GLOBERANGER

a Fujitsu company

Start with where.

Because digitalising your organisation starts with knowing where your assets are.

Your journey to becoming a digital organisation starts with *where*

You've probably heard the wisdom, "Start with why." But when it comes to digitalising your business to solve your business' challenges and unlock new opportunities, the best advice is: start with where.

Where are the assets that make, or lose, your organisation the most money?

Knowing where your assets are at any given time is the first step to digitising your organisation - and driving unexpected growth.

What makes us so sure? We're GlobeRanger, a Fujitsu company and industry leader in helping organisations use IoT-enabled asset tracking, management and decision-making as the very first step in their digital transformation journey.

So, what's your biggest business challenge?

When we visit our customers, it often surprises them just how many physical and digital things they have, and need, to make their organisation work. Why? Because many are overlooked.

Depending on the sector you're in, we could be looking at, and looking and for, any of a range of asset types.

Raw materials, products-in-production, supplies or finished goods

Equipment, machinery, tools or vehicles

Spare parts (repairables or consumables)

Merchandising materials, collateral or samples

Data

Anything else you need to deliver value for your organisation

Different assets, similar business challenges

No matter how different our customers' organisations are, the challenges they face with their physical assets are often very similar. Which ones do you share?

Who's accountable for re-ordering those parts?

Where are my assets when I need them?

How much stock do I have left?

How old are those components?

How can I reduce cycle counts?

What are the bottlenecks in my production line?

How long will it take us to mobilise those assets?

How can I make better use of my storage space?

How can I track the quality of my supplier's deliveries?

These are the challenges that inspired the start of GlobeRanger in 1998, back at the start of what was hailed as the digital revolution. And they are still the challenges that get us up every morning today.

Because over the last two decades, we've realised something that makes 'digital' accessible to every organisation - and will be just as true for yours.

Going digital isn't a revolution, it's an evolution.

It can solve your biggest business challenges, but it starts with simply knowing where your assets are.

Connecting your physical assets, digitally

From retail to hospitality, manufacturing to travel, defense to aerospace. From private to public. From big to small. From local to global. We've worked with such diverse customers. But we've found that when it comes to their assets, they have a lot in common:

They have lots of physical assets

They have high-value assets

They lack quick access to asset audit trails

They have business critical assets

They need to mobilise their assets fast

Their assets are in flux

They have highly complex assets

What's critical is that every organisation has one challenge involving their assets that, once solved, could help their organisation join the digital evolution. While their challenges are unique to them, their solutions all start in the same place: connecting their physical assets to the 'Internet of Things'.

So, what is this 'Internet of Things'?

You may be asking yourself: can the Internet of Things (IoT) really be an opportunity for a business like ours? The answer is yes. But, like so much technology jargon, it needs to be debunked.

IoT is just an evolution of the internet as you know it. It's essentially about all types of things – from devices to objects – connected online.

You've already seen it in your home, controlling devices like Alexa, Next and Ring, from your smart phone. Smart watches give you insight and control over your health and wellbeing. And traffic and navigation apps make it easier and faster for you to get from A to B.

Well, over the next five years, IoT is going to change the way we do business too.

The IoT market is estimated to exceed

$1,000,000,000,000

by 2025

More than **50%** of connected devices will be in businesses

By 2050 there will be **100 billion** connected devices in the world

83% of businesses introducing IoT technology claim to have improved their efficiency

88% see a competitive advantage in streamlining their asset inventory

94% already report returns on their investment

**The trillion-dollar IoT opportunity is there for the taking.
But where do you start?
Well, start with where you are now.**

A tale of two organisations

Right now, the world is a tale of two types of organisation: Digital Migrants and Digital Disruptors. And, as you'd expect, each has its own unique priorities, challenges and aspirations.

Digital Migrants

- Legacy organisations that have stood the test of time but under pressure to evolve
- Have established facilities, infrastructure and ecosystem, rooted in tried-and-tested conventional processes
- Lack the agility, resilience and capacity for fast innovation they need to turn market, customer changes to their advantage
- Have deep experience in long-tenure employees but struggle to attract younger, digitally savvy talent

Digital Disruptors

- Conceived in the digital age, they have digital in their business' DNA
- Fully integrated cutting-edge technologies, ensuring seamless connectivity, real-time data analysis and agile operations
- Able to deliver innovation fast to disrupt existing markets, create new categories, respond to emerging customer needs, driving new consumer habits
- Attract younger, tech-savvy workforce looking to thrive in a culture of innovation

Where are you on the journey to digital?

Most businesses are somewhere along this journey - and accelerating their progress can seem daunting.

It's not just a matter of adapting their old technologies or introducing new ones.
It's about transforming their ecosystem.

From equipment to workers.
From production process to quality control.
From supply chain to suppliers.
From distribution network to logistics.

But we know that true transformation doesn't happen overnight.

Solution

The answer lies in starting where the organisation is now and retrofitting. Reinvention isn't feasible - or necessary. We can help you take a much more risk, efficiency- and cost-managed approach.

What does it look like? We start by asking where are the assets that, if better managed, can make, or save, your organisation the most money.

Then we integrate the right IoT-enabling technology, collect the right data and give you the right tools to turn it into the insight you need to make the right decisions to change your organisation - and change the game.

Drivers and barriers to digitalisation

For legacy organisations which derive value from complex, high-value assets, digitalisation is not just about adding some new digital tools. It's about changing your mindset and culture to see, think of and work with your assets differently - based on data-based decisions.

Key drivers to digitalising organisations

Visibility

of real-time data, turned into actionable insights to solve problems and make smart decisions

Adaptability

to work productively, collaboratively and sustainably in any environment

Agility

to respond, adapt, anticipate or pivot to market, customer, supply chain or competitor changes

Ingenuity

to innovate at speed to disrupt the market and develop more sustainable practices, while improving operational performance, increasing quality and unlocking profitability

Key barriers to digitalising organisations

There are more businesses out there that haven't gone digital than have. **80% of small businesses in the United States aren't taking complete advantage of the technology tools that are available to them.** And there's plenty of valid reasons why.

- Fear of change
- Lack of knowledge about digital technologies
- Not enough time to explore the path to digital
- Perceived lack of budget for what's perceived as revolutionary change

- Conflicting priorities affected by current market uncertainties
- Concerns about downtime
- Pressure to meet short-term financial targets
- Increasing numbers of stakeholders needing to be involved in decisioning

A planned pathway to digitisation

Given the pace of change, organisations may feel pressured to adopt every new technology. But lasting transformation isn't about mere adoption. It's about a well-considered approach, tailored to the business' challenges. The goal isn't just operational efficiency, it's sustainable growth.

The advantages of insight to accelerate your journey

With the right assets tagged and monitored, the raw, real-time, rich data you glean from them, and about them, can help your team do what you've only imagined:
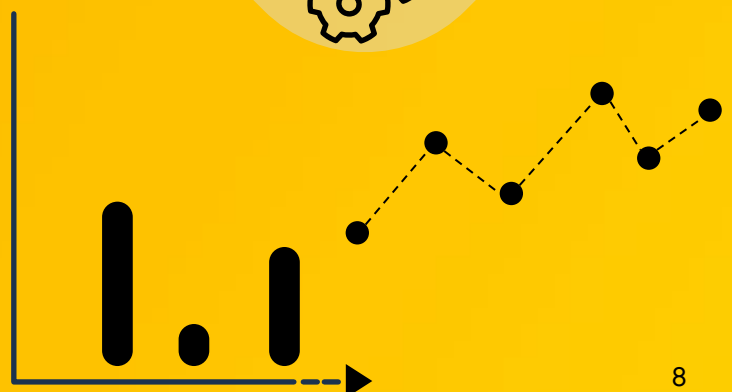
- **Pinpoint precisely where your real problems are**

- **Inform smarter decisions about processes and people**

- **Create more secure, more sustainable practices**

- **Identify opportunities to integrate new technologies that can save time and cost**

- **Inspire ideas that help you increase innovation, speed and agility**

End-to-end visibility: your organisation's superpower

In short, you'll get end-to-end visibility of your business, through your most valuable assets - a fundamental requirement for modern business.

Think of it as a 360-degree view of your assets, and your operations and turn them into value, that can highlight both vulnerabilities and efficiencies, as well as areas for growth and development.

By accessing this effortlessly, leaders can more successfully navigate the complexities of today's business landscape, and develop the agility, resilience and ability to innovate that will pull them ahead of the curve.

So, our advice is not to start with the question, "Why should we digitalise our organisation now?" Assume digitalisation is an imperative - and start with the question, "Where are the assets that drive, develop and deliver the value that's at the heart of our organisation's purpose?"

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How do you get from here to connected?

You're just six steps away from connecting your organisation to the Internet of Things - and being able to take advantage of the benefits and value that the IoT opportunity promises. Before your competitors do.

6. Evolve
We can enable your connected organisation to use time-critical data about your assets to inform value-critical decisions, instantly

5. Roll-out
We'll scale the solution across the site, and others, to create an integrated solution

4. Pilot
We'll trial the solution on a specific area with limited assets to prove the business benefits and value

6 Steps

6 1
5 2
4 3

1. Consultation
We'll discuss your business problems and explore how we can help

2. Site survey
We'll do a deep assessment of your site, assets, operation, challenges

3. Proposal
We'll write up our recommended solution and pilot proposal
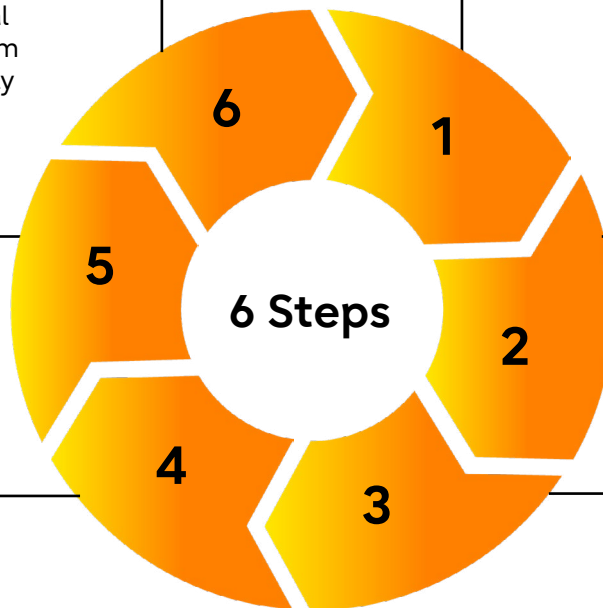
What technology do we work with?

Just some of the asset-tracking technologies we can use to customise the right solution for your organisation.

Marking and tagging technologies are part of a broader suite of tech that enables and facilitates the accurate capture and rapid transmission of machine- readable data to automated information systems.
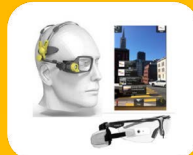
As GlobeRanger is technology-agnostic, we choose the right devices and equipment for your organisation's objectives, assets, environment, processes and budget.

Barcodes

Passive Tag | Active Tag | Wi-Fi, BLE, GPS Tags

Radio Frequency Identification

Digital Image Processors

Mobile Data Devices

Sensors/Actuators

We also have our own bespoke iMotion™ platform and tools.

Over the years, we have developed, built and scaled our own bespoke GlobeRanger iMotion™ platform and tools.
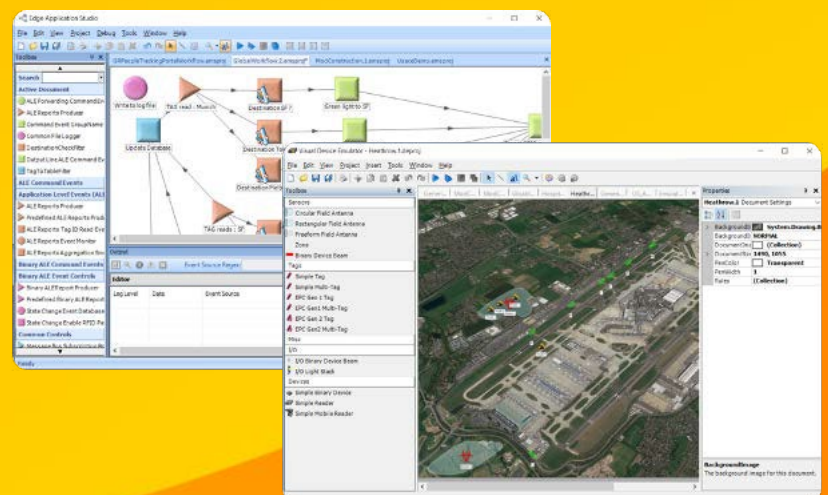
iMotion™ gathers, filters and processes the data we gather from the network of devices and sensors we deploy to track the assets in your organisation.

Among our bespoke iMotion™ tools are:
- A Device Management Console
- A Workflow Design Studio
- A Virtual Device Emulator

As you'd expect, iMotion™ is compatible with on-prem, cloud or hybrid technologies, including Microsoft Azure and Amazon Web Services among others.

But, as always, we'll ensure the technology we design into your organisation's asset-tracking solution fits your organisation's needs – not the other way around.

| Asset Tracking | Liquid Management | Inventory Receiving |

Sample of GlobeRanger applications built on or integrated with iMotion

iMotion Platform Architecture

Edge Application Development Studio

Edge Process Manager (Workflows)
(Data processing, business rules, data filtering and interfaces)

Visual Device Emulator

Edge Device Manager
(Configure, capture control and monitor)

Device Adapters

| IoT Sensors | AIT Devices (RFID, Barcode, BLE, Wi-Fi) | Weight Scales | PLCs |

Seeing is believing in your business' evolution

As your business evolves, we can also evolve your asset tracking solution with it, so we can help you optimise your whole organisation, area by area:

Based on true partnership, here's what GlobeRanger can help your business to achieve, now – and in the future

Now	Future
Real-time visibility of assets and supply chain	**Business insight** through asset data collection and analysis
Asset efficiency, especially in auditing and restocking	**Opportunity mapping,** backed up by data, to transform your organisation
Operational efficiency, especially in mobilising and distribution	**Faster connectivity** with lower latency by integrating 5G
Optimisation of your processes, doing more with less	**Automated decisioning,** smarter working and cost reductions by integrating AI
Accountability, proving asset provenance, location and spend	**Unalterable provenance trail** to boost ESG credentials by integrating blockchain

Where can the path to digital maturity take you?

Once your assets are fuelling your decisioning with real-time data, the future is yours.
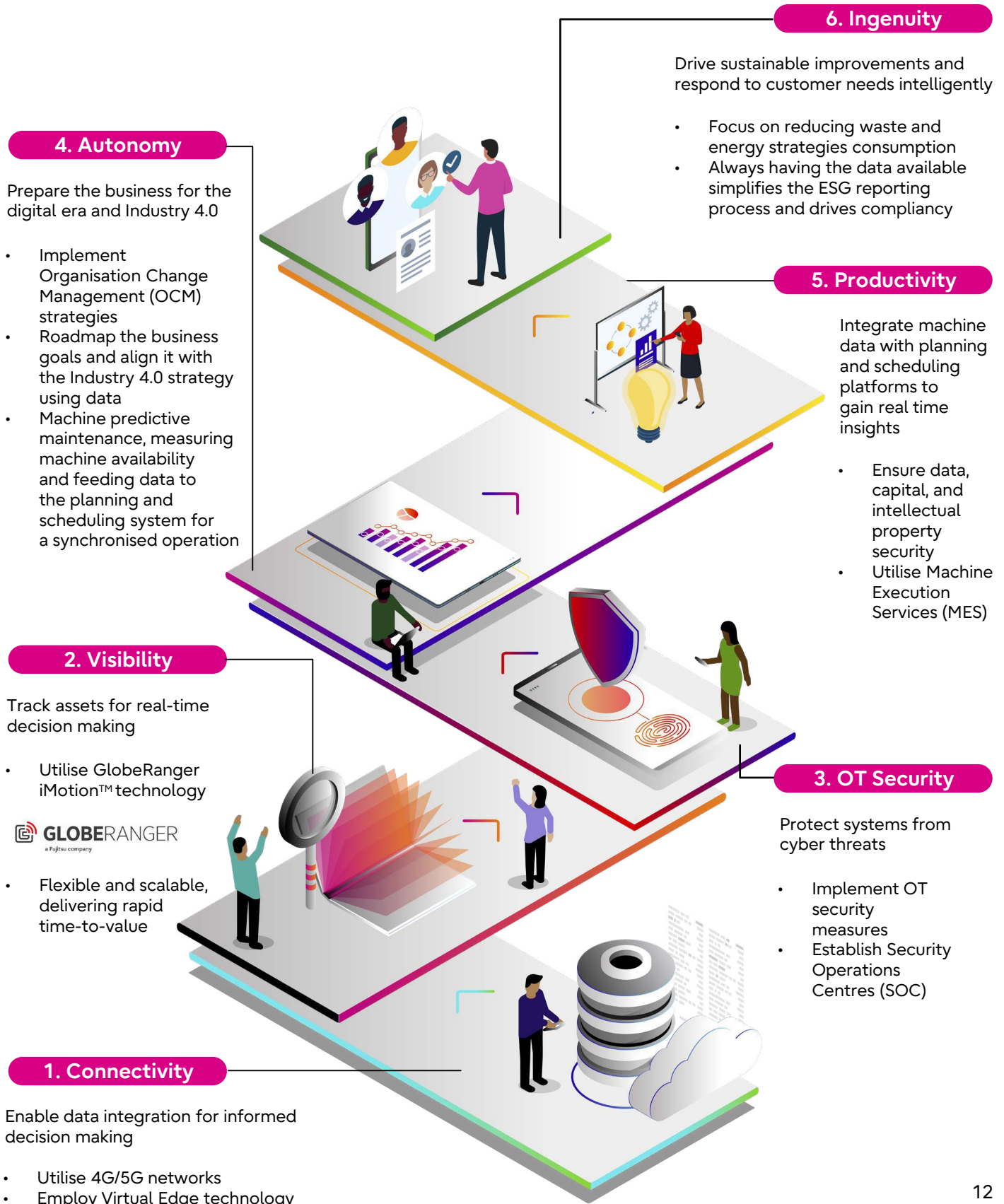
When you're ready, we can help you use your data to identify other problems, challenges and opportunities in your business and co-create the strategies that can drive growth, on a robust, timed and cost-managed roadmap.

Then, we can collaborate with Fujitsu to integrate the essential and emerging technologies that can make it happen. **Milestone by milestone.**

Your organisation's path will be your own, starting from where you are now

GlobeRanger can give you the superpower of visibility in your organisation. But with our ecosystem of world-class partners, we can also support you on your ongoing journey to digitalisation - and take end-to-end accountability.

6. Ingenuity

Drive sustainable improvements and respond to customer needs intelligently

- Focus on reducing waste and energy strategies consumption
- Always having the data available simplifies the ESG reporting process and drives compliancy

4. Autonomy

Prepare the business for the digital era and Industry 4.0

- Implement Organisation Change Management (OCM) strategies
- Roadmap the business goals and align it with the Industry 4.0 strategy using data
- Machine predictive maintenance, measuring machine availability and feeding data to the planning and scheduling system for a synchronised operation

5. Productivity

Integrate machine data with planning and scheduling platforms to gain real time insights

- Ensure data, capital, and intellectual property security
- Utilise Machine Execution Services (MES)

2. Visibility

Track assets for real-time decision making

- Utilise GlobeRanger iMotion™ technology

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- Flexible and scalable, delivering rapid time-to-value

3. OT Security

Protect systems from cyber threats

- Implement OT security measures
- Establish Security Operations Centres (SOC)

1. Connectivity

Enable data integration for informed decision making

- Utilise 4G/5G networks
- Employ Virtual Edge technology

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Every journey starts with a single step

Just two stories tracking our customers' journeys to digitalisation

Leading aircraft manufacturer

Having already deployed GlobeRanger's RFID technology on a leading aircraft manufacturer's production line to track their components and we worked with them to co-create the Emergency Equipment Management Smart Check solution.

Simply, it uses the RFID tags to enable flight crew to easily scan essential equipment pre-flight.
It's a seamless, cost-effective solution that cut this critical process down from more than an hour, using repetitive and back-breaking under-seat inspection, to just 90 seconds.

And, of course, it removes human error and frees up crew to add that human touch to their passengers' onboarding experience.

> Learn more about tracking aircraft kit in an instant

We used GlobeRanger's iMotion IoT Edgeware Platform to enable Beam's team to track millions of oak barrels of whiskey through their production lifecycle, barrel by barrel.

It's a three-stage project encompassing the commissioning, tagging and movement of each oak barrel, ensuring total visibility of inventory at every step of the liquid maturation process and providing a digital trail that allows for the automatic movement of whiskey between plants, warehouses and trucks. So, every drop is Jim Beam quality – and not a drop is lost.

Moreover, every bottle has its own story to tell.

> Learn more about IoT monitoring and tracking

What makes GlobeRanger your ideal partner, right from the start?

Quite simply, as part of the Fujitsu network, we can offer you advantages that no other supplier can:

> A single partner

We can handle everything, from identifying what your business needs and setting it up, to integrating your existing systems and helping you scale up as your requirements change.

> An impartial provider

We're hardware agnostic, so we'll ensure we pick the best technology for your use case, whatever that may be.

> A trusted reputation

We're collaborative, responsive and pride ourselves on building lasting partnerships based on outcomes – just ask our customers.

> Unrivalled experience

We helped invent asset tracking and management technologies, and our experts are ready to share their experience with you.

> Competitive prices

As industry veterans, we've got long-term relationships with hardware specialists that mean we can offer highly competitive prices, and with our flexible pricing models, digital transformation is affordable for all.

> Quick ROI

We aim to deliver savings from cost-efficiencies as well as value from optimising your organisation. In fact, we measure our success on it.

> Longevity

With the backing of Fujitsu, pioneers in the technology industry for more than 85 years, you can be sure that when you need us, we'll be here.

> Global footprint

With access to Fujitsu's global teams and networks, we can be with you whenever and wherever you need us.

So, where do you start?

We'd love to talk about that – and also about where GlobeRanger can take your organisation on your digital journey.

We'll start with where your assets are and connect them to the digital world.
But over time, we'll work together to connect the organisation you know now to the one that'll disrupt your market in the future.

Because no one values your assets more than we do. After all, our business depends on them.

Welcome
to the future.

Your digital
evolution
starts today.

Ready to start?

> Discover other organisations which share your ambitions

> Test your organisation's readiness to go digital

> Hear our MD's view on the power of starting with where

> Explore how we're transforming global manufacturing

Contact us

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