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**PAYROLL SERVICE AND
TECHNOLOGY SUPPLEMENT**



Featuring contributions from:

ADP Canada, Avanti Software, CADJPro, Ceridian, Oracle

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Welcome to the Future

Each year, technology takes us further.

Through the past two years we've leaned on technology more than ever to keep us connected, keep businesses running and to allow the economy to rebuild and readjust.

The Canadian Payroll Association works closely with Canada's payroll leaders who have, and continue to help do just that – by providing payroll and human capital management technology to keep Canadians paid and organizations operating, no matter what.

That's why each year the Association publishes the **Payroll Service and Technology Supplement**, to connect you, our payroll community, with insights from the leaders in the industry about the future of the profession. This year, we asked them to answer the following questions:

- How can and will Artificial Intelligence (AI) contribute to shaping the future of payroll and the payroll profession – beyond more efficient data processing?
- How can and should payroll professionals prepare themselves to succeed and thrive in an 'AI' future?
- What are payroll service providers doing to help clients optimize their use of AI, today and tomorrow, and increase the value of the business value of the payroll function?

Here's what they shared*...

**The opinions expressed are those of the contributing organizations, and have not been edited by the Canadian Payroll Association.*



Future Proofing Your Business: The Top Four Technology Must Haves in HR and Payroll

By Majeda Fyith, CPHR, Executive HR Relationship Manager, ADP Human Resources Outsourcing

Often, it's the CIO and Operations team who grapple with technology and big data in their daily attempts to solve the company's biggest challenges. From reducing costs to increasing efficiency, the main goal is always the same – future proof the business.

Today, workforces and business processes are widely dispersed. Capturing, compiling, and making sense of data - from inventory counts to people matters, is more complex than ever. If finance and HR are to contribute to a future-proofing strategy they must adopt a technology mindset paired with a business analysis skill set traditionally expected from an organization's other departments, such as IT.

The path to success

Evaluating current or future payroll and HR platforms can be overwhelming. A great first step is identifying the key benefits you're looking for the system to deliver. And, while your "wish list" may seem endless, there are often four key "must haves" commonly sought after in today's top payroll and HR systems:

1. Intuitive and easy to use
2. Proactively supports compliance
3. Provides actionable insights
4. Remains up-to-date and capable of next generation technology integration

Be intuitive and easy to use

Technology in the workplace should be as straightforward, and transformative, as the technology we encounter in our everyday lives. It should just work and work easily. By centralizing and automating repetitive tasks, payroll and HR departments can have the freedom to focus efforts on strategic and insights generating work.

Intuitive Payroll & HR Capabilities	Benefits
Manage pay, benefits, and HR activities from a single application, configured to the way your business works	Faster processes, fewer errors, higher productivity and trust
Detailed pay, time and attendance visibility, synced and updated continuously, in real-time	Feel more confident and trust in pay, time and attendance
Easily edit and configure pay, time and benefits policy templates in plain language without confusing codes	Reduce errors, improve productivity
Pay whomever you want, whenever you want, and see gross-to-net at anytime	Increase flexibility and employee experience

Proactively support compliance

Your organization's payroll and HR platform needs to remain in-step with ever-evolving government policies, programs and legislation. Automatic updates and modeling capabilities should be incorporated to address immediate changes and forecast the impact of upcoming legislative revisions.

ADP Workforce Now® adapted to hundreds of changes in 2020 alone. From new statutory and regulatory updates to rules and regulations, the scalable platform can quickly adjust to changes, with little to no impact for end users.

Proactive Compliance Capabilities	Benefits
Proactive error detection, alerts and notifications	Reduce mistakes, catch them before they happen
Automatic assignment of federal and provincial taxes	Supports tax compliance
Policy change modelling	Business flexibility. See the potential impact of pay, policy and compliance changes before they happen
Automate legal system-wide updates	Faster, lower cost compliance with fewer errors

Provide actionable insights

Organizations need to turn mountains of workforce data into actionable insights to help manage costs, strengthen talent pipelines and identify areas for improved employee engagement. Customized reporting along with the ability to see data in one place, makes that process easier. Additionally, platforms that centralize data offer a holistic view of the workforce, providing organizations an opportunity to zero in on discrepancies or pay equity issues.

Traditionally it's been difficult to compare HR Metrics between organizations, or within specific industries. Proprietary tools within some payroll platforms have now made this a reality, providing clients with anonymized data from millions of employee records. Benchmark metrics include insights into compensation, workforce demographics and workforce changes all within one single instance.

Insights Generating Capabilities	Benefits
Customized reporting and insights proactively presented in your flow of work	Make smarter, more timely business decisions
See your data, driven off a single database	Improved data visibility, get to insights faster
Turnover probability	Identify at-risk employees to focus attention on engagement and improving retention
Payroll data updated automatically and in real time	Understand your payroll liabilities in real time, not just at the close of your payroll period
Compensation benchmarking	Generate faster and more meaningful insights

Future-proof your technology

Future-proof technology is a large ask. However, it's not impossible. Ensuring your payroll and HR platform is a single-database suite built with point-and-click integration capabilities allows organizations the flexibility to incorporate future innovation.

Future Proof with these Capabilities	Benefits
Open standards ecosystem	Integrate a variety of third-party solutions to connect and securely share data across your payroll & HR platform (i.e.: time & attendance, recruitment, training)
Seamless Integration	Simplicity of single sign-on, single data input, and single billing. Enter employee information once, instead of multiple times, freeing up more time to focus on what really matters
Single database	Speeds response, unifies data, and reduces the likelihood of changes resulting in breaking processes or making errors
Cloud-native architecture	Quickly adjust to fast-changing market conditions, shift capex to opex

Today's payroll and HR professionals need to make smart, timely decisions to meet their company's specialized needs for recruiting, onboarding, learning, compensation and so much more.

To do so now - and in the future - they need access to platforms that are secure, intuitive, flexible and easy to use. Keeping the above four "must haves" in mind when evaluating a payroll and HR platform will not only future-proof your payroll and HR functions, it will also play a key role in future-proofing your business.

Majeda Fyith is a seasoned and accomplished Human Resources professional and people leader with almost 15 years of diverse experience supporting large, complex organizations in both the public and private sectors across a number of unique industries. Majeda is passionate about client service, including her acumen for building strong partnerships and teams, recognizing the needs of her clients and colleagues, and adding value through creative, timely and cost effective HR solutions.

Supplemented by extensive Board experience, Majeda has served on several non-profit Boards as an HR Consultant, Festival and Project Manager, and Board Director responsible for program and fund development. Majeda holds a Bachelor of Commerce from The Alberta School of Business at University of Alberta, as well as her CPHR designation. She resides in Edmonton, AB with her beautiful family.



What Role Will AI and RPA Play in Payroll Management Software?

By Tara MacKinnon, Content Marketing Lead at Avanti Software

Do the terms AI and RPA freak you out a little bit? For some, they conjure images of robots working away in rooms devoid of life and personality. While there's some truth to the sterility of robotics, there's no denying the benefits of integrating them into your system. For payroll professionals, AI and RPA will clear the clutter of make-work tasks and set the stage for payroll as a core strategic function.

Let's start with some basic terminology. You may hear AI and RPA used in the same settings. To clear any confusion, AI is Artificial Intelligence and RPA is Robotic Process Automation. RPA is the use of software/specialized computer programs to standardize and automate repeatable business processes, whereas AI is technology that has the capacity to get smarter over time. The general term is machine learning. As a machine gets smarter, its capabilities like problem-solving and predictive abilities will increase. In payroll, AI will be beneficial for self-service support, reporting requests, and technical troubleshooting.

Unlike AI, RPA programs perform the same way every time. They don't learn from repetition or come up with a better way of doing a task. Think of them as virtual assistants that take on your not-so-complicated repetitive tasks and perform them exactly as instructed every time – saving you time and increasing efficiency.

For organizations, both AI and RPA can help to increase client and employee satisfaction while reducing operational costs.

So, what exactly can AI and RPA do for payroll professionals?

First off, automation is nothing to fear. Incorporating automated functionality and tasks into your processes will reduce those time-consuming tasks that can take up much of your workday.

Payroll management requires you to frequently work with large amounts of data. Sometimes that can mean redundant manual data entry and time-consuming coordination with HR and people management functions. Throw in a pandemic and rapidly changing legislation, and your workload is maxed out.

How technology can improve payroll's day-to-day

Accurate aggregation and validation

Collecting and sorting the amount of information involved in payroll processing takes up a lot of time and manual effort. Most of that time involves uploading data between HR, time and attendance, and resource planning. Using this approach makes it all too easy to input inaccurate or incomplete data into your system and leaves it up to your payroll team to find and correct it. Sure, errors can be found and fixed, but that just means more time and effort spent on an inefficient system.

Automation can streamline your data management. By using **application programming interfaces** (APIs), you can schedule automatic data transfers between admin systems to greatly reduce time spent on manually doing it yourself. By pairing these automated transfers with data validation systems, your payroll data can be checked for accuracy automatically – before and after processing. This reduces the need for off-cycle runs and results in more accurate data for quality reporting.

Additional payroll support

Payroll support is a necessary part of your job, but also a part of the job that takes extra time when you need to be focused on getting payroll ready for upcoming pay periods. Not many organizations have dedicated payroll support team members to answer questions about pay cheques and tax slips, the responsibility typically falls on you, which means you field numerous calls a day to answer frequently asked questions from members of your organization.

The good news is you can automate this process too. AI chatbots can be programmed to instantly answer common payroll questions and converse like humans, saving you hours in phone calls and emails. Chatbots can also learn how to decipher complex questions and direct employees to you or the right team member for a quick resolution. When integrated into self-service applications, an AI chatbot will reduce payroll and HR workloads and empower your employees.

Pattern recognition

We've spoken about how manual processes make accuracy and efficiency difficult to achieve. They also make it difficult for you to capture and measure real performance metrics – making it nearly impossible to spot patterns or trends (good or bad) in company performance.

Automating your payroll tasks will mean your data collection improves and will help you with analysis. Having accurate data means you can regularly analyze and find areas for improvement. This is where AI could help you to identify data irregularities, recognize problematic patterns, and over time, automatically implement new rules for processes.

AI will help identify potential errors before they arise. For example, one validation method for payroll is to manually compare one pay period's net pay relative to another. If there are discrepancies, it's a trigger for a payroll professional to dig in and assess. Through AI, there is a greater potential to flag issues, in addition to providing an explanation for the issue. Clarity for the win!

Another example relates to positive pattern recognition. Let's say a company provides RRSP matching based on an employee's hire date anniversary. AI may recognize a pattern whereby this employee consistently increases their RRSP contribution as their employer's matching grows. Ahead of their anniversary date, payroll could serve a recommended action to check in with the employee and proactively ask if there is interest in increasing a contribution.

Going a step further, a more complex example is cross-functional data usage. Let's say someone's compensation has been flat for a period of time, their performance has been poor, and their time off has increased. AI might be able to identify someone at risk of attrition and serve up a warning flag.

See the big picture

There's a wealth of insightful payroll information waiting for you to discover. With the help of AI-powered automation and analytics, the payroll function will transform from an administrative function to a much more strategic role. As a result, you'll find your career shifting. You won't be automated out of a job, but the redundant parts of your jobs will be. Less "import-the-time-batch" and "run-the-payroll" and more focus on strategy and how to use your data to your benefit.

This shift will let you focus on delivering increased value to your organization. It will give you the opportunity to look for new ways to adapt payroll rules and processes to achieve greater productivity, efficiency, and compliance.

How to prepare your organization for the future of payroll technology

Understandably, the introduction of time and labour-saving tech will likely cause a stir within your organization. To help prepare your team, the best thing to do is be transparent and to ease the anxiety around new technology.

Provide training

This is your team's chance to upskill and move forward! To help develop fluency with modern technology systems, it's important to invest in your team and provide them with the tools to learn how to use, manipulate, and contextualize data. Investing in professional development will not only increase payroll's strength, but also your organization's success.

Move to the cloud

Is your organization on the cloud yet? For payroll professionals, moving to the cloud will help empower the entire organization. Migrating to a **cloud solution** will free up time for you to be more strategic in your role. The automated features offered from cloud-based solutions give you the opportunity to focus on the big picture – your employees. More organizations transitioning to the cloud means more providers and vendors will have more data to build truly optimized products. Enhanced payroll models are coming and will change the way we work, for the better.

Transparency and change management

As organizations adopt new technologies, it's crucial your managers communicate with employees about what's being done and what it means for their jobs. By conveying the key benefits of digital transformation, you can assure your team their jobs are safe, and they have a role to play in the progress of the company.

You've got this

The future of payroll technology can feel daunting, but if you're equipped with the right skills, technology, and perspective, you're sure to flourish in your profession. Just remember, data is your friend and once you move past the mundane tasks that take up too much of your time, you will elevate the role of payroll to a much more strategic function for your business. You've got this.

To learn more about how to automate your processes with an all-in-one cloud-based payroll solution, visit **www.avanti.ca**.

Run your payroll in half the time with Avanti. Our 100 per cent Canadian cloud-based HRIS solution helps mid-sized companies empower their teams to build better workplaces, no matter the complexity. Featuring a robust, configurable range of tools, our all-in-one platform specializes in transforming and automating processes for all your organizational needs. Our modules include Payroll and Benefits, Workforce and People Management, and Talent Acquisition, plus our API and mobile app.



Using Tech to Focus on What Matters

By Garcia Hanson-Francis, CPM, CEO & Certified Payroll Expert

The global pandemic has changed everything – especially where and how we work.

In March 2020, many companies moved their workforces out of the office to employee's homes. Though it happened quickly, the transition wasn't seamless. Organizations needed to work through security and network issues and weren't sure how to hold meetings. Employees struggled with internet bandwidth, while parents juggled work with home schooling. It was a challenging time.

This situation in particular impacted payroll services. There were immediate leaves, schedule and shift changes, new government benefits, and tax deductions needing to be managed swiftly and accurately. And, like so many of us, payroll professionals were working remotely too.

To work confidently and securely, more organizations turned to digital solutions and virtual payroll systems. Having the right cloud-based technology allowed teams to collaborate effectively and do their jobs efficiently.

What is the cloud anyway?

Most of us have used the cloud in some capacity but to clarify: the cloud simply means storing and running applications using the internet.

With cloud-based payroll systems, teams work with real-time data that is stored securely on remote servers. They can access, operate, and control everything from onboarding employees to ensuring compliance to overseeing exit processes online.¹ The added benefit is that businesses don't have to worry about storage space, backups, or upgrades.²

The cloud in action

As providers of virtual cloud-based payroll systems, CADJPro has seen their advantages up close. Besides the obvious benefit of enabling payroll professionals to do their jobs remotely, we've observed other positive impacts.

Efficiency boost

The number one benefit of adopting a virtual payroll system is improved efficiency. We've seen firsthand how cloud-technology simplifies payroll processes, improves turnaround times, helps remote payroll teams work together and reduces administrative tasks. Here are some examples:

- The automation of timecards, printed cheques, and tax forms streamlines processes.
- With automatic payroll calculations, there's significant reduction in fixing manual data input errors.
- The ability to access information and consolidated payroll metrics any time, anywhere is ideal for employees who work remotely.

- With a centralized location to store employee data, it's much easier to track and manage onboarding, benefits, salary revisions, and leaves.
- Systems with self-service functionality allow employees to submit requests, adjust information, or review their pay information easily, reducing the back-and-forth interactions between payroll professionals and employees.³

Helps with bottomline

For clients managing their payroll in-house, moving to cloud-technology saved money and time. They didn't have to invest in servers and other hardware to run on-premises systems that were lagging behind in today's digital world. This enabled significant reductions in the resources needed in the past to complete routine payroll tasks. And, due to demand, cloud-based technology is now more affordable than it was previously. So, with a minimal investment, companies were able to immediately improve productivity and turnaround times.¹

Better compliance reporting

Staying on top of compliance is a big part of working in payroll. COVID-19 has definitely made tracking and implementing new legislation even more important. Businesses with cloud-based payroll systems were better able to keep up with the ever-changing compliance landscape.

Thoughts on security

Businesses that use virtual payroll systems feel that clouds are more secure than traditional on-premises environments. In a Software Advice survey, 96 per cent of small to medium businesses actively using cloud-based payroll software were "very confident" or "confident" that their employee data was secure.⁴

On the cloud, sensitive information (personal and financial data) is encrypted, preventing data breaches. Companies can also integrate security tools such as web application firewalls to cloud payroll platforms.⁵

Changing focus to strategy and employee needs

Most of the benefits above do one important thing – save payroll professionals' time so they can work on more strategic initiatives. Technology can be leveraged to address the changing needs of employees brought on by a global health crisis and the Black Lives Matter movement. Mercer's *2020-2021 Global Talent Trends* report identifies "DEI (Diversity, Equity, and Inclusion) analytics as the top priority of Canadian companies in 2021, followed by defining future workforce needs, energizing the employee experience and reinventing flexibility."

DEI

Employees, stakeholders, and investors expect organizations to make significant DEI headway. There's an increased urgency for improved analytics on pay equity and health trends. To do this companies need to address the gaps and disparities in wages, healthcare, wellbeing, and benefits for underrepresented groups.⁶

Health and financial wellness

With COVID-19's constant change and unknowns, we're stressed and burned out. Employee health and wellness is increasingly becoming more important. Since March 2020, businesses learned that employee well-being is an essential to growth and survival.

Flexibility

Remote work and its flexibility won't go away when the pandemic is over. Workers are telling employers that working from home is preferable, at least part of the time. With 42 per cent of the companies Mercer surveyed looking into performance data related to flexible work, the conversation will continue for years to come. In fact, 59 per cent of Canadian organizations have already expanded flexible working policies and practices, and a further 40 per cent are planning to do so in 2021.⁶

Employee upskilling and reskilling

After 24-plus months in flux, employee skill flexibility is as important as flexible work conditions. Companies are recognizing the many advantages to having a workforce that can pivot at a moment's notice. According to Mercer's talent report, more than four in five (83 per cent) Canadian HR leaders report that skill development was a focus in 2021.⁶

What's on the horizon

Organizations considering the move to cloud-based payroll are also interested in employee self-service (ESS) software. From the perspective of freeing up time to focus on employee-focused strategic initiatives, self-service functionality makes a lot of sense. It lets employees find the information they need without engaging payroll or HR.⁷

ESS tools will become more essential to payroll and HR operations in the future. Employees who appreciate immediate access to their salary data will want more employment information available. Another self-service option that might be available in the near future is on-demand pay from earned wages. In a crisis situation, like a pandemic, it's indispensable to have access to your money when you need it.⁷

CADJPro offers virtual outsourcing and implementation of new payroll services to small, medium, and large organizations. In the age of COVID-19, we've had a unique perspective on how cloud-based technology has impacted groups and teams. We're glad to share our observations over the last 24-plus months. Learn more at www.cadjpro.com

¹ <https://www.zoho.com/blog/payroll/cloud-payroll-software.html>

² <https://www.xero.com/ca/resources/accountant-bookkeeper-guides/payroll/cloud-payroll/>

³ <https://www.monterail.com/blog/hr-technology-trends-for-business-2021>

⁴ <https://www.softwareadvice.com/resources/>

⁵ <https://www.itworldcanada.com/article/why-payroll-security-should-be-handled-by-the-cloud-in-the-new-normal/438610>

⁶ <https://www.mercer.ca/en/what-we-do/workforce-and-careers/hr-global-talent-trends>

⁷ <https://whatfix.com/blog/hr-technology-trends-2021/>

CERIDIAN

How AI Can Transform Payroll into a Strategic Business Function to Drive Value Today and Tomorrow

After the events of 2020, enterprise organizations are preparing for the next unpredictable, economy-shattering event. Unlike the cost-cutting that occurred after the 2008 financial crisis, the pandemic has accelerated the need for digital transformationⁱ. In a recent Ceridian survey of 2,000 global executives, 75 per cent of North American and European respondents reported an increased investment in new technologies through 2024ⁱⁱ.

This speed and desire for bold innovation may be because executives are tasked with delivering on productivity, innovation, and revenue simultaneously. To achieve this, organizations need to make informed decisions faster, which means having access to robust data and the ability to transform it into actionable insights. Over 30 per cent of CEOs responding to Gartner's 2021 Executive Survey see artificial intelligence as the most industry-impactful technology in their pursuit of digital transformationⁱⁱⁱ.

Payroll is a natural fit for artificial intelligence, due to the large volume of data and the controlled rules of its processes. Today's organizations need to make informed decisions faster, which means having the ability to transform their own data into actionable insights. Advanced technologies such as artificial intelligence and machine learning are gaining traction as a result.

Machine learning functions by setting rules and limits and can be an effective tool for reducing risk and maintaining compliance with a variety of requirements, including regional legislation, company policies, data privacy, and security rules. AI offers ways to tackle complex manual tasks far more efficiently and at scale.

Data is the new currency in the information age and payroll professionals can harness the power of AI to go beyond data processing and contribute meaningfully to their organization's overall strategy.

Acting as a human support in a digital world

Artificial intelligence can be a key support to augment human processes and decision-making, bringing more business value to the payroll function. Beyond efficient data processing, AI for payroll allows it to become a predictive service, capable of streamlining decision processes to unlock greater value. Make smarter decisions faster about capital allocation, risk modelling, and equity analytics to improve fairness in compensation decisions.

PricewaterhouseCoopers (PwC) surveyed U.S. companies ramping up their AI investments in the wake of the COVID-19 crisis. The most common AI use cases in 2021 included managing risk, fraud, and cybersecurity threats, helping employees make better decisions, analyzing scenarios using simulation modeling, and automating routine tasks^{iv}. All these can be applied to payroll operations.

Automation and machine learning can transform the payroll practitioner role from an administrative to a strategic function. AI can interpret the complexities of payroll data and generate more intelligent insights to provide leaders with more strategic support in decisions across their organization.

Automating manual tasks

Machine learning (ML) can reduce manual processes and enhance decision making. PwC research found that organizations using AI for document information extraction saved 30-40 per cent of the hours they typically spent on contracts, invoices, tax forms, and more^v.

Organizations found their document operations were more efficient and easier to manage, from simple procedures to more complex, integrated tasks.

Using historical data submission, AI applications can quickly detect significant anomalies in employee time submissions and directly alert an employee or timekeeper when a time record hasn't been entered. Employees can independently correct any mistakes without disrupting the payroll process.

Streamlining repetitive processes leaves less room for error and ultimately drives a better return on investment for organizations using AI applications. It can also improve the employee experience. Almost half of global executives surveyed in Ceridian's 2021 Executive Survey are investing in technology to support higher value work as a tangible way of improving employee well-being.

But the value of AI in payroll extends far beyond simply improving payroll processing efficiency. Here are some ways AI can transform organizations through the power of pay data.

Supporting equity efforts through fair compensation

Equal pay for equal work is still not the reality for many people. The Government of Canada's Pay Equity Act is an important step in closing the gender and racial wage gap, however, employers need to make improving pay equity a priority^{vi}. There's a price to pay for failure – litigation in the form of collective and class action suits have become increasingly expensive for organizations^{vii}.

Pay audits

Pay audits are an effective way to detect any gender or race-based pay disparities and find opportunities to improve equity. Regular audits allow employers to determine if discrepancies are non-discriminatory and compliant with Equal Employment Opportunity Commission (EEOC) regulations.

Audits can do more than simply uncover pay disparities within the workforce. A deeper dive into pay data can help employers understand why they exist. Data opens the door to larger conversations about pay practices and business decisions that impact compensation. This can include workplace procedures including pay upon hire, promotions, commissions, as well as one-time bonuses and structured increases.

Accounting for equity in the workplace can be complex, especially when compensation decisions are based on multiple factors, such as different experience levels and types of experience, job performance, and related skill sets. Artificial intelligence can parse through HR and payroll data to analyze retention rates, payroll summaries, and inequities between individuals within a group. AI can also help organizations create compensation benchmarks based on labour market data, allowing for more equitable compensation decisions.

Helps to maintain compliance and minimize payroll errors

Companies can augment and interpret their own data with AI to support their compliance goals, while reducing the risk of costly errors. Compliance becomes infinitely more complex as organizations expand into new regions with different labour laws, tax requirements, and company policies.

Reduce errors

Formats change, typos occur, and currency and tax legislations can vary by region. Machine learning can comb through high volumes of data and efficiently reference records. Payroll professionals can use the support of smart systems to work more efficiently and reduce the occurrence of errors from repetitive tasks^{viii}.

Machine learning can leverage the history available within an organization's payroll system as well as external systems of available source data to continually learn. This learning model is what allows artificial intelligence to adapt to ever-changing conditions and use complex data science techniques to achieve a high degree of accuracy in payroll operations.

Automate audits

Much of payroll is defined by rules and limits. Machine learning also functions by building a set of business rules, such as clarifying the difference between an anomaly and error. Companies can also define sets of limits to run workflows and raise alerts. Intelligent software can then assist payroll professionals by taking on the administrative burden of managing procedural data, time-consuming reconciliation efforts, and preventing costly errors.

Before AI was used in payroll, spot audits were the only feasible option for a company to assess data accuracy. Payroll audits were based on the accumulated knowledge of procedures, deductions, and taxable benefits. These efforts were subject to clerical error and could miss issues that result from changes to tax or employment legislation in different regions. As opposed to conducting manual audits on an annual basis, AI can automate regular quality assurance reports with reference to past payroll data to detect anomalies and errors.

Reframing payroll practitioners as strategic business partners

More companies are turning to technology to help them become more agile, productive, and proactive in their operations. *Ceridian's 2021 Executive Survey* found 79 per cent of organizations had increased their overall digital maturity in the past year, with a focus on HR solutions and advanced analytics and decision support technologies^x.

Artificial intelligence can transform payroll into a strategic function, whose value lies in harnessing data insights to benefit the entire organization. With machine learning, AI can create predictive models from payroll data to help organizations make more informed, data-driven decisions. And leveraging AI this way can help organizations become more competitive: companies at the forefront of AI adoption have moved beyond leveraging AI to control labour costs to focus on using this technology to create new business opportunities^x.

Some examples of how payroll professionals can become strategic partners to the business include compensation benchmarking, identifying patterns in absenteeism, and understanding the overall cost of the workforce against the revenue generated. These are significant challenges that, when addressed, help organizations attract and retain top talent and optimize spend.

What decisions should AI help make?

AI supports human decision-making processes by equipping leaders with more – and better – insights. These insights allow leaders to make decisions at a faster rate than they could by simply analyzing past performance. Consider how spelling and grammar checks are used to support daily writing, but AI grammar tools don't write the email for you. Similarly, AI in payroll helps you uncover right insights at the right moment – but it's up to you to take action.

There are different degrees of what is appropriate for AI in decision making: decision automation and decision augmentation^{xi}. Automation allows the system to take action based on predictive analytics. Augmentation identifies multiple decisions to human users and relies on the synergy between employee knowledge and AI's capability to analyze high volumes of data.

Whether a decision should be automated or augmented depends on how quickly the organization needs a decision and its complexity. These situations require payroll professionals to examine their organization's needs, and identify which strategic work requires human intervention, and what manual tasks can be automated.

Automation is ideal for situations with simple, repetitive, and predictable outcomes. These decisions typically need to be made within a few minutes. Augmentation is for decisions that require less urgency and have a more complex set of variables that could determine the best decision.

There are decisions made every day by payroll professionals and business owners. These can include determining the base salary for a role, assessing merit increases, and scheduling workforce labour costs. These decisions are usually made in advance and therefore are not time dependent, which falls into the category of augmented decision making. One in three organizations currently uses AI for select pay decisions, with 79 per cent reporting it has helped them to standardize the pay structure within their operation.

Creating a decision assessment model takes time and a high volume of data for machine modeling to be accurate. For organizations focused on a long-term return on investment, smart payroll can help shape budgets, cut unnecessary expenses, and support smarter decision making in the future.

The path forward for the future of payroll

Payroll professionals can prepare themselves to succeed in an AI future by:

- identifying the aspects of their workload that can be optimized with automation, and
- further exploring the benefits of augmented support in data-driven decisions

Payroll data can help organizations evaluate pay and budget-related decisions with business goals in mind.

Ceridian is already leveraging the power of pay to unlock insights from payroll data. Companies can take action to improve areas such as operational efficiency, employee engagement, and reducing labour costs, among other things.

Artificial intelligence for payroll has many benefits beyond saving time through automation. AI has the power to transform how organizations view the role of payroll and generate value-creating insights faster from this data.

Go beyond repetitive administrative tasks to more strategic work that improves the employee experience. AI can cut through the complexities of payroll data to generate more intelligent insights that help organizations look ahead with a data-driven strategy.

At Ceridian, we create innovative technology that organizations around the world use to attract, develop, manage, and pay their people. Our award-winning Dayforce solution helps our customers manage compliance, make better decisions, build great teams, and drive engagement with their employees. Ceridian has solutions for organizations of all sizes. Ceridian. Intelligence at work.

ⁱ PwC, Great Expectations: Global executives respond to great disruption

ⁱⁱ McKinsey, What's Next for Consumers, Workers, and Companies in the Post-COVID-19 Recovery

ⁱⁱⁱ Gartner Executive Survey 2021

^{iv} PwC, AI Predictions 2021

^v PwC, It's time to get excited about boring AI

^{vi} Government of Canada, Overview of the Pay Equity Act

^{vii} Bloomberg, Equal Pay Lawsuits Persist as Bills, Policy Plans to Target Gaps

^{viii} Robert Half, Jobs and AI Anxiety

^{ix} Ceridian, 2021-2022 Executive Survey

^x McKinsey, The state of AI in 2020

^{xi} Gartner, Would you let artificial intelligence make your pay decisions, June 2nd 2021

ORACLE

Cloud HCM

Changing the Focus of Payroll with Artificial Intelligence

By Felicia Cheek, Director, HCM Product Strategy, Oracle

Without warning, we experienced a significant disruption in how we live, work, and play, which forced us to change how we *think, act and do*. In retrospect, we were able to adjust quickly, and those that leveraged technology to navigate through the change were able to pivot at a much faster pace and adapt to the shifting landscape.

Operational business continuity plans, particularly for payroll, have been put to the test. Payroll leaders are now more determined than ever to prepare for the future. For many, ensuring continuous payroll operations during the pandemic has strengthened their push for digital transformation across the payroll process. A 2020 Deloitte Payroll Benchmark Survey shows more than 70 per cent of organizations either process payroll in the cloud or are currently implementing a cloud payroll solution indicating organizations are embracing cloud payroll technology faster than in the past. And that same survey shows almost 60 per cent are considering leveraging Robotic Process Automation (RPA), intending to increase efficiency by automating the execution of routine, repetitive processes.

For many organizations, the natural next step is to explore the usage of artificial intelligence (AI). How can it be used to elevate payroll's position in the organization? In this article, I will share insight on how artificial intelligence is a powerful game-changer and can reshape the payroll process, ultimately freeing payroll professionals to focus on those activities that add greater value to the broader organization and the overall positioning of payroll.

Artificial intelligence will further streamline the payroll process, redefining the role of the payroll professional

Digital technologies like cloud computing and RPA have forever changed how payroll is processed, and artificial intelligence is no different. AI will play a significant role in leading the movement of payroll from a highly transactional process to a more analytical and decision support focus. Expect to see payroll professionals making more valuable contributions to the success of their organization by providing insight and analytics to support overall labour management decisions. However, artificial intelligence will continue to increase productivity and quality throughout the end-to-end payroll process. Some areas where AI may have the potential to improve overall efficiencies include:

- **Scheduling** can require insight from various inputs like skills, training, performance levels, work preferences, attendance records, and other attributes. AI and machine learning can be used to automate data analysis from multiple sources necessary to create optimal schedules for both the organization and the employee.
- **Time approval** often takes supervisors and managers away from performing activities needed to run the business. With AI and machine learning, the effort required to approve time can be more targeted, allowing management to focus on those anomalies and exceptions in time cards that warrant their attention.

- **Early wage access** is often delivered out of the box with payroll systems. AI can be used to understand better how employees are using early wage access, analyzing data ranging from frequency, salary, pay cycle, overtime, scheduling patterns, and other behaviours. The insight gained in this area can help organizations make more intelligent decisions about what employee financial wellness tools and practices may help better support employees. These added insights can help to boost employee morale and increase operational productivity.
- **Compliance** is always a primary focus for payroll organizations. With the multitude of legislative changes we've had over the last year, the ability to track and better understand the impact of the changes is a considerable benefit ensuring continuous compliance and reducing the risk of noncompliance.
- **Business travellers** often are subject to taxation in multiple jurisdictions. Usually, this information is tracked manually, increasing errors. AI technology can be used to analyze employee expense data to provide direction on necessary adjustments to individual tax withholdings. Early identification of these anomalies can help proactively ensure all employer responsibilities are being met and predict additional employer expenses.
- **Remote workers** have increased over the last year, and the insight on the impact to employer expenses such as taxes and benefits is essential to planning, understanding, and predicting labour expenses. Additionally, AI can be used to identify anomalies in labour costs; for example, in the case of employer expenses like unemployment taxes in the United States where annual limits were previously met, but due to a location change, may need to resume, AI would allow the prediction of these unplanned labor costs.
- **Chatbots** are commonly used to quickly resolve Tier I and some Tier II payroll inquiries, contributing to a timelier and higher quality call resolution rate which can have a positive impact on the employee experience and reduces the time payroll staff spends on inquiries.
- **Audit and reconciliation** is another area to leverage AI. It usually requires involvement from seasoned payroll professionals with a learned ability to spot anomalies in the payroll output using various reports and tools like Excel.

With AI, machine learning can create algorithms to analyze data over a period of time, automating the identification of payroll anomalies. This can speed up the process and free payroll staff to work on more value-added activities.

Most organizations are using AI for process automation and optimization to some extent. While payroll has moved a bit slower, we will see increased usage in the upcoming years as digital strategies continue to advance throughout the payroll process.

Upskill opportunities exist for payroll professionals

AI is designed to solve problems by working in a structured, predefined manner, looking at large amounts of data to determine patterns, make predictions and act based on those predictions. There are many activities across the payroll process that are routine and reoccurring with large amounts of data, like the data reconciliation process that occur at different times before, during, and after the payroll process to ensure accuracy. By automating the reconciliation process, payroll resources are not entirely removed; however, the focus becomes more analytical, taking them away from tedious routine and highly transactional activities. It is important to note that AI cannot make decisions and lacks breadth and depth of perception, reasoning, judgment, and creativity like a human. The role of the payroll professionals will indeed change, but as technologies like AI continue to advance, new opportunities will emerge.

The addition of AI in payroll will further streamline and simplify the end-to-end process, freeing payroll professionals to play a more integral role in data interpretation, analytics, and other activities that enable decision support. This additional time is an opportunity to upskill as payroll

professionals will need to have a detailed understanding of key business drivers to ensure they can make decisions on leveraging insight from data that can be used to support decision-making across the broader organization. This key skill further highlights the need for the critical people component to efficiencies gained from AI. For most organizations, upskilling to increase or enhance the profile of payroll professionals in critical areas like business acumen, critical thinking, problem-solving, creativity, and innovation is where they need to focus on improving and complementing productivity and efficiency gains when using AI.

With AI, as with other digital technologies, traditional roles and responsibilities change, shifting from highly routine transactional activities to more value-added strategic and analytical activities that help to elevate the overall positioning of the payroll professional. Ultimately there will be more focus on providing insight and expertise to better manage labour costs across the organization. In addition, outside of the payroll area, AI is an excellent way for payroll professionals to expand and diversify their skillsets, increasing their overall work profile as AI skills are transferable to other areas of the business and outside of the organization. Forbes believes jobs requiring AI skills will increase by 71 per cent over the next five years.

Our technology empowers payroll professionals to focus on activities that increase the payroll value proposition

Before companies can use AI or data science to make decisions, they must invest significant effort, time, and expense in data collection and preparation. Oracle's advanced HCM controls module has automated these laborious data prep tasks so organizations can start using advanced analytics right away. Using algorithms that can proactively monitor millions of HCM and payroll transactions and/or activities, process owners can be alerted to highly suspicious transactions (ghost employees, unusual amounts, lack of separation of duties, etc.) in a user-friendly dashboard.

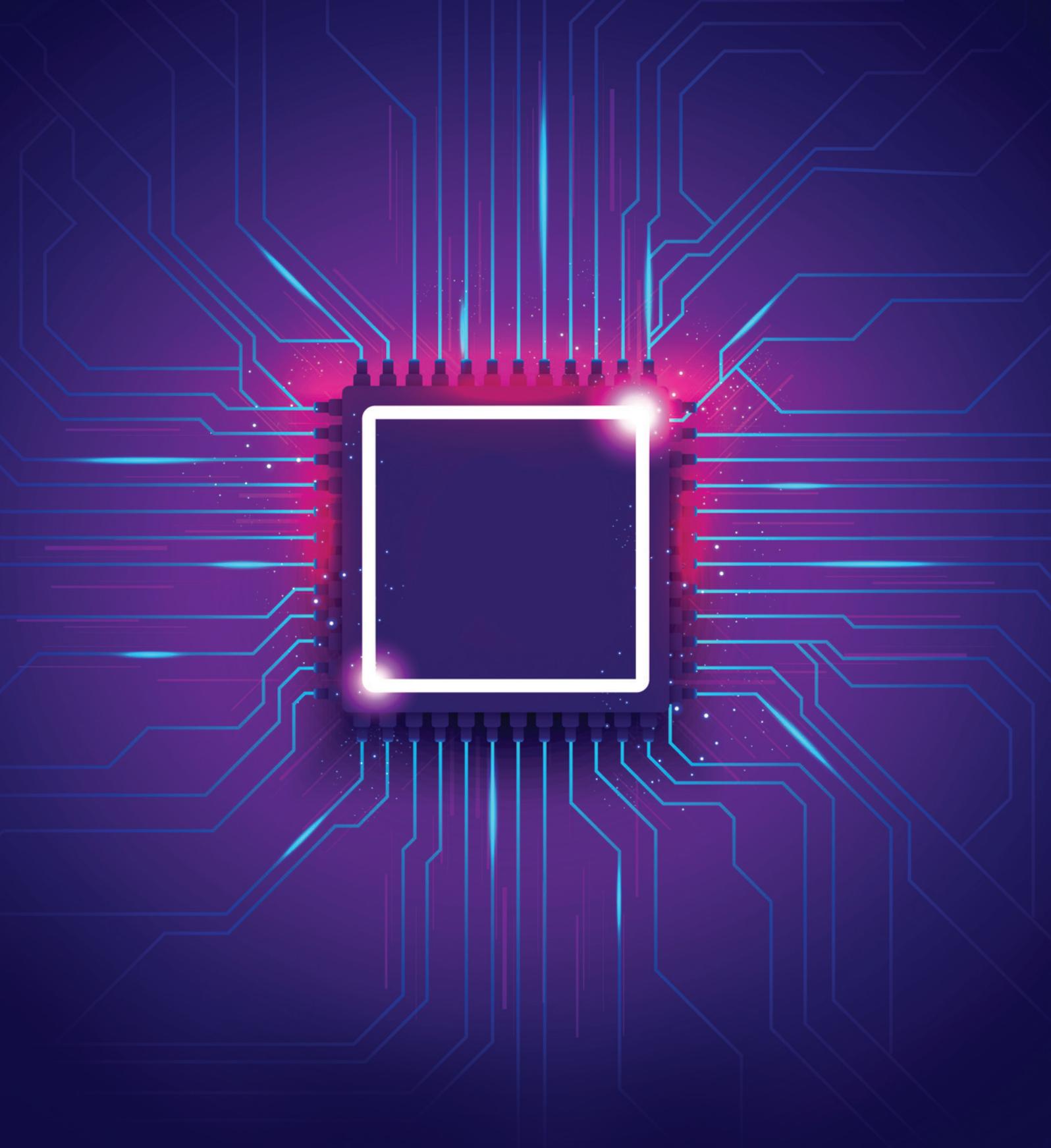
The value of the payroll professional is in the power of the insight into labour trends, practices, and costs that they can share with leaders to support decisions related to labour management. They should be free to focus on activities that give them the best insight into this data. Oracle's Cloud payroll solution is fully integrated with Oracle Cloud HCM and positioned to enable paying employees in several countries around the globe. Cloud payroll is designed to digitally transform the payroll process by automating, simplifying, and streamlining day-to-day activities. This is accomplished through the extensive use of innovative technologies like Robotic Process Automation (RPA), continuous calculations, real-time interactive integrations, and Artificial Intelligence (AI), all intended to empower payroll staff to work smart.

AI is used for continuous data validation to ensure a fast and high-quality payroll process. Our payroll engine can calculate pay for more than 200,000 employees per hour. We continuously enable optimal processing speeds to increase productivity and efficiency across the payroll process by leveraging AI.

Chatbots contribute to increased efficiencies across the payroll process, and they also can be used to encourage timely, consistent, and accurate responses to payroll inquiries. Over time, Chatbots have become more intelligent and can answer more complex payroll inquiries and increase contact centre metrics like the first-time error resolution rate, and frees payroll staff to work on other more value-added activities.

Chatbots can also further ease self-service by responding to employees' spoken commands like "Let me see my last payslip." This is all part of our commitment to leverage digital technologies like AI to enhance the employee experience.

As our commitment to payroll and the payroll professional continues, AI will play a role in our quest to leverage innovation to streamline the process to help elevate the payroll professional.



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