



# IoT improves quality of life and sustainability in cities

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“The acquisition of SRL Traffic Systems by 3i Infrastructure for c. US\$213 million has highlighted the relevance of Internet of Things (IoT) solutions, and their importance for both better quality of life and more environmental awareness in cities using new technologies.

With this transaction, 3i is expanding its position in modern infrastructure, based on the long-term prospects of investments in smart cities, the impact of environmental, social and governance (ESG), and the predictable revenue and cash flow in this sector.”

**JAN P. HATJE**  
IOT SPECIALIST  
OAKLINS

## MARKET TRENDS

### Signs of intelligence

Networked technologies and IoT can create smart solutions, which can improve the quality of life of city residents and reduce resource consumption.

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## CASE STUDY

### Investing for the future

Private equity company 3i is positioning itself in the smart cities sector, highlighting a trend towards investing in cloud computing and IoT.

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## VALUATION TRENDS

### Uncertain times

Over the past year, we've seen trading results for companies in the IoT sector regress sharply, with certain business models particularly affected.

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# Introduction

Since the concept of a smart city was first introduced, IoT technology has been one of the main pillars in its development. As technology advances and more countries embrace next-generation connectivity, the role of the IoT will continue to grow and have an even greater impact on the way we live. In recent years, smart cities have evolved significantly and notably expanded their potential. The charging station parking space that sends a notification when it's available, the street lighting that marks a danger spot with

colored light, or the bus that runs when it's needed: smart applications can make being in a city more convenient, efficient and safe. Right now, capital cities around the world are leading the way when it comes to these advancements.

In this Spot On, we share recent market developments and the rationale behind different acquisitions, as well as their consequences and insights, along with further findings on value drivers within the industry.

In the fast-evolving IoT market, M&A activity is an opportunity to accelerate knowledge building and growth to create a sustainable competitive edge.

"In the future, smart city technology will anticipate the needs of residents using artificial intelligence. It will also become more interactive and more flexible. All of this will occur as cities tackle urban challenges while capitalizing on innovation."

**JAMES HONAN**  
CEO OF AFFLUENCE CORPORATION

# Recent market developments

The IoT smart cities market is expected to reach US\$555 billion by 2030

**This massive growth in IoT technology in smart cities is driven by the demand for smart systems, sustainability and green connected technologies to make life in cities more comfortable.**

For example, smart cities use rapidly changing technologies to reduce emissions. According to a report by IDTechEx, the biggest advantage of a smart city is that it can deploy evolving energy technologies at an affordable price and thereby move toward zero emissions. The report predicts that communities will increasingly take advantage of hydrogen and renewable electricity, smart materials and transportation. It also states that energy independence and higher use of renewable energy are currently the easiest goals for cities to achieve because the necessary technology already exists. Furthermore, there are countless startups in the market that aim to solve problems related to meeting these aims.

The movement towards smart cities is also underscored by the fact that the UN has set 17 Sustainable Development Goals. These are global goals to be implemented by 2030, and some of them can be achieved through digital solutions using the IoT. Water is a key topic at the moment, for instance, related to numerous issues such as affordable clean energy, access to clean water and greater sustainability in cities and towns.

So it's becoming increasingly important to manage water use more effectively and treat wastewater safer. Remote pumping and treatment systems that work more in a safer way with various wireless or wired network technologies can help. For example, sensors provide collected data to be sent to a dashboard that can then be accessed and processed from anywhere. What's more, the IoT does not just offer the usual time and cost savings. It also means we can use real-time analytics of water for effective and safe distribution. The same applies to clean air. Here, too, smart entrepreneurs can be found offering solutions for cities and towns to analyze air quality across the board, bring in other layers of data such as wind speed and temperature, and make decisions and install new systems based on this information.

According to the UN Sustainable Development Goals, everyone should have access to affordable, reliable and sustainable energy. Clean energy technologies are at the forefront of achieving this, which is precisely why we need IoT solutions. Only through digital technology can we meet the requirements of being reliable and affordable. In wind energy, for example, the use of sensors and artificial intelligence is leading to decisions about when to transmit or store power. In this way, operators can optimally regulate power and demand. And nothing is lost.

In addition, smart grids help us optimize the management of energy, and smart metering systems allow utilities to use power distribution systems more effectively. In the process, they waste less electricity and can operate more sustainably.

With the UN calling for more sustainability in many areas, we are seeing an increasing number of startups dedicated to this sector and using the IoT in their solutions. They range from the company working to make batteries more efficient and longer-lasting by tracking and improving their performance using Digital Twins, to the business developing smart sensors to analyze current air quality.

In the following pages, we present the 3i Infrastructure case study and discuss the rationale of the transaction from an IoT perspective. We also provide an overview of the most recent deals and valuations in this sector, as well as the outlook for the coming months.





# Case study



## HOW THE PRIVATE EQUITY COMPANY 3i IS POSITIONING ITSELF IN THE SMART CITIES SECTOR

In December 2021, the Infrastructure Investment Vehicle (3i Infrastructure plc), part of the British private equity company 3i Group plc, expanded its position in the modern infrastructure sector with a new acquisition. In general, its investments are increasingly directed towards smart cities, i.e. development concepts that aim to make cities more efficient, technologically advanced, greener and socially inclusive, especially in the interconnected areas of energy, buildings, mobility and infrastructure, and information technologies. As well as 3i Group, major players such as Blackrock, Brookfield Infrastructure Partners and Macquarie Infrastructure & Real Assets are also positioning themselves in smart cities investments.

In this case study, we take a closer look at one of 3i Infrastructure's latest investments and discuss two questions: What are the goals and strategic rationale behind the investments in smart cities? Why are these investments so appealing to private equity? We will look in detail at the deals, status quo and implications for the future.

### 3i's acquisition of SRL Traffic Systems

SRL Traffic Systems is the market-leading traffic management equipment rental company in the UK. On 6 December 2021, 3i Infrastructure announced an investment of c. US\$213 million to acquire a 92% stake in SRL. The current management has reinvested to acquire the remaining 8% stake. 3i Infrastructure has provided a further c.US\$92 million of debt financing to SRL with the intention of replacing its third-party debt.

SRL, which is headquartered in Cheshire, owns a fleet of almost 13,000 items of traffic management equipment, which it rents to local authorities, utilities, contractors and traffic management companies from a nationwide network of depots. SRL offers its customers a full-service rental solution, which includes the planning and design of complex traffic management systems, installation, maintenance and integration with existing systems, as well as direct sales of equipment assembled by SRL which helps reduce costs, delays and carbon emissions in cities and their surrounds.

### Investment rationale

With its investment in SRL, 3i is further expanding its investment position in smart cities. The private equity fund's portfolio currently includes 12 active investments in sectors such as intelligent transportation systems (ITS), energy and smart grids, smart infrastructure, and mobility information and control.

3i's fund is thus a representative example of this trend in the sector: moving away from classic infrastructure investments towards those connected to the megatrends of cloud computing and IoT.

### Complementing the product portfolio

SRL joins existing infrastructure investments such as Global Cloud Xchange, a leading global data communications service provider and owner of one of the world's largest private subsea fiber-optic networks, and Tampnet, the leading independent offshore communications network operator in the North Sea and the Gulf of Mexico.

With Attero, which is a leading provider of recycling plants and clean energy production in the Netherlands,



3i's portfolio also covers strategic acquisitions in the sector of waste management, which is also likely to be high on the agenda of many other investors due to its high ESG relevance.

### What motivates private equity companies to invest in smart cities?

The long-term prospects of these investments and the better predictability of revenue and cash flows are the main arguments in favor of investments in the infrastructure sector. In particular, as contracts with customers and suppliers are usually long-term and closed, this supports the aspect of precise forecasting for private equity investors. The high barriers to entry created by the steep upfront costs also give companies inside the sector a decisive competitive advantage.

However, investments in smart city infrastructure do not come with only advantages. Investments in this sector are still very asset heavy, which leads to higher exposure in times of macroeconomic turmoil, especially in terms of the refinancing structure of investors. But exposure to cluster risks with customers and suppliers can also become a problem with classic infrastructure investments.



# A recent Oaklins deal

## FOUNDERS AND MANAGEMENT OF VÆKSTPARTNER KAPITAL SELL CIM INDUSTRIAL SYSTEMS TO XANO

Oaklins was engaged by the owners of CIM Industrial Systems as exclusive financial advisor for this transaction. The listed Swedish industrial group XANO has signed an agreement to acquire all shares in CIM Industrial Systems AS, a leading Danish specialist in production software in the fields of pharmaceuticals and industry 4.0. Using its own frameworks and products, CIM offers end-to-end production software solutions in the areas of industrial IoT, track & trace/serialization, machine vision and test & measurement, as well as related customized work. CIM's solutions enable its customers, which include well-known pharmaceutical and infrastructure companies, to make business-critical decisions based on reliable data.

A collaboration between Grundfos and CIM resulted in a new vision platform, significantly reducing the installation time for new vision solutions for clean water in cities.

**Problem:** Since 2003, vision systems have had a vital role to play in the quality assessment of Grundfos' pumps. However, until 2013, Grundfos did not have a solid vision platform to rely on when manufacturing staff called and asked for a new vision solution to be developed and installed. This meant that developing vision solutions was time-consuming and expensive.

**Solution:** CIM was brought in to develop a standardized vision framework that would ease the process of developing new vision solutions, and make it easier to roll out existing ones to the 56 countries that have Grundfos production sites.

CIM's industrial software products and development resources will complement and supplement the existing automation activities within XANO's industrial solutions business area. The acquisition expands the company's technical software know-how and opens up access to new market segments. There are also positive international development opportunities, and many of CIM's services are directly applicable to the proprietary systems of the industrial solutions area. CIM's products and services can also be offered to customers of the group's other business units.



XANO's acquisition of CIM marks the end of the successful investment by private equity fund VækstPartner Kapital, which has held 35% of CIM since 2018. In the past three years, CIM has succeeded, among other things, in increasing its pharma-related activities from 15% to 40% of revenue, while the share of revenue from internally developed software products increased from 5% to 20%.

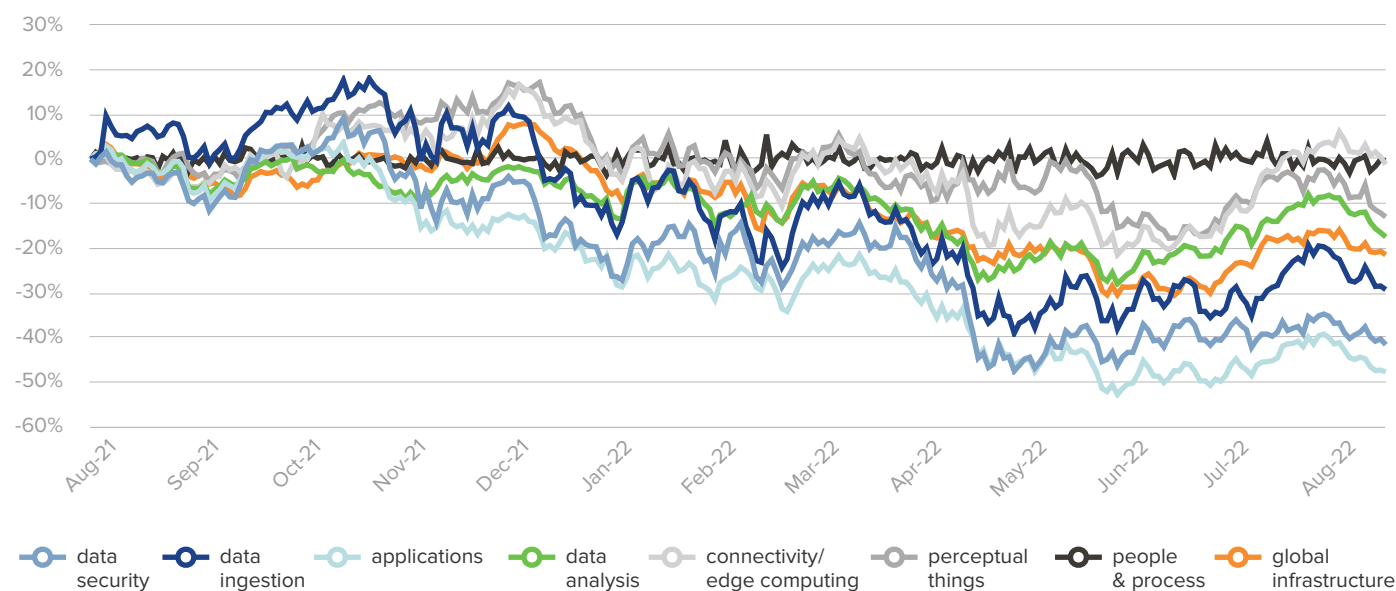
# Valuation trends

To get a more detailed understanding of the value drivers in the IoT market, we have separated all firms into two groups according to their business model, with each group containing specific layers.

Firstly, the software as a service (SaaS) group, which has five layers: data ingestion, data analysis, data security, applications and connectivity/edge computing. In the second group,

perceptual things refers to sensor-related businesses and hardware and software businesses, while people & process is comprised of consulting businesses. The trading multiples are based on revenue.

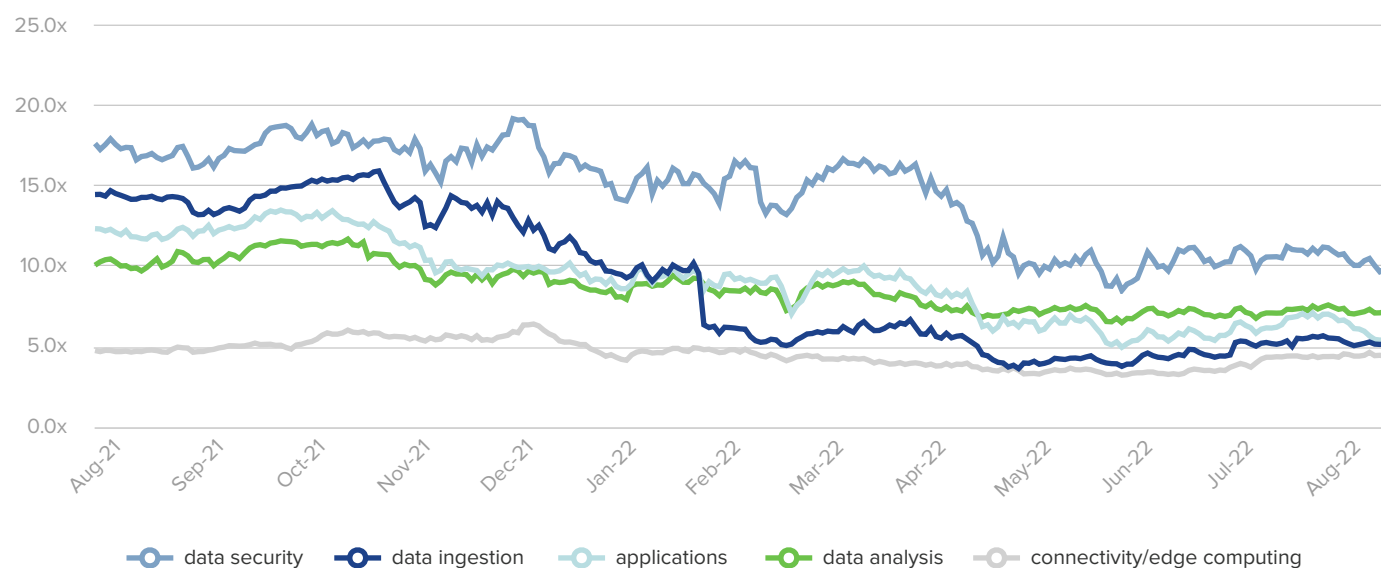
## Development of trading multiples across different layers



Source: S&P Capital IQ

The data analysis shows that in the past year, trading results for companies in the IoT sector have regressed sharply. This trend runs through all verticals, in some cases with declines of up to 50%.

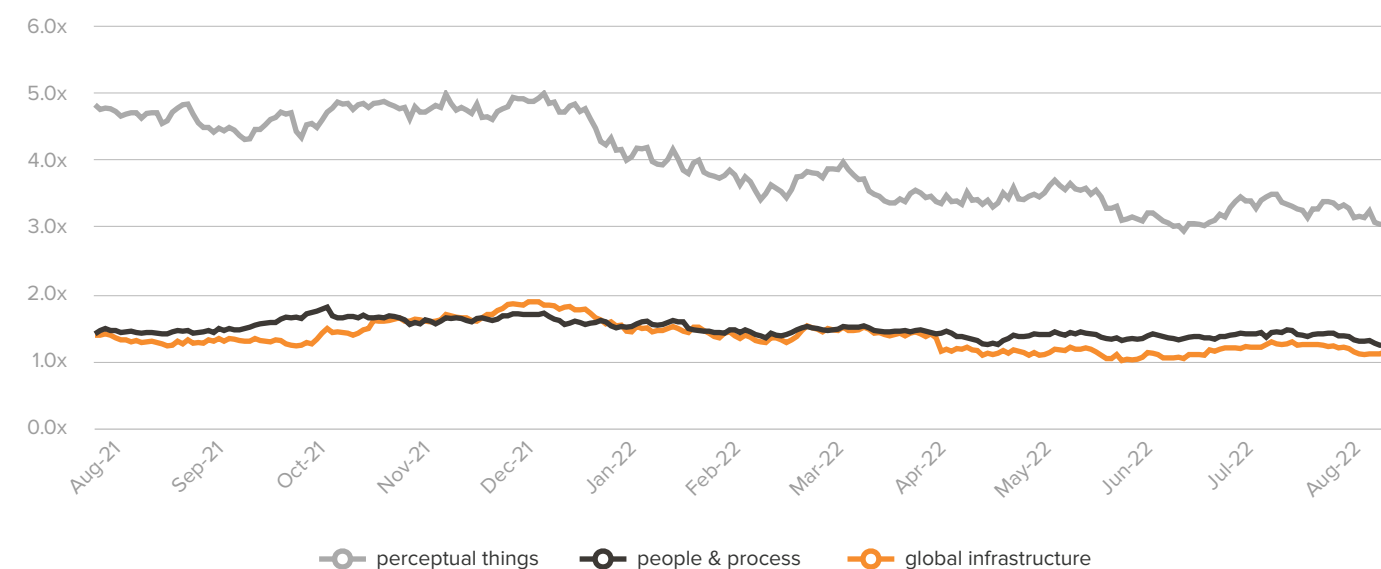
## Group 1 — trading multiples



Source: S&amp;P Capital IQ

To put the trading results in perspective, we also looked at transactions in the sector over the same period. Comparing the trading multiples for group 1, it is noticeable that the data security sector saw the sharpest decline, while connectivity and edge computing remained relatively stable at just under 5x.

## Group 2 — trading multiples



Source: S&amp;P Capital IQ

The picture is different for the hardware and service-related business models. Here the multiples are generally lower, with a maximum of 5x for perceptual things in December 2021. Both the global infrastructure and people & process models developed consistently, but with very low multiples.

# Summary

As population and urbanization increase in the coming years, many cities will harness technology and advanced networks to manage scarce resources. In particular, cities will increasingly turn to a subset of the IoT known as smart city solutions.

IoT technologies can achieve greater efficiency in energy and resource consumption in cities. This is done through innovations such as smart meters, smart transportation, smart grids, smart building management solutions, and smart air quality monitors. In addition, it's possible to improve the quality of life for city residents, as ESG goals can also be achieved through technology. For example, in recent years,

government agencies around the world have stepped up their decarbonization efforts — in the case of the EU, it has set a goal to reduce methane emissions by 55% by 2030 compared to levels in the 1990s.

The adoption of the IoT is also an effective way for businesses and cities to solve the problem of faulty information and metering systems, and protect fragile ecosystems. IoT-powered sensors make it possible to create and monitor better conditions to ensure compliance with lower emission targets and waste regulations, and simplify life in general. The potential of smart cities is almost limitless, and their growth is expected to accelerate in the coming years.

The two case studies of 3i and CIM also show that IoT companies are currently in the M&A spotlight, as their stable cash flows, revenues and profits are a high priority for PE companies and strategic investors. The additional ESG impact also means that such transactions will increasingly take place.

However, a look at valuations in the sector over the last 12 months shows that the sector has suffered a sharp decline, both when looking at the month-by-month development in percentage terms, and valuations by trading multiples.

We watch with interest the progress of smart cities and their impact on the IoT market in the coming years.





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- M&A advisory (buy- and sell-side)
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- Debt advisory
- Corporate finance services

IoT is one of our focus areas. Combining comprehensive sector knowledge with global execution has led Oaklins to become one of the most experienced M&A advisors in the IoT sector, with a large network of relevant market players worldwide. This results in the best possible merger, acquisition and divestment opportunities for IoT companies.

If mergers, acquisitions, or divestitures of businesses or business units are part of your strategy, we would welcome the opportunity to exchange ideas with you.



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Jan leads Oaklins' IoT team, and is also a managing partner at Oaklins Germany. Jan has a strong network in this industry and is in regular contact with the key players. As part of his sector focus, he continuously follows developments, publishes newsletters and attends the major events. He has advised a number of clients either on M&A or on strategic development. He has a deep understanding of the market dynamics and value drivers regarding smart devices, connectivity, big data and intelligent solutions. Notable transactions Jan has completed include Garz & Fricke, vyzVoice and Höft & Wessel (now Almex).

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