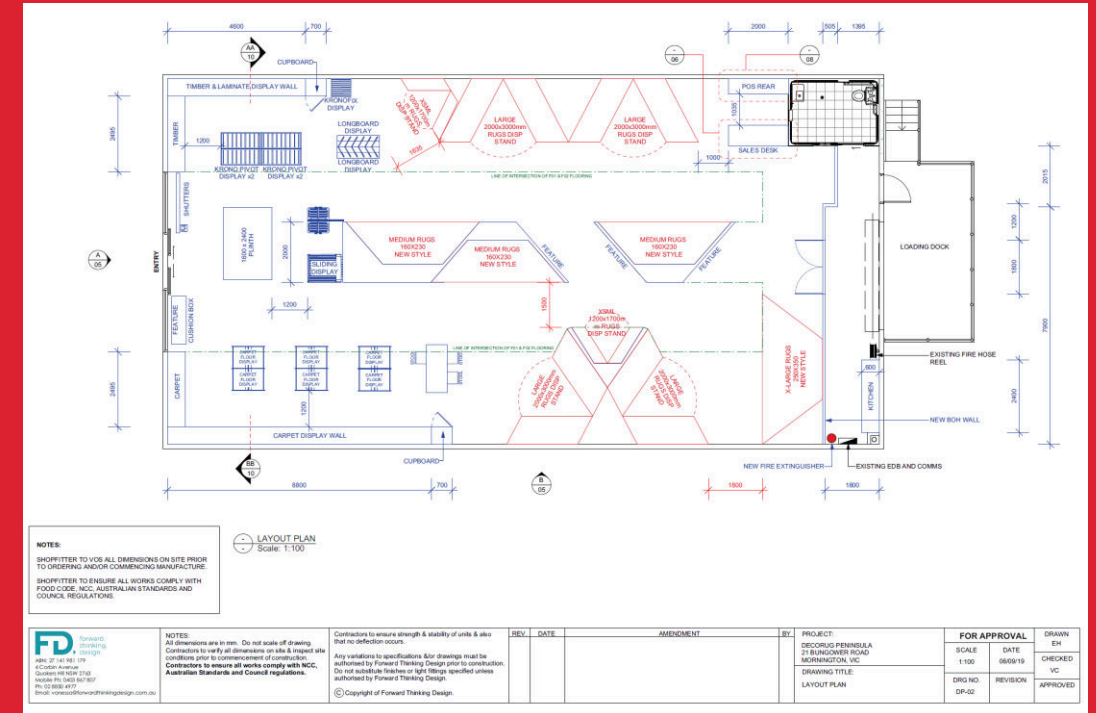
Image provided by *Forward Thinking Design*

OFFICES & MEDICAL

Relevant tech/solution options: Passive Infrared (PIR) and/or Infrared (IR) installed on roof/ desks. Option to deploy sensors with additional monitoring such as temp, air quality, light level, etc. Honeywell Space Sense to analyse space with the option of environmental analytics. Additional capability to deliver energy efficiencies and comfort performance through service packages.

Costs of purchase, install and ongoing: Site and project dependent, number of sensors, analytics package coverage and duration, preference for ongoing maintenance (wired or battery) and ongoing consultation sessions

Relevant case studies to show benefits/improvements: Large scale office rollout for designing the redevelopment of 3 floors based on data insights.

Sizes and images of sensors and infrastructure needed to support your systems: Sensors are generally 5cm – 10cm in diameter and are paired with a number of gateways to transfer data to the cloud. They require an internet connection or the ability to add one. We recommend a secure level of cybersecurity be implemented (Honeywell can provide).

Time and trades required for install, staff training/monitoring and defit: Sensor type dependent, 100 wireless sensors could be installed in a 1-2 days, or wired is likely to need 3 days for Electricians and Engineers to complete the installation. Configuration for that size is one week, and then a day for training.
Total typical time = 9 business days. (wireless solution).

After sales support and warranties for our clients should they proceed with your systems: Software as a Service (SaaS) model supports software, which can be supplemented with on-site maintenance packages for complete support.
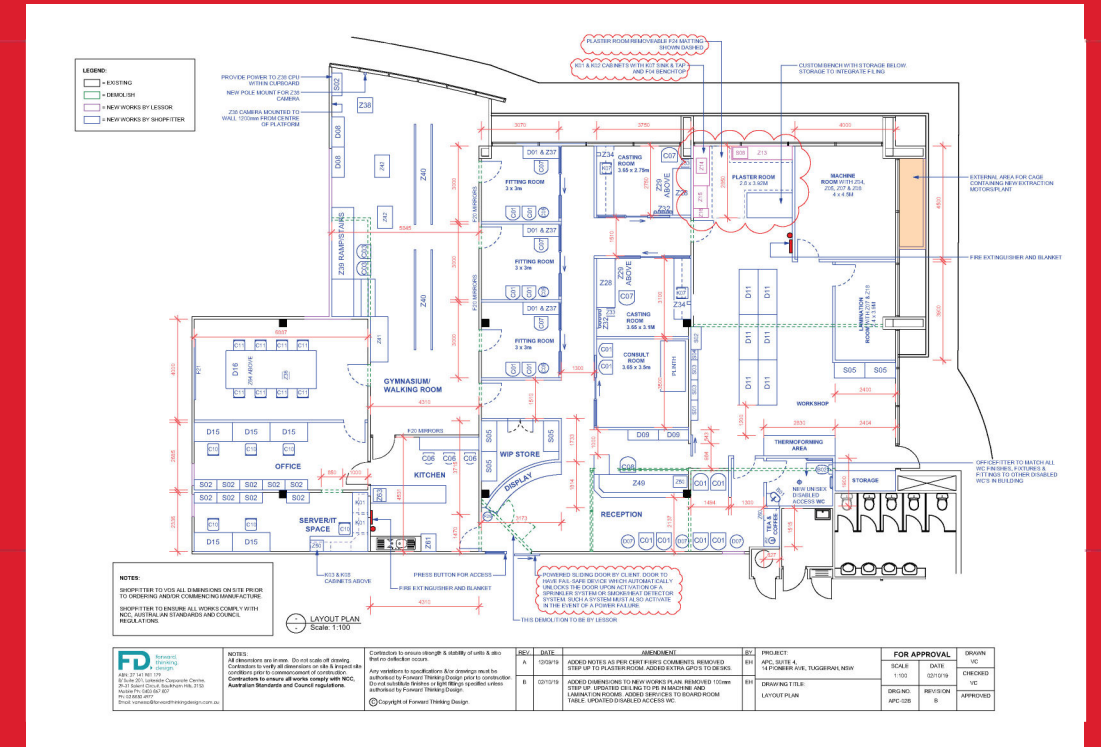

Image provided by Forward Thinking Design

CONTACT DETAILS

STEPHEN MILLIKEN

BUSINESS CONSULTANT
HONEYWELL BUILDING SOLUTIONS
MOBILE: 0466 572 986
EMAIL: STEPHEN.MILLIKEN@HONEYWELL.COM

Honeywell