Edge Tech

Crafting the Future Work Landscape: Intelligent Automation, Artificial Intelligence, and Beyond

The Edge Tech 2024 Report

Over the next 12 months, the seamless interplay of Artificial Intelligence (AI), Intelligent Automation (IA), and Robotic Process Automation (RPA) is poised to redefine the future of work. Let's see how.

Contents

Foreword: The Evolution of Work in the Age of Mainstream AI

Across every industry from transportation to healthcare, financial services to retail, customer service to energy, the integration of automation, AI (Artificial Intelligence), and other advanced technologies is fundamentally transforming the nature of work.

In recent years, the impact of this transformation has accelerated. As Deloitte's 2023 Global Human Capital Trends report observes, **automation, AI, and technology are reshaping both jobs "and the skills required to do them,"** while The World Economic Forum predicts **AI could replace 85 million jobs by 2025** — while also creating 97 million new ones. At the same time, a 2023 Bain & Company report notes high failure rates for many AI projects **emphasising the need for patience rather than hype**.

Clearly, the transformative impact AI and automation will have on work processes and skill requirements for human workers will be immense--but as that last data point suggests, we need to be realistic and not over-promise. We also need to move stakeholders (including employees) away from the 'robots will take all our jobs' conversation and instead look at a more flexible and nuanced picture, one more marked by a hybrid human-machine work environment. For example, a survey by MIT Sloan Management Review finds 73% of organisations are looking to **augment human skills with AI** rather than replacing jobs outright.

As that starts to happen, work is evolving to capitalise on the respective strengths of the human worker and their new machine helper. Entirely new speciality occupations have shot up almost overnight and will continue to with the advancement of AI and automation.

As work itself starts to evolve for the humans involved in developing, deploying, and interacting with these technologies, organisations must evolve their workforce strategies to attract and re-skill talent into these critical emerging roles.

Why: the nature of work is fundamentally changing, and matching the right human talent to new machine capabilities will be key to supporting innovation, productivity, and human job satisfaction. Against this backdrop, we can already see the Intelligent Automation landscape in 2023 brings together mature and emerging capabilities including AI, RPA, Analytics, Process Mining and more.

Continued...

Leading enterprise adoption is being driven by the urgent need for **enhanced data insights, a push for hyper-automation, and digital transformation** according to Deloitte. Encouraging more rapid uptake of these advanced technologies is the rise in enterprise acceptance of cloud infrastructure and low-code platforms, which McKinsey says are **lowering barriers to deploy these technologies in a new set of integrated automation platforms** (Gartner predicts **80% of technology products and services will be built by those who are not technology professionals by 2024.**)

Growing customer confidence in AI and automation is also being bolstered with continuous bot improvement with AI and Unified Automation. IDC global data indicates 80% of large firms are now piloting or moving to production with Intelligent Automation, indicating it has **crossed the technology adoption chasm**.

However, while democratisation through reusable solutions is expanding adoption, realising the full value of robotics/AI/Intelligent Automation requires updated skills and organisational change management.

Other challenges remain: ethical application of IA/AI **remains a puzzle** — research by Deloitte identifies **managing AI ethics as a critical capability** — while the work on scaling and optimising adoption to transform work is only really beginning. Therefore, with a maturing AI/IA technology landscape and proven benefits, the imperative in 2024 is on vision, leadership and responsible application to build even more effective human-machine collaboration.

Want to know the secret of the future of work?

Simple.

We need to harness automation as a constructive force.

And we hope you agree that this, the latest Edge Tech market trends report, has some practical ideas on how your organisation can acquire the capability to do so.

Ollie Sulley
Co-Founder of Edge Tech

Chapter 1: Trends And Drivers

The aftermath of digital transformation

The pandemic necessitated digital transformation at scale and created urgency to automate work across sectors. Better understanding of IA/AI's financial benefits is inspiring investment, with a projected global AI software market of **over $126 billion by the end of 2023**, aided by increased availability of intuitive automation tools like low-code platforms and prebuilt AI through cloud services lowers barriers to adoption.

RPA

The global Robotic Process Automation market is projected to **achieve a market size of $25.1 billion by 2030**, rising at a CAGR of 35.9% from 2022 to 2030. Observers expect 90% or more will **ramp investment sharply up by 2024**. The continued growth in RPA spending reflects its status as a gateway into automation; users report RPA delivers quick wins and ROI. A recurrent pattern is that while RPA has limitations, it gets organisations engaged and energised about automation, with positive initial experience leading them to invest further, fuelling even further adoption and growth.

Artificial Intelligence

By 2023, according to Gartner, **over 50% of organisations have adopted AI in some capacity**. If growth trends persist, this could easily reach 60% or even higher by 2024.

This reflects the current rapid maturation of AI technologies and techniques that are making them more accessible: advances like pre-trained models, AutoML, and NLP (Natural Language Processing are allowing more companies to implement AI. Lower barriers to adoption should continue driving uptake through 2024, while the impact of ChatGPT has introduced the idea of Large Language Models (LLMs) to both the average user but also line of business managers.

Machine Learning

In 2022, the Machine Learning (ML) market grew to $38 billion and is projected to be north of $200 billion by 2028. Sustaining 30-40% CAGR (compound annual growth rate), the market could easily reach **$64 billion to $80 billion by 2024**.

This forecasted huge surge in ML adoption follows key use cases that have demonstrated ML's business potential. Multiple industries are seeing ML deliver real improvements in areas like personalised recommendations, predictive analytics, and pattern recognition, while the need for these capabilities is propelling investment.

Process Mining

Respected number crunchers IDC forecasts **double-digit growth through 2026**, which, if this level of momentum were to be maintained, would result in the Process Mining software market surpassing $2 billion by 2024.

The main driver here is that as organisations look to optimise processes before and after automation, process mining provides visibility organisations lacked previously. Integrating process mining with RPA and AI is also being found again and again to promote continuous automation improvement. In many ways, Process Mining's growth aligns with demand for process excellence.

Prospects for continued growth

In summary, customer expertise with automation is increasing, breakthroughs keep demonstrating AI/ML's value, desire for process insights is rising, and RPA offers a hugely convenient entry point.

Combined, these trends support bullish economic conditions for RPA, AI, ML and Process Mining into 2024 and beyond, as organisations accelerate adoption to remain competitive. Let's now dive a bit deeper into the factors driving this growth and which should give stakeholders confidence the graph line will continue "up and to the right"

A context of change

Credible market research from diligent sources identifies several key factors fuelling rapid growth in adoption of IA and AI solutions. The first driver is the digital economy's bottomless thirst for data. Exponential increases in data volume and computing power are enabling more advanced applications. In fact, Cybercrime Magazine estimates the amount of data created and replicated will **surpass 200 zettabytes globally** by the end of 2025 (1 zettabyte = 1 billion terabytes/1 trillion gigabytes).

The second driver for organisational demand: Tech to help them consistently deliver improved customer experience and 100% data-driven decision-making. A challenge Intelligent Automation is aiding directly here is in **closing capability lags**: a 2023 McKinsey survey found over 80% of executives reported **skill gaps in critical problem-solving areas AI could address**. However, there is already change at the grassroots: younger, tech-savvy workers are increasingly receptive to **augmenting their capabilities via automation**.

The next is the constant rate of basic tech progress. Advances in Natural Language Processing highlighted in the **2023 NLP in Business Report** are driving growth in conversational interfaces, for example, while **growing cloud AI adoption** was evidenced by AWS's launch of 10 new AI services in Q1 2023.

Another factor: regulation and policy changes in sectors like banking and healthcare also encourage automation progress. Together, these drivers converge to make enterprise IA/AI adoption more strategically urgent and feasible than ever, as organisations race to harness automation's benefits and avoid competitive displacement.

The convergence debate continues

While welcoming this expansion, for many practitioners, the potential closer integration of Artificial Intelligence and Intelligent Automation capabilities is emerging as a key area of debate.

Debate that can shade into controversy; some argue this convergence is inevitable and transformative, while others suggest the technologies are fundamentally incompatible. The pro-case for convergence holds that combining AI and Intelligent Automation like Robotic Process Automation will be mutually reinforcing: after all, RPA provides the structured data to train AI; in turn, RPA bots can be infused with AI to handle unstructured data and emulate higher-level human skills, and this could allow **end-to-end automation of increasingly complex processes**.

In the contra corner, convergence sceptics contend RPA and AI adoption necessitate completely different strategic approaches. In this view, RPA focuses on replacing repetitive human tasks, but AI performs best on emerging use cases with limited historical data. **Building competencies in both simultaneously** may therefore be challenging.

Convergence critics also point out many current AI deployments focus on narrow point solutions versus enterprise-wide platforms. Integrating disjointed AI tools with broader automation ecosystems is difficult, and **significant technical and organisational barriers to convergence exist today**.

Convergence proponents counter that the technologies are already coming together in areas like computer vision-enabled process mining and NLP-powered conversational interfaces. Pre-built connectors between RPA and AI tools are also now available; **tight integration may take time**, but is conceptually achievable.

As the technologies mature, the reality may lie somewhere in the middle; while true convergence into unified systems may be elusive initially, closer coordination between automation efforts will likely occur.

With structured change management, organisations that are proactively embracing technologies like AI and Intelligent Automation can harness the complementary strengths of RPA and AI but for now, pragmatism is still probably warranted for such a complex transformation.

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"In the past year, the widespread availability of AI technologies has set the stage for a powerful convergence of technologies, including intelligent automation, RPA and more. This convergence has the potential to profoundly influence the way businesses function. Harnessing AI to seamlessly integrate big data management, analysis and comprehension into automated workflows promises a realm of increased efficiency, predictive insights and personalised experiences. This transformation is poised to reshape company operations and elevate customer relationships. As for the most promising technology with the potential to reshape the future, Generative AI is capturing attention. Its remarkable capabilities include generating creative content, aiding developers in writing code, and enhancing productivity. Generative AI holds the promise of transforming the way we work and innovate."

Graham Penman
CTO at jaam automation

Implications for the global workforce

The accelerated adoption of Intelligent Automation (IA), Artificial Intelligence (AI) and other emerging technologies is being strengthened by a workforce evolution. That needs to happen, as new roles, skills and ways of working out of widespread automation and intelligent process redesign are clearly needed to complement the dazzling capabilities of the new technologies.

A growing category is "hybrid" professionals who can fluently speak both business and IT, combining business and technical acumen (think, data scientists seamlessly embedded into corporate teams). Demand is also rising for translators who can bridge IT and line of business needs: there is increasing discussion around the need for a new class of '**business-AI' 'translators**, i.e., humans who work directly with smart systems to train and improve their contributions.

But these changes will affect more than just special elites. The reality is that in 2024 and beyond, to thrive alongside machines every employee will need basic technology literacy fused with "soft" skills like creativity, empathy and problem-solving. To stay relevant, lifelong learning must become the norm: The World Economic Forum predicts that before 2030, **over a billion jobs will need reskilling**.

Their managers need to catch up, too. New leadership priorities include managing remote/hybrid teams, overseeing ethical AI practices and guiding organisations through transformation. Diversity and inclusion are also emerging as clear social imperatives for Gen Z, while their line of business managers look to more diverse perspectives to fuel new breakthroughs. The future of the workplace seems to be one where flatter, team-based structures displace traditional hierarchies and silos.

The verdict's clear: as automation starts to change not just work processes but the roles of the people working in them, workforce planning must look ahead 5-10 years at how techniques and strategies like proactive reskilling, talent exchanges and gig partnerships can aid the transition.

"Work has changed dramatically in the tech era thanks to the tidal wave of digital innovation. Tech has disrupted how we produce, collaborate and structure jobs. The nature of work is unrecognizable from a decade ago. Software, data, AI and robots augment and automate tasks across industries. This has created new human-machine partnerships which are powering advances in every sector, leading to the development of solutions that were once thought impossible.

Virtual teams built on digital platforms ignore physical boundaries. Compute, connectivity, automation, mobile tech, cloud services, intelligent automation, and AI enabling us to solve complex problems, personalize experiences, and create in novel and adaptive ways. Tech is propelling work forward, erasing limits once set by physical and cognitive boundaries. Opportunities today exceed both our expectations and imagination. Our future now blends possibilities and complexities. But are you ready?"

Kieran Gilmurray
Intelligent Automation, Data Analytics and
Emerging Technology Consultant

Chapter 2: Debunking The Hype: Addressing IA/AI/Automation Market Misconceptions And Unrealistic Expectations

Banishing lingering and unhelpful automation myths

In the last chapter we surfaced all the positives around 2023's growth and acceptance of Intelligent Automation and Artificial Intelligence, which is set to continue so strongly into 2024.

However, as organisations explore these advanced technologies at scale and in expectation of serious business payback, it is important to acknowledge (and so, effectively handle and plan for) common misconceptions and unrealistic expectations early on. Clearly, without a realistic view of investment outcomes, organisations risk wasted budget and failed initiatives.

For example, a far too widespread misconception even in 2024 is that implementing IA/AI will lead to near-total workforce automation. In reality, many jobs involve non-routine tasks, emotional intelligence and complex decision-making that AI cannot yet replicate. A better goal that needs to be communicated to stakeholders is not full replacement, but augmenting human capabilities through human-machine collaboration.

Another misconception that continues to dog the discussion is that IA/AI adoption is simple and fast. In fact, a successful IA/AI intervention requires careful planning and change management. A 2023 McKinsey probe, for example, found that **only 8% of AI adopters reported consistent extensive benefits**, highlighting the persistent gap between expectations and reality. At the same time, the remarkable overnight success of ChatGPT has stoked perhaps ultimately as unhelpful, **inflating expectations around Generative AI**, with 40% of respondents to a Summer 2023 parallel McKinsey probe saying their organisations will increase their investment in AI overall because of advances in the Large Language Model approach.

To avoid disappointment and so curb any danger of IA/AI backlash, to succeed with IA/AI organisations must invest in building integrated data pipelines, AI talent, and new processes. Another issue to be sensitive to is that there can also be unrealistic expectations of cost savings and productivity gains from IA/AI.

The crux here is that while there is significant potential, actual achieved game-changing outcomes depend on how the technologies are implemented. Again, we turn to McKinsey's thought leadership here: it reports that companies with a strong innovation culture and operating model achieve, on average, four percentage points greater annual for total shareholder return growth and 16% higher median return on invested capital than other growth outperformers. Top innovative companies also increase their chances of outpacing their industry peers on revenue and profit growth by 52%. And they do this by actively nurturing new sources of growth by building an innovation mindset and culture, and driving it with **investments in the very state-of-the-art digital technologies we are highlighting in this study**.

Thus, we call on stakeholders to encourage adopters to pursue IA/AI to not just reduce costs but to frame it as their chosen on-ramp for enhancing future growth and innovation. The good news is that via thoughtful leadership, realistic framing and organisational learning, companies can easily move past the myths and hype to implement IA/AI successfully. Proactive communication, training, and change management will help foster an accurate, balanced view on the path forward.

"The misconception within companies that I come up against the most is that automation is a silver bullet for efficiency. If the processes you want to automate are inefficient and not well organised, it's an extremely unrealistic expectation that throwing technology at it will magically sort everything out. However, identifying that a process isn't working properly is a significant step towards becoming more efficient, and understanding what is needed to make that process as efficient as possible is the cornerstone of implementing a successful process automation project. A little early work in nailing down requirements goes a very long way.

Understanding and improving business processes no longer requires a troop of management consultants. With the use of modern task and process analysis AI technologies, deep insights into your business processes can be obtained easily to help identify where your inefficiencies and opportunities for improvement lie. That then clears the way for you to use intelligent automation technologies to deliver those improvements based on real insights."

Anton du Toit
Head of Customer Success at jaam automation

Chapter 3: Market Landscape And Innovation

The AI-IA-RPA sector continues to evolve at a rapid pace, driving home the industry's dynamism. As we enter 2024, UiPath continues to dominate the RPA market with 63% market share, and from a recruitment perspective we still very much see it as the dominant player in the market. Nonetheless, it for sure faces rising competition from **Automation Anywhere, Robocorp, SS&C Blue Prism and NICE**, and from **the whole low code/no code approach**.

UiPath's strengths include a wide range of process automation capabilities, so its dominance may persist over the course of the next 12 months. Over in cloud AI, AWS leads with over 30% market share, due to its breadth of AI services and developer tools but **Microsoft is closing fast**. In parallel, open-source RPA intelligence automation software like Robocorp is also gaining traction, while low code / no code continues its steady rise, with application platforms utilising a visual software development approach with simple tools such as drag-and-drop components and pre-built connectors are finding more and more enterprise adopters and the **rise of the so-called "citizen developer" continues apace**.

Emerging technologies and innovations shaping the Future of Work

In 2024, we expect rising interest in Process Mining, given its proven capability to help organisations uncover process inefficiencies as part of automation initiatives. One analysis out of Everest Group, for example, **found it reduced process cycle times by 16.7% on average**.

Another very promising approach is MLOps. Genpact expects MLOps adoption will be fueled by the need to **improve AI project success rates**, which stand at only 54% for 2023. In parallel, federated learning allows training on decentralised data, increasing privacy; one study by MIT Tech Review estimates it **can reduce data privacy violations by up to 62%**.

As noted, Generative AI saw explosive growth in 2022 and even more so in 2023, with **ChatGPT gaining 100 million users in its first two months of release**. We expect it to continue to dominate the enterprise IT conversation in 2024, but solid use cases of business exploitation so far remain thin on the ground. We can also expect debate on Gen AI's impact on employment, but the full profile here remains unclear: for example, Capgemini found **69% of organisations surveyed believed that Generative AI will lead to the emergence of new job roles** (e.g., Prompt Engineer) but as we enter 2024 is still in its infancy at ground-level.

Start-ups and disruptive ventures in the field

As is to be expected given the pace of technological change, interesting new developments are also coming along in not just a number of ancillary fields to IA/AI/RPA, but **there is no lack of potential contenders for future disruption and challenge**.

Accepting that there is always an element of hype and VC 'propaganda' for funding vehicles, vendors whose stories bear a second look here in our opinion include:

Conversational AI

Conversational AI startups use Natural Language Processing, Machine Learning, and Deep Learning to simulate human conversation. Companies gaining prominence in this market include:

**Hugging Face (highly social AI) (France)
Character AI (open-ended conversational applications) (USA)
Yellow Messenger (enterprise AI channel for customer engagement) (India)
DRUID AI (Conversational AI Bots) (Romania)**

Process Mining

Process Mining extracts process data from IT systems to model, analyse and optimise business processes and is a technique designed to discover, monitor and improve real processes (i.e., not assumed processes) by extracting readily available knowledge from the event logs of information systems. Today, a Process Mining solution will tend to include automated process discovery, i.e., extracting process models from an event log (a chronologically ordered list of the recorded events in a computer application). Significant players include:

**Celonis
Scout (Soroco)
Signavio (SAP)
Minit (Microsoft)**

As noted elsewhere in Crafting The Future Landscape, we can expect 2024 to be a major year for all things Gen AI… but will we see any significant breakthroughs in what purists still say society needs, AGI (**Artificial General Intelligence**), as in genuinely autonomous systems that will surpass human capabilities in the majority of economically valuable tasks?

Some say there's **only a 50% chance of this happening by 2060**… but others that it's much nearer. What we can be sure of: AI is now firmly in the mainstream of both business and society, with high expectations and deep fears on both sides. The public will soon start demanding clear answers on questions that have really only been of interest to practitioners for decades. What happens then will shape our common future well into the future.

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"The global AI, IA, and RPA industry is undergoing a period of rapid growth and matu-ration.

Driven by advancements in computing power, data and need – RPA, IA and AI are now capable of intelligently automating tasks that were previously considered to be the exclusive domain of humans.

Each are mature technologies that have been widely adopted by organizations across all industries. Today, increases in demand for automation, a growing availability of AI talent and advances in AI technology enable companies the opportunity to automate a wider range of tasks than at any point in time and the best companies are doing just that".

Olivier Gomez
Co-Founder and CEO at IAC.ai

Chapter 4: What We Are Seeing in the IA/AI/RPA Space

Drawing from Edge Tech's unique vantage point within the industry, this section offers valuable insights into the current AI-IA-RPA landscape. It examines the emergence of new roles, salary benchmarks and provides firsthand observations of the workplace trends in these industries.

In the following graphs, you will find remuneration details for a handful of the most in-demand positions we see across the UK and the US. For ease, we have included a number of technologies grouped into one job title, for example, "IA Developer" includes a range of technologies such as RPA, Chatbots, BPM, Process Mining, IDP etc.

The sales job title listed in our graphs includes junior sales positions such as SDR / BDR and also includes Senior Sales Executives up to Enterprise Account Executive.

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"In the UK, over 2023, we have seen very little movement when it comes to increases in salaries and day rates we found that the average earning in these bands has gone up across the board. This may be from the economic position in the UK throughout the year with companies having to make layoffs and enterprises putting a pause on new technology initiatives. The market seemed to stabilise after a steady increase year on year from 2020. There was no movement at the bottom end of the salaries which shows that the work these individuals do is still valued and there isn't a fight for professionals to undercut each other just to secure the job and organisations aren't low-balling offers.

The same can be said for the US too, however, there was a slight increase in some positions at the top end which shows that the value for individuals in the space is still there and increasing gradually.

Overall the market has stayed strong taking into account external factors which have had an impact and it's great to see the space we work in still has a lot of potential."

Harrison Goode
Co-Founder of Edge Tech

Salary benchmarks data

UK Permanent Salaries

Per Year*

Role	Low	High
Intelligent Automation Developer	£35k	£65k
Intelligent Automation Solution Architect	£80k	£110k
Intelligent Automation Sales Engineer	£70k	£130k
Sales	£40k	£140k
Business Analyst	£40k	£70k
Consultant	£60k	£120k
Project Manager	£60k	£100k
Head of Intelligent Automation	£80k	£130k
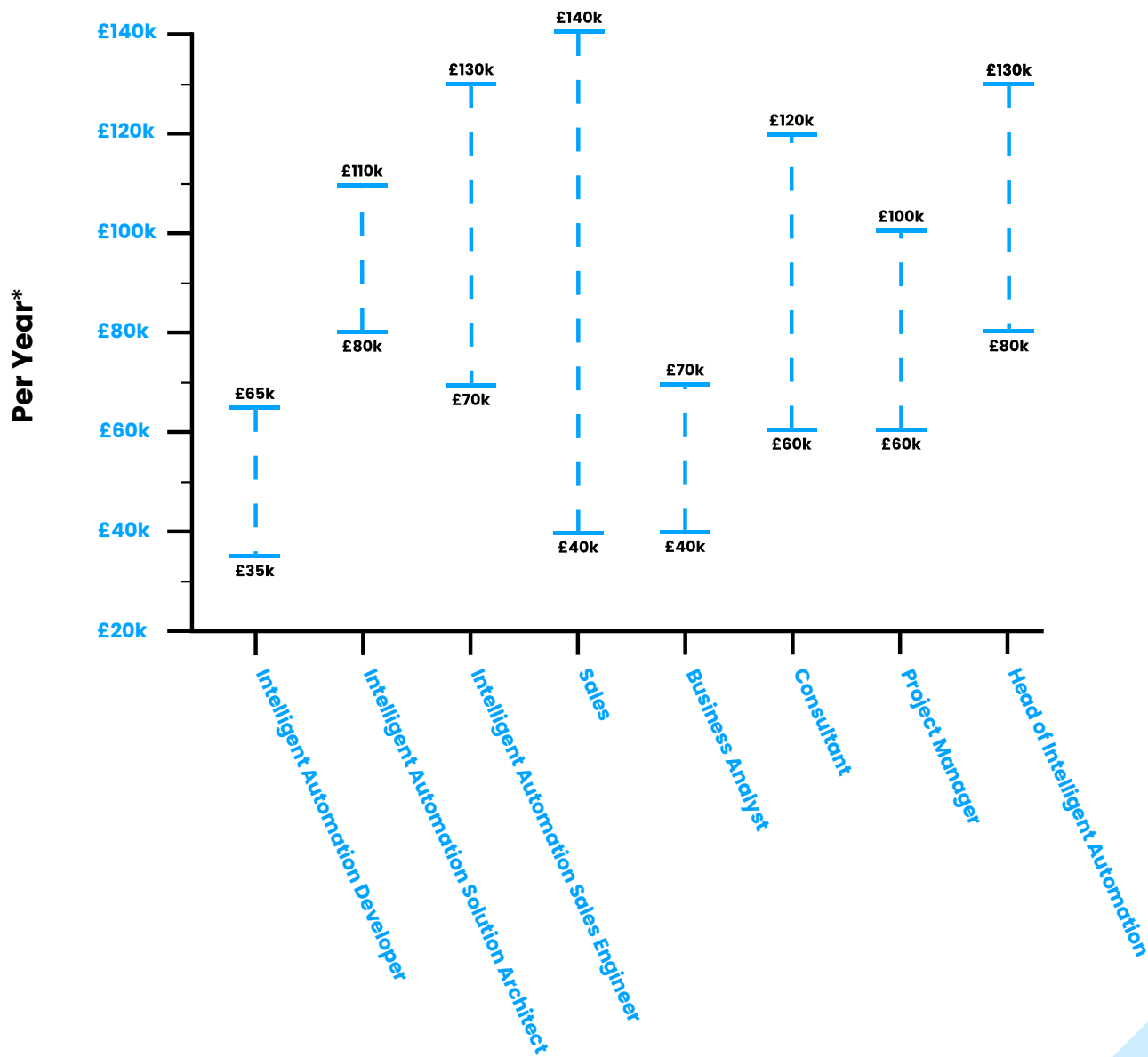
*Salaries listed are base salaries only and do not include bonus or on target earnings (OTE)

US Permanent Salaries

Per Year*

Role	Low	High
Intelligent Automation Developer	$85k	$120k
Intelligent Automation Solution Architect	$120k	$170k
Intelligent Automation Sales Engineer	$100k	$180k
Sales	$80k	$200k
Business Analyst	$70k	$130k
Consultant	$80k	$150k
Project Manager	$100k	$150k
Head of Intelligent Automation	$150k	$200k
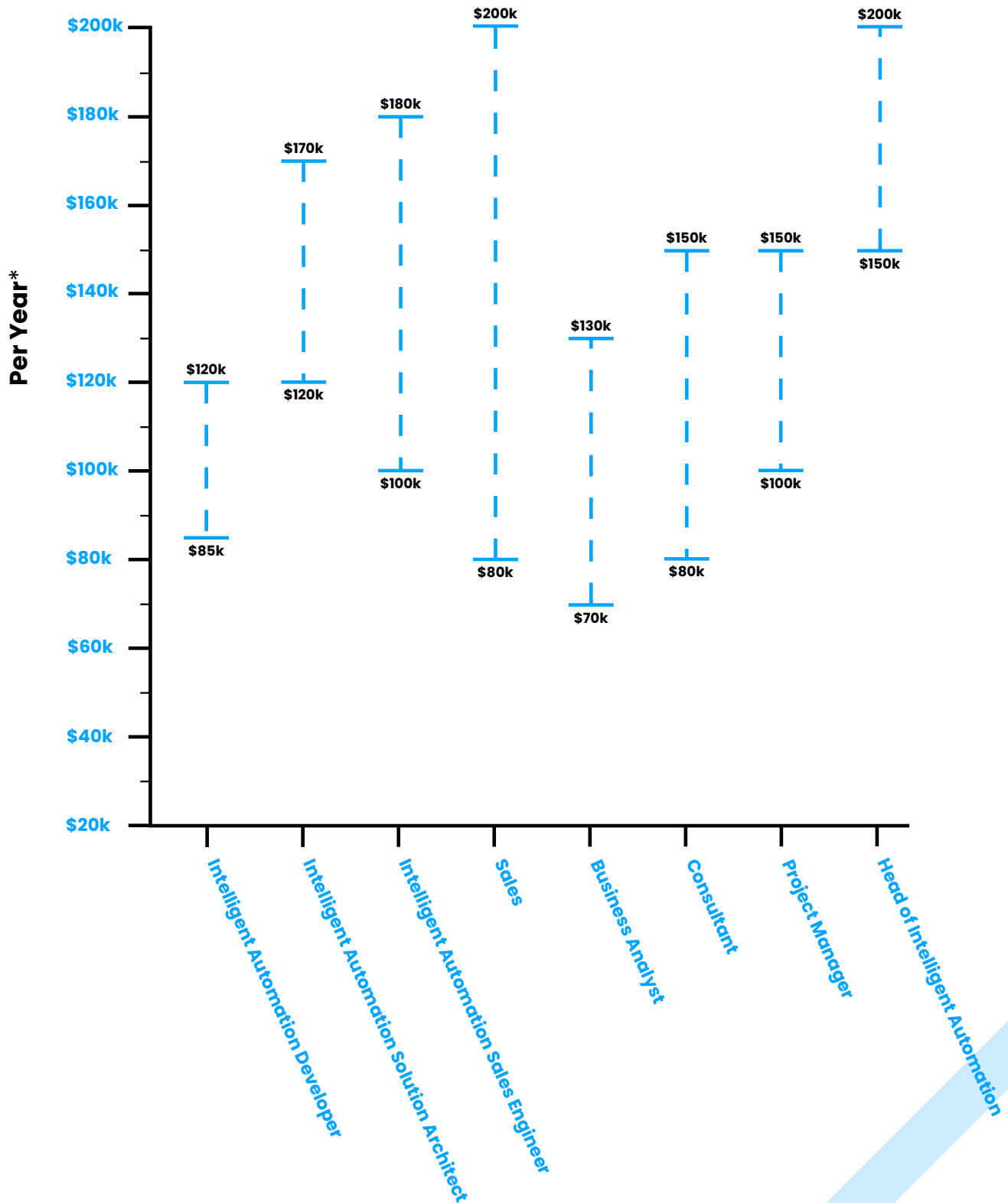
*Salaries listed are base salaries only and do not include bonus or on target earnings (OTE)

UK Contract Day Rates
(Excluding any consultancy or agency fees)

Per Day

Role	Range
Intelligent Automation Developer	£350 – £600
Intelligent Automation Solution Architect	£500 – £800
Business Analyst	£350 – £550
Consultant	£500 – £900
Project Manager	£600 – £900
Head of Intelligent Automation	£800 – £1200
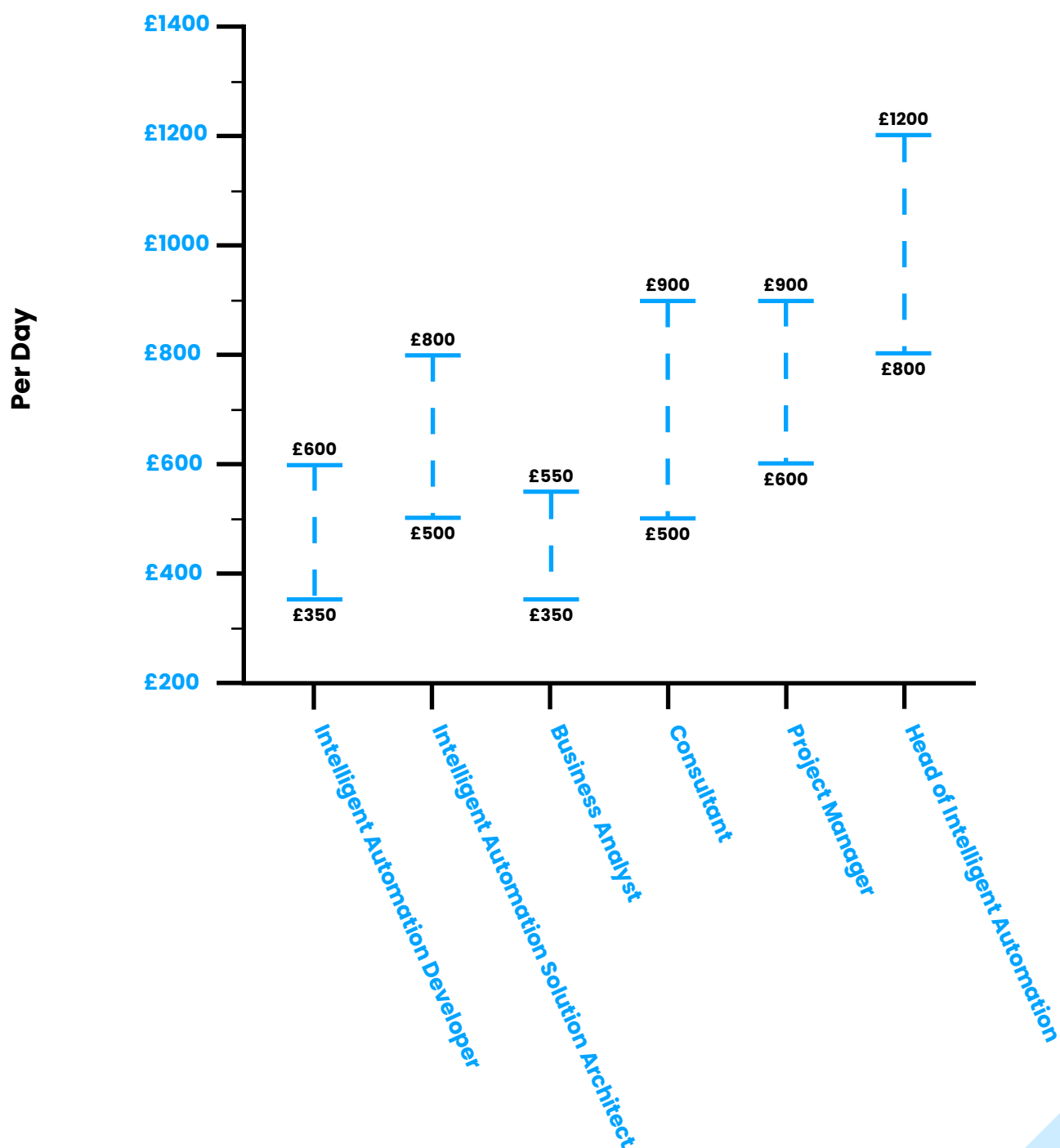
US Contract Hourly Rates
(Excluding any consultancy or agency fees)

Per Day

$200	
$180	
$160	
$140	
$120	
$100	
$80	
$60	
$40	
$20	

$190

$150

$140   **$140**

$120

$110

$100

$95   **$95**

$90

$70

$65

Intelligent Automation Developer

Intelligent Automation Solution Architect

Business Analyst

Consultant

Project Manager

Head of Intelligent Automation
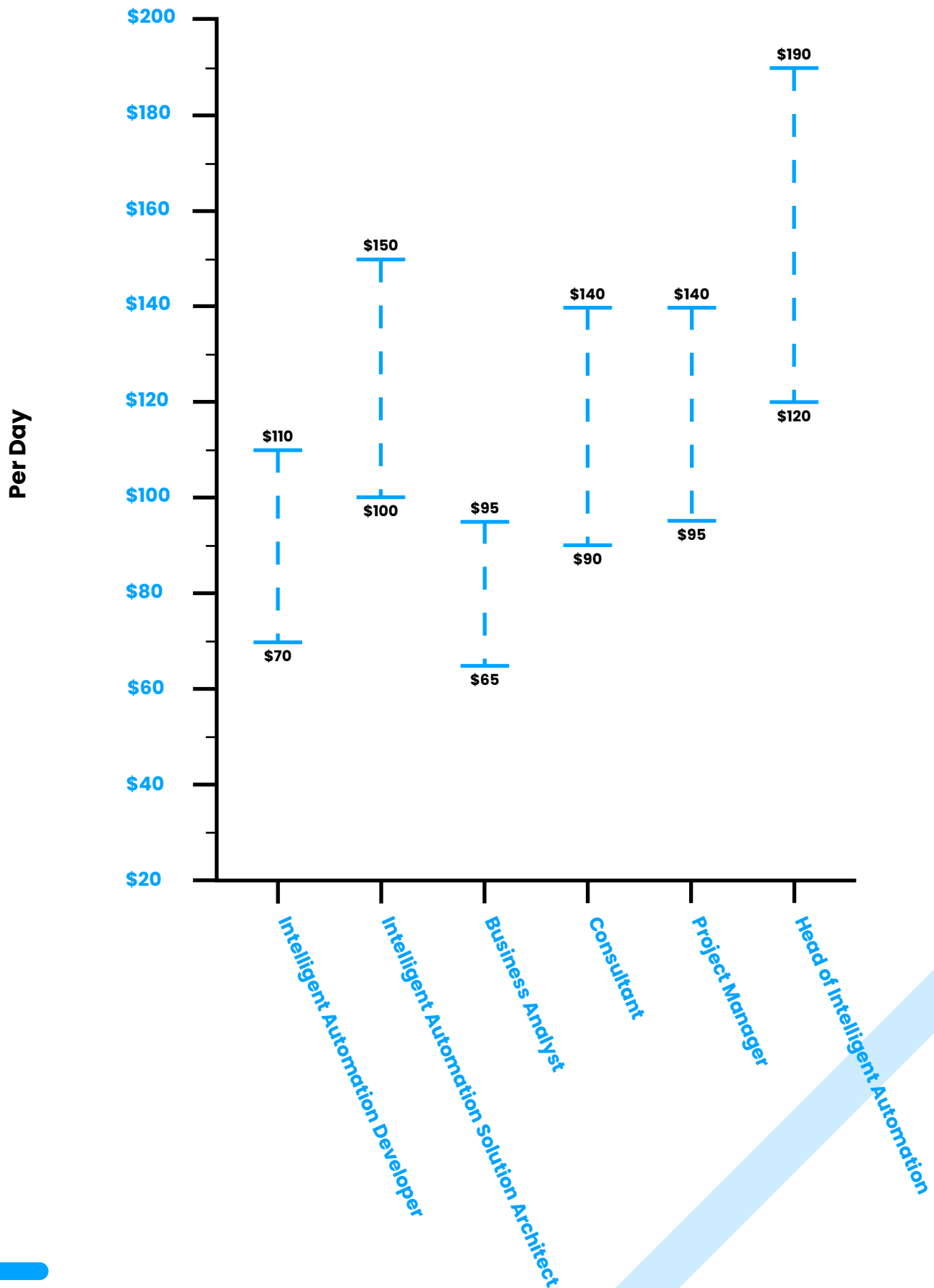
Roles Edge Tech is seeing that are emerging or becoming redundant

Over 2023 there was very little change when it comes to roles in the RPA, IA & AI space, for the most part, these roles are here to stay but just like the technology that evolves year-to-year, so do the roles.

Head of RPA / RPA Director - Rather than become redundant we have seen this role morph into something bigger, encompassing a wider scope of technologies rather than just RPA. This role has transformed into a Head of Intelligent Automation / Intelligent Automation Director and this individual is now responsible for a range of technologies such as; RPA, Process Mining, IDP/OCR, Chatbots/NLP/Conversational AI and low-code/no-code automation capabilities.

Prompt Engineers - We have seen a rise of the Prompt Engineer, many hailed prompt engineering as the hottest and most in-demand job in 2023 after the rise of ChatGPT. Most classing prompt engineers as "AI whisperers"— experts capable of unlocking the systems' greatest potential, however, AI experts and tech analysts now argue that as AI systems improve, prompt engineering will become redundant. We could argue that this in both camps as emerging and potentially redundant but the demand for these experts is still on the rise and only time will tell if they're here to stay.

Chapter 5: Talent Acquisition Strategies

As the workforce transforms thanks to widespread adoption of robots, digital processes, automation and AI, attracting and nurturing AI, IA, and RPA talent became pivotal.

What are the best strategies for achieving this, while promoting diversity and inclusion and so offer organisations a dependable roadmap to business transformation through automation success?

Attracting IA, AI and RPA talent

As organisations accelerate adoption of digital transformation, attracting skilled talent at all levels is crucial. Best practice suggests that with demand outpacing supply for these skills, a multifaceted approach is required.

For example, for senior roles—where the talent pool is even more restricted— partnering with specialised recruitment partners consistently provides access to pre-profiled, in-demand talent. Firms such as Edge Tech have networks and expertise to run targeted executive searches, and their utilisation in your IA, AI and RPA talent acquisition strategy should be a priority. The speed to market and reduction in your time-to-hire is also a huge benefit, especially when you need these key skills in your organisation and can't settle for sub-par expertise.

It is also advised that internal promotion or recruitment is also a key pillar of your strategy. Reskilling existing employees is also a tactic gaining significant traction. For example, an IBM survey found 81% of employees **rated reskilling as the best way to retain talent**. While currently expensive at a market average of about $24,000 per employee, internal reskilling also **builds loyalty, deepens loyalty and leverages institutional knowledge**, Deloitte confirms.

To aid such initiatives, organisations are launching reskilling initiatives like academies, bootcamps and online platforms. It seems clear that a blended external-internal IA, AI and RPA talent acquisition strategy is imperative for long-term talent acquisition success.

Effective retention and nurturing of valuable IA, AI and RPA talent

As Intelligent Automation (IA), Artificial Intelligence (AI) and Robotic Process Automation (RPA) adoption accelerates, competition for skilled talent in these areas is intensifying. Organisations must therefore prioritise retaining and nurturing their automation teams to maintain a competitive edge.

This needs to start with competitive compensation benchmarked to market rates, as you can see here in the 2024 Edge Tech employment trends report. Here, equity options, profit sharing and bonuses tied to automation metrics can incentivise top performers. Recognising contributions publicly and offering growth opportunities can also be highly effective in deepening engagement and employee loyalty. For instance, a 2023 Deloitte analysis found clear, defined career progression was the top retention driver for a majority (53%) of AI professionals contacted.

Beyond financial incentives, flexibility and work-life balance are important values for the automation and AI professional. Embracing remote and hybrid working, promoting outside learning time, and tailoring roles to individual strengths and interests are also proven HR policies to be employed here. In 2023, McKinsey found technology professionals clearly prioritising flexibility and purpose over pay.

This class of highly-skilled, highly-in-demand professionals also like to feel their skills will be built by working for you. Thus, investing in continuous skills development is critical: access to courses, conferences and cross-training needs to be the default for your internal L&D (Learning and Development) team. Another useful technique is domain-specific mentorship by seasoned professionals that complement technical training. In turn, developing and funding automation communities of practice fosters knowledge sharing and collaboration.

The verdict is clear: via creative, holistic nurturing and career development approaches, organisations can (and do) build deeply skilled automation teams with retained institutional knowledge and loyalty. The takeaway should be that attracting talent may be a short-term issue, while retaining that talent for the long-term is what should be permanent.

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"The Automation & AI market continues to be a hot area and central to that market 'heat' is the people. So the biggest priority for anyone looking to resource in this space is to ensure you can retain the teams you have built.

Building teams can be a lengthy and costly exercise and the AI and Automation market is competing heavily for this resource. What we have seen is that creating an environment of support, learning, flexibility and fun has been key to how we bring our people on and retain them. We are lucky to have very low attrition and long tenure rates.

Specifically in the AI and Automation space keeping things 'fresh' is important. At ISG we call ourselves problem solvers, which means our teams are constantly working with new technology, tricky business issues and combining them both to deliver outcomes. It keeps them engaged and challenged.

To support this, we give them freedom to learn both structured and on their own, giving them a route to the next steps in their career. Also, we encourage our teams to create content, IP, white papers, commentary and opinion pieces so they feel they are contributing and adding value to our overall effort as a firm.

To coin two phrases from Dr Jim Goodnight, founder of SAS Institute, the world's largest data and analytics company and arguably the precursor of AI. "Every day, nearly all of the value of your company walks out of the gates at the end of the day" and one of his other zingers is "Treat employees like they make a difference and they will."

James Ewing
Director - Head of Intelligent Automation & AI EMEA at ISG

Chapter 6: The Future Work Horizon

Over the remainder of the 2020s, rapid evolution of Artificial Intelligence (AI), Intelligent Automation (IA) and Robotic Process Automation (RPA) will profoundly reshape work within these fields. As adoption accelerates, new roles, skills and ways of working will emerge that organisations must prepare for.

For sure, some job displacement will occur and needs to be planned for and carefully managed: last year, McKinsey warned over **10% of jobs could be lost to automation** over the course of the next 12 months.

In parallel, collaborative work between humans and AI systems will in 2024 become a daily reality (to take just one prediction, a 2023 PwC report predicted over **7 million new jobs from human-AI collaboration by the late 2020s**). Here, roles like "AI Trainers" will teach and refine systems, while new quality assurance roles will focus on monitoring AI fairness, ethics and transparency.

Technical skills like Machine Learning engineering, Natural Language Processing and Conversational AI will be in high demand but strong business and soft skills are also crucial to ensure technology aligns with organisational goals. A 2023 McKinsey survey found companies will need to **reskill over 15% of their workforce by 2030** in areas like AI and Analytics, for instance.

Lifelong learning is imperative as algorithms and tools continuously change what we humans will need to know and be asked to do. Short-form learning through digital channels will become the norm, for example, and a 2023 World Economic Forum study **noted the importance of workforce upskilling and reskilling** in the face of these realities.

Remote and hybrid working models will also likely become the norm, requiring management focus on engagement, collaboration and productivity. We can expect new tools for data versioning, testing and automation to also soon emerge, while demand for deep technical skills like Machine Learning engineering will be in very high demand. In addition, lifelong learning and change management will become ongoing imperatives.

As human-AI collaboration reshapes how work gets done, to succeed, workplaces will need to foster agility, creativity and innovation. It's the organisations who will be able to continually adapt and progress who will lead the future, and IA and AI is starting to provide the momentum for so doing.

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"Generative AI has put AI front and centre in the public arena like nothing before, sparking debates in business and political circles on the future of AI. One thing is for sure, mainstream AI has arrived, Microsoft has embedded it at the very heart of the plans for the Office products we all use on a day-to-day basis with Co-Pilot and there are hundreds of generative AI tools available to everyone.

The question therefore is no longer will my business use AI but rather what the guidance for is for 'generally available AI tools' and where do we invest in AI for core business advantage. In the intelligent automation industry in particular, solution providers are already providing generative AI tools to help automation teams build the 1st iteration of data models, data capture forms and business processes. We need to take advantage of these whilst ensuring that business requirements are articulated well for the generation cycles and that we are not lazy and we 'validate the output'!

The race to use AI is on, how it will unfold will be fascinating, our role for now in IT is to embrace but provide guiderails and validation."

Andrew Murphy
Head of Strategy at jaam automation

Robust industry growth trend-lines

As adoption accelerates across sectors, the Intelligent Automation (IA) and Artificial Intelligence (AI) industry is poised for robust growth in 2024 and beyond. According to IDC, **worldwide spending on AI solutions will reach a half a trillion ($500 billion) dollars this year**, sharply up from $341 billion in 2022. The IA market will also expand significantly, with Mordor Intelligence forecasting a CAGR of 23.2% from 2022-2027, **reaching $360 billion globally**.

Several key factors are driving this substantial growth, including:

- Exponential increases in data volume and computing power are enabling more advanced IA/AI use cases

- Competitive pressures to digitally transform operations and decision-making are propelling adoption. IA/AI allows companies to gain strategic advantages

- Demand for enhanced customer experience, higher productivity, increased automation and improved business insights is rising across industries

- New AI-as-a-Service solutions offered through cloud platforms make adoption easier for organisations, especially at the Global 2000 corporate level

- Gartner is clear that what it calls 'Emergent AI' will have a profound impact on business and society—but also cautions that Gen AI (ChatGPT/LLMs) is still very far from full maturity, and has therefore place Generative AI on the peak of inflated expectations on its most recent (2023) emerging technologies 'hype cycle'

- No less than 50% of organisations report using AI tools for at least one function within their operations. By industry so far the top adopters of IA and AI are high-tech and telecoms (where 38% of companies report at least some utilisation), followed by professional services, retail and financial services

- Within enterprises, operations, service, sales & marketing, and strategic planning will see the most IA/AI investment. However, SMBs (small and medium businesses) are also starting to adopt these technologies

- As adoption expands, managing organisational change, building trust in AI, monitoring fairness and ethics, and updating policies will become critical. Hybrid human-AI approaches leveraging strengths of people and machines will gain traction.

Overall, Intelligent Automation and AI will clearly be pivotal technologies shaping the future enterprise landscape.

What could go wrong? Potential IA roadblocks and checks

Driven by the rapid advancements in Intelligent Automation, Artificial Intelligence, and allied technologies, the global landscape of work is currently in the midst of a sweeping transformation. As we find ourselves moving into 2024, it is imperative to recognise and delve into the potential disruptions that these innovations hold for the industry. Why? These disruptions are reshaping not only how businesses operate but also how they interact with their workforce and compete in the global business system, and so both the responsible IA practitioner and the informed line of business leader needs to fold them into their automation thinking and planning.

The increasingly important wider business, regulatory and social context

The introduction of Automation and AI tools has the potential to completely reshape our current workplace dynamics. In the face of these changes, employees may harbour concerns related to job security and adaptability. To address these often (but not in all circumstances) legitimate concerns and facilitate a smooth transition to an optimised and automated new BAU, organisations are encouraged to establish clear change management programmes, provide opportunities for training and upskilling, and cultivate a culture of employee support mixed with adaptability.

The hacker factor

With an increasing reliance on digital technologies, organisational vulnerability to cyberattacks and data breaches is growing. A **2023 report by Cybersecurity Ventures** highlighted the continued evolution and sophistication of cyber threats, and predicted that the world lost $8 trillion to cyber fraud last year. Organisations must prioritise robust cybersecurity measures to safeguard sensitive data and ensure the integrity of their automated systems, lest their automation and AI investment fall victim to such bad actors.

Data privacy and ethical concerns (and which can no longer be ignored)

The relentless collection and utilisation of vast amounts of data to fuel AI and automation initiatives has raised significant concerns around data privacy and ethics. Recent developments such as the European Union's Data Governance Act underscore the evolving landscape of data privacy regulations and there is real danger of consumer rejection of AI-based solutions if they are seen to impinge too much on their personal information. This poses a significant challenge for businesses, who need to be seen to responsibly manage and protect data while navigating a complex web of important legal, regulatory and ethical considerations.

Global competition and economic realignment

Too much of the IA, AI and RPA conversation is UK or US-focused, but of course the adoption of Intelligent Automation and AI is not confined to a single geographic region, and is 100% a global phenomenon.

As industries across the world embrace these technologies, economic realignment and major shifts in global competitiveness should be expected (and planned for). In this rapidly-evolving landscape, to maintain their competitive edge, organisations need to remain agile and adept at adapting to changing market dynamics—and, as far as feasible, be prepared for the unexpected.

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"AI: AI technologies continue to expand their reach across industries, particularly in healthcare, finance, and manufacturing. In 2024, we anticipate further growth in AI applications, driven by improved Natural Language Processing, Computer Vision, and reinforcement learning. AI is set to revolutionise customer service through Chatbots and virtual assistants, enhance personalised marketing, and play a crucial role in autonomous vehicles.

IA: IA combines human intelligence with machine automation to streamline business processes. 2024 will see IA becoming integral to organisational efficiency, with increased adoption in HR, supply chain management, and data analysis. The IA landscape will be marked by more advanced decision support systems and AI-driven collaborative tools.

RPA: RPA will continue to automate repetitive tasks, resulting in operational cost savings for businesses. In 2024, RPA will witness growth in adoption among small and medium-sized enterprises, leading to a more democratised automation landscape. More sophisticated RPA bots with enhanced cognitive capabilities and better integration with AI systems will be the focal point.

Industry Growth and Trends: Industry-wide, we expect to see significant growth in AI, IA, and RPA investments, with healthcare, finance, and manufacturing sectors leading the way. The convergence of these technologies will lead to the creation of intelligent and autonomous systems capable of handling complex tasks and decision-making. In terms of challenges, issues related to ethics, privacy, and regulation will continue to be in the spotlight."

Tom Allen
Founder of The AI Journal

Chapter 7: Conclusion

Summarising Edge Tech's key insights and takeaways: What have we learned from compiling the 2024 Edge Tech report?

That:

- In 2023 and entering 2024, despite inflation and the collapse of Silicon Valley Bank (which has had an undeniable temporary negative impact on the tech VC funding scene), the automation and AI sector remains an extremely strong area of the global enterprise IT market

- That proven use cases around the impact of IA and RPA are finally starting to come through, with organisations sharing impressive achievements and bottom line KPIs

- That demand for skills in these areas has never been higher

- That legitimate concerns about the future of employment need to be taken seriously by players in the market, who may find it wise to stress the message that automation is here to help and automate routine tasks, not eliminate jobs (per se)

- That Gen AI is near the peak of inflated expectations, and it would be wise to expect at least some sort of a backlash against it—and, legitimately or not, pressure for regulation to constrain it

- That from the employer's point of view, a hot market means restricted supply and strong salary expectations—and that it may take longer than anticipated to fill some gaps

- That on the other hand, in-house training and cultivation of existing talent to fill these gaps is more than possible and that the spread of open source user-friendly platforms and approaches like no code and AutoML and other 'AI democratisation' approaches may offer perfectly reasonable entry paths for at least some application creation

- That intriguing new jobs and entire careers on the interface between advanced tech and the world of business are emerging that need tracking and investigation

- That working with trusted expert third party recruitment service leaders like Edge Tech is your best way of avoiding wasted time and opportunities

- That the urgency and criticality of the role should really influence how you search for the role, and how you engage external parties. We have found that a retained search through Edge Tech over 2023, saw a 100% completion rate, in a 30% shorter time period than if a contingent model was used

- Hiring managers are now busier than ever, having to often do more, with less people. A smooth recruitment process, done quickly, will save much more time in the long run, so make sure to have a detailed plan of the process, and can fit all of the interview stages in a maximum of two weeks, to make sure you do not have to start over again

- In conclusion, that the future work landscape is being created now, today, by a coming together of the key technologies of Intelligent Automation, Artificial Intelligence, ChatGPT and more—and that the business person or developer reading this report is right on the cusp of achievement and transformation in 2024, and beyond

Chapter 8: Who Are Edge Tech

Edge Tech is a market leader in recruitment for the emerging technologies space. With extensive talent acquisition experience in multiple industries in RPA, ML, IA and AI means we're well placed to source talent that will supercharge your growth.

How Edge Tech helps leaders like you

We connect fast-growing companies with talented technical, operational, and sales experts across the UK, Europe, US, and Canada. Whether you're searching for a key individual or to build an entire team, our bespoke search services are designed to help you effortlessly meet your hiring goals, including:

- **Permanent hiring:** The go-to solution for those essential positions you can't afford to get wrong.

- **Contract hiring:** Hire world-class temporary, contract and interim experts in hours, not days.

- **Edge TaaS:** A fully outsourced talent team dedicated to your business that handles all of your hiring, taking the responsibility of sourcing, engaging and hiring highly skilled and qualified talent for all your positions – from advert to onboarding, we do it all.

Benefit from the sector's proven leader in these technologies

Our team is here to take the headache away from recruiting by reducing your time-to-hire while increasing the quality of your applications.

We do this via our extensive network of technical, sales and operational talent, and can fill your permanent and interim positions in as little as 48 hours.

Sounds good? **Then get in touch with us today** to see how we can help you craft your brand's unique and profitable future work landscape by taking advantage of the new innovations we have discussed in this, The 2024 Edge Tech report.

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