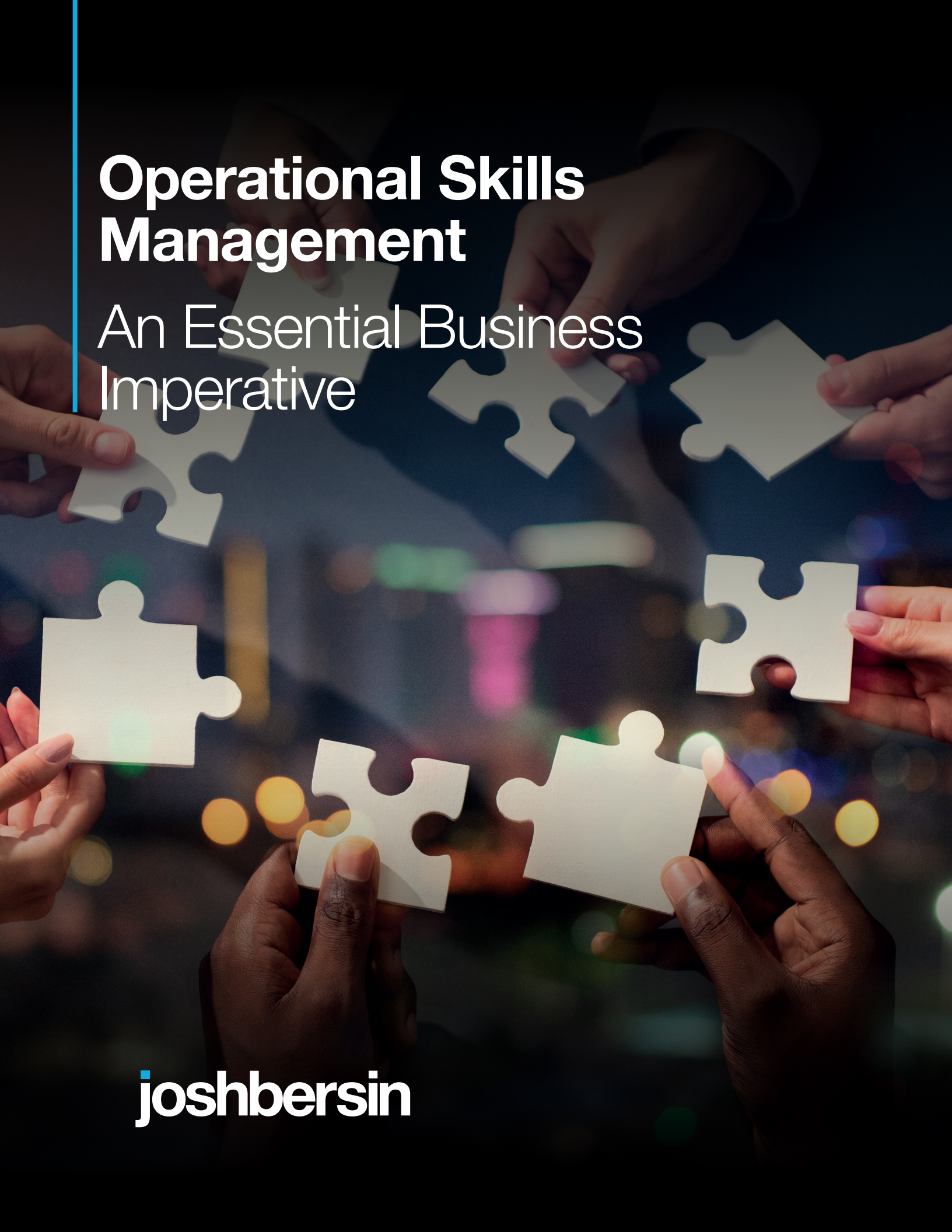
Operational Skills Management

An Essential Business Imperative



joshbersin

Every business and HR leader is worried about skills. Studies now show that the half-life of business skills is less than two years, and every job is becoming more automated, technology-enabled, and complex. And this means companies need to reskill, upskill, and transform their workforce on a very regular basis.

For some types of skills, this process happens behind the scenes. White collar employees read, take courses, and learn from peers, and we observe people's competence through their work.

For operational skills, however, the world is completely different. If an airline pilot or machine operator is not well trained, a massive accident or failure may occur. So, we need a more rigorous way to manage, measure, certify, and validate operational skills.

Every company has operational or essential skills. In healthcare, most nurses, technicians, and medical professionals must be licensed and certified. In manufacturing, workers must be trained, observed, and often validated. In field service and support, people must be trained in different models and versions of equipment and software. And in engineering and construction, people must be certified.

Figure 1: The Difference between Non-Operational and Operational Skills

	NON-OPERATIONAL SKILLS	OPERATIONAL SKILLS
What they are	Important skills that drive business results but do not need to be certified or validated	Skills that must be in place to operate the company, and are considered essential and must be validated
Example	Leadership, behavioral, diversity, values-based	Operating equipment, strategic technologies, software tools and expertise, product design, technical sales
How they are assigned	Broadly attached to the HR job code, recommended by management	Curated into the actual role(s) the individual is performing and dynamically assigned in granular, targeted buckets
How we observe them	Job performance and results, some testing, completion of training programs or content. Annual performance reviews.	Demonstrating proficiency in specific tasks, completing certification, validation of skills through successful work and operations
How we measure proficiency	Observation, some testing, feedback, reputation	Proof of competence, testing, direct observation, compliance validation
Risk of low competency	Poor employee engagement, lack of productivity, customer satisfaction problems	Fire, accident, equipment damage, personal injury, business disruption or failure

Source: Josh Bersin Research, 2021.

Industry View: Field Services

Companies in the energy or utilities sectors serve their customers with highly trained technical experts who perform complex operational activities on site. These technicians install or repair specialized equipment under strict regulatory requirements, and often must demonstrate competence to maintain their license to operate. As technologies, products and solutions change, operations teams continuously seek to upgrade and validate the skillsets of their teams. Deep visibility into the verified skills profile of every field worker is essential to ensure the right crew for the right job.

The Traditional Approach: Jobs, Competencies, and Proficiencies

For years companies associated validated skills with competencies attached to job descriptions. These competency models were often created by certification boards or company HR managers, and employees were then tested, observed, and hired against these models. Each competency typically had multiple levels of proficiency, and people were given a rating (1-5 typically) to determine their level of proficiency.

While this model makes good sense, it has not been well automated. Learning management systems tried to automate this process, but these platforms were often used for every job in the company, so organizations rarely adopted these features. As a result, a market segment of third-party skills validation tools has emerged.

Now that technology evolves even faster, this problem has grown in scale. Most people in operational jobs must be recertified or retrained on a regular basis, and in many companies every new product launch sets off a massive set of training that must be completed.

We also have the challenge of managing the validators or trainers. In most high-risk occupations (oil refining, for example), there are shift supervisors or other technical leaders who take responsibility for operations. These people must validate these skills and watch over new staff to make sure they're doing things correctly. Not only do we need systems to track who is certified, we also have to track who is qualified to do the certification.

In the early 2000s some learning management systems (Saba, Plateau) were designed to handle this problem. Unfortunately, however, these products turned into HR and talent management platforms, essentially leaving this problem as a difficult one to solve. Today most companies don't have a skills and competency-based compliance system, or if they do, it's running on a legacy platform.

The World Evolves: Add Skills and Skills Inference to the Puzzle

In the last decade, another new approach has emerged: the idea of creating a large skills taxonomy for the company. In this approach, companies look at all the skills they need, covering everything from communication and teamwork to software engineering, change management, sales, and leadership. These broad skills-inference platforms grew up from the digital learning domain, so they are mostly used to help find online courses or content. They were never designed for validated or operational skills, so they don't solve the problem either.

We've also found that companies aren't very good at simplifying this complex puzzle. Every job requires hundreds of skills for success. Some are must haves and others are nice to have. And some must be validated and certified. This means HR and training departments must decide what skills should be certified, which ones are highest priority to develop, and which are strategic and unique to the business.

When doing research on this topic, we found that the development of strategic operational skills is essential. Companies like Lockheed Martin, Intermountain Healthcare, and Aggreko have business reviews of the top essential skills to make sure all stakeholders are involved. These meetings become more strategic every year, and they help the company focus its attention on the most important areas.

In operational roles, these skills and competencies become very complex. Imagine a manufacturing company that has hundreds of machines, each of which requires operational expertise in starting, operating, tuning, repairing, and shutting down equipment. Very quickly a company starts to develop a hierarchical library of hundreds or thousands of competencies, some of which have to be updated on a regular basis.

As you'll read about in the case studies, our research found how important it is to prioritize which skills are essential. Vendors have thousands of skills in their libraries, but you may not need them all. What matters is defining which skills are essential and need to be operationally validated, and then reviewing this list with the business. Companies that do this well create a highly strategic asset and the skills become more refined and more valuable over time.

Lockheed Martin, for example, is focused on learning new technologies and skills that support twenty-first century warfare. NASA found it needed massive new skills to staff the Mars mission. Intermountain Healthcare uses its standardized skill library to drive quality and reduce redundant skills training. In each case, these companies identify priority needs through an annual planning process, and we urge companies to put a process like this in place.

Four Actions for Success

How should organizations approach the operational skills challenge? We see four activities as critical to the effort of building a competency management program.

Clarify what areas of your company demand operational excellence. Not every business function requires validated and certified skills. In some companies (i.e., highly competitive software companies) sales and customer service are very high value teams, so they are rigorously trained and certified. In healthcare organizations such as Intermountain Healthcare, the operational needs are in patient care, nursing, and healthcare delivery. In equipment maintenance and operations such as Aggreko, the operational skills needed are in implementation, customer project management, and equipment operations. And in other companies such as Lockheed Martin, the certified skills are in strategic technologies needed to win major government contracts. You should decide where to focus your operational effort and focus on areas which drive strategic revenue, differentiation, or have huge risk for poor execution.

Assign the right skills to the right roles. Second, you have to assemble your set of competencies and assign these to roles. In some industries (pharmaceuticals, for example) these are mandated processes and you may already have hundreds of granular competencies. In other situations, the competency models are in the minds of leaders and subject matter experts. It takes time to bring these together, discuss and debate them, and agree on what will matter.

Decide how to develop and validate skills. The third issue to address is perhaps the most important: how will we develop, validate, and certify these skills? Will we send people to training? Give them on-the-job coaching? Ask them to prove their expertise on the job? Or use simulation or testing? There are a wide variety of development and assessment options, and platforms like Kahuna can help you decide which fit best.

Roll out the solution and start planning for the future. The fourth part of the puzzle is to implement the model in a platform, roll it out, and teach the organization how to perform. In the companies we interviewed, the Kahuna platform became central to the company's mission, and then over time became a critical system of record. You must train and encourage (and sometimes require) people to use the competency system so you can keep track of competency gaps, identify leaders, and plan your workforce as your company grows.

An Industry View: Clinical Services

Organizations in the healthcare sector provide patients and customers with high quality care, often under incredibly challenging circumstances. Clinical employees are highly specialized workers who must continue to develop their skills on a regular basis to meet stringent regulatory requirements. As patient demand changes rapidly in healthcare settings, it's critical for operational leaders to have clear and accurate visibility into the skills available in the workforce to make confident staffing decisions.

Working with HR and Business Leadership

Operational skills must be led, aligned, and managed by business leaders, training professionals, and HR. Why? Because these strategies are essential foundations of the company.

Consider the training of nurses or healthcare workers in a hospital. Not only is this a business-critical issue for patients, it impacts hiring, operations, and ongoing leadership priorities. All stakeholders must buy in.

Consider an oil company, an electric utility, or a pharmaceutical company. These organizations may live or die by the operational capabilities of their people, so it's critical that business, HR, and L&D leaders work together.

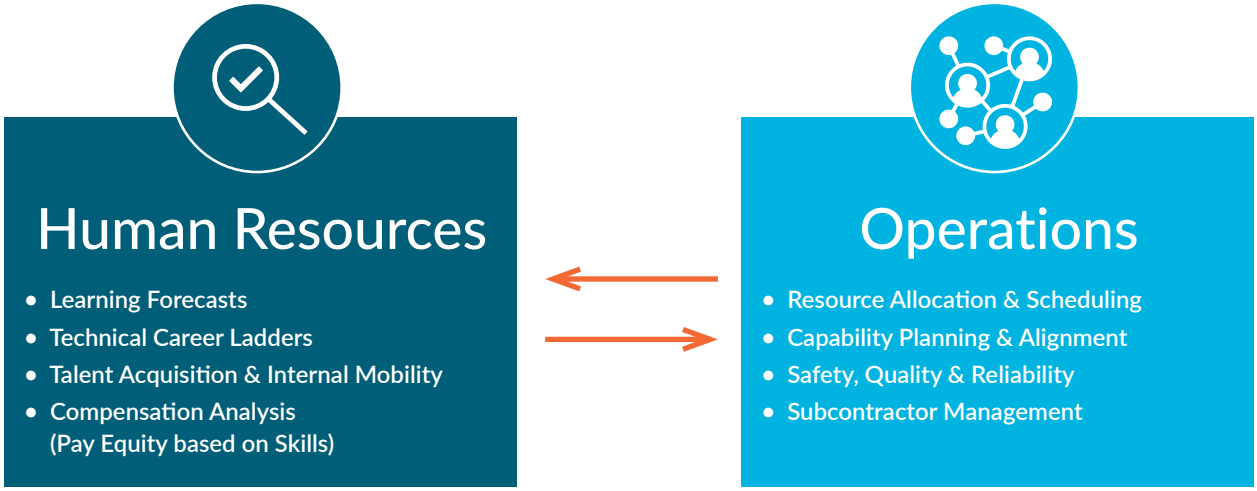
Many companies try to boil the ocean by developing large, complex competency models for every role. While this seems like a good idea, the sheer weight of the effort typically creates problems. If business and HR leaders work together, the company can focus its efforts on the most important business area, the most important roles, and the critical capabilities that make the company succeed.

Figure 2: A Partnership between HR and Operations

PROCESS	HR	OPERATIONS
Define skills	Identify critical roles and look at hiring, training, and pipeline needs	Define critical skills, proficiency levels, testing, and certification process
Manage skills	Put in place systems and processes that link to core HR systems for all essential employees	Make sure line leaders understand the process, tools, mandatory steps, and their roles
Develop skills	Develop a wide range of training and development offerings, including content, coaching, simulation, testing, and assessment	Help curate, contribute to, and implement development and make sure all employees understand the need to stay current and sharp on all operational areas

Source: Josh Bersin Research, 2021.

Figure 3: Uses for Operational Skills Data



Source: Josh Bersin Research, 2021.

Then L&D can help with the models, HR can help with job alignment and recruiting, and business leaders can communicate, reinforce, and explain the value of the program.

A strong partnership between operations and HR is essential. First, the operations team immediately sees the ROI of this strategy and can cost justify the effort. Second, when HR and operations work together, the skills system can be used for training, hiring, pipeline management, and other purposes. Third, by working together the HR business partners are fully aligned with all operational needs. Training can be designed to happen in the flow of work, whether in the field or on the hospital ward; assessments will be rigorous enough to meet all compliance and safety requirements; and your company has a platform to roll out new products, services, or operational procedures.

Operational skills can be used for many important purposes. As this chart shows, once they are established, they can be used by HR and operations for a wide variety of business-critical needs.

In operations, managers and team leaders are equipped with deep visibility into their teams. This gives them the ability to easily and quickly assemble teams and schedule and deploy employees as needed. Projecting and addressing future skill gaps within a team or even for a particular employee is another important outcome. As business needs change, managers can adapt quickly to ensure their teams are prepared with the skills that matter most. And for high-regulation industries, having on-demand, up-to-date certification information about every employee reduces time spent preparing for organizational audits.

For HR, the value of deep, granular operational skills visibility is clear. Learning specialists are better able to track and manage training needs across the business, providing the right skills development at the right time, and in the most cost-effective ways. Access to high fidelity competency data also supports the HR team in workforce planning, with a clear view of current and future skills gaps.

And employees get clarity on what's expected of them today and in the future. Leading companies have switched on to the need to transparently signal to their workforce the roles and skills that are growing in market demand. We know that training and development are among the top reasons employees cite for staying with a company, so providing your workers with the skills they need increases engagement and fosters a culture of continuous learning.

Recommendations and Considerations for an Operational Skills Management Platform

Solution capabilities. Does the platform meet your operational needs? Can it manage multiple levels of competency, different assessment models, and different roles in the process?

Ease of use. Is the platform designed for the end user? Will your employees be able to interact with the solution at any location or setting, in the flow of work? What analytics are available for HR and operations leaders?

Integration with other HR systems. Is the system designed to integrate with your core HR and financial systems so employees, roles, titles, and job levels stay in sync as people move from role to role?

Assessment flexibility. Does the solution allow you to include a variety of assessment types, like self-reporting checklists, assessor verification, and on-the-job demonstrations? Can you assign different types of assessments and verifications to each competency?

Will the vendor support you as a partner? How experienced is the vendor at true operational skills management? Many companies offer skills features, but they don't focus on operational skills. Vendors who understand the nature of certified, verified skills have deep domain expertise and offer reporting, planning tools, and other advanced features you will need.

Conclusions

The past year has taught us clearly that the core operational skills of workers in settings like hospitals, manufacturing and energy services are essential, not just to the organization, but to the stability and safety of our economy. Now is the time to get deep visibility into the functional and technical skills of your enterprise, so that you are equipped with a resilient, flexible workforce that can meet the rapidly changing demands of the market, today and into the future.

Verified Skilling at Intermountain Healthcare

Intermountain Healthcare is an integrated, not-for-profit health system that serves people across Utah, Idaho, and Nevada. Comprised of more than 41,000 caregivers, the company operates a wide network of clinics, hospitals, homecare, insurance plans and telehealth services. It is focused on helping people in their communities live the healthiest lives possible. Intermountain Healthcare is recognized as a national leader in delivering high quality, affordable care.

With a commitment to continuously improving the quality of clinical care, there's already a strong culture of learning and skilling embedded in the organization's DNA. As Mark Lemon, director of learning and development at Intermountain Healthcare, said, "Skills training is baked into many parts of our organization. Healthcare is so dynamic, you are always training and retraining on the next process, the next piece of equipment. We need competent and capable caregivers who are ready for what's next."

Despite having a culture of learning, the challenge at Intermountain was clear. With a heavy dependence on paper-based records of skills and competencies, there was no level of discoverability across the organization. With tens of thousands of clinicians deployed in multiple settings, it was challenging for the business to ensure standards of care, allow for rapid redeployment of staff to support patient demand, or eliminate the inefficiency of redundant training.

In 2010, the company embarked on a mission to standardize the core operational training program of its clinical staff. The nursing education team and the corporate learning and development team came together to identify and organize the more than 5,000 clinical competencies that Intermountain manages. Curating the core skills by roles, clinical speciality, and patient acuity was a critical first step in the process. Early implementations with spreadsheets and internal platforms validated the importance of a digital approach to enable reporting, maintain standards and efficiently manage curricula across the system. Intermountain partnered with Kahuna to scale the strategy and provide a modern user experience for its caregivers. At Intermountain, there is a high need for verifiable skills assurance. Said Lemon, "In our environment, it's not uncommon for an external hospital auditor to come in and say 'Show me that this caregiver has been trained to use this infusion pump.' It's very specific and has detail and validation that goes far beyond the attributes of your typical employee or LinkedIn profile".

The Kahuna platform's assessment flexibility was well suited to meet Intermountain's needs. The company utilizes many levels of evaluation in the system today, from self-reporting to assessor-driven demonstrations, maintaining an up-to-date granular view of every clinical employee's proven skills.

Today, as Intermountain continues its skilling journey with more service lines and other hospital systems, the company recognizes the importance of bringing together operations and HR to truly institutionalize the strategy. "It started with nursing and learning and development teams working together to identify the problem and build a competency framework to optimize training. These partnerships are essential to connect all the expertise needed to create and evolve the solutions."

Aggreko: Mapping Operational Skills of a Global Workforce

Headquartered in Glasgow, Scotland, Aggreko is a leading global supplier of temporary power and heating and cooling solutions. Employing 2,500 field technicians in 195 locations around the world, the company provides everything from short-term energy services that power local events like concerts and sports tournaments to longer term energy provision in some of the hardest to reach corners of the world to emergency relief in countries struck by natural disaster.

With highly specific skills required by every field technician, company leaders set out in 2019 to ensure they knew exactly what and where the operational capabilities were in their global workforce. A strong focus on safety also drove the need to have extremely high confidence in the level of expertise in each of technical employees. Aggreko partnered with Kahuna to provide a skills solution to meet its needs.

“There’s a big push in the energy market to have a deep understanding of what skills we have where and to get a picture of what our workforce competencies look like at a granular lev at all times,” said Walter Davis, global head of talent and learning technology at Aggreko. “We also need to make sure that the skills of our technical employees are rated consistently and that there’s evidence to support each rating.”

As a first step in its journey, Aggreko’s global learning team began working with the business to create a skills framework. Starting with product areas made sense for the company. The team defined buckets of skills based on product lines and services and then further broke these buckets into specific skills and competencies. As part of this work, the team also explored the existing role hierarchies in order to attach skills and expertise levels to each operational role.

“The exercise of curating the skills taxonomy and role hierarchy allowed us to consolidate our job roles quite a bit. Now we can focus on multi-skilled roles which allows us greater flexibility in the field.”

Today, as the energy market continues to shift toward renewable sources, Aggreko expects to continue to build on its operational skills framework in the Kahuna platform.

Lockheed Martin Missiles and Fire Control: Managing Critical Skills

Lockheed Martin is an American aerospace and defense company with operations across the United States and internationally. Employing more than 100,000 workers, the company is principally engaged in the research, design, development and manufacture of advanced technology systems, products and services. The company's core purpose is to serve its customers' missions to keep people safe.

"We've been on this journey to understand and assess our critical skills pipeline health for some time, but we were struggling with effectively managing the data, says Valeri Gloodt, senior manager of talent management and development for the Lockheed Martin Missiles and Fire Control business area. "By using a skills management system, we found the opportunity to expand our own capability of how we manage our critical skills supply and proficiency levels to understand our pipeline gaps."

"We worked with our engineering organization, which pulled together leadership and subject matter experts, and then together we looked at a job. As a learning specialist, I helped facilitate the process by examining which skills or competencies fit each job best," said Mark Walus, senior talent management consultant.

Lockheed Martin approached the creation of its skills taxonomy with a technology-first lens which has helped these efforts be sustainable. "We first ask what technologies we need to be committing to as a business. Then when we position those technologies as priorities; some skills naturally fall out of the equation, while others move up in importance. We don't get bound by jobs that may change," said Mark.

Today, the company sees the value of deep skills data as an essential part of its business model and an important vehicle for elevating the conversation with senior leadership. "When we marry up skills data with all our HR data and our program data, we can extrapolate what our overall pipeline looks like at all levels for the organization. The story is a lot bigger than just skills proficiency."

About Josh Bersin

Josh Bersin is an internationally recognized analyst, educator, and thought leader focusing on the global talent market and the challenges impacting business workforces around the world. He studies the world of work, HR and leadership practices, and the broad talent technology market.

He founded Bersin & Associates in 2001 to provide research and advisory services focused on corporate learning. Over the next ten years, he expanded the company's coverage to encompass HR, talent management, talent acquisition, and leadership. He sold the company to Deloitte in 2012, when it became known as Bersin™ by Deloitte. Bersin left Deloitte in 2018..

In 2019, Bersin founded the Josh Bersin Academy, the world's first global development academy for HR and talent professionals and a transformation agent for HR organizations. The Academy offers content-rich online programs, a carefully curated library of tools and resources, and a global community that helps HR and talent professionals stay current on the trends and practices needed to drive organizational success in the modern world of work.

Bersin is frequently featured in talent and business publications such as Forbes, Harvard Business Review, HR Executive, FastCompany, The Wall Street Journal, and CLO Magazine. He is a regular keynote speaker at industry events around the world and a popular blogger with more than 800,000 followers on LinkedIn.

His education includes a BS in engineering from Cornell University, an MS in engineering from Stanford University, and an MBA from the Haas School of Business at the University of California, Berkeley.