

# interact Pro



## Smarter lighting for smarter business

A guide to creating a better workplace for SMEs



# Contents

Welcome	3
Research findings	4
Top tips for creating the ultimate workplace	8
Q&A	10
Case study: Pelling Marketing by Design	12
Case study: Flextrus	14
Product overview	16

# Welcome

Change is the one constant in life and of course the business world is no exception. Small and medium-sized enterprise (SME) owners are constantly juggling changing priorities and have huge demands on their time and attention as they seek to grow their businesses. With so many plates to keep spinning, we wanted to create an easy guide for SMEs on how they can design a more pleasant, and ultimately more productive, workplace for themselves and their staff.



Better building design, including lighting, facilitates stronger employee empowerment as it gives employees choices and fulfils the natural human desire for control, which might lead to higher job satisfaction, better mood, and increased motivation. A thorough literature review<sup>1</sup> demonstrated that better building design results in less absenteeism (0.4-1.5%); increased self-assessed performance (2-10%); and improved health and well-being ratings (6-10%).

So, it's clear that the indoor environment is more and more important for people's health and well-being, as well as their performance. I am fascinated by the role indoor illumination can play in relation to people's experiences, performance, happiness and health. The question is what is the perception of business senior decision makers and consumers?

Signify commissioned YouGov to conduct research with 1,000 senior decision makers in business, and Ipsos MORI to survey 5,000 consumers, to find out what was important to them and what they'd like their workplace to be like. In addition, colleagues spoke to a leading academic who has conducted extensive research on the impact of the working environment on employee productivity. And we have some practical tips from an office design company that specializes in creating inspirational and motivational spaces.

At Signify, we understand that no two SMEs are the same, that's why we created Interact Pro. It's the first multi-tasking, connected lighting system with an app and dashboard developed for SMEs and is as adaptable as you are. Interact Pro's smart lighting provides learning and insights for your business. And with the Internet of Things (IoT) only set to become more intrinsic to our lives, businesses that start to adopt the technology can prepare themselves well for the future.

You can see real-life examples of Interact Pro in action in the two case studies we've included within this guide.

I hope you find it informative and take some inspiration that you can apply to your own business. If you have any questions about Interact Pro, simply get in touch with your local contact using the details below.

**Bianca van der Zande**  
Research scientist  
Signify

1. G. Newsham et al, Improving Organizational Productivity with Building Automation Systems, 2017



# Research findings

## The backbone of the global economy

SMEs account for the majority of private sector businesses around the world and are key employers and drivers of innovation. Yet being a business owner can be a constant balancing act as you seek to keep clients happy, staff engaged, and the business on track for its strategic goals.

The talent you have in your business is key to its success and competition for the best people is tough. So most business owners take a keen interest in how they can attract and retain the best people. The appeal of a company is made up of a large range of factors such as compensation, benefits, the location, the range of clients, the type of work. The list goes on! But did you know that the workplace itself can have a big impact on employee engagement and retention? And we're not just talking about ping pong tables and bean bags.

## Warm and fuzzy is not enough

Despite the recent trend of people working from wherever it suits them, whether that's from home or from a café, many still need to regularly head into a specific workplace. While many would agree that a nicer workplace just makes spending time at work more pleasant, for most business owners that's not enough to justify investing when there are many other areas of the business that need prioritizing. However, there is a solid business case for creating and maintaining a workplace that people enjoy spending time in.

A review by [Spector \(1997\)](#), cited by [Harter, Schmidt and Corey](#), suggested that more satisfied employees are more cooperative, more helpful to colleagues, and more likely to stay with a business longer than dissatisfied employees. And with estimates of the costs of replacing employees ranging from thousands to tens of thousands of euros, being able to keep the people you want to keep will clearly help the bottom line.

There are many other factors at play as well. Scientific research indicates that improving the working environment results in a lower number of complaints and absenteeism and an increase in productivity. What business owner would turn that down?

## Finding and keeping talented staff is an ongoing issue

In Signify's own research of over 1,000 SMEs,<sup>2</sup> over half of them said they struggle to recruit talent and two in five said they have issues retaining employees. And they're not expecting these problems to go away anytime soon, with many expecting these issues to continue for the next five years.

When it comes to connected technology, such as heating, light or sound systems, nearly one in five SMEs (17%) already use it in some form and 29% are interested in doing so in the future. However, some SMEs are potentially missing a trick. Signify conducted research with over 5,000 consumers<sup>3</sup> across five countries and over half (55%) of staff surveyed said they'd be in favor of their employer investing in connected tech, specifically smart lighting, ahead of other improvements. Enhancing work spaces through connected, adaptable lighting, should therefore be an important consideration for businesses in the war for talent.

Our research revealed that employees believe smart lighting can bring a range of benefits to the workplace, from reduced eye strain and a decrease in fatigue, to improved ambiance and increased productivity. Also, those that worked in places which had clients and customers visiting said they think smart lighting would have a positive impact on how customers would perceive the business. So smart lighting can help deliver a huge range of benefits.



# 55%

of staff surveyed said they'd be in favor of their employer investing in connected tech, specifically smart lighting



# 54%

of employees would expect smart lighting to improve their working environment

2. Figures from YouGov Plc. Total sample size was 1,097 senior decision makers from private sector businesses with 10 to 249 employees in Britain and with 11 to 500 employees in the US. Fieldwork was undertaken between 13th - 22nd August 2018. The survey was carried out online. The figures have been weighted to be representative of each country's business size, then given an even weighting for each country to produce an 'average' value.

3. Figures are from online interviews undertaken by Ipsos MORI for Signify. Research was conducted in August 2018, polling over 5,000 adults from five different countries: China, Germany, the Netherlands, the UK and the USA. The samples are nationally representative of the populations.



Over half of employees (54%) would expect smart lighting to improve their working environment and 55% would be in favor of their employer installing it. When it comes to the benefits they'd expect smart lighting to bring to their workplace, the majority (52%) would expect it to reduce eye strain. More than two in five (41%) would expect it to improve ambiance in the workplace and the third most popular benefit was a decrease in tiredness, on 37%. And more than three in five (61%) think that smart lighting would improve overall customer favorability of a company or organization.

## We want our home comforts at work

Only 1% of workers we surveyed exclusively work from home. The majority still have to head into the workplace, whether it be a fixed desk in a private office, or hot desk.

Technology in the home is usually ahead of what we use at work; for example, compare your home IT with what you use at work. This often drives change in the workplace as people want the convenience and experience they have at home when in the workplace.

We surveyed workers about their expectations of the workplace and the most commonly expected item (43%) was plants. In second place was smart lighting, with two in five saying it's expected. Breakout areas came third, with over a third (36%) of people expecting them. The least expected item in the workplace was a games area, such as board games, a pool table or a games console, with only 14% of people expecting these.

What came through loud and clear is that people want to be treated as individuals and to be able to influence their work environment. Personalization is also a huge trend, running through everything from marketing to product creation, for example you can even get personalized trainers these days. Also, business owners can leverage this to improve their employee engagement. Smart lighting, which can be personalized to suit the user's needs and preferences, is an important tool for SME owners wanting to improve the employee experience and business productivity.

**“Smart lighting, which can be personalized to suit the users’ needs and preferences, is an important tool for SME owners wanting to improve the employee experience and business productivity”**



# Lighting the way forward for SMEs with Interact Pro

New global research reveals connected tech could hold the key to attracting employees and customers for SMEs

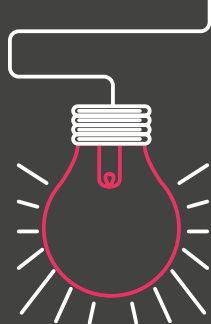
Talent is a leading concern for SMEs

54%

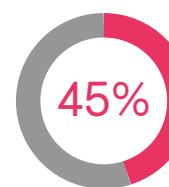
struggle to recruit talent

40%

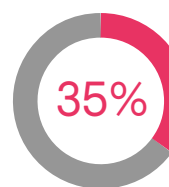
have issues retaining employees



Employee retention is an important issue for SMEs both in the US and UK



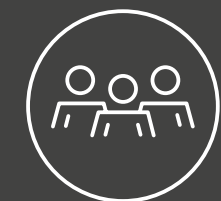
of SMEs in the US struggle to retain talent



compared to 35% in the UK

61%

of employees believe that smart lighting would give customers a more favorable opinion of a business



The value of connected tech in the workplace is recognized by a growing number of SMEs

17%

SMEs already use connected technology

29%

SMEs are interested in doing so in the future



54%

of SMEs think having smart lighting in the workplace would have a positive impact on employee well-being

One of the main perceived benefits of smart lighting in the workplace is reduced eye strain, in fact over half of employees cite this as a benefit

Perceived benefits of having smart lighting in the workplace

Reduced eye strain

52%

Improved ambiance

41%

Less tired

37%

Improved mood

35%

Improved focus

33%

Improved well-being

29%

Increased productivity

29%



55%

Over half of employees would be in favor of their employer investing in connected tech, specifically smart lighting, ahead of other improvements

## Why choose LED?

In years to come we'll see the total disappearance of 19<sup>th</sup> century incandescent light bulbs – the end of the first mass electric appliance! These will be replaced by 21<sup>st</sup> century efficient, LED and connected lighting systems and technologies.

Energy consumption can decrease up to ~90% with LED lighting<sup>4</sup>. This makes it not only more friendly to your bottom line but friendlier to the environment too.

LED lighting can now be used in all applications. Also, it can be connected to lighting management systems and adjusted to produce the exact lighting you and your employees want.

The benefits go beyond energy efficiency, cost savings and reduced carbon emissions. With lighting levels that can be adjusted and with no compromise in light quality, LEDs can help create more productive workplaces too.

Although energy-efficient lighting technologies cost a little more initially, they offer great levels of payback and save large amounts of both energy and money during their lifetime.

So rather than asking why choose LED, we think the question is, why wouldn't you?

SME figures are from YouGov Plc. Total sample size was 1,097 senior decision makers from private sector businesses with 10 to 249 employees in Britain and with 11 to 500 employees in the US. Fieldwork was undertaken between 13th – 22nd August 2018. The survey was carried out online. The figures have been weighted to be representative of each country's business size, then given an even weighting for each country to produce an 'average' value. Consumer figures are from online interviews undertaken by Ipsos MORI. Research was conducted in August 2018, polling over 5,000 adults from five different countries: China, Germany, the Netherlands, the UK and the USA. The samples are nationally representative of the populations.

4. Data from Lighting Europe, 2016 report



# Top tips for creating the ultimate workplace

Oktra is a team of designers, builders and strategists focused on creating workplaces that help people achieve their ambitions. Peter Dalzell, CEO at Oktra, shares his top tips for SME bosses who are interested in creating a great workplace for their employees.

oktra

Find them at [Oktra.co.uk](https://Oktra.co.uk)

01

Create an agile work environment where employees have the flexibility to work in a variety of spaces to support different needs and interactions.

02

Connection is a basic human need. Include a central hub such as an open drinks area or kitchen where people can connect throughout the day.

03

Provide suitable workstations to boost productivity; ergonomic furniture and up-to-date technology ensure employees can do their jobs properly.

04

A smart lighting system can improve employee well-being, mood and therefore productivity. Also, exposure to natural light is beneficial.

05

Break out spaces help refocus and reenergize employees. Having a break from the screen during the working day will keep employees motivated.

06

Your workplace should embody your brand. Choose colors that represent your brand and the type of work you do, it can encourage employees to support and achieve your corporate objectives.

07

Consider your layout and make sure there is enough space per employee; there should be a minimum of 11m<sup>3</sup> per person. Use an [office space calculator](#) if you are unsure.

08

Bring nature inside. People have an instinctive need to connect with nature and it is proven to boost productivity by 15%.

09

Eliminate clutter. You will have a more efficient workforce if your work space is clean and organized, without distractions.





# Q&A with Dr Craig Knight, Chartered Psychologist



**Dr Craig Knight, Chartered Psychologist, Honorary Research Fellow (Exon) and Director of Identity Realization Ltd, is an expert in change management and the impact of the working environment.**

He has been working with various academic and commercial teams since 2003 on projects of doctoral and post-doctoral standard, many of which have been published. Also, he has advised companies on how leadership, design and management affect well-being, intelligence and productivity. We caught up with Dr Knight to get his thoughts on how SME owners could learn from his research and expertise.



## **What's the current state of most workplaces?**

Most offices in the western world include some sort of lean system, where waste management and supervision are guiding philosophies. There is an emphasis on clear desks where only tasked work should feature. Management looks to uphold standardized procedures throughout the business and any artefacts unnecessary to the work at hand – such as souvenirs, plants and photographs – are discouraged. These offices look minimalist. However, let me be clear, evidence suggests that these spaces are harmful.



## **Why do you think that employees who are able to personalize their workspace can be more productive?**

Enriching a workplace consistently generates psychological engagement within the space itself as well as developing a greater sense of identity with the organization that provides it. People are happier. As a direct consequence, enrichment of a previously lean work space reliably shows productivity increases in the order of 15%.



## **So do you think it's advisable to let workers have some say over their workplace design?**

Absolutely. If you allow the true workplace experts to develop the business environment, then you can see spectacular improvement. The people who work in an office know the place better than managers, better than consultants. So, trust them to know what they want and what is needed.

Light is one of many factors that business owners should consider in the workplace, as it can have astonishing effects. Light has been shown to be at once invigorating, calming and sculptural (think theatre-style lighting). Yet too many businesses pay scant attention to light, offering cheap rather than effective solutions. Science suggests that poor lighting strategies put well-being, happiness and productivity in jeopardy.

**“Light is one of many factors that business owners should consider in the workplace, as it can have astonishing effects”**



In our research, giving the same kit of design parts to both designers and workers has seen workers produce environments in which they are more creative, more engaged and more productive than in spaces created for them by experts, with effects that last over time. It is under these conditions where we see productivity increase by rates of up to 32%. Be warned though, when management starts to interfere, results plummet back to the awful levels of lean, even without stark environments.



## **Why can allowing employees to personalize their workplace make such a difference?**

Trust, resource, respect and autonomy are the key ingredients of productive working. A lean space offers only the resources necessary to perform one task, it fails badly across the remaining criteria. Enriching the space offers resource that extends beyond the job at hand, while a tangible investment in the workspace shows respect, even affection for the employees. Ultimately, giving people a good set of tools with which to develop their own environment hits the mark at every level. It isn't magic, just sound psychological sense.



## **Why should business owners pay attention to the environment they provide for their employees?**

The environment in which people work is crucial to their success and often indicative of management attitude. Evidence overwhelmingly shows that an inconsiderate, stark workplace will produce the worst results; a place where freedom pervades and personalization is allowed will consistently be the best.

Throughout our research, there has never been an organization in which people have been too comfortable, too happy, or too trusted. These measures are both positively and causally linked to better engagement, happiness and productivity. When people feel uncomfortable in their surroundings they are less engaged – not only with the space but also with what they do in it. Give those people a sense of control and that all changes, people report being happier at work, identifying more with their employer, and are more effective when doing their jobs.

**“Enriching the space offers resource that extends beyond the job at hand, while a tangible investment in the workspace shows respect, even affection for the employees”**



## Case study

# Pelling Marketing by Design

**Pelling Marketing by Design is based in Farnham in the south-east of England. An office-based team, they provide web and graphic design services.**

### Why did you decide to install Interact Pro?

James Gubbins, owner of Pelling Marketing by Design, was looking to upgrade his office, situated in an old, quirky building which was a former kiln, to LED lighting and reduce his energy costs. Small businesses are always looking to retain profits and reducing overheads is a simple and effective way they can achieve this.

“Cutting unnecessary expense and streamlining the business is really important for us,” says James. “Often we have clients in the building and there can be several areas of the office that aren’t being used all of the time. What’s more, the fluorescent tubes we had in place tended to flicker and produce different shades of light. Not ideal for when we are trying to present ourselves as a modern, forward-thinking business.”

The fact that the Pelling office was in a listed building was a complicating factor; installing luminaires and signal cables, such as DALI, was out of the question. Also, disruption to the team in the office needed to be kept to a minimum to avoid affecting productivity and the bottom line.

“Once I had begun to see how much information was on offer through connected lighting and understand the potential energy savings by combining this with a switch to LED, I could immediately see that this would have a positive impact,” says James.

### How was the experience of getting it set up?

In order to better understand the existing energy consumption and how the office was being used, Pelling opted to use the lights without the available controls, behavior scheduling or automation, for one month. This helped provide insights into how to maximize energy savings once the



trial period ended and the controls were switched on.

After installation, the Interact Pro app clearly showed that some of the lesser used areas, such as the kitchen, had lights that were often left on. This made it the ideal place to install a sensor for automated control of the lights. Also, light scheduling was used to automatically turn lights off and avoid accidental energy wastage.

By speaking to the individual members of the Pelling Marketing by Design team it was possible to learn about their preferences in terms of light levels – running the Philips Interact Ready LED tubes at only 70% brightness – thus further reducing energy consumption.

### What have the results been?

The results have been overwhelming, with a uniform professional look and large energy savings. The switch to ultra-output Philips

**“Once I had begun to see how much information was on offer through connected lighting and understand the potential energy savings by combining this with a switch to LED, I could immediately see that this would have a positive impact”**

Interact Ready LED tubes alone saved 62% – and adding the lighting sensors and control element saved an additional 47%. This meant that the overall energy bill for lighting was reduced by 79%.

“We were stunned by how much energy we saved – this project will pay for itself within two years and that is without taking into account the cost of replacing fluorescent tubes as and when they fail,” said James. “Our team is happy they can adjust the light levels to suit their needs and it is great to be able to show customers how we have been working to reduce our energy usage too.”

As with any small, creative business, Pelling is looking to grow and take on new team members. A key aspect of the Interact Pro connected lighting is that the installer can return and reconfigure the existing lighting set-up to better suit any new office layout should they wish, using the app or desktop portal. Overall, the Interact Pro lighting system has allowed substantial cost savings while at the same time providing a much more dynamic working environment that can be tailored to an employee’s needs at a moment’s notice.



# 62%

savings from the switch to ultra-output Philips Interact Ready LED

# 79%

reduction in overall lighting energy bill

**“Our team is happy they can adjust the light levels to suit their needs and it is great to be able to show customers how we have been working to reduce our energy usage too.”**



**“We were stunned by how much energy we saved – this project will pay for itself within two years”**



## Case study

## Flextrus

Flextrus is one of the leaders in flexible packaging in Northern Europe and has over 320 employees. It operates two factories in Lund in southern Sweden and one in Highbridge in Somerset in the south-west of England, creating packaging for clients including Findus and Unilever's Colman's brands.

**Why did you decide to install Interact Pro?**

The workplace in Lund, Sweden, is a manufacturing plant and requires high light levels to ensure staff can carry out their jobs safely and efficiently. Tommy Nilsson, Maintenance Engineer – Electricity at Flextrus, explains, "Many of the luminaires are mounted in areas with restricted access and replacing them means pausing production, building a suitable platform and then changing out the light source, which costs us money. Stopping production is obviously something we want to avoid in manufacturing so we wanted to move away from fluorescent light sources to a more reliable system."

Flextrus did not want to install a DALI system with all the accompanying cabling required. Ahlsell, Flextrus' lighting wholesaler, recommended Interact Pro due to its ease of installation and use, as well as the insights the system provides into energy use and efficiency.

Tommy adds, "The factory was designed to let as much light through the windows as possible. We wanted to be able to adjust the levels inside during the day to become more energy efficient and take advantage of the natural light."

**"We wanted to be able to adjust the levels inside during the day to become more energy efficient and take advantage of the natural light"**



**"The fact that Interact Pro makes it so easy to adjust how lights are grouped or zoned means it's simple to change as our business requirements change over time"**

**How was the experience of getting it set up?**

Tommy says, "Our wholesaler was very helpful in showing how the system works. There are also useful resources on installation and commissioning on Signify's YouTube channel. The installer we had on site was excited about how simple it was to install the Philips CoreLine luminaires, even if accessing some parts of the ceiling to install the new luminaires was a bit tricky.

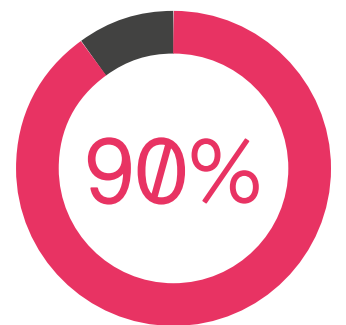
"All in all the installation proceeded really smoothly and the app gives us easy control of the whole system via the Interact Pro gateway, meaning we can control the lights from anywhere in the world."

**What have the results been?**

"Our total energy consumption has reduced by 90% which is a bigger reduction than we were expecting. Considering we had calculated return on investment of under three years from the system, to have this decreased even further is fantastic. The sensors mean we use less energy when there is a lot of light coming from outside as it automatically adjusts the lighting indoors. The in-built schedules also mean lights don't get forgotten about," says Tommy.

"Interact Pro provides valuable data about which parts of the building are in use and allows us to reduce energy use when areas

are unoccupied. The team also likes the fact that the connected lighting can be adjusted to their needs and preferences. We're big fans of the Philips CoreLine range too and look forward to installing new products in the factory as they're introduced to the range. The fact that Interact Pro makes it so easy to adjust how lights are grouped or zoned means it's simple to change as our business requirements change over time," finishes Tommy.



reduction in total energy consumption





# Product overview

## Personalized, optimized lighting with Interact Pro

Whatever success looks like for you, smart lighting can help lay the foundation. If your goal is continual improvement, Interact Pro can deliver insights into how your lighting is performing so you can optimize energy usage and operational efficiency. If your aim is to be a high-performing business everyone wants to work for, you can use the power of light to energize your team and create a workplace where everyone's comfortable and productive. And with the ability to manage, schedule and automate lighting, you can save energy costs and the planet.

## Better lighting, happier workers

First and foremost, your staff get to control their own lighting. They can easily adjust it for the task at hand. Better working conditions mean improved morale and productivity and make it easier to attract and retain the best employees.

## Efficiency-driven savings

The next benefit? That's energy savings. Lighting sensors work with Interact Pro to figure out if a particular area is in use or not. And if it isn't, the lights automatically dim or turn off. That's less manual switching and more energy saved for your business. The system can even sense the level of ambient daylight and adjust the lighting accordingly.

This helps businesses meet regulatory targets and qualify for green business subsidies. Also, it contributes to the company image, in terms of commitment to social responsibility.

## Valuable data insights

Last, but not least, there's data. To ensure you get full value from the lighting, it can gather and interpret data. With the Interact Pro app and dashboard, you're provided with a wealth of information, such as different automated light settings to data on energy usage.

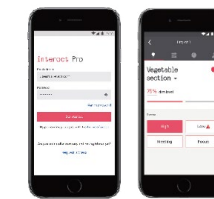


[Click here to watch a short video about Interact Pro](#)

The key to Interact Pro is the gateway. Through the app and the dashboard, it unlocks the power of IoT connected lighting to help you save energy and enhance comfort.

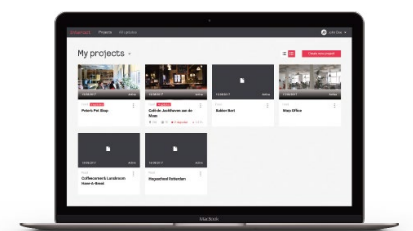


Interact Pro gateway



Interact Pro app

Available via app stores



Interact Pro dashboard

For installer and business owners (projects, energy, health status of lighting)

Interact Pro is compatible with Philips Interact Ready lamps, luminaires and accessories.



Smart luminaires



Smart lamps



Smart sensors



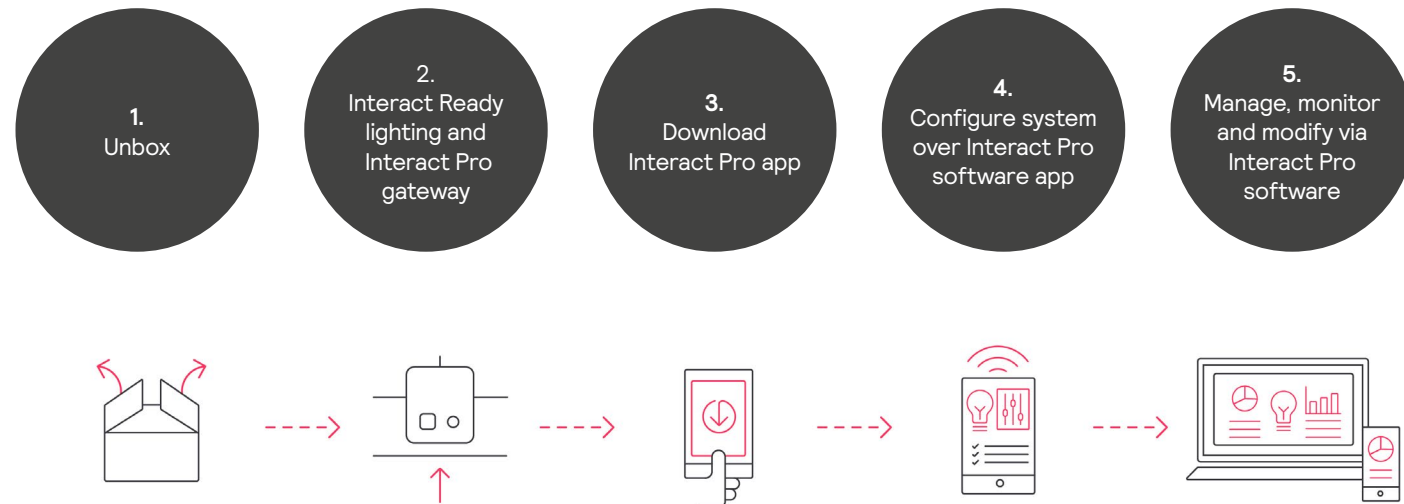
Smart wall-switches

PHILIPS

interact  
ready.



The wireless installation means that it's quick and easy to get up and running, using either an installer, or even doing it yourself. Get connected in five simple steps.



Interact Pro provides a range of features which you can get up and running immediately:

- Lighting scene management via smartphone
- Lighting scheduling or manual switching
- Customization of rooms, zones, on/off/dim and scene setting
- Energy consumption data
- Personalization of user settings
- Occupancy sensing
- Daylight harvesting

The benefits it provides to your business include:

- The perfect light for all spaces, creating a more conducive workplace where people can energize, focus and relax – all of which contribute to improved productivity
- Optimized and personalized light for employees, tasks, safety and security
- The sensors can automatically sense the level of daylight and adjust the light accordingly; no forgotten rooms and less manual switching
- Energy savings and cost reduction
- Data to improve energy use and sustainability
- The flexible system is unique in the market for being able to mix luminaires and lamps in a connected system with the same level of features, such as dimming, grouping and scheduling



[Click here to visit the dedicated Interact Pro website](#)

SMEs appreciate the power of a multi-tasker better than any other business. Embrace the ultimate multi-tasking, smart lighting system with Interact Pro by Signify, delivering benefits far beyond light for smarter business.

Contact us to find out more:

Visit our website: [interact-lighting.com/pro](https://interact-lighting.com/pro)





© 2018 Signify Holding. All rights reserved. The information provided herein is subject to change, without notice. Signify does not give any representation or warranty as to the accuracy or completeness of the information included herein and shall not be liable for any action in reliance thereon. The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract.

Philips and the Philips Shield Emblem are registered trademarks of Koninklijke Philips N.V. All other trademarks are owned by Signify Holding or their respective owners.

Date of release: December 2018

interact Pro