



SWITCH  Lighting

Network Site Visit Case Study

Switch Lighting
making lighting smarter!

POWERED BY

CallaghanInnovation
New Zealand's Innovation Agency

PROGRAMME PARTNERS

 **Beca**

 **EMA+**

INDUSTRY **4.0**
Network

Switch Lighting – making lighting smarter!



About Switch Lighting

Switch Lighting is a Nelson-based manufacturer of LED lighting. With close to 14 years' experience since their establishment in 2009, they have been dedicated to creating high-quality LED lighting solutions for their customers. Their lights are designed and crafted to suit the New Zealand environment, whether that be on the coast or atop a mountain in a national park. Their mission is to enhance the environments we work, live and play in.

Never tell them that an LED is just an LED! They are committed to investing in the future and are always on the lookout for the latest advancements in their sector. As pioneers in their field, they were the first lighting company to introduce colour tuning LED lighting to New Zealand.

Switch Lighting firmly believe that LED lighting is the way of the future. As a clean, green, energy-

efficient light source, it is environmentally friendly, and they take great pride in being one of the few LED light manufacturers based in New Zealand.

Background

The team at Switch Lighting regularly attend trade shows to stay up to date with the latest industry technology. During a recent trade show visit, they identified a gap in the market for a product that would simplify the process of creating different lighting environments in the home. While other solutions were available, they were often difficult to learn, train, and use, and required additional cables and a high level of expertise to install, commission and be used by the customer.

Recognising the opportunity, rather than adopting a platform that was locked to a particular hardware supplier, the team decided to adopt the available "open source ecosystem" technology, which allows manufacturers

Switch Lighting – making lighting smarter!

to create hardware products that use the ecosystem to communicate with each other. This approach has allowed them to develop products that are highly flexible, easy to use and provides a simple way for end-users to create uniquely lit environments.

To simplify installation, the team leveraged Bluetooth connectivity, which eliminates the need for additional wiring and reduces the level of expertise, time and cost required for installation and commissioning. Additionally, they have incorporated colour tuning technology, which allows for the creation of personalised lighting environments with simple wireless controls.

Overall, they believe their product represents a significant opportunity to meet the needs of customers who want to create personalised lighting environments in their homes without the hassle and complexity of traditional solutions using the latest technology available.

Solution

Upon discovering the Casambi solution, our team of R&D Engineers investigated other Bluetooth chip manufacturers, including Qualcomm IC from the USA. While this IC was excellent, it would require Switch Lighting to develop its own App or user interface.

The advantage of Casambi was that they had already developed a comprehensive App, allowing Switch Lighting to avoid investing heavily in software and staff. Therefore, the Casambi solution was chosen as the best way forward.

Switch Lighting required a method of controlling their colour tuning, and customer feedback indicated that a physical light switch was still essential rather than just using an App to control the lighting. Other solutions that used a fixed wall switch turned off the Wi-Fi/Bluetooth, thus making the smart functionality unavailable.



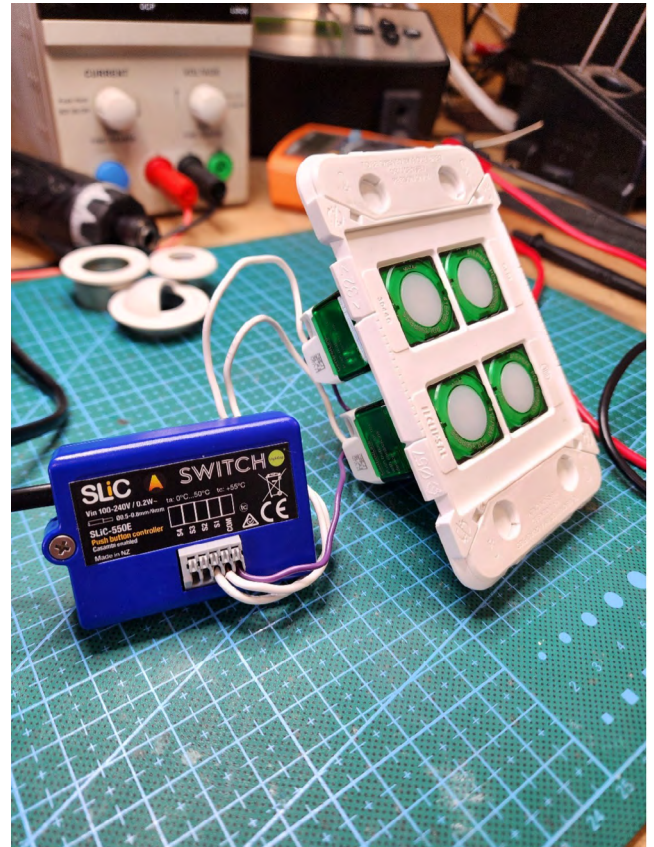
Switch Lighting – making lighting smarter!

Switch Lighting recognised this gap and developed a Bluetooth interface between the standard switch and the Casambi system. Their next step is to add a rotary dimming control, as requested by their customers.

Switch Lighting is currently the only company in Australasia designing and manufacturing Casambi-enabled products.

Key benefits:

- Cemented Switch as the Industry Leader
- Allows Switch to use colour tuning in their products
- First New Zealand company to introduce colour tuning lighting (and still the only one)
- Providing affordable, simple, smart lighting to the end user



Key takeaways:

- Importance of visiting trade shows to keep up to date with latest trends and technology was hugely beneficial.
- Open-source platforms that enable products to talk to each other are good (not locked to a particular hardware provider).
- Sometimes, taking a calculated risk on emerging technology early can put you at the forefront of the market.
- Don't be tempted to shortcut and skip ahead when you are developing a new and ground-breaking product, if you have an agreed NPD process, stick to it.

About the site visits and Industry 4.0

The purpose of the Demonstration Network is to drive uptake of Industry 4.0 technologies among New Zealand manufacturers with the aim of increasing their productivity and global competitiveness. The Network of Site Visits (NSV) are part of the [Industry 4.0 Demonstration Network](#), which also includes a mobile showcase and smart factory showing cutting-edge industry 4.0 technologies in action. The NSV takes selected companies through a fully-funded assessment process to help them accelerate their own journey towards Industry 4.0, and sees them share their knowledge with other manufacturers.

Further questions?

To find out more please contact

EMA

+64 (9) 367 0900
manufacturing@ema.co.nz

INDUSTRY 4.0
Network

POWERED BY

CallaghanInnovation
New Zealand's Innovation Agency

PROGRAMME PARTNERS

 **Becca**



CASE STUDY DESIGNED BY

