

UNIT ONE

Groundwork for Workforce Asset Management

BEGINNING WITH THE CONTENTS OF UNIT 1, the growing need for operative and strategic workforce management (WFM) technology tools and meaningful data will be evident. Both employer and employee encounter challenges around increasing productivity, reducing costs and increasing income, compliance, attracting and retaining good workers, and facilitating adequate work-life balance while delivering high-quality products and services. It takes a well-planned approach that melds and balances four business disciplines to prioritize and address these challenges. The recommended solution for employers is the workforce management office or officer (WMO) model wherein certified Workforce Asset Management Professionals (WAM-Pros) work to effectively secure and deploy these tools. This model overcomes the disconnect between identifying the need and putting important solutions into practice. The WMO is a new senior level business unit or delegate whose leadership role is filled by the WAM-Pro.

Yet, a WAM-Pro cannot easily accomplish the organization's goals or objectives without proper authority and autonomy. Luckily, this can be established from within or by the WMO. The priorities of both WMO and WAM-Pro should be those WFM tasks that positively affect the organization and help it meet its executive level goals. WAM is identified as a cross-disciplinary specialty; it represents the convergence of human resources, information technology, finance, and operations. The roles of the WAM-Pro and WMO should extend beyond the boundaries of a specific business unit. For example, when WAM-Pros report directly to an information technology (IT) manager, then their work is prioritized along IT-specific objectives. When a request for a custom staffing report comes in from an operational department, although this would be a task for the WAM-Pros and WMOs to assign to IT as a priority, their IT manager may instead prioritize an IT objective such as maintaining the current server capacity over

expanding equipment to support the new staffing report. The WMO avoids this conflict. A WAM-Pro uses the WMO as a platform to effectively prioritize and address WFM needs across the organization.

WAM-Pros should operate from a multidisciplinary perspective. The WAM-Pros are charged with elevating WFM systems and practices from tactical to strategic. They operate as leaders accountable to the achievement of a growing list of financial and operational workplace initiatives. The WMO is designed to move WFM systems from back office tactical devices to front-end mission-critical operational systems. With the proper authority and channels of communication, the WMO gives WAM-Pros a centralized, recognizable, and respected hub closely aligned with senior operational and financial leadership. The WMO is a place where leadership, strategy, and accountability convene on behalf of stakeholders, managers, employees, and ultimately customers.

Different organizations have different needs and experience different issues. Issues could be related to compliance, productivity, labor cost, workplace alignment, meaningful analytics, managing risk and volatility, company culture, or may even reflect a combination of them all. What should be noted is that these issues will drive the need. And if WFM business needs are to be effectively met, both the WMO and the WAM-Pro should be evolving with the changing priorities and requirements of the organization. For the WMO, evolution means taking ownership of WFM issues and addressing them in real time. There is no one-size-fits-all solution, so the WMO should prioritize the application of actionable, data- and technology-centric WAM solutions. The WAM-Pro evolves in a similarly strategic and operational fashion—aligning high-quality people and intelligent technology, and then teaching others how to manage and utilize these assets to predict results or accomplish certain objectives in real time.

The WAM-Pro is not simply a techie, or strictly a consultant. Because of the many aspects of WAM, there are a variety of tasks that the WAM-Pros can be involved in and jobs they can do. From strategic planning, discovery, development, management, compliance, training, and so on, WAM-Pros can look forward to many different career paths and areas to share their knowledge and experience. WAM-Pros' roles are to enable organizations and their people to adopt, engage, and improve their workforce management systems and outcomes.

Introduction and Background

IN THIS CHAPTER, THE FOCUS is on defining Workforce Asset Management (WAM) and explaining some of its essential components. This chapter introduces not only the concept of WAM, but also further develops the conversation by explaining the need for WAM in current business practice, identifying the other areas and departments that can benefit from WAM, and tracing the evolution of the technology associated with WAM. This chapter encourages employers by connecting current or recurrent problems in the workplace to new, impactful methods and solutions. This chapter is intended to inspire and provoke employees to be a part of developing the role of the Workforce Asset Management Professional (WAM-Pro) and implementing these WAM solutions.

Learning Objectives

By the end of Chapter 1, you should be able to:

- Define Workforce Asset Management (WAM) and the four fields of management that converge into the cross-disciplinary specialty of WAM.
- Explain four primary reasons that WAM has become essential to twenty-first-century organizations.
- Identify the subdisciplines of management that have to be converged to achieve effective WAM.
- Understand what business skills are necessary to solve problems in the workplace using workforce management (WFM) technology.

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- Locate potential gaps in organizational knowledge and resources related to WFM systems.
- Recognize the emerging and expanding roles and responsibilities of workforce management technology professionals.
- Describe the value proposition of various workforce management application and implementation approaches.

1.1 WORKFORCE ASSET MANAGEMENT: A CROSS-DISCIPLINARY SPECIALTY*

Workforce Asset Management (WAM) is the integrated discipline of sourcing, structuring, developing, compensating, and managing the people in an enterprise—whether a business, a healthcare facility, an educational institution, government agency, or other—through the effective utilization of technology and workforce analytics derived from that technology. This new discipline is the convergence of functions within four widely recognized fields of management, specifically human resources, operations, finance, and information technology (see Figure 1.1). Workforce asset management differs from human resource management because it is concerned not just with the strategic management of people to derive value for the enterprise, but rather with creating value through the combined strategic, operational, financial, *and* technological management of the workforce in real time from frontline employee to chief executive. This converged approach is focused on producing value both for the enterprise and for the people themselves.



FIGURE 1.1 The Spheres of Influence for Workforce Asset Management

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* This section was contributed by Susan L. Koen, PhD.

Workforce asset management is essential in twenty-first-century enterprises for four reasons. First is the reality that *all* of the people in an enterprise today, not just a few formal leaders, are essential to achieving mission success. Second is the recognition that people are more than human resources and more than human capital—they represent the critical, differentiating asset of an organization (albeit an amalgam of both tangible and intangible means of creating value). Third, and equally important, is the increasing cost of locating, maintaining, and improving the performance of desirable people for the enterprise. And, fourth are the increasing risk management demands as well as regulatory and contractual obligations associated with modern workforce management. Businesses, public institutions, or nonprofit organizations that do not understand and operate with these four facts in the forefront may lose ground to the competition that learns to apply WAM effectively or suffer from the simple economics of not managing the workforce well.

From a strategic perspective, the value of WAM is its cross-disciplinary mind-set and competencies that enable an enterprise to more effectively and efficiently align people for the achievement of its mission, strategic vision, and key performance indicators (KPIs). Compared to the discreet disciplines of human resources (HR), information technology (IT), finance, and operations, WAM views people and technology as core, integrated organizational investments that need to be (and can be) *managed* effectively across the enterprise to enable peak performance, facilitate the leading returns on these investments, *and* deliver a positive quality of life. Optimizing people in the modern enterprise requires the rapid and effective utilization of workforce analytics. No longer can enterprises succeed just with the use of time and attendance software that processes and reports hour data to payroll systems. Rather, modern-day enterprises require the integration of a growing range of people-related data from core software applications like enterprise resource planning (ERP), human resources information system (HRIS), talent management, workforce scheduling, and leave management, along with timekeeping, to deliver a clear and continuous picture of the current state and required actions for optimization of workforce engagement, performance, costs, and value-added impact.

From an operational perspective, day-to-day and even hour-by-hour decision making is enhanced through the availability of data from integrated WFM systems that are interpreted by certified, professional workforce asset managers. Business enterprises and healthcare facilities, for example, can use converged workforce analytics to identify a high-quality, trained, and fit-for-duty employee to replace an employee on planned or unplanned leave. Institutions that are under careful cost-control pressures can manage **payroll leakage** while simultaneously developing the competencies and engagement levels of their staff. In short, WAM enables both manager and employee to have integrated information for managing their deployment and utilization optimally *and* in real time.

(a) Cross-Disciplines of Workforce Asset Management

Achieving both strategic and operational Workforce Asset Management requires the successful integration of 14 major subdisciplines under the four major management

categories of human resources, operations, finance, and information technology. Each of these is listed and explicated:

Human Resources Management

- **Compensation and benefits.** Management of both monetary and nonmonetary rewards given to employees.
- **Labor laws, contracts, and compliance.** The legal requirements for employment and workforce utilization that govern an enterprise in a given location.
- **Safety and security.** Organizational efforts to prevent and/or mitigate risks and associated losses to people and the enterprise as a whole; this includes access control, which refers to the growing need to control people traffic in and out of sensitive locations or within specific hours. Security concerns are addressed with biometric technology analyzing reported labor activity and granting entry onto premises or into systems.
- **Staffing/talent management.** Management of the employee life cycle, including sourcing, recruiting, hiring, onboarding, and retaining the preferred candidates for designated jobs in the organization.
- **Training and development.** Ongoing expansion, retention, and improved application of workforce capabilities so that people can add value through their work.
- **Work-life balance and employee well-being.** Various organizational policies and practices aimed at working diligently toward a positive quality of life and optimal energy management for employees, including the use of both physiologically and socially compatible work schedules, telework and job-sharing opportunities, and flextime.
- **Global HR.** Administration of worldwide people deployment, including expatriation and repatriation as well as legal compliance across a wide range of countries and local entities.

Operations Management

- **Production scheduling and control.** Alignment of customer and enterprise demands with operational capacities, including people capacities and availabilities, in order to produce goods or deliver services in an efficient and effective manner.

Finance Management

- **Payroll.** Processing, reporting, and maintenance of records, including paychecks, related to employee compensation and certain nonmonetary benefits, including data that are legally required to be maintained and reported to governmental entities, such as federal and state agencies in the United States (and other countries in the case of multinational enterprises).
- **Finance.** Allocation of labor expense to the proper cost center so that the organization can effectively manage price, cost, and profitability. These efforts also include reporting to funding sources such as grant monies in academic settings or payers for healthcare services. Allocating labor deployment costs also helps organizations take full advantage of equipment utilization and capital investments.

- **Audit.** Review and validation of processes and data related to the workforce. This is essential to the organization's ability to avoid noncompliant activities and to defend itself from labor-related litigation and grievances.

Information Technology Management

- **Business/IT alignment.** Dynamic integration of IT to achieve business objectives, including market competitiveness and financial performance.
- **IT sourcing.** Location, evaluation, and engagement of vendors for IT infrastructure components; in the case of WAM, the emphasis is on sourcing certain types of hardware, software, or cloud (online) solutions.
- **Telework.** Extension of business systems beyond the employer's premises so they are available to remote and mobile workers.

(b) Workforce Asset Management Applications

Achieving both strategic and operational Workforce Asset Management also requires the integration of a number of major software applications or online solutions. These include:

- **ERP (Enterprise Resource Planning).** Software that integrates internal and external management information, typically from sales and service, operations, and finance/accounting, for the purpose of delivering comprehensive and timely information to internal business functions and related external stakeholders and business partners. This category includes industry-specific software, like point-of-sale (POS) systems in retail and clinical systems that house patient care data in healthcare facilities.
- **HRIS (human resources information system) or HRMS (human resources management system).** A software or online solution normally packaged as a database that enables the entry, tracking, and storage of employee information for the combined needs of human resources and payroll.
- **Talent management system.** A software or online solution designed to improve processes for recruiting, developing, and retaining people with the required skills and aptitude to meet current and future organizational needs. This type of system typically is designed to interface with an HRIS or HRMS.
- **Timekeeping.** Manages data and rule sets for payment and reporting of employee activity. Configured software or online solutions are designed to increase efficiency, visibility, and accuracy of time records.
- **Workforce scheduling system.** A software or online solution designed to streamline and update the process of matching the right people to the production/service demands of the enterprise in a manner that meets both the cost and performance concerns of the enterprise and the personal quality of life and financial needs of employees. Note: These applications may be fully integrated with the timekeeping system or incorporated as a stand-alone application that interfaces with other WFM systems.
- **Leave management system.** A software or online solution designed to manage various types of absence and leave activities and programs. Note: These applications

may be fully integrated with the timekeeping system or incorporated as a stand-alone application that interfaces with the WFM and HRMS systems.

- **Workforce analytics.** Use of statistical models that integrate internal and external data to predict future workforce and talent-related needs, behaviors, and outcomes. Note: These tools can be integrated fully into WFM systems, operate as a stand-alone product interfaced to WFM systems, or operate as a module fully integrated with the timekeeping system.
- **Billing systems.** Applications that manage revenue or payer data to report, reconcile, and collect income related to labor activity.

(c) Workforce Asset Management and Value Creation: A Call to Action

Achieving sustained, measurable results in twenty-first-century enterprises depends on the creation of value through the effective convergence of people and technology assets. Enhancing the collective impact of these assets in today's complex and dynamic world requires the cross-disciplinary mind-set and competencies of WAM. Through the integration of organizational disciplines and systems that touch people, and thereby impact organizational performance and value creation, modern-day businesses, non-profits, and public institutions can obtain the comprehensive and timely information and understanding they need to reach their strategic goals.

Organizational stakeholders from the human resources, operations, finance, and information technology management disciplines are called to meet the twenty-first-century need for timely availability and utilization of broad and meaningful people data. They are specifically called to expand their knowledge and capabilities, so they can take this new integrated, cross-disciplinary approach to simultaneously improve both people performance and people-related costs. This Workforce Asset Management book of knowledge and the WAM-Pro certification hold the key to the mind-set and required competencies that are essential to value creation today.

1.2 INCREASING BUSINESS NEED FOR WORKFORCE MANAGEMENT TECHNOLOGY*

Integrating workforce management technology into business practices is nothing new. The gains from automating the *manual* processes and tightening up compliance are easily understood. What knowledge may be missing is that of incorporating Workforce Asset Management technology into the *decision-making* processes and operations activities involved in actively managing the workforce *and* the work being done. WAM addresses issues from tactical application, such as flagging latecomers to help with attendance management and policy enforcement, to strategic planning and forecasting, such as using data from sales to anticipate need for labor on

* This section was contributed by Lisa Disselkamp.

certain projects or at certain times, and cutting unnecessary labor and extraneous costs at others.

Nevertheless, there are specific challenges around WAM, and businesses should know how they impact timekeeping, labor scheduling, leave management, and workforce analytics systems. With more and more compliance, laws, and regulations to consider, managing labor activity, data, and pay has become increasingly complex. Changing needs of employers and employees can put a strain on work-life balance and business capacity. Telework and instant communication between employees and managers dramatically changes the dynamic of supervision and the boundaries of the workplace. Intelligent technology systems and processes can reduce paperwork and assist with management, but may increase the need for careful configuration and security controls. Recognizing the business skills and resources necessary to prepare for and leverage these technologies can help the organization identify gaps in knowledge and practice that can impede effective deployment of WFM systems.

(a) Specific Business Problems

Workforce asset management has the ability to deliver real-time results to real-world business problems. Imagine being able to free managers from having to track and handle absences (determine which are planned, unplanned, the Family Medical Leave Act [FMLA], and so on) so that they can focus on managing their team; or having a self-scheduling systems that updates in real time so employees and managers can schedule according to need and availability, and avoid confusion and inadequate labor. WAM-Pros should be leaders in the development, implementation, and adoption of new WFM technologies and WAM practices that may help solve some of the workforce's greater problems.

i. Striking a Balance between Compliance and Productivity

Two primary concerns in managing people are compliance and productivity, which at times may seem to be in conflict. Businesses require productivity; yet productivity is contingent on compliance. Compliant labor management entails the appropriate execution and enforcement of a long list of rules and regulations. These rules originate both externally—from parties outside the employer—and internally from within the organization. The rules dictate what employees do, when and where they work or rest, and what happens under certain conditions of work. The government—federal, state, and local—applies regulations governing how employees are paid, their working hours, and various rights for leave and separation. The rules vary and can include rules based on age and job description, type of industry or service, physical ability, and employment status.

Compliance is also mandated by company policies that define various compensation programs such as premiums for working various hours of the day or days of the week, or for being on standby. Employer policies dictate available paid and unpaid time-off rules, how time off is requested and affirmed, and what happens at termination. Internal rules may include guidelines for where an employee may take a smoking break, the length of meal breaks, and which time-collection device an employee

is required to use. Internal policies also tell technology administrators how to set up system user access and what data must be protected. There are external guidelines for data privacy as well.

Employers that have bargaining agreements (i.e., union contracts) with their employees have another set of rules to follow that define many time and attendance activities such as scheduling practices, compensation, and procedures such as how a manager should assign overtime hours.

Workforce management systems are used to enforce compliance with these rules across the organization. In today's litigious environment, the employer should be able to demonstrate fair and consistent management of workers or face costly grievances or legal action.

From an organization's operational standpoint, productivity is a critical element of WFM. Luckily, this technology is well suited to match employee skill sets, experience, availability, and expense to desired volume, quality, and cost of services and products, while also accounting for compliance rules.

ii. Controlling the Cost of Labor

The survival of an organization is dependent on successful asset management. Generating income is critical, but producing a good or service creates labor expense. WFM systems are where compensation policy and scheduling practice manifest themselves into compensable activity and cost for the organization. Payroll systems have long been the focus of payroll spending management. These systems manage historical data, meaning after-the-fact information on the employee's work activity that is now an obligation to pay. Payroll processing has become more efficient and methodical and has enabled payroll professionals to manage compliance more closely. But payroll systems cannot offer the type of real-time data that is necessary to forecast or actively reduce costs.

Labor cost reduction is often tackled from the human resources angle with reductions in force, redesigned compensation plans, and wage freezes. Reducing head count is one way to lower the cost of labor, but operationally the organization must have workers to produce goods and services and sustain the business. Controlling the cost of labor will still be an issue with the remaining workforce.

WFM systems offer an intelligent alternative that solves the problem of managing labor cost. Used carefully, and *with intent*, the WAM-Pro can find ways to engage this technology to influence the amount of money the organization spends on labor.

iii. Engaging and Aligning the Workforce

Labor engagement and alignment with organizational objectives are fundamental in an organization's strategy for success. Innovation and growth depend on a high level of service quality, customer satisfaction, and production efficiency. From the beginning, the workforce—employees and managers alike—should be applying themselves to the most important tasks and objectives of the organization. Yet to achieve such active and productive engagement, the necessary tools and benefits should be in place to effectively align and support the workforce. Leading

organizations align their WFM systems to deliver win-win situations where both employer and employee are satisfied with policy and practice. Organizations want a qualified and motivated workforce, but attracting and retaining such employees can be challenging. Let WFM systems accept the challenge of making the workplace productive, consistent, compliant, collaborative, transparent, responsive, and flexible. Keep strong players on the field and mitigate misapplication before it threatens the vitality of the organization.

iv. Streamlining the Reporting and Processing of Labor Activity for Payroll

Payroll is the original consumer of time and attendance data. Timekeeping data is sent to payroll on a recurring cycle that has no margin for error or missed deadlines.

Human resource systems demand time and attendance information to feed benefit, leave management, and compliance information systems, among many other needs. Rules for benefit and compensation programs require careful management. Accrual policies for paid time off can be quite complex in tracking of both the earning and taking of benefit time. It is not uncommon for the earning computations to be based on actual time worked. What better system than the timekeeping system to track and manage the benefit balances? Increasingly, compensation programs are designed around complex rules for eligibility and computation of pay. Not only does the organization need to carefully track how much time is worked, but when and under what conditions often determine the paid amount.

Accounting needs labor activity information to generate its financial reports and inform the organization about expenses, profits, and its investment in human capital.

Operational units are the latest consumers of time and attendance system information, and their appetite continues to increase. Such information allows managers to understand more about how their workforce operates and what it needs to function more efficiently. Are some night-shift employees skipping out early on shifts because the 12-hour shifts are too long to find appropriate care for their dependents? Does the organization really need three on-call employees for the opening shift when sales are not usually more than \$1,000? Workforce information offers significant opportunities to better manage operational objectives and business costs.

Information technology (IT) areas may also call on the WFM systems to supply important information to larger business intelligence or data warehouse applications. IT is often the conduit for collecting and disseminating critical information throughout the organization. IT can also supply workforce management systems with useful key performance indicator (KPI) data, which further enhances the WFM system's ability to manage labor activity.

Regulatory agencies, auditors, and outside attorneys will require the WFM system to produce reports on specific events, data, and company information. These requests will often exceed the standard reports or output, and require the system administrators to know their database and system design well enough to comply with these requests.

It is important to position the WFM systems appropriately in terms of governance and mandate. Reporting can potentially become the tail that wags the dog rather than the other way around. Essentially, when a system is administered solely around

reporting capabilities it can potentially diminish its ability to fulfill its primary mission of real-time workforce management. Knowing where reports should be executed and how many custom reports are essential keeps this activity manageable and leverages the appropriate reporting tools, which may be outside of the WFM system.

v. Data versus Meaningful Metrics and Analytics

Business intelligence depends not just on raw **data**, of which WFM systems have abundance, it also requires meaningful information. WFM systems are an incredible source of reliable, valid, and readily available data. More importantly, when designed properly they can provide *meaningful* data—**information** that is measureable and actionable. Competitive organizations use this information and analyze it so that it can be a predictor of what can happen or can be used as a scorecard to tell the organization how it is doing. Absence information is an example of data that must be qualified before an attendance issue can be identified. Timecard data must have a work schedule against which to compare reported time. How can the system report tardiness or absence if it does not know when the employee was scheduled to start working? To deliver valid data the source of the data should be verifiable. Data collection devices using biometrics such as finger scans, voice or facial recognition, or even simple badges and PIN numbers help produce data that is credible.

The business demand for workforce analytics can be met with a detailed set of technology tools that are designed to collect, analyze, visualize, and communicate that information.

vi. Mitigating Risk and Volatility

Workforce management systems contain valuable data and therefore are inherently tasked to manage risk. The systems are based on policy, regulation, and desired outcomes and should be configured with security, control, and visibility in mind. Each action allowed within the system should be assigned on an as-needed basis by user role. Reducing risk typically means limiting the number of people who can perform certain actions. Yet, it is not uncommon to have exceptions. What should be managed is *who* can override those policies inside the WFM system and *who* monitors those overrides.

With financial systems, fraud is a regular concern. Workforce management systems are financial systems by design because they are used to generate and direct payments to individuals. The security features are designed to avoid fraud and abuse, but they are not foolproof. Employers should understand the areas where fraud is possible and most likely and secure the leading technology for their situation to mitigate the risk. The controls extend end to end from biometric devices for employee data entry to audit trails to track system administrator inputs. Another aspect of fraud is gaming the system wherein employees do not actually violate rules but abuse the lack of clarity and controls in the system. The risk here is that substantial payroll leakage (unintended labor spending) can create serious financial costs.

Compliance and fraud prevention are expected and perhaps even somewhat routine. But organizations are also hit with the unexpected change. Disasters and economic pressures put WFM systems to work when they are expected to handle calamities such as natural disasters, technology malfunctions, and market conditions that can quickly

bring operations to a halt. However, people still have to be paid and employers continue to have reporting and operational demands to meet. Workforce management systems often do a good job of providing a backup plan, preserving data, or quickly flexing for an unusual circumstance, especially when compared to entirely manual systems. The WAM-Pro manages these risks with disaster contingency plans that leverage the WFM system's ability to quickly recover.

There are also planned changes such as mergers, corporate acquisitions, growth and expansion, new systems, new people, and new rules and benefits that present challenges to the employer. As the business evolves the workforce management system should evolve, too. Unfortunately, too often WFM (timekeeping, scheduling, and leave) systems are the last to be converted but must meet the same new program go-live date. Intense pressure can be placed on workforce management professionals to convert systems and people to the new model within a short time frame. WFM systems have grown up in this constantly changing environment and choosing a product that is highly configurable, flexible, and allows for easy testing and evolution can increase the ability to keep these systems in sync with and fully supporting the organization as it evolves.

vii. Administration of Benefits and Compensation

The human resources office is often viewed as the administrator of benefits and compensation. But HR work (benefit plans and compensation policies) is primarily on paper until the work activity happens and the worked time is applied to the policies and programs. Time and attendance systems, including leave management packages, are where benefits and compensation manifest themselves into actionable and compensable events. These systems collect, compute, report, and track how benefits are earned, granted, and paid. The employer relies on the WFM system pay rules to enforce each minute detail of the pay policy. Managers may also get involved in discretionary or situational comp and benefit practices, and WFM systems can also perform that job within the constraints of the proscribed policy and practice. These systems facilitate consistency among managers and provide transparency at the upper levels to make certain that only what should be paid is paid.

viii. Culture

Perhaps one of the more disconcerting demands put on workforce management systems is when a system is trapped within an environment of inertia, lack of organizational maturity, poor leadership, or one that is experiencing a persistent regression effect (i.e., an attachment to doing things the way they have normally been done). In these situations either not much is demanded of the WFM domain, or too much is expected with little support to adequately get things done. Even with a leading WFM system, the organization cannot help itself. Much of the functionality sits idle on the shelf until an emergency arises, or the pain from neglecting the issue grows too great to ignore. Surprisingly, in some cases the system itself is blamed and the employer looks for a new system to replace the presumably inadequate product they already own. The real inadequacy was in the culture that refuted proper system design, implementation, and adoption.

(b) Know What You Want the Technology to Do

Workforce management systems by themselves are not the answer. They are a tool for improving business activities. They need an adept hand and a mature environment. The system cannot fix what is fundamentally broken. Enhancing something that should not be happening is not an improvement. For example, if managers can change punches and a new technology simply makes that easier, that is not an improvement. The managers should not be editing punches in the first place. The system should not simply make things easier or faster, but should help organizations to achieve new and more effective ways of getting things done.

WFM systems are often asked to solve problems that have nothing to do with a lack of technology. The problems are a combination of lack of understanding, shortage of information, and the absence of any hard science applied to the practical business problem at hand.

A simple example is how schedules are created and the propensity for certain departments to incur overtime. The patterns and shift assignments that have historically been used may not be based on criteria that support high-quality performance and minimal labor hours. Simply automating the current model—despite being easier to post and react to, or including more schedule features and options—may not create an appreciable reduction in overtime.

Missing are the specific business principles and the knowledgeable staff required to apply them. WFM business practices and technology require special skills and knowledge. Many of the activities are not taught in formal education programs. How many business schools teach future managers the techniques and science of labor scheduling by industry and situation?

The organization should assess its operational model and ask, “Do we know what we are doing and why?” before trying to do it better, faster, or with more information. Before making such an investment, leadership should be meticulously assessing the organizational requirements and aligning the appropriate staff around accomplishing these needs. How will leadership know the appropriate staff? They will be those certified WAM-Pros who have the knowledge and experience to tackle WAM problems. Perhaps the role of WFM technology implementation is not to improve systems, but rather replace and evolve business activities.

1.3 EVOLUTION OF WORKFORCE ASSET MANAGEMENT TECHNOLOGY*

Workforce management systems started out as simple mechanical devices dating back to the 1890s, but have now become fully integrated Web-based computer systems expanding the domain of WFM from basic timekeeping to broader management of labor activity, cost, schedules, leave management, and workforce analytics. Unfortunately, the approach to managing the workforce has not changed as dramatically as the mechanics of capturing,

* This section was contributed by Lisa Disselkamp.

computing, managing, and reporting labor activity. Although the tools have evolved making the processes more efficient, the focus has remained on the tactical processes.

Organizations may be frustrated that the technology or system solutions are not solving their problems, or perhaps they are solving only symptoms of larger problems. The old problems seem to have evolved, too. But they are not alone. A community of innovators pioneering new answers to old problems through technology, policy, and practice is coming into its own. These leaders are helping the employer answer the challenges of an increasingly regulated, competitive, and litigious business environment and a more demanding workforce in order to remain viable and reduce risk.

(a) Evolution of Timekeeping Systems

Mechanical time clocks were first introduced as a technological device in the late 1890s, but the technology remained fairly stagnant for many decades.¹ It was not until 1977 that a microchip was put into a time clock making it the first intelligent device able to not only record time stamps but also able to execute simple computations.

Concurrent with that development were the emergence of complex computing systems and an environment of increasing complexity around how people are paid. Capturing the time and adding it up was no longer enough. The systems needed to be able to apply rules and report figures to remote locations efficiently and systematically. In response to these demands, an industry of device manufacturers and software developers introduced an increasing variety of time-collection devices with intelligent design. With the intent to cut down the amount of unnecessary tasks, these systems were integrated with software applications that could handle the details and volume and had the capability to communicate concurrently with other WFM systems. Technology was designed and configured to pay people, process taxes and benefits, and report to the organization information about labor expense. By the late 1990s, employers were routinely using automated time clocks that were fully integrated with timekeeping systems.

Over the next decade, biometrics, telephony, and bar code technology were introduced. **Local Area Networks (LAN)**, **Wide Area Networks (WAN)**, and the Web were also developed and growing in usage. With centrally controlled clocks that could quickly analyze and export data, it became easier to validate data and distribute it across networks or to other systems. These technological advancements changed the landscape of the workplace, and changed the mentality of the workforce. There was a sense of interconnectedness between systems, for example, when scheduling merges with time and attendance. In the past two decades, there have been many other leaps forward, from the ever-expanding wireless capabilities to cloud technology coming to fruition. Today, intelligent devices act as decision support systems, relieving managers of menial tasks, and alerting them to important, real-time information about operations, compliance, and finances. Much in the workplace has changed.

(b) Rethinking Where the Practice of Workforce Asset Management Belongs

To trace the evolution of Workforce Asset Management it is useful to review the terms used to describe this area of employer activity. The earliest origins of this employer

function were simply part of the payroll function. Timekeeping devices came about when time clocks were introduced to collect time. The term *time and attendance* was appropriate when attendance could be measured within the time collection process against a schedule of expected work.

Workforce management signifies a broader range of processes, including complex pay rule processing, segregation of duties by users of the system, and managing labor activity exceptions and productivity.

Workforce Asset Management now emerges as we recognize the ability to strategically manage people and technology with appropriate planning, investment, resource allocation, information, tools, and training to proactively effect positive financial and operational outcomes.

WAM is not a back-office accounting process. It is a front-end operational function that requires an operating model designed *with intent* to direct and support how the workforce is deployed and compensated. WAM leverages technology to institutionalize effective decision-making practices before, during, and after labor is deployed. The relative importance of the business function has risen to the level of strategic function. The financial and competitive significance likewise calls for senior leadership with direct and close relations with executives. Therefore, it may be better to situate this management area underneath or within areas that are strategic and operational, rather than administrative, and have ongoing relationships or authority at a senior level.

WAM is typically positioned as a stand-alone business unit with a director or equivalent level or higher leader at the helm. This new business unit is the **workforce management office** (WMO), which functions to support the entire organization and align Workforce Asset Management tightly with its strategic objectives.

A precedent has been set with the project management office (PMO), the business unit of today that manages projects for the enterprise to make certain that the required and applicable projects are pursued and each project is managed well. Organizations recognized that the process for funding and approving projects as well as managing those investments was not consistently in alignment with what would support the overall objectives or goals of the organization. The PMO elevated the function of managing projects regardless of size, domain, or discipline in a way that increased accountability and accomplishments for those investments and assets.

The model for the WMO is similar to the PMO, designed with appropriate authority, resources, executive level access, and accountability. Chapter 2 covers the new WMO model in more detail.

(c) The Multifaceted Role of Workforce Asset Management Professionals

As workforce management technology has expanded in functionality, the roles and responsibilities of Workforce Asset Management Professionals have changed considerably. The WAM-Pro certification constitutes the broad range of knowledge, skills, and abilities that the active professional should master to be effective as an owner of important organizational goals and systems. As described earlier, WAM is a cross-disciplinary

domain requiring knowledge in a variety of areas. The WAM-Pro is routinely involved in the following activities:

- Discovery and requirements gathering
- Visioning and planning
- Feasibility analysis and benchmarking
- System, process, and solution selection, and design
- Development and deployment of business and system solutions
- Operations administration and logistics
- Strategy and data management
- Testing and implementation
- Training and employee engagement
- Help desk and quality assurance
- Reporting and analytics

From planning to production, the WAM-Pro sees the process through, with innumerable details in between. The more detailed roles of the WAM-Pro can be garnered from the following chapters and sections in the *Workforce Asset Management Book of Knowledge* (WAMBOK). The responsibilities of the WAM-Pro have grown far larger and grander than simply managing time collection, reporting, and system issues. Because of the extensive knowledge and experience, a certified WAM-Pro should have many engagement options and various opportunities within an organization.

(d) Careers and Certification

Given that this knowledge landscape covers a diverse, highly technical, and continually evolving arena of tools and rules, it is nearly impossible for the individual to achieve and maintain the requisite knowledge and capabilities without help. Having *not* been recognized as a separate specialty knowledge area, many professionals have landed in their Workforce Asset Management role by chance rather than by design. Thus, they arrive with a background that may have only been marginally related to this line of work. Up until now, WAM experience and knowledge have been gained on the job. Training has consisted of technology-specific skills applied to a defined set of business problems and processes. One cannot yet join the workforce with a degree in WAM. The topic is rarely, if ever, taught at the college level. Nonetheless, many individuals do make a career out of WAM. But they are without a measure of whether they are strong performers in this area. Prior to the WAMBOK, there would be little agreement in the field on what constitutes a specialist or defines leading practice.

Associations such as the **Workforce Educational Organization** (WEO) and the Association for Workforce Asset Management (AWAM) are designed to address these concerns. This association recognizes the particular and specialized knowledge and competencies required to serve employers effectively. As the technology and business needs have outpaced the available education programs, a serious knowledge gap has emerged. The absence of a recognized standard of proficiency and the resulting void in terms of whom the organization should listen to on matters of workforce management also hurts employers.

Establishing a credentialed, professional role in this area will make it clear to leadership that those who speak with authority and understanding on issues related to their labor costs, productivity, and technology are measurably proficient.

The human resource leader who is assessing the organization's talent pool should establish a plan to recruit, educate, and support a career path that populates within its workforce skilled individuals who understand and apply the principles of WAM. Human resource leaders should consider the following: The career professional who specializes in WAM and predominantly operates to support workforce assets (people and technology) is the primary focus. Certified professionals should be resident in the business areas that manage labor cost and productivity, and within the **workforce management office** in particular. The WMO is essentially the center of excellence within the organization from which WAM knowledge, strategic planning, and leadership emanate.

The second talent pool to cultivate is the many users of WAM systems—be they direct operators who spend hands-on time daily or weekly using the systems (e.g., employees, supervisors, timekeepers, or schedulers) or high-end users who rely on the outcomes and meaningful data produced by the engagement of the technology on operations (e.g., managers, directors, VPs, chief financial officers, and chief executive officers). For the latter groups of individuals, workforce management is not typically their primary job, but they rely on WFM to do their job effectively. This pool of WFM users may suffer from the knowledge gap because they lack a full understanding of the interconnectedness of the systems they use and the outcomes from their work. When functionality of a system goes unused, for example, it is often because people do not understand what to expect, what to ask for, or how to use the tools they are given. This also relates to the positioning of WAM. The knowledge gap at any level perpetuates the old way of managing labor activity and cost as a tactical process rather than one based on strategic outcomes.

When the workforce does not understand the potential of the tools they own, the investment in both people and systems may not be fully leveraged. It becomes a serious financial concern because the lack of education and awareness are limiting the return on investment from systems, processes, and people. Leaders who recognize this situation can build a measurable business case for increased investment in educating, recruiting, and sustaining their Workforce Asset Management Professionals. Certified WAM-Pros can benefit the organization by:

- Expanded utilization of existing technology (more benefit from what is already owned).
- Tighter alignment of labor activity and cost with organizational objectives.
- Enhanced productivity for operations.
- Increased controls on labor expense.
- Improved decision support for frontline supervisors working to manage activity and cost.
- Establishing a defensible time and attendance model for audits, grievances, and lawsuits.
- Delivering more meaningful information about the workforce.

- More informed vendor and product evaluation.
- Return on investment analysis and realization.
- Competitive advantage.

The plan for evolving the workforce around this domain should include writing a strategic vision and the business case for evolving the enterprise's structure to include the WMO. Budget for a core group of people who are already involved in Workforce Asset Management to become trained and certified as a WAM-Pro is critical. These team members can then create internal education programs for the user community building internal competency around timely and important issues.

Chapter 2 explains the core WAM principles. Review these to plan for incremental steps for improving career development and education. For example, by identifying the organization's strategic objectives for this year, select one or two that relate to the workforce. Use the design review process and have core team and WAM users participate in the program. (Chapter 20 goes into more depth on design review.) Enlist an executive sponsor and set measurable goals for the next year, including financial metrics. Demonstrate to the organization how people and technology, armed with the knowledge and tools, can affect important and visible change. Use that to further expand WAM careers and opportunities.

For the individual, education is an essential component to achieving the desired results. Competencies that are certified can give the individual's skill set legitimacy and can elevate one's potential and importance to the organization. The process of becoming certified can also expose WAM-Pros to a new sphere of practitioners, technologists, researchers, and thought leaders who can support the WAM-Pro and position them as a conduit of valuable information and tools. The WAM-Pro programs and certification are designed to introduce a new career path by increasing knowledge and related opportunities for the WAM-Pro. WAM-Pros have the opportunity to join or start a study group, attend or teach a class on WAM, and engage others in the organization or circle of associates to get involved and champion the new models of innovation and technologies detailed here in the WAMBOK.

(e) Spotlight on Innovation and Understanding

So where have those involved or interested in WAM gone so far? An exciting outcome of the WAM certification initiative has been the assembling of many leading innovators from a broad range of specialties. The contributor list at the back of the book lists the individuals who have shared their vision, knowledge, and experience. Many of these individuals have been championing the benefits of Workforce Asset Management technologies and practice for a long time. The writers of the WAMBOK represent a widening circle of contributors and supporters who continue to enhance and expand the market's understanding and methodologies in this area. This is just the beginning for formalizing and disseminating the knowledge of Workforce Asset Management that pervades into many aspects of the workplace.

Today a body of knowledge has been created that encompasses not only the technology for time reporting and processing, labor scheduling, and leave management,

but also discusses practical solutions for a variety of worker concerns. For example, Dr. Susan Koen brings into the conversation understanding about issues such as fatigue and fitness for duty management. Susan Lambert, PhD is pioneering research and findings on workforce scheduling optimization providing practical considerations to help keep labor supply and demand in balance. André Houde designed scheduling applications and here expounds on how effective schedules can be built.

Dr. Charles Mullin, a labor economist, provides an inside look at labor data and statistical issues and Andrew Bagley, Esq. looks at timekeeping practice and design from the litigant's standpoint giving WAM-Pros the insight to create a defensible and auditable workforce management system. Joan Williams contributes to the advancement of workforce management responsibilities by sharing her research around progressive models for schedule equilibrium. The Department of Labor contributors introduce workplace flexibility and universal designs for including a widening array of worker capabilities. Everyone is aware of the increasing role that data is playing in our lives and Dr. John Hausknecht provides a practical guide to presenting and interpreting data—particularly when data is visualized graphically.

Numerous technologists have provided guidance on data management, security, privacy, and system administration so that those who come into this domain without a technical background can gain an understanding of the information technology environment and relevant issues. Even if your organization is not mature in this area, the information may be important and impactful.

Vicki Lambert, CPP, and Roger Smith, CPP, are prominent educators and advisers in the area of federal and state payroll regulations and practice. From their experience and knowledge, they share an inventory of important laws and guidelines to help employers make their workforce management systems compliant and accurate with configuration tips for WAM systems.

Mike King, PMP and MBA, was one of the early certified project management professionals, and provides a primer on various topics such as project management, vendor and product selection, and return on investment as they relate to this domain as well as many other significant contributions.

There is incredible potential in the WAM field. Whether interested in system or practice related fields, there are few, if any, limits on what a certified WAM-Pro can achieve. Where will you make your mark?

NOTES

1. Lisa Disselkamp, *No Boundaries: How to Use Time and Labor Management Technology to Win the Race for Profits and Productivity* (Hoboken, NJ: John Wiley & Sons, 2009).