



# PAYROLL LEADERS' GLOBAL PAYROLL EFFICIENCY INDEX 2023

Benchmarking the Technology Industry's Payroll  
Processing KPIs Across 130+ countries

Published June 2023





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## WHY THE PEI REPORT?

The reason we put the report together is simple: standard SLAs like accuracy and timeliness don’t give a sufficient level of insight into how efficient a payroll operation is.

As a result, many organizations and payroll leaders find themselves frustrated with issues in payroll, even though their standard SLAs tell them that everything is fine. In the PEI report, we focus on more detailed and insightful KPIs, so that payroll teams can gain a better understanding of how and where their payroll processes can be improved.

## PEI REPORT SAMPLE DATA

This is the fourth edition of our Global Payroll Efficiency Index. We have sampled data from global organizations across three regions: the Americas (AMER); Europe and the Middle East and Africa (EMEA); and Asia-Pacific (APAC). Our results are based on more than one million payslips, all generated between January 1 and December 31, 2022, all of which are from businesses that use a unified payroll platform, where these benchmarks can be measured.

# EXECUTIVE SUMMARY

## How the cost of living crisis and the war for talent are driving the adoption of payroll innovation for the world's tech industry.

Our last two reports were shaped significantly by global events – namely the COVID-19 pandemic and The Great Resignation.

Exploring data from 2020, the 2021 report showed that payroll teams were incredibly resilient given the upheaval and disruption of the pandemic, making improvements in most areas.

Looking at 2021 figures, last year's report demonstrated further improvements (albeit at a slower rate), which is a feat payroll teams and their colleagues should be proud of in such unpredictable circumstances.

This year's report paints a similarly positive picture of payroll performance in 2022, with improvements being made in all areas except for First-Time Approvals (FTA).

While this is good news overall for payroll leaders, it's somewhat surprising; as FTA is generally regarded as a catch-all KPI that represents overall efficiency, it is unusual that the other four metrics all improved where FTA did not. As we'll delve further into our Technology Industry comparison in the following pages, it's possible that – even with the tech industry's less-complex payroll requirements – this anomalous FTA performance may be due to tech businesses making additional payments to staff to help them with their living costs, many of which will have been off-cycle.

Either way, the overarching positive trend in results is certainly reflective of an increased desire and ability for payroll teams to innovate their pay processes.

**With the events of recent years now having at least partially subsided, payroll leaders and their teams in the tech space are finding routes to introduce new solutions and embrace a more modern pay experience.**

This has, in part, been driven by employee demand. Flexible solutions like on-demand pay can help employees cope better with the new-found pressures of the cost of living crisis.

Across the board – and specifically within the tech industry – a consequence of this is increased pressure for payroll to provide these benefits as standard, especially in a climate where talent attraction and retention is as challenging as it is crucial.



# EXECUTIVE SUMMARY

In addition, payroll leaders in the tech industry are feeling increased innovation pressure from the wider business, too. While a positive from the past few years' world events is undeniably a renewed interest in employee wellbeing, payroll teams (alongside the wider business) are demanding greater data insights from the payroll function. A good example of an innovation impacting KPI results here is the increased integration between payroll and Human Capital Management (HCM) systems, which have contributed to substantial reductions in data input issues (DII).

This refocus on innovation should also support improved FTA rates, but this hasn't been the case in the global figures. However, a look at regional results may uncover the reason why: the FTA rate in EMEA dropped sharply in 2022, to the extent that it significantly impacted collective global results. Given the region's upheaval over the past 12 months, it could well be the case that the fluctuating disruption has uniquely affected wider payroll operations in the region.

At a macro level, KPIs have either improved or held steady when compared to the previous year. This demonstrates plenty of potential to improve both pay efficiency and bolster employee experiences to enhance payroll strategies.

We expect the increased adoption of technologies in this area to further improve efficiency in the years to come, which should be reflected in future reports. This should also have a knock-on effect on both payment and wider payroll processes, the performance of which are closely interconnected with payroll efficiency.

**This is why we have introduced a new metric of payment timeliness into this year's report.**

## 3.3%

DII have decreased by 3.3% for the global tech sector compared to last year, reflecting increased integration between payroll and HCM systems.

# EXECUTIVE SUMMARY - TECH VS GLOBAL

GLOBAL	Accuracy	Timelines	First time approval	Data input issues	Issues per 1000 Payslips	Calendar Length	Supplementary Impacts
	99.90%	99.71%	75.24%	64.0%	8.69	5.887	17.23%
AMER	99.94%	99.93%	82.70%	57.6%	9.11	4.1	36.43%
APAC	99.99%	100%	78.82%	71.5%	7.16	5.9	10.77%
EMEA	99.82%	99.40%	70.49%	62.6%	9.61	6.6	13.81%
TECH	Accuracy	Timelines	First time approval	Data input issues	Issues per 1000 Payslips	Calendar Length	Supplementary Impacts
	99.93%	99.84%	72.70%	66.8%	8.84	5.744	19.57%
AMER	99.68%	99.38%	82.08%	59.2%	12.41	4.3	36.22%
APAC	99.99%	99.98%	75.96%	72.9%	7.97	6.3	12.64%
EMEA	99.99%	99.91%	66.17%	66.9%	7.94	6.2	15.16%



# STANDARD SLAs, WHAT’S THE PROBLEM?

Accuracy and timeliness are important metrics for payroll teams to track – they’re a good, high-level indicator of overall performance, and help flag when things go wrong. But they don’t tell the whole story.

Globally, payroll accuracy runs at around 99.9%. This means that the number of payslips and employees affected by payroll issues is very small – and the generally ‘green’ results of standard SLAs reflect this.

However, they don’t shed any light on just how time-consuming, difficult or expensive it was to achieve those results, leaving payroll

teams with little in the way of actionable insight. To deliver that insight, we have developed five additional payroll KPIs that paint a more detailed picture of your payroll performance.

These metrics, when measured at global and regional levels, allow organizations to benchmark their performance against peers, and discover where any remediation efforts should be prioritized.

“Why are my SLAs green if my payroll team feels red?”

John Pearce, SVP Global Payroll Operations, CloudPay

99.9%

ACCORDING TO OUR FINDINGS, GLOBAL PAYROLL ACCURACY RUNS AT 99.9%

## A NEW MODEL FOR PAYROLL EFFICIENCY

Standard SLAs don’t provide the insight that payroll teams need to address many of the problems they face every day, such as spreadsheet errors, inflexible timelines, language barriers, large numbers of stakeholders, and so on.

Much of this is down to a lack of data collection on behalf of payroll vendors, which is why we decided to take a different approach – an approach that helps payroll leaders get to the root cause of their inefficiencies.

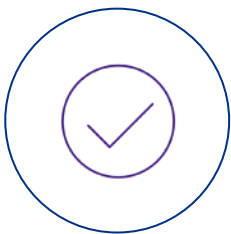
The KPIs that we have developed form the basis of a data model that standardizes formats and workflows, making it easy to automatically collect payroll data from every part of a global business. We are able to analyze this data in real time in order to better understand, measure and review processes – gaining insights to pass on to organizations to help them improve their own payroll operations.

# THE KPIs

The five KPIs we focus on collectively shed new light on how well a payroll vendor is performing, how strong their relationships are with their business customers, and where there are issues that may require improvement or remediation. These issues may include (and are not necessarily limited to):

- Compromised payroll data
- A lack of cross-country reporting
- The inability to gain full global visibility of payroll costs
- Fragmented processes preventing the adoption of a continuous improvement strategy

The KPIs are:



**First-time approvals (FTA):**

The percentage of payroll runs approved first-time, without any changes required.



**Data input issues (DII):**

The proportion of all issues affecting payroll that have been caused by data input mistakes.



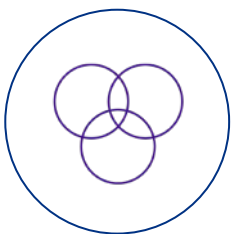
**Issues per 1000 payslips (I/1000):**

How many payslips per thousand are affected by issues in each payroll cycle.



**Calendar length:**

How long it takes to complete a payroll cycle end-to-end.



**Supplementary impact:**

The proportion of all payroll runs that take place outside the normal payroll cycle.

Alongside these KPIs, this year we have added **payment timeliness** for the first time. Payment timeliness looks at the percentage of payments which were made within the pay window.

We've included this statistic to highlight the importance of integration across the payroll and treasury functions, and because of the major impact that difficulties or inefficiencies in one part of the process can have elsewhere. Comparative analysis for payment timeliness will be possible in future reports.

# TECH INDUSTRY VS. THE GLOBAL BENCHMARK

## How does the technology industry perform against the global benchmark?

With almost 30% of total data in this year's report coming from the technology industry, we've extracted the tech sector's KPI results to provide a comparison with wider global performance.

What prevails is a white-collar tech sector handling less complex payroll mechanisms; employees are typically paid in monthly cycles and provide fewer changing data points (such as ad-hoc overtime) when compared to more traditionally blue-collar sectors, such as retail or manufacturing.

As a result, the tech industry exceeds the global benchmark on accuracy and timeliness. While this doesn't equate to total payroll efficiency – with less complexity at play, it does highlight how payroll functions are benefiting from consistency and repeatability in the payment process.

This helps to drive accuracy with less need for manual issue intervention, while enabling better payment timeliness through a higher percentage of payments made within the pay window.

With less complex payroll needs and typically newer payroll technology being integrated with wider HCM systems, tech companies are increasingly able to 'reduce the middle' of their payroll cycles – in effect, accelerating efficiencies with the bulk of their main payroll, excluding pre-cycle anomalies and post-pay error handling – which in turn, could well contribute to a shortened calendar length. Combine that with innovations like instant salary payments – where payments can be made to employees in seconds using the card rails network instead of banking rails (such as BACS) – and further time saving reductions can be achieved.

However, the sector's FTA sits significantly below the global benchmark. For an industry suffering from both the ongoing war for talent and staff turnover, tech companies are typically having to do more to retain employees. One way this may present itself is in paying staff outside of typical payroll cycles to help protect the employee experience. If this is the case, it would also likely explain DII and issues per 1000 payslip rates being notably higher in the tech sector versus the global average.

Conflating the higher issues per 1000 payslips rate, while the tech sector does indeed benefit from less complex payroll generally, the inverse of this is true with its (often) overly-complex RSU, stock option calculations and array of non-traditional employee benefits. Specifically within the AMER region, these complexities could well add to the elevated issues per 1000 payslips noted.

**As the tech sector continues to contend with its war for talent, future reports will keep a close eye on the industry's performance: one that is leveraging better integration and newer technology for faster results.**

# 0.13%

The tech industry sits ahead of the global benchmark on payment timeliness, but falls behind on FTA, DII and issues per 1000 payslips



# < THE PEI MATRIX



# THE PEI MATRIX

For the third time, this report includes our unique PEI Matrix, which gives valuable country-by-country insight into how local conditions can affect the efficiency of payroll. We achieve this by cross-referencing the results of two of our KPIs: first-time approvals (FTA) and issues per 1000 payslips (I/1000).

This analysis is important because three major differences in payroll performance between territories can have a significant impact:

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Payroll talent access and availability

Some countries have much stronger payroll experience and expertise than others. At the same time, the recent upheaval in the global job market means businesses in some areas may be better able to weather the storm.

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Complexity of payroll

There are large variations in how easy or difficult it is to process payroll in different countries, with regards to legislation, compliance, and local cultural customs.

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Software maturity

Some territories are far more advanced in taking full advantage of payroll software, while businesses in other areas are hampered by outdated solutions or in finding effective workarounds.

The PEI Matrix examines payroll difficulty against first-time approvals and issues per 1000 payslips in every country.

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# WHAT WE CAN LEARN

Each of the countries chosen for analysis in the PEI Matrix has been placed into one of four quadrants, depending on the results in FTA and I/1000. Comparing your own performance relative to your national benchmark can tell you whether you are falling behind, meeting, or exceeding country-specific standards.

The four quadrants are:

**Least difficult, very efficient**

Countries here are performing in line with expectations for their area. If yours doesn't match this, then it is likely to be because of issues within your organization rather than external issues. If it does, then you can focus your efforts on other areas of your business that may need attention.

**Least difficult, least efficient**

These are countries where payroll isn't difficult to execute, but efficiency is still lacking, likely because of difficulties within. This should, however, be put in the context of how many payroll runs are required in a particular country, as payroll is naturally more difficult to run for larger volumes of employees.

**Very difficult, very efficient**

These countries are performing at a high level despite having to deal with challenging payroll conditions. If your country is categorized here but your business isn't at this standard, then now is the time to assess your payroll operation and look for improvements. If you are operating at this level, then your focus should be on monitoring and responding in order to maintain the standard.

**Very difficult, least efficient**

This category consists of countries where payroll performance is lacking, but where there are understandable reasons why. Nevertheless, you should still look for process improvements wherever you can find them.



## First-time approval analysis

**For countries where payroll is relatively easy to run, there has been little change in the results compared to last year at a global level.**

Compare the global benchmark with a tech sector view, however, and a different picture emerges. While Mexico and Costa Rica retain their top spots at both global and tech sector levels in the upper-left quadrant, South Africa’s tech sector FTA drops by 4.3%. More significantly, the United Arab Emirates’ tech sector FTA drops 8.9% when compared to its global benchmark, moving it from top to bottom-left quadrant.

**However, the overall trend of increased efficiency doesn’t seem to apply to countries in the bottom-left quadrant (least difficult, least efficient).**

While an exception is true of Singapore’s tech sector – which moved from the bottom- to top-left quadrant having posted a 5.4% improvement compared to their global benchmark – all others in the bottom-left quadrant have regressed at a global level, with the UK and Philippines both dropping below 50%. Interestingly, the UK’s tech sector FTA falls a further 5.9% when compared to its global benchmark, while the Philippines’ tech sector FTA actually increases by 8.8%. For the UK at least, this

could be down to the fact that UK-based multinationals tend to have larger headcounts, where more adjustments are needed to ensure payroll accuracy – potentially contributing to a lower FTA rate.

### What does this mean?

While movements on this matrix at an industry-agnostic level are not huge, they do suggest that the impact of the pandemic is subsiding and businesses around the world are getting used to new ways of working.

For countries such as the Philippines and Singapore, the increase in tech sector specific FTAs when compared to global benchmarks suggests that the modern pay experience, and use of automated processes across payroll functions, is becoming more commonplace. We expect further efficiencies to be realized by most countries in the years to come.

Both Singapore and the Philippines have seen significant efficiency improvements in their FTA rates when comparing their tech sector performance to relative global benchmarks, while the UK and United Arab Emirates have seen a decline.

## Issues per 1000 payslips analysis

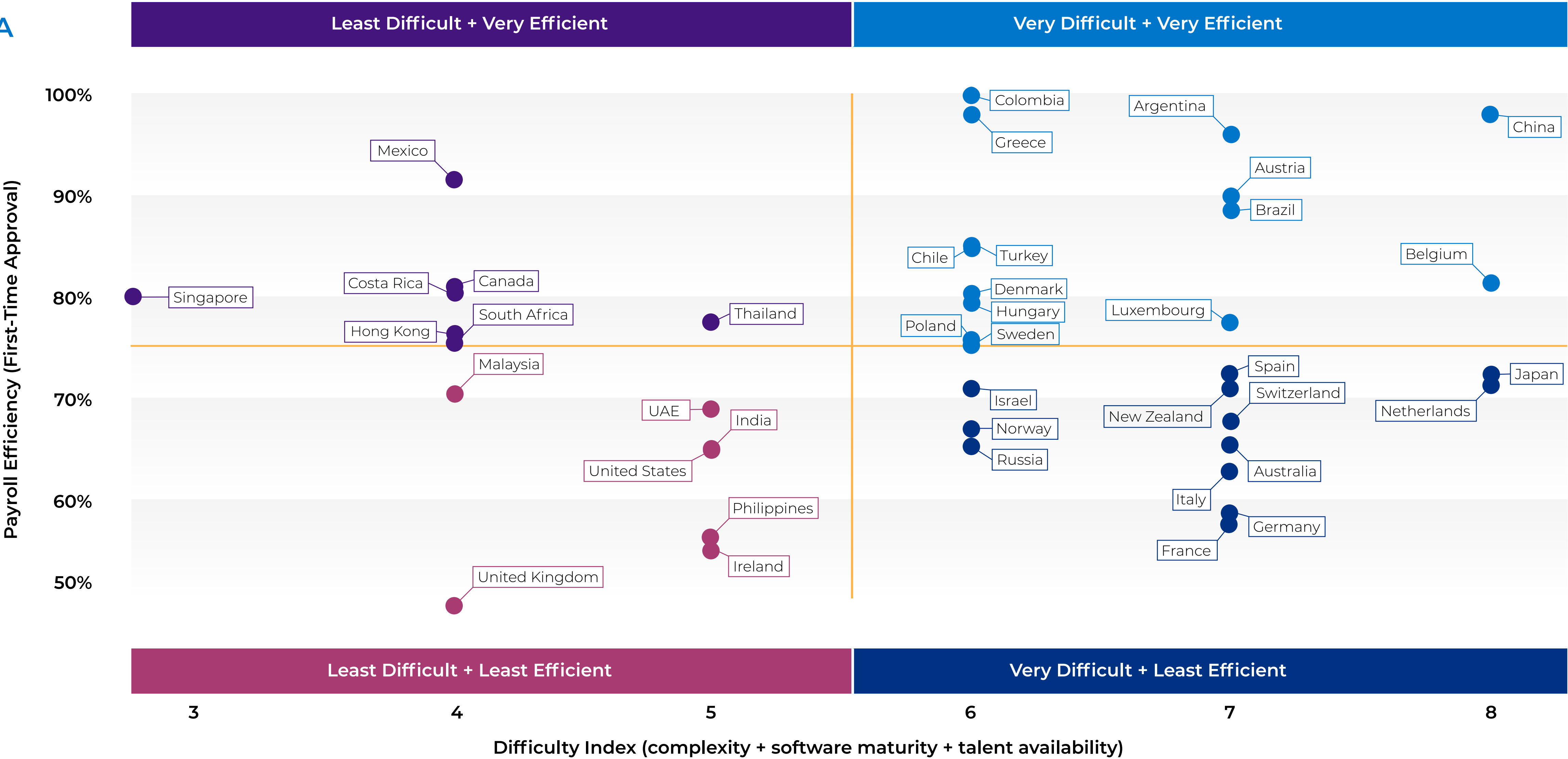
**This is the second year that we have produced a matrix for issues per 1000 payslips, allowing us to analyze the link between this metric and first-time approvals.**

At both global and tech sector levels, most countries remain ‘efficient’, with a rate of less than 20 issues per 1000 payslips. Among the biggest positive changes, Australia has moved from the bottom- to top-right quadrant at both global and tech sector levels, achieving an improvement despite relative difficulty in running payroll there.

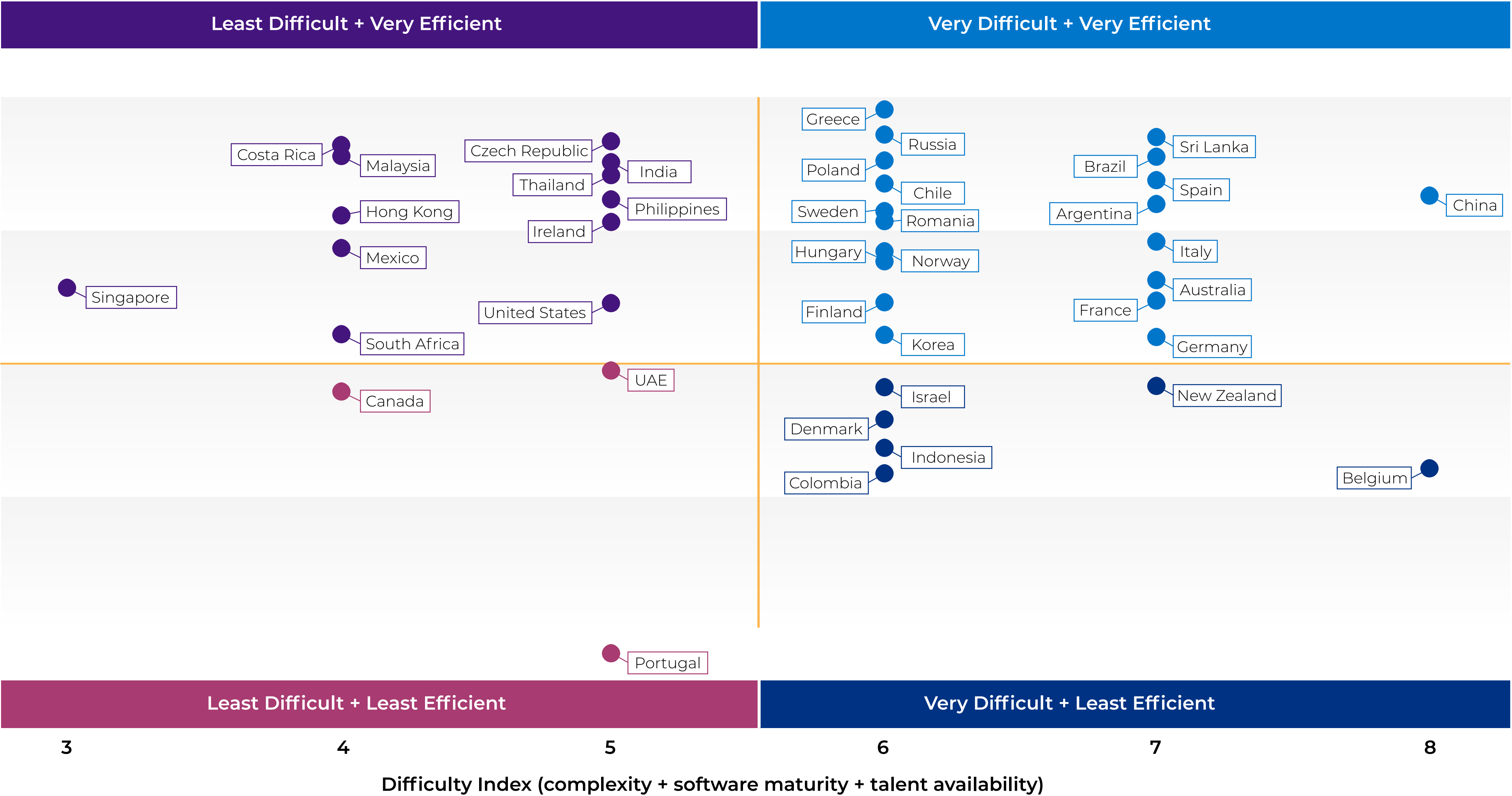
While China remains the most difficult country to run payroll across both matrices, its issues per 1000 payslips rate remains one of the lowest at both general and tech sector specific levels.

Surprisingly, Portugal’s issues per 1000 payslips rate for its tech sector increased by a staggering 23.3% when comparing performance to its global benchmark. Its tech sector FTA performance also showed the same downward trend with a decline of 4.5%.

FTA



ISSUES/1K





# < KPI RESULTS



KPI RESULTS

# FIRST-TIME APPROVALS



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The percentage of payroll runs that are approved at the first review with no changes

## Why it matters

The first-time approval (FTA) rate is a good measure of the overall efficacy and accuracy of data input processes and gross-to-net calculations. If an FTA rate is high, then it suggests that payroll processes are efficient and are using quality data and good calculations; on the other hand, a low rate – and subsequent fluctuations – can be used to track the impact of any changes to processes.

## What it means for you

If there are improvements that you need to make to your payroll processes, whether they be in payroll data, input process accuracy or approval workflows, then they will most likely be reflected in a low FTA rate. A high rate means you can divert your attention to making improvements elsewhere.

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# FIRST-TIME APPROVALS

## THE RESULTS

For the first time in the history of this report, the global FTA rate has dropped compared to the previous report, albeit only by a relatively small amount (0.87%). This is a significant result, although a closer look at the regional figures helps put the change in better context.

The drop in the global rate has been driven almost entirely by a sharp fall of 2% in the EMEA region, a far sharper drop than had been experienced last year (0.78%).

Certain countries in the EMEA region saw considerable declines in performance, such as Lithuania (32.8%), Bahrain (16.8%), Slovenia (10.5%) and Saudi Arabia (9.8%). However, the majority of countries in the region saw declines between 2-5%, reflecting the more general disruption in that region. While the Americas region saw another decline, it was only marginal (0.21%), and the APAC rate stabilized with a 0.08% improvement after a huge gain of 5.63% last year.

It's also important to consider these results in the context of the other KPIs in this report. As you will read in the following sections, the overall number of issues has reduced, as has the proportion coming from data input. This suggests that the lower overall FTA rate is down to edge-case issues that aren't being picked up by normal filters, and are only resolved long after payroll is presented for approval for the first time.

2% DECREASE IN EMEA REGION FROM LAST YEAR





FIRST-TIME APPROVALS

COUNTRY COMPARISON

China has moved up from second to first this year, and its score of 95.98% is the second-highest in the history of this report, after the 96.5% recorded by Panama in 2019.

China has now ranked in the top five for this KPI since 2019, steadily improving each time, and Brazil maintains the top five position it has held since 2020.

Greece and Cyprus have entered the top five for the first time, replacing Peru and last year’s number one, Bahrain.

The UK, Ireland and Guernsey all remain in the bottom five, as they were last year.

At the other end of the scale, four of the lowest five achievers are in the EMEA region. The exception is the Philippines, which has long struggled with this metric and has ranked in the bottom five since 2020. France replaces Denmark in this list, returning to the bottom five for the first time since 2019.

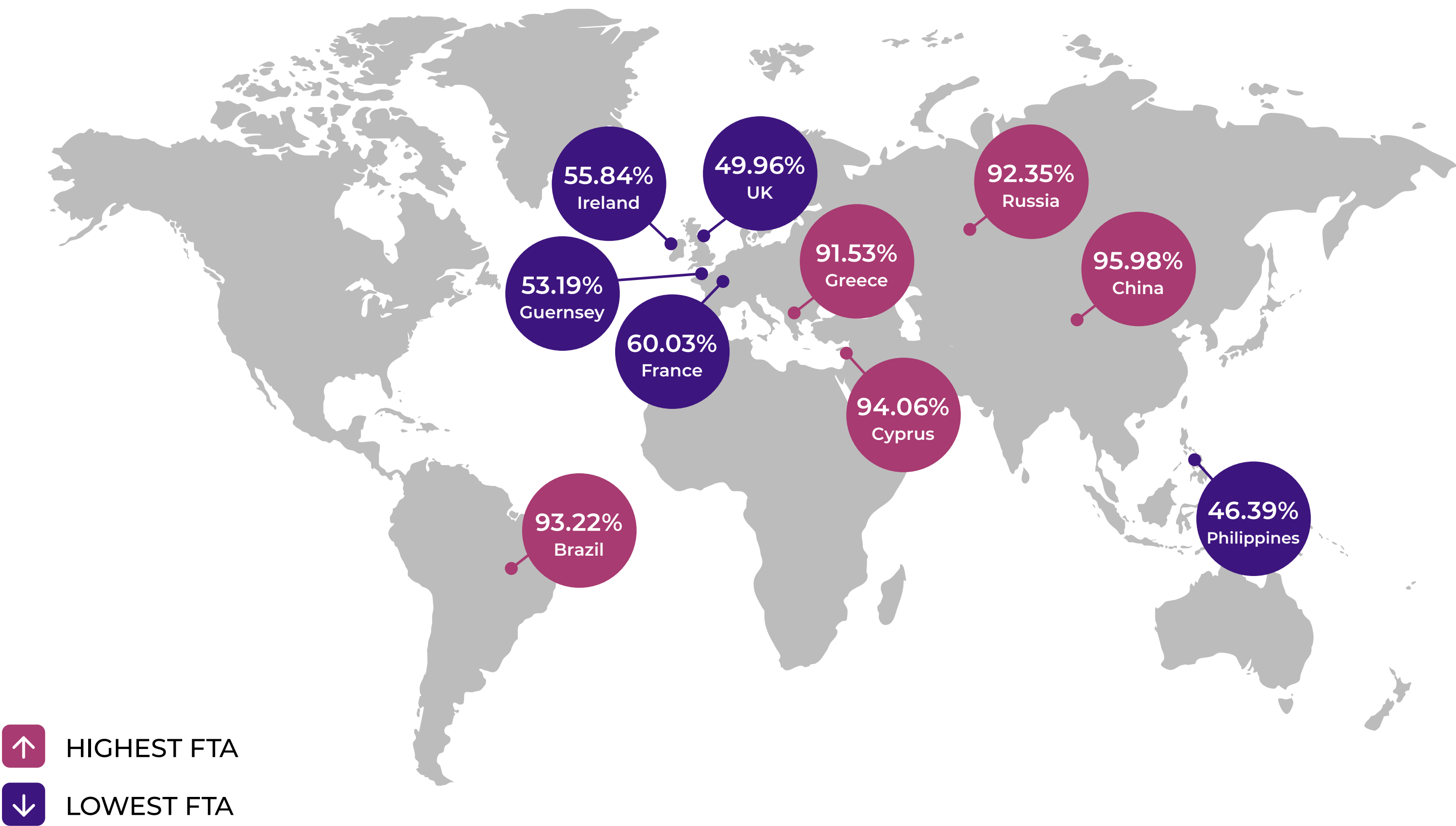
China has now ranked in the top five for this KPI since 2019.

# FIRST-TIME APPROVALS

## COUNTRY COMPARISON

What can you do to improve your performance for this KPI?

- Work out why your payroll runs aren't approved first-time
- Solve the root causes, whether they are upstream (poor / late data) or through data transfer and processing
- Ensure payroll processing staff understand what's needed to get the payroll approved first time



KPI RESULTS

# DATA INPUT ISSUES



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The proportion of issues affecting payroll that are caused by mistakes in data input

## Why it matters

If you can quantify a high proportion of your issues that are caused by data input, you can flag up a number of problem areas. These can include bad collection methods, faulty data transfers, or other issues upstream within payroll systems.

## What it means for you

While end-cycle reports can identify the scale of errors, they tend not to pinpoint the cause of them, and whether they're down to human error, calculation mistakes or data transfer problems. If there are a large number of data input issues, processing and validation becomes delayed, which in turn reduces the amount of time available to complete those important duties properly.

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DATA INPUT ISSUES

THE RESULTS

The proportion of issues caused by data input has steadily declined in recent years.

While that decline slowed slightly last year, it has accelerated again in 2022, with a global reduction of 3.6%. Much of this is likely down to increased integration between payroll and HCM platforms, which vastly increases the likelihood of payroll data being accurate as it's imported directly from the HCM system.

The APAC rate reduced by 2.5%, wiping out almost all of the 2.7% rise that was experienced last year.

The global fall has been mainly driven by a huge reduction of 10.2% in the Americas region, the largest regional drop for this metric ever seen in this report. The APAC rate reduced by 2.5%, wiping out almost all of the 2.7% rise that was experienced last year. Meanwhile, the EMEA reduction of 1.8% was the lowest of the three which, given the extenuating circumstances, isn't entirely unexpected.

10.2%

REDUCTION IN DATA INPUT ISSUES IN THE AMERICAS REGION

LOWEST DII  
PERCENTAGE

24.3%  
NORWAY

HIGHEST DII  
PERCENTAGE

100%  
GUATEMALA,  
SERBIA

DATA INPUT ISSUES

COUNTRY COMPARISON

The make-up of the global top five has changed substantially. New Zealand remains in the top list for the fourth year, but last year’s top three – Hungary, Bulgaria and Peru – have all fallen out of the top five altogether.

This is a particular surprise for Hungary, which was first last year and second the year before.

Norway is ranked as the top performer by a sizable margin, with Portugal and Uruguay new entries in third and fourth respectively.

The United Kingdom has dropped out of the bottom five, despite the fact that its rate has worsened from 87.26% to 89.90%.

Last year, no countries reported a 100% DII rate, but this year two countries have that dubious honor: Guatemala and Serbia. The fact that one of these countries is in the Americas region, which recorded a huge reduction overall, suggests that other countries in the region have performed particularly well.

The results of these two countries mean that some of the other low-ranking results should be taken with a pinch of salt. For example, China has moved into the bottom 5 with 94.59% despite having improved its rate from 96.12% last year.

Guatemala and Serbia both reported a 100% DII rate.

DATA INPUT ISSUES

COUNTRY COMPARISON

What can you do to improve your performance for this KPI?

- Perform a trend-analysis to identify any particular countries with a high rate
- Explore why these errors are occurring: training, unclear requirements, poor data quality, or complex manual calculations
- Introduce further integration if possible



LOWEST DATA INPUT ISSUES

- Norway 24.39%
- New Zealand 31.16%
- Portugal 33.11%
- Uruguay 35.90%
- Guernsey 37.14%



HIGHEST DATA INPUT ISSUES

- Singapore 90.92%
- China 94.59%
- Bolivia 96.77%
- Serbia 100%
- Guatemala 100%



KPI RESULTS

# ISSUES PER 1000 PAYSLIPS



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The number of payslips affected by issues in each cycle

## Why it matters

Understanding the quantity of payslips containing errors in each cycle is important because it provides clarity around the impact and performance of a payroll system. It's also useful in monitoring the consequences of any changes to payroll processes, particularly from an employee perspective.

## What it means for you

This is a very useful indicator of payroll process accuracy, certainly in comparison to more commonly used SLAs. This is because there tends to be a substantial difference in results between stronger and weaker performers, and also because it's represented by a single number that's easy for all stakeholders to understand.

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ISSUES PER 1000 PAYSLIPS

THE RESULTS

After a surprise increase last year, the global rate of issues per 1000 payslips has reduced to 8.64, the lowest rate ever recorded in this report.

This has been driven mainly by another large reduction by EMEA, coming down by 3.44 to just 8.99. Indeed, given that it recorded a result of 15.63 in 2019, EMEA's rate has come down by 42.5% in just three years.

This is particularly impressive given the disruption the region has faced of late. But the sustained approach to bringing this metric down (aside from a marginal increase in 2021) suggests that businesses across the region are making a concerted effort to resolve these issues as much as they can.

42.5%

REDUCTION IN EMEA SINCE 2019

AMER saw a 1.22 increase from last year, with an average of 9.97 issues per 1000 payslips now – meaning it is the lowest performing region.

APAC posted only a small reduction of 0.83, but remains the best performer for the fourth year in a row, suggesting that there isn't much more room for improvement beyond the current position. The Americas, meanwhile, was the only region to post an increase, having been the only one to post a fall last year; the improvements in EMEA mean that the Americas is now the lowest performing region in this metric.



# ISSUES PER 1000 PAYSLIPS

## COUNTRY COMPARISON

It’s perhaps no coincidence that the best two performers here – Guatemala and Serbia – are the same two countries that reported 100% data input issues.

This could be because businesses in these countries don’t monitor for problems in other areas. Costa Rica and Brazil have appeared in the top five list before – yet the presence of Brazil is interesting, given its traditionally short calendar length and high rate of supplemental impact.

Norway is a new entry with the highest number of issues per 1000 payslips, although its figure of 33.6 is better than the 34.1 recorded by fifth-placed Israel last year. Norway also has the lowest proportion of data input issues, strongly suggesting that there are common problems elsewhere.

Luxembourg, Guernsey, Denmark and Israel all retain their bottom-five places from last year. The territory to drop out is Jersey, which recorded 80.2 issues per 1000 payslips last year; given the small nature of the Channel Island, this figure may have been an anomaly or caused by an unforeseen event.

Pakistan, Chile and India were all in the top five last year but have dropped out this time round.



# ISSUES PER 1000 PAYSLIPS

## COUNTRY COMPARISON

What can you do to improve your performance for this KPI?

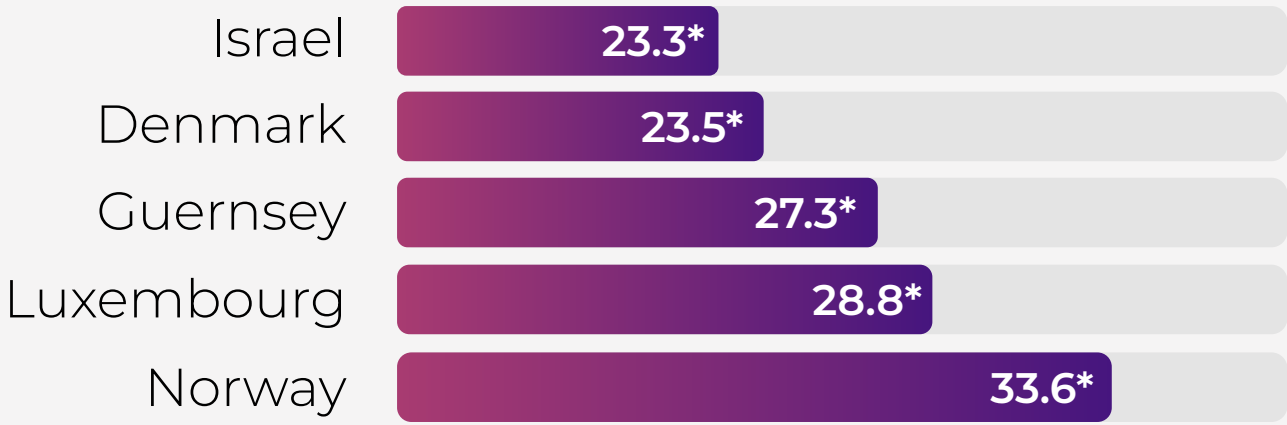
- Perform a trend-analysis to identify any particular countries with a high rate
- Explore why these errors are occurring: training, unclear requirements, poor data quality, or complex manual calculations

### LOWEST ISSUE RATES



\*issues per 1000 payslips

### HIGHEST ISSUE RATES



\*issues per 1000 payslips

KPI RESULTS

CALENDAR LENGTH



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The amount of time it takes to complete a payroll cycle end-to-end

Why it matters

Knowing how long a payroll cycle takes to complete end-to-end is important, because it's a figure that can be influenced by many different factors. Data accuracy, subject matter expertise and system integration can all have an effect on the result, and can help with understanding where payroll performance can be improved.

What it means for you

This metric is a direct indicator of how efficiently payroll processes are running, as any improvements that are made should generate significant time savings. These include system integrations supporting fully automated data transfer, and robotic data validation which can save whole days rather than just hours.

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# CALENDAR LENGTH

## TECH SECTOR RESULTS

After a small increase in 2019, the global tech industry witnessed yet another positive reduction in its global calendar length for 2022, albeit by a modest 0.06 days – continuing its 2021 trend.

Interestingly, that decrease belongs squarely to the EMEA region, who noted a 0.2 day decrease where its APAC and AMER counterparts posted an increase of 0.17 and 0.14 in calendar length, respectively. This regional trend broadly aligns with wider, industry-agnostic global benchmarks.

Integration plays a significant part in ensuring that payroll teams have confidence in their data, so they don't need to build in additional contingency time.

Calendar length is an area where the integration of payroll with other platforms – particularly from a data perspective – can make a real difference. Using EMEA as an example, its calendar length has shortened at the same time that its issues per 1000 payslips rate has also substantially reduced (by 3.25 per 1000). Typically, a shorter calendar length can lead to an increase in issues due to

payroll processes being rushed and mis-checked. It's clear that technology is changing the dynamic here. Integration can also give payroll teams more confidence that data is accurate ahead of starting a cycle – reducing the amount of contingency time needing to be built into schedules, to correct mistakes or run additional checks.

0.06 DAYS

REDUCTION IN CALENDAR LENGTH FOR THE GLOBAL TECH INDUSTRY

SHORTEST  
CALENDAR  
LENGTH

2.0  
BRAZIL

LONGEST  
CALENDAR  
LENGTH

14.0  
BAHRAIN



CALENDAR LENGTH

COUNTRY COMPARISON BY TECH SECTOR

Brazil continues to top the global tech sector charts with the shortest calendar length for the second year running, with Bahrain also repeating its position at the bottom of the table, as the country housing tech companies with the longest calendar length.



And while the United States, Venezuela and Bolivia remain in the top five for shortest calendar length for tech companies globally, Singapore also joins them despite a spike in DII of 3.12%. Given that lower DII rates normally equate to shorter calendar months, this may indicate future movement towards an increasing calendar length for the country’s tech companies in the next 12 months.

At the bottom of the table, Bahrain remains home to tech companies with the longest calendar lengths, despite a reduction from 15 to 14 days.

The country is joined by Sri Lanka for the second year in a row, which finished second from bottom in the rankings – noting no change in calendar length at 11 days.

Working their way up the table from their previous positions in the lower rankings, France and Serbia have both made strides in reducing calendar length – with Serbia moving from 9 days in 2021 to 7 days in 2022.

Bahrain remains home to tech companies with the longest calendar lengths, despite a reduction from 15 to 14 days.

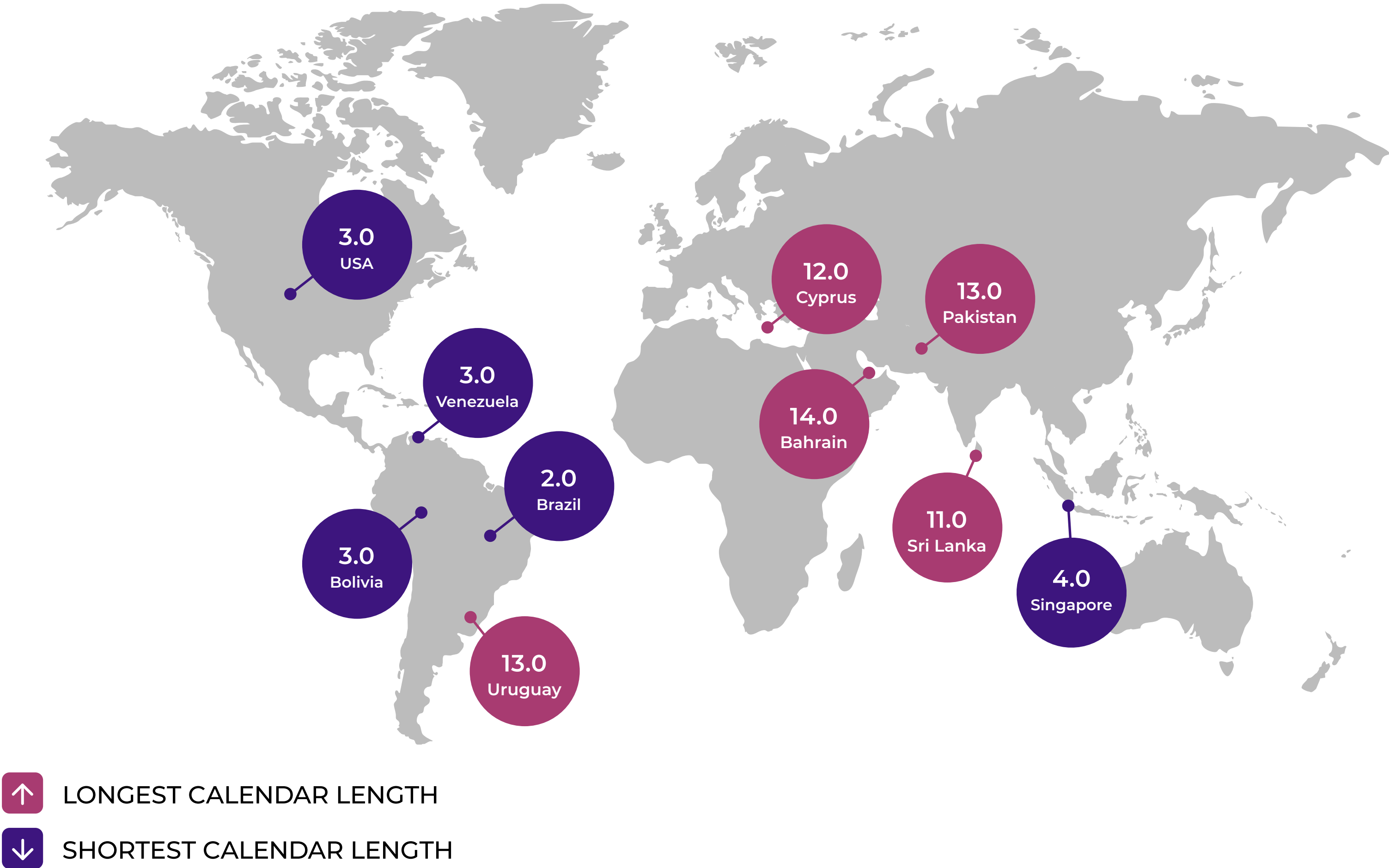
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CALENDAR LENGTH

COUNTRY COMPARISON BY TECH SECTOR

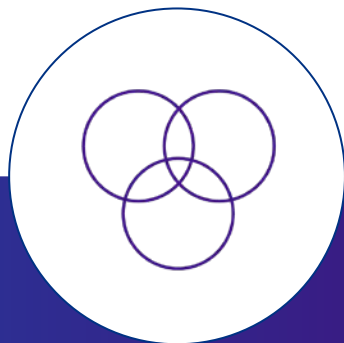
What can you do to improve your performance for this KPI?

- Break down your calendar into smaller, more digestible steps
- Assess ways to shorten calendar length without compromising timeliness or accuracy
- Explore integrations that can speed up inputs, or automate calculations and validations



KPI RESULTS

SUPPLEMENTAL IMPACT



<

The proportion of total payroll runs that are completed in addition to the normal payroll cycle

Why it matters

When supplemental runs have to be carried out because initial payroll cycles are inefficient, payroll quickly becomes unnecessarily expensive and cumbersome. Given that payroll can consume as much as 60% of the total cost of a business, keeping these extra runs to a minimum can make a real difference to profitability.

What it means for you

While a certain amount of supplemental runs may be acceptable, there is always scope to explore ways of reducing them wherever possible. Improved management and better data quality can normally help in this area, and come with the additional knock-on benefit of cutting calendar length.

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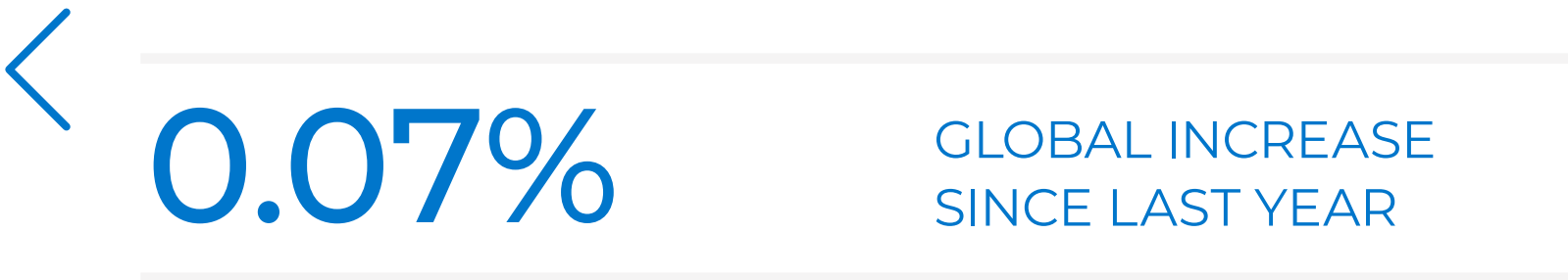


SUPPLEMENTAL IMPACT

THE RESULTS

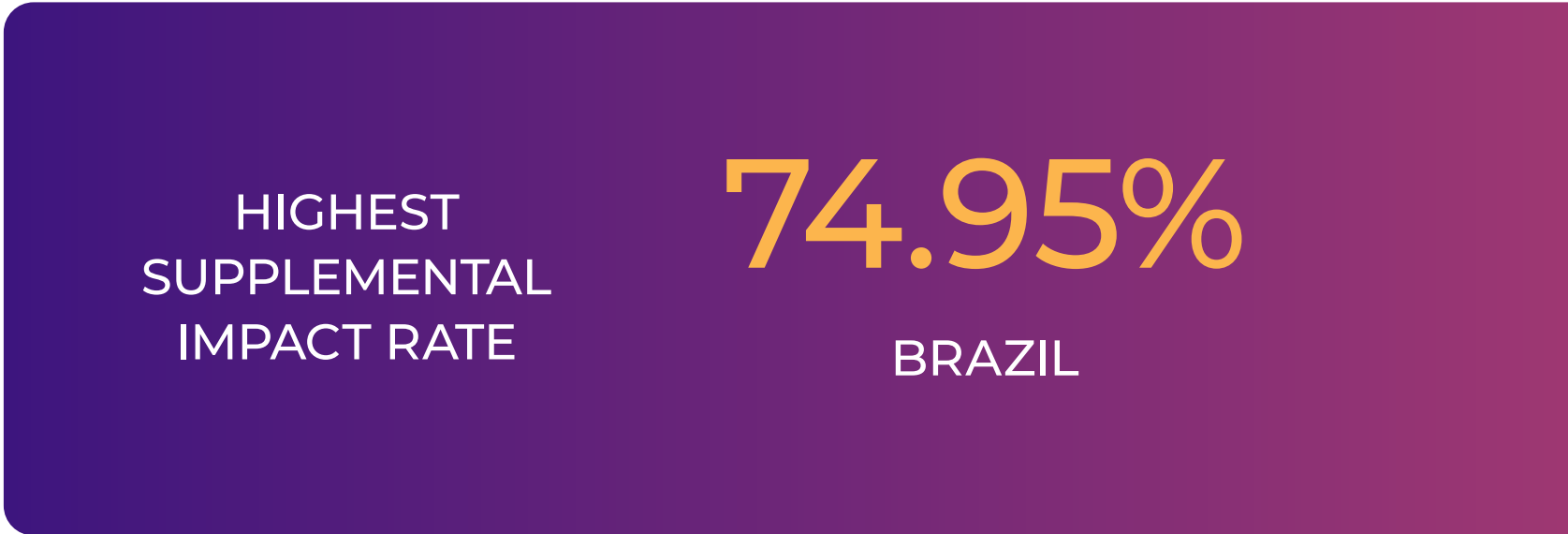
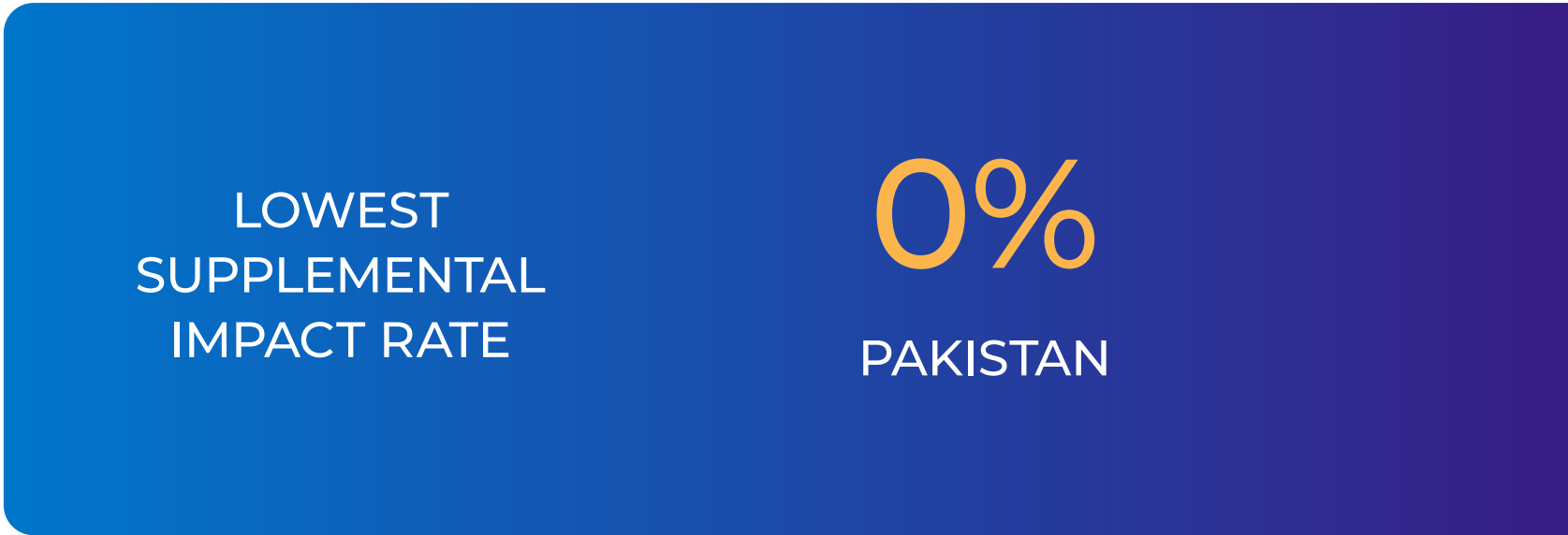
The rate of supplemental impact has swayed in recent years. A large increase of 4.2% in 2020 as the pandemic took hold was tempered by a 2.3% reduction in 2021.

To demonstrate how things have calmed down since the events of COVID-19 and the Great Resignation, the 2022 result is almost identical to the previous year – just a 0.07% increase to 17.23%.



The results across all three regions reflect more stable results when compared to 2021 and 2020.

This stagnation is reflected in the results for all three regions. Americas (0.13%) and EMEA (0.1%) posted marginal increases, while APAC dropped very slightly (0.04%) – this is despite the marked difference in overall rates between the regions, the Americas having a high rate in particular.



SUPPLEMENTAL IMPACT

COUNTRY COMPARISON

Guernsey had a 0% supplemental impact rate last year but is not even in the top five this time around, which is most likely a symptom of a small sample size.

Instead, Pakistan has recorded a rate of zero, improving from 4.65% last year, and 2.7% in the 2020 data when it placed fifth. Vietnam is a re-entry to the list at 1.41%, although it hasn't reached the peak of 0.7% when it placed second two years ago. With 0.99%, Cyprus is a new entry in second place.

0%

SUPPLEMENTAL IMPACT  
RATE IN PAKISTAN

Brazil retains its position as the worst performer, with the highest supplemental impact rate for the fourth consecutive year. As in previous years, these results should be considered in the context of their typically short calendar lengths, which suggests that payroll is rushed through without proper checks and validations being carried out. This naturally leads to large numbers of extra runs having to be made to resolve issues afterwards.

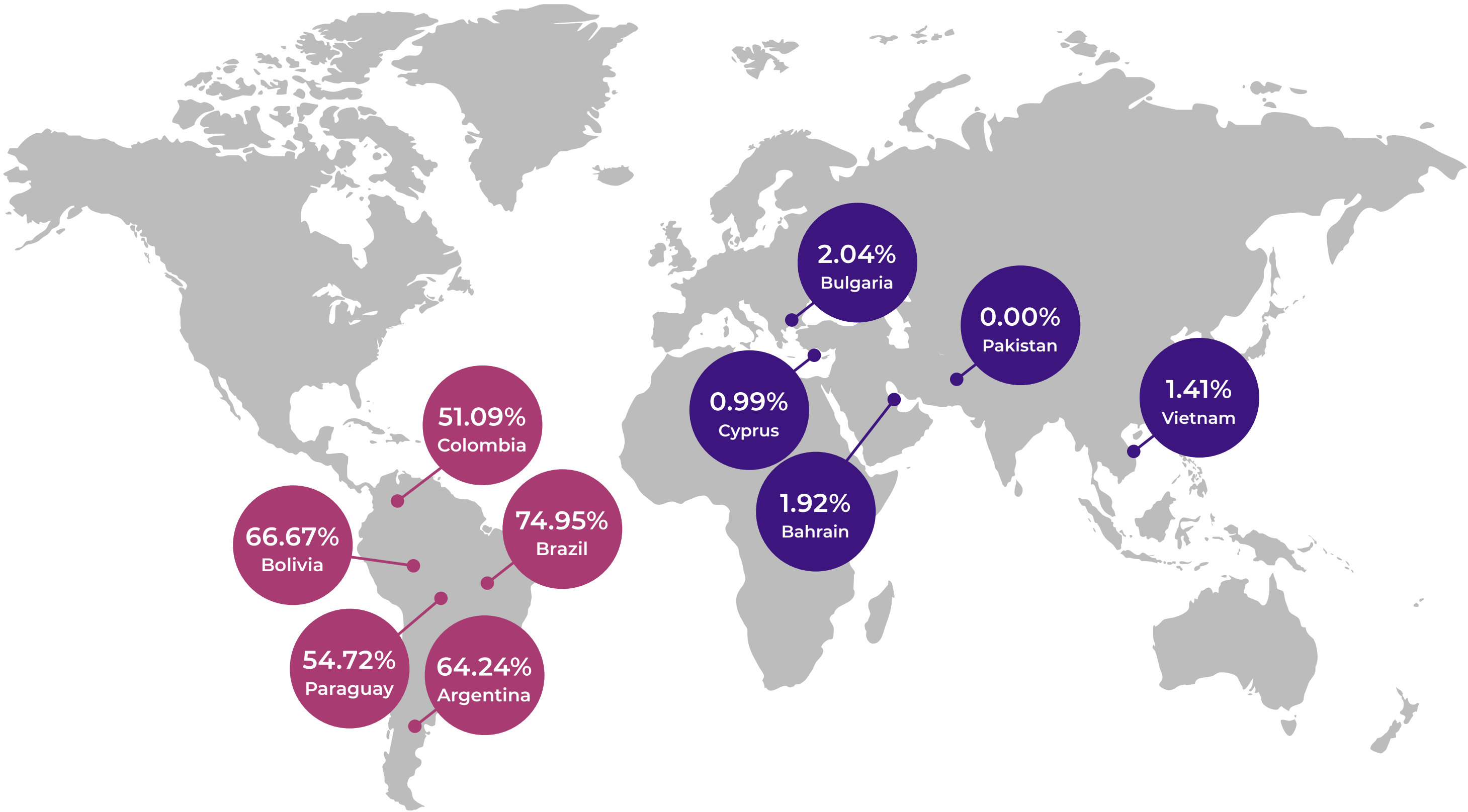
This is the second year in a row that South American countries have locked out the bottom five places for supplemental impact.

# SUPPLEMENTAL IMPACT

## COUNTRY COMPARISON

What can you do to improve your performance for this KPI?

- Assess whether country-specific requirements are generating supplemental runs
- Explore ways to improve business processes to reduce off-cycle runs (e.g. for bonuses, commission, etc.)



↑ HIGHEST SUPPLEMENTAL IMPACT  
↓ LOWEST SUPPLEMENTAL IMPACT



# PAYMENTS

**This year, for the first time, we have chosen to include the impact of treasury processes within this report. This is because, while the relationship between payroll and treasury processes is vitally important, they are still often run separately. In many cases, one is run in-house and the other by a managed service provider, which has implications from an efficiency standpoint.**

If there are inefficiencies in payroll processes that cause delays, these have a knock-on impact on payments. As pay dates are generally fixed, payroll delays mean the window for treasury teams to run their own processes of raising funding and making payments can be severely reduced. This may force treasury teams to use urgent fundraising mechanisms, with additional cost and processing burden. However, in the worst-case scenario, it could lead to payment dates being missed, which has a major negative impact on employee experience, and therefore on talent acquisition and retention.

Through our research, we have found that treasury teams globally were able to make payments on time in 99.02% of cases. In the main, this is likely to be caused by delays in payroll processes, reducing the time that payments and treasury teams have to do their own processing. So while this demonstrates

that the vast majority of payments are made in a timely manner, it also shows that some have improvements to make.

To respond, teams should explore potential efficiencies in both payroll and payments processes. In particular, they should look at unifying payroll and treasury to eliminate delays in the process, and explore innovations like instant salary payments and alternative funding options that can free up extra breathing space within the payroll calendar.

We will continue to track this metric in future reports, so that we can quantify the scale of the impact that payroll and treasury can have on each other.

- What can you do to improve your performance for this KPI?**
- Remember to factor in the lead times for payments into the payroll calendar
  - Check geographical implications on the payments process (e.g. someone in one time zone approving a payroll in another) and plan for any resulting delays

# REGIONAL SUMMARIES





REGIONAL ANALYSIS

AMER

The impressive 8.7% reduction in DII for the AMER tech sector is one of the stand-out results of this year’s reports. However, the region’s results across its other metrics weren’t as promising.

While its tech sector’s FTA increased by 0.4% – faring better than its global benchmark, which dropped by 0.2% – its calendar length increased by 0.1 days. Conflating this, its issues per 1000 payslips also increased by 1.52; further underperforming its regional benchmark, which increased by 1.2+.

This supplemental impact increase is driven by extremely high rates among most Latin American nations.

Elsewhere, the region’s tech sector outperformed its regional benchmark on supplemental impact; where the former reduced by 0.02%, the latter increased by 0.1%. Unfortunately, the region’s rates at both industry-agnostic and tech sector-specific perspectives remains more than double those of the other two regions.

Overall, despite the notable DII result, it means that the AMER region remains the worst-performing region of the three in terms of year-on-year progress – at both general and tech sector levels. This is likely due to a combination of shorter payroll frequencies in many countries – leading to rushed processing, less-extensive validation and an increase in errors – alongside a complex landscape of RSU, stock option calculations and a host of non-traditional employee benefits.

8.7%

REDUCTION IN DII FOR THE AMER TECH SECTOR

82.1%

FTA RATE FOR THE AMER TECH SECTOR – THE HIGHEST OF ALL REGIONS

REGIONAL ANALYSIS

EMEA

The EMEA region noted mixed results at an industry-agnostic level, which was reflective of its tech sector-specific performance. Its biggest improvement across both was a significant decrease in issues per 1000 payslips, declining by 3.44 across the region and 3.25 within its tech sector.

< The region’s tech sector FTA continued to decline for a second year, noting a further 2.2% reduction in this year’s report to 66.2%; even lower than the region’s average at 69.1%. Unfortunately, this lands it firmly as the lowest performing region – 15.9% behind its AMER leader, and 6.5% behind the global average.

3.25

DECREASE IN ISSUES PER 1000 PAYSLIPS FOR EMEA’S TECH SECTOR

Despite its tech sector’s calendar length decreasing by 0.2 days and data input issues taking the same direction with a 1.5% reduction, the EMEA region’s results are somewhat disappointing overall. However, this should be taken with a pinch of salt given some of the extenuating circumstances.

The EMEA region’s tech sector remains the lowest performing on FTA since 2019.

4.76%

DECREASE IN FTA FOR EMEA’S TECH SECTOR SINCE 2020

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REGIONAL ANALYSIS

APAC

In general, the APAC region is the best-performing of the three this year at an industry-agnostic level, despite the fact that its overall performance is actually worse than it was in the 2021 data. The same is true for its tech sector’s performance.

As an example, the region’s tech sector posted the highest improvement on FTA at 0.92%. However, this is 1.02% down on its 1.94% improvement in 2021, and still lags significantly behind its AMER frontrunner in this year’s report, by 6.12% (although 9.79% ahead of the EMEA region).

0.92%

INCREASE IN FTA FOR APAC’S TECH SECTOR SINCE  
LAST YEAR

In more positive reflections, the region’s tech sector noted a decrease in DII of 3.3% in this year’s report – a significant result considering its excessive increase of 7.4% in 2021. While the region’s tech sector remains the lowest-performing when it comes to DII across all regions, its wider results across other metrics paint a picture of commitment to embracing new payroll technologies.

APAC’s tech sector has continued to make strides over the past 12 months – especially with its DII performance – but must remain aware of increasing calendar lengths and supplemental impact.

3.3%

DECREASE IN DII FOR THE  
TECH SECTOR

# < CONCLUSION





# CONCLUSION

## REAPING REWARDS THROUGH INNOVATION

One of the key themes that runs through much of this report is integration. Bringing different functions together and creating more joined-up, automated workflows can help deliver the efficiencies that are so important to achieving the kind of smooth, fast, accurate payroll that defines the modern pay experience.

For example, much of the reduction in data input issues is likely to have been driven by integration between payroll and HCM platforms that share a common source of data truth. Similarly, integrating payroll and payment processes within the same platform is vital to ensuring that payments are always delivered to employees on time.

Connecting these functions – and using innovative technology where possible – is therefore key to helping organizations further enhance their payroll performance, and improve the global and regional benchmarks that this report highlights.

As well as greater integration between payroll and HCM, there are a number of technologies and solutions that businesses can explore to gain efficiencies and realize a more modern pay experience.

These include (and are not necessarily limited to):

- On-demand pay and alternative pay options (such as instant salary payments) that maximize flexibility for employees and can give more time back to payroll teams
- Different funding options that reduce time pressures on payroll and payment cycles
- Improving the visibility and analysis of data to better understand where improvements can be made

The results from this report demonstrate that reducing reliance on manual processes is the key to driving improvements in performance, including:

- Paying employees on time, every time, without errors and in full compliance with all relevant regulations
- Managing cash flow and tracking salary payments without any administrative compromise on the payroll team
- Engaging and motivating workforces, and making pay a strong differentiator when attracting and retaining top talent

Of course, many organizations don't have access to the data presented in this report, which is why it's important to challenge your payroll provider to supply it. Payroll teams should have an open dialogue with suppliers to understand how they can improve their processes to achieve the performance improvements outlined, and know which solutions they'll need to do so.

CloudPay's mission is to turn pay into a business advantage. We are transforming global payroll – creating a modern pay experience that is fast, flexible, and certain for employees and payroll teams around the world.

Having a single global platform, that gives unrivalled visibility and analytics, is how we are able to create this report. Understanding how your payroll function performs, and identifying exactly where improvements can be made, is the first crucial step to making the modern pay experience a reality.

# THE NUMBERS

## METRICS BY REGION

REGION	First-Time Approval	Data Input Issues	Issues per 1,000 Payslips	Calendar Length	Supplemental Impact
AMER	82.47%	58.50%	9.97	4.1	36.43%
APAC	77.81%	71.50%	7.43	6	10.77%
EMEA	69.11%	63.40%	8.99	6.5	13.81%

## FIRST-TIME APPROVAL

Percentage of gross-to-net calculations approved upon initial review

HIGHEST RATES*		LOWEST RATES	
China	95.98%	Philippines	46.39%
Cyprus	94.06%	United Kingdom	49.96%
Brazil	93.22%	Guernsey	53.19%
Russia	92.35%	Ireland	55.84%
Greece	91.53%	France	60.03%
Croatia	91.04%	India	62.30%
Bolivia	90.48%	Lithuania	63.83%
Chile	89.17%	Germany	64.18%
Argentina	88.92%	Bulgaria	65.31%
Slovakia	88.89%	United States	65.99%

\*Highest and lowest for all metrics include only countries with a minimum of 1,000 payslips per cycle



# THE NUMBERS

## DATA INPUT ISSUES

Percentage of data errors caused by incorrect or incomplete customer data entry

HIGHEST PERCENTAGES		LOWEST PERCENTAGES	
Guatemala	100.00%	Norway	24.39%
Serbia	100.00%	New Zealand	31.16%
Bolivia	96.77%	Portugal	33.11%
China	94.59%	Uruguay	35.90%
Singapore	90.92%	Guernsey	37.14%
Thailand	89.88%	Hungary	37.50%
United Kingdom	89.09%	Japan	38.00%
Philippines	87.24%	Denmark	40.12%
Malaysia	86.88%	Israel	41.98%
Honduras	85.71%	Argentina	44.12%

## ISSUES PER 1,000 PAYSLIPS

Number of data issues identified for every 1,000 payslips processed

HIGHEST ISSUE COUNTS		LOWEST ISSUE COUNTS	
Norway	33.6	Guatemala	1.6
Luxembourg	28.8	Serbia	1.7
Guernsey	27.3	Brazil	2.1
Denmark	23.5	Costa Rica	2.4
Israel	23.3	Russia	2.6
Portugal	21.1	Sri Lanka	3.0
France	19.5	Peru	3.5
Japan	19.3	China	3.5
Greece	19.0	Saudi Arabia	3.82
Austria	18.6	United Kingdom	3.85

# THE NUMBERS

## CALENDAR LENGTH

Number of days required to complete payroll processing (from lock to approval)

LONGEST CALENDAR WINDOWS		SHORTEST CALENDAR WINDOWS	
Uruguay	12.7	United States	2.9
Pakistan	11.9	Bolivia	3.0
Sri Lanka	8.9	Brazil	3.2
Egypt	8.2	Canada	3.5
Israel	8.1	Honduras	4.0
France	8.0	Nicaragua	4.1
Malaysia	7.9	Singapore	4.1
Norway	7.8	Dominican Republic	4.2
Germany	7.79	Guatemala	4.2
Portugal	7.76	Argentina	4.36

## SUPPLEMENTAL IMPACT

Percentage of payroll runs completed as supplemental runs

HIGHEST PERCENTAGES		LOWEST PERCENTAGES	
Brazil	74.95%	Pakistan	0.00%
Bolivia	66.67%	Cyprus	0.99%
Argentina	64.24%	Vietnam	1.41%
Paraguay	54.72%	Bahrain	1.92%
Colombia	51.09%	Bulgaria	2.04%
Ecuador	48.15%	Guernsey	2.13%
Guatemala	44.19%	Jersey	2.15%
Peru	42.31%	Philippines	2.41%
Spain	41.27%	South Africa	3.06%
Uruguay	37.37%	Saudi Arabia	3.52%



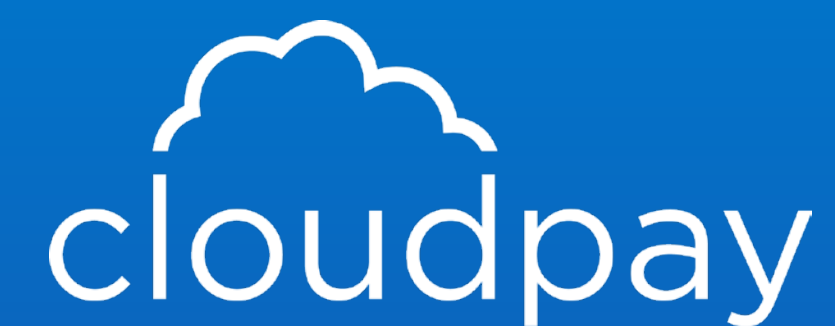
## ABOUT THIS REPORT

The Global Payroll Efficiency Index examines the payroll process using new metrics that, when understood and measured, can help multinational companies benchmark and optimize their payroll performance and costs.

For this fourth edition of the Global Payroll Efficiency Index, we sampled data from multinational entities across the AMER, APAC, and EMEA regions, and from more than one million payslips generated between January 1 and December 31, 2022.

The next edition of the PEI Report, based on payroll data from 2023, will be published in Spring 2024.





## ABOUT CLOUDPAY

CloudPay is on a mission to modernise the pay experience and turn pay into a business advantage. Our integrated portfolio of payroll, payments and pay on-demand solutions are delivered through a single cloud-based platform that can be deployed anywhere in the world. By unifying payroll, treasury and HCM functions and leveraging the latest technology, we transform pay processes, making them fast, flexible and certain.

### CloudPay UK

Kingsgate House  
Newbury Road  
Andover Hampshire  
SP10 4DU  
United Kingdom

**CLOUDPAY.COM**

### Americas:

+1.919.322.5800

### Asia:

+65.6403.5900

### Europe:

+44.1264.253.100