

# BUILD VS BUY

## TRANSFORMING THE TALENT ECONOMY

### MAXIMIZING AN ORGANIZATION'S MOST VALUABLE ASSET – ITS PEOPLE

An organization's most valued asset is its people, yet C-Suite and managers still struggle to ideally match their talent to roles and projects, empower their employees, and evaluate the readiness of new candidates. Without visibility, standards, content, and technology, organizations are unable to attain business workforce agility, including pivoting at times of crisis, sustainably increase productivity, retain talent, and strategically plan for its workforce future.

At iQ4, we developed a customizable, skills development and management platform for a company to address – and master – these challenges. iQ4 uniquely mobilizes an enterprise's external and internal talent supply chain. By helping enterprise clients find, assess, build and retain talent, iQ4 assists in developing workforce ready candidates and up-skilling / re-skilling existing staff. iQ4 quickly establishes a baseline of current skills, identifies gaps in up-skilling / re-skilling requirements, and delivers applied-knowledge programs to fill those requirements with external candidates.



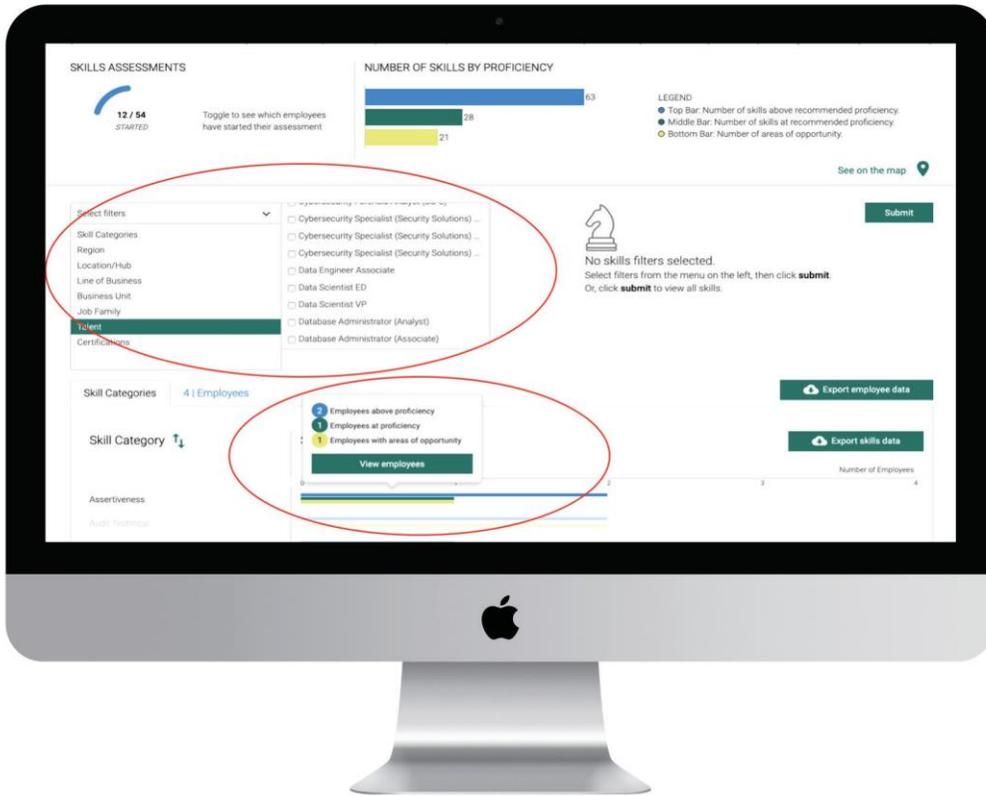
**Big Picture:** Responding to this challenge, iQ4 formed a consortium, the CWA (Cybersecurity Workforce Alliance) now 2,500 members strong collaborating with NASA, JPMorgan Chase, The National Student Clearinghouse, City University of New York (CUNY) / State University of New York (SUNY), Department of Labor, Department of Commerce and NIST, with a mission to accelerate student workforce readiness and to develop a massively scalable and measurable solution (tooling, content, and models) in solving the skills-gap. This movement has now extended to include IBM, and the American Workforce Policy Advisory Board's Interoperable Learning Record addressing standards and data interoperability at scale,

As a result based on extensive collaboration, iQ4 co-developed with JPMorgan Chase, an open-enterprise solution at the intersection of corporate talent requirements and the education ecosystem, which transforms and enables management to optimize skills supply/demand to meet real-time business needs, extending transparency to students and educators required to build the next generation talent pipeline. The iQ4 Skills Management Platform captures life-long learning, skills, and credentials by validating source, proficiency, progression, and potential (a digital resume of a skills DNA). Using machine learning, the platform parses, curates, integrates, and logically maps personal, educational, and workforce data to iQ4's standards-based four-tiered taxonomy repository, which is fully interoperable with enterprise application data sources.

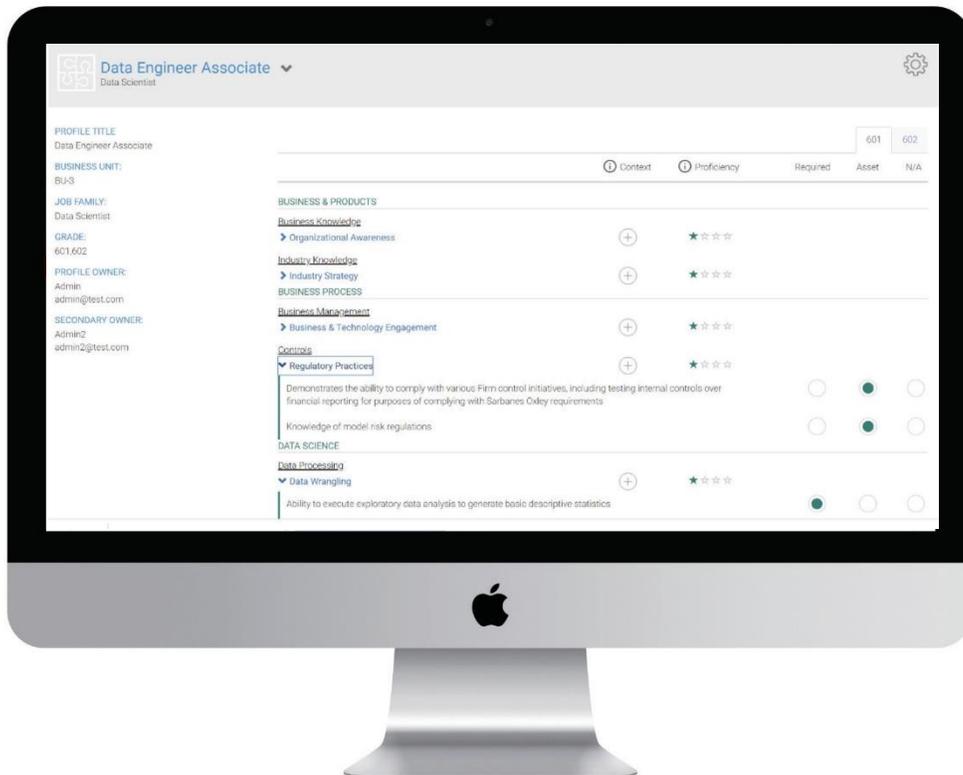
**Enterprise Talent Mission:** To succeed, an enterprise's objectives for workforce and talent supply must include effectively measuring skills, precisely defining where to develop and grow people based on the needs of the business as well as developing a robust external talent pipeline. To achieve these goals, iQ4 assists in:

- Optimizing internal talent across functional boundaries, engaging in "skills silo busting"
- Applying a Skills Search Engine to enable a cross-skills matching program and facilitate internal/external mobility
- Enhancing workforce balance, cross silo/functional collaboration, and resource optimization thereby increasing utilization of a firm's talent
- Consistently defining and applying knowledge, skills, and abilities (KSA's) to efficiently develop and grow people internally, while scientifically enabling external talent pipelines to fill skills gaps and engaging college/university students through virtual internships and apprenticeships
- Connectivity to an enterprise's human resource information system record types, hierarchy, entities, etc. with applications like Oracle HCM, Workday, SAP, among others with 100% accretive and additive talent toolsets from iQ4

Business Leadership, CIO / LOB/ HR	Dashboard filters by BU, LOB, geography, job family, credentials, potential talent fingertip decision support for entire management team. Support system integration.
Chief Development Officer	Talent discovery and real time optimization – Five P's: multi source Performance, Progression, Pathways. Potential, Purpose. Optimize the right talent for the right job.
Managers	Decision support analytics for project and workload balancing. Filter matching at competency and KSA level across businesses, job families, proficiency, etc..
Agile Team Leader	Data lens into the total talent resource pool. Real-time project team allocation by roles, competencies and KSAs
Employee/Student	Create my personal "Passport" including current and additional assessed competencies and KSA's, skill gap course recommendation, career pathways/gaps, T-Shaped data rendering



**Enterprise Dashboard:** Allows the organization to manage supply/demand internally across all businesses, geographies, and employees that are currently in these roles, identify employees that could/should be in these roles, and target student talent to build the next generation workforce.

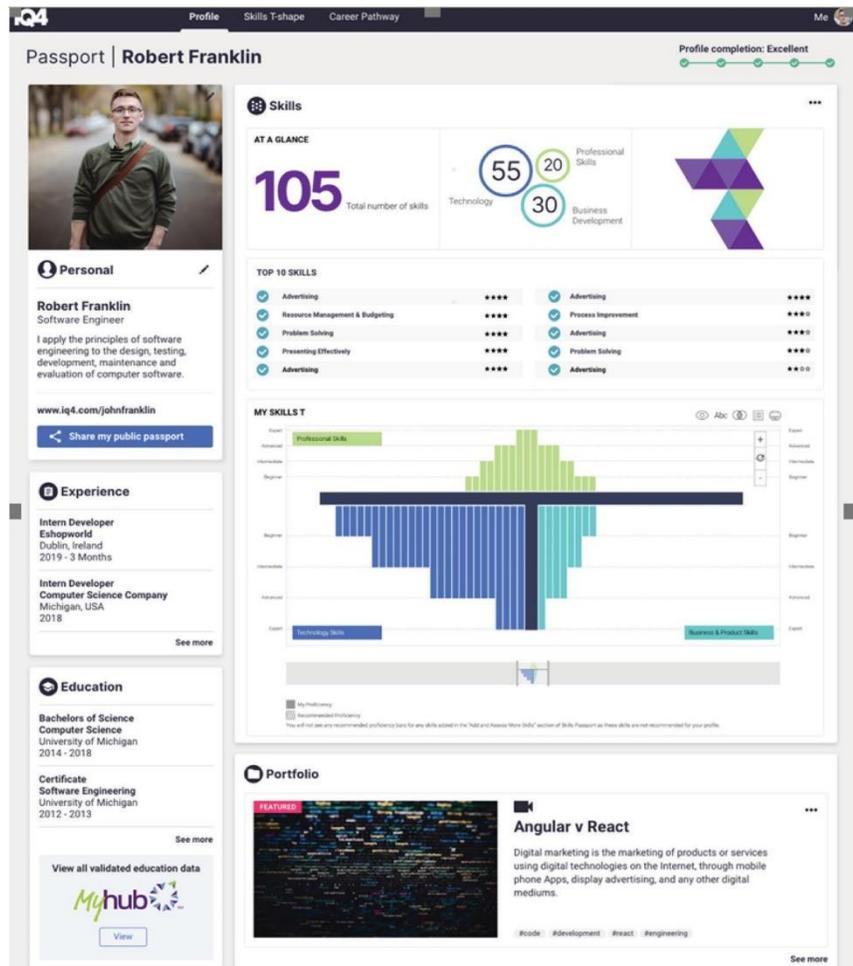


**Skills ID/Role Profile:** “Core to iQ4’s platform is our skills taxonomy engine, and the role profile used to define what skills and proficiencies a business needs. iQ4 tethers its technology base to the NIST standards framework, and contains thousands of technology, engineering, science, and operational roles, competencies, grades, proficiency, context, and tasks. Our unique machine learning engine allows the enterprise to create new roles and people skills profiles based on job requisitions and resumes at scale.



**Enterprise Learner “My T”:**  
 A critical function of the iQ4 platform is to meet an employee’s desire to use a tool that supports his/her current objectives and future career aspirations within an organization. iQ4 pioneered a patent-pending “data rendering” of an individual’s skills digital persona that engages people to self-challenge their performance and empowers their career pathway future.

**Student Pipeline Development:** iQ4 together with the National Student Clearinghouse have joined forces and pioneered a new digital learner record, The Myhub system, which empowers student mobility and enables transparency that mobilizes industry & education and will transform the talent economy. Every individual deserves a way to translate his/her full education, training, and work experience to a record of transferable skills that will open the doors to high wage occupations and careers. The current education-to-workforce ecosystem results in skills being under-matched and/or mismatched for potential employment opportunities. Competency-based education and virtual apprenticeships provide a broad range of educational experiences that are difficult to document on a traditional transcript.



The Myhub Passport and Applied Learning Program is a verifiable record of a person’s achievements in education or training processes, formal or informal, classroom-based, or workplace-based and can be interchangeably shared between education providers and businesses. The Myhub systems provide information exchange from school to school, school to business, business to school, and business to business for more than 21 million students and 14 thousand high schools in the United States.

**Summary: Four Ways iQ4 Assists Enterprises**

**1. Deploy IT Role / KSA Industry Standard Taxonomies (e.g. Cyber/Information Security, Cloud, Data Science) and Establish the Enterprise Internal Skills Inventory:** Helps enterprises answer the question – Who and what skills do we have in the company mapped against a standard role/KSA taxonomy?

**2. Matching and Capacity Management Engine:** Since we can now identify and map personnel, we can efficiently search and deploy our workforce assets. Helps enterprises answer the question – How do we search for and deploy skills, and optimize utilization within the organization?

**3. Building Internal Pipeline and Up-Skilling/Re-Skilling Current Entry-Level and Junior Employees.** Now that we have a taxonomy that describes roles and KSA’s, how do we increase employee mobility and career pathways through training?

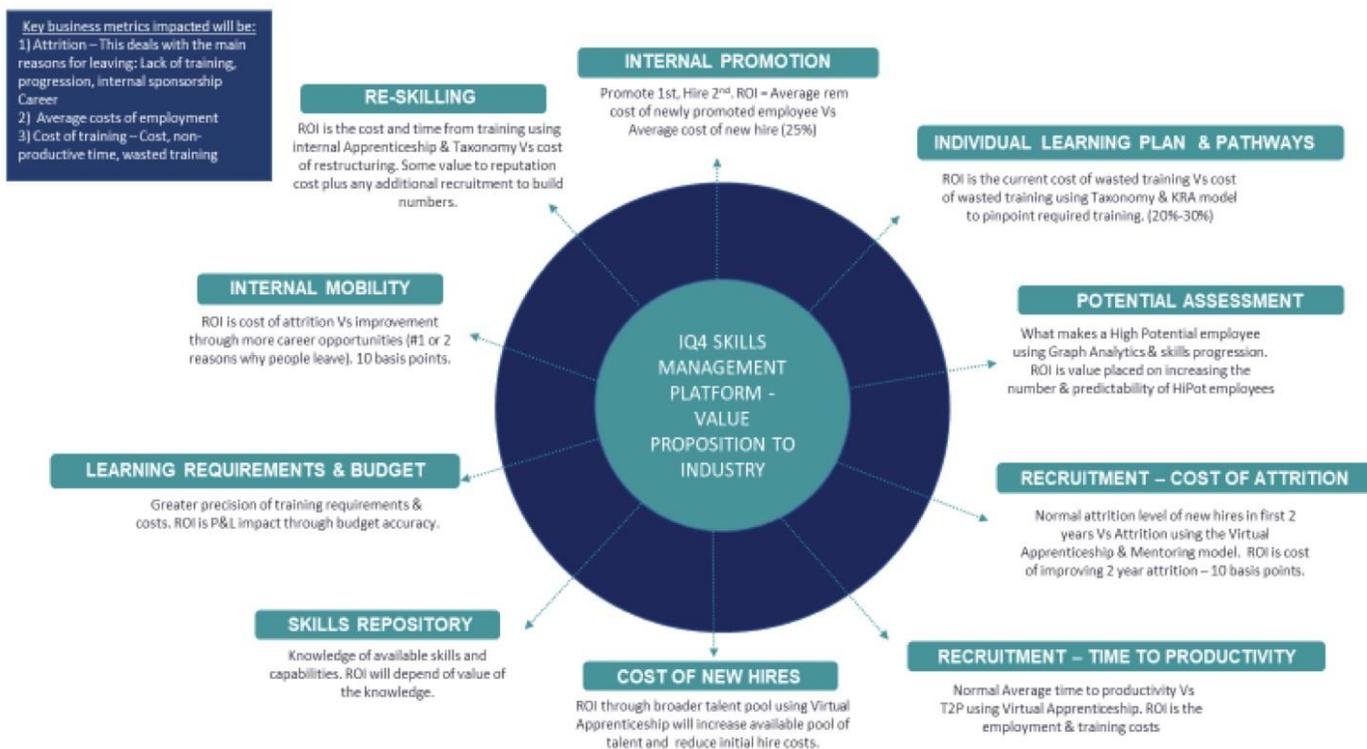
**4. Building the External Pipeline:** Now that we have role/KSA taxonomies in place internally and the skills inventory gaps identified, we can extend that taxonomy to begin building an external talent pipeline to fill the gaps. iQ4 has a business model, curriculum, and platform to help enterprises fill entry-level and junior talent roles. Helps enterprises answer the question – How do we fill gaps in our recruiting plans by building an external pipeline of students and junior level recruits? Two options:

- **Access the iQ4 Student/Alumni database.** iQ4 maintains a database of thousands of students and alumni who have taken our pre-apprenticeship courses and worked with industry mentors on real-world projects. The virtual apprenticeships often equate to 300 to 600 hours of on-the-job-training. You can scan this population by viewing their “passport”, filter across multiple dimensions, and select top-tier candidates for hire.
- **Sponsor and Mentor a University Population.** iQ4 provides a business model, university relationships (as well as your own), and a platform designed to deliver virtual apprenticeship programs which makes it easy for enterprises to get involved in building, mentoring, and measuring their own, tailored “farm system” of student talent.

**The key ROI levers that will positively drive this investment include:**

- 1. Increased mobility and utilization of resources:** Providing for a quick response to business needs wherever they exist (cross-silos), based on fully informed skills profiles and a matching engine to increase the utilization and efficiency of the talent pool.
- 2. Career pathways and retention:** The capability to more accurately provide talent work opportunities that directly match and meet critical business needs will foster more positive retention, reduce attrition, lower costs for replacement hires, and reduce time to hire for open roles.
- 3. More targeted hiring:** Matching business needs to the existing talent pool will also assist in identifying talent-gaps and more targeted hiring needs. This will reduce the overall recruiting process (RPO) costs, with less on-boarding and training costs to reach desired levels of productivity.

**Enterprise ROI:** Enterprises will benefit significantly from the ability to deploy a well-defined and fully managed Skills Inventory and Capacity Matching Program. iQ4 has multiple data models to support these ROI levers. In general, we expect that these three areas would generate a 10x – 15x return on the proposed investment.



**Summary:**

**Our goal is to deliver an enterprise "skills silo busting" matching engine to optimize workforce skills balancing. Aligning iQ4's standards-based taxonomy with a client's ecosystem registry will create the foundation to establish consistency in defining firmwide needs and employee capability. iQ4 looks forward to partnering with our clients to solve this epic challenge in optimizing their greatest asset ... their people!**

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