Scenario: The Growing Influence of Adult Learners in 2030 Perpetual Reskilling for Adult Learners – A 60-Year Curriculum

Case Summary: This scenario describes the Adult Learner-Centric world of 2030. Perpetual reskilling of adult learners over careers spanning 60 years or more will be essential to participate in the workforce. Adult learners will face strong, continuous demands for perpetual upskilling and speedier achievement of work tasks, plus faster upskilling when they change role or employer. Moreover, learners in K-12 and higher education will need to acquire early on, the habits of mind, body, and spirit to thrive in this environment. This will create a new dynamic for learners, workers, employers, and learning providers. Adult learners will grow in number and influence.

The employability of fresh graduates and the continuing value of adult learners will be enhanced if they can combine skills in using two technology-based capabilities. First, emerging productivity and performance-enhancement tools, agents, and practices. Second, new organizational frameworks/capabilities that leverage AI-AR empowerment. These platforms will deploy these productivity/performance tools for individual, teams, and organizations. They will enable continuously improving and reinventing organizational processes. These tools and agents will be in the Cloud or in the individual's workplace. Using these capabilities adult learners will be incentivized to perform at increasingly high level.

These developments will: 1) accelerate and shorten the pathways between post-secondary education and employment; 2) shift the emphasis to demonstrated competences, stackable credentials, and perpetual learning; 3) require seamless collaboration between learning providers, employers, and workforce knowledge facilitators; 4) increase the modes and channels for perpetual learning by adult learners; and 5) create new services such as verifying the competences of new and transient employees and creating personalized competence portfolios managed by individuals and validated by certifiers.

Why Read This? This visit to the 2030 future brings to life the discussions in Chapters I and II about cascading cycles of acceleration, disruption, and transformation in work and learning, It also showcases the changes necessary in the new breed of learning enterprises that will evolve to thrive in the changing Knowledge, Work, and Learning Ecosystem. It concludes with a set of questions for leaders seeking to thrive in the Adult Learner-Centric world of 2030.



<u>The Scenario</u> (Referenced in Chapter II)

The world of 2030 will witness dramatic changes in the dynamics of knowledge, work and learning and the ecosystem that supports them.

Adult Learners Will Become the Predominant Force

By 2030, adult learners will be the predominant force in the Learning, Competence Building, and Knowledge Industry, globally. Four factors will shape this predominance:

- First, the sheer numbers of active adult learners. Tens if not hundreds of millions of additional adult learners will be engaged in active, workforce-focused learning, globally.
- Second, the requirements for perpetual learning and competence-building for adultscan only be delivered by dramatically different approaches and models. They will be delivered at scale, priced affordably, and will not operate using the same business models as traditional higher education.
- Third, perpetual adult learning must become a critical contributor in achieving greater equity of accomplishment and societal well-being in societies across the globe.
- Fourth, worldwide and growing shortages of knowledge workers plague the global economy, and those shortages can be remedied expeditiously by re-training and cross-training adult learners; such learners generally need little motivation to engage in competence building that empower them to succeed via agile, personalized, competence development and performance support for individuals and teams.

Figure 1 - Adult Learning Will Predominate

Tens of millions of additional adult learners in active, workforce-focused learning. Perpetual, competencebased learning will require dramatically different approaches and models. Adult Learning must promote greater equality of accomplishment and sociatal well-being, globally.

By 2030, changes will have occurred in K-12 education and "coming of age" post-secondary learning for 18-22-year-old learners. These changes will include embedded artificial intelligence and analytics to expand the choices for how young people learn. In many settings big data and machine learning will be deployed to personalize the best learning methods for individuals. On another dimension, these enhancements will enable individuals to fuse their active learning and personal development experiences with problem-solving and work experiences. These will occur earlier and earlier in their school experiences. Pathways to employment will shorten; reskilling opportunities will abound. The changing economy will require continuous retraining and upskilling of over 100 million Americans, alone.

Moreover, learners will be consciously prepared for lifetimes of churning, swirling learning activities to achieve critical thinking skills, supporting work, careers, citizenship, and personal development. Success stories will be widely shared and emulated.

Learning will never stop. It will cease to have a beginning and an end. It will be technologyenabled, perpetual, regenerative, and linked to real world accomplishments. It will involve a vibrant Knowledge, Work, and Learning Ecosystem consisting of Workforce Knowledge Facilitators, Learning and Certification Providers, and Employers. Learners will be in the middle – and in the driver's seat.



Realities for the Adult Learner in 2030

So by the time learners reach young adulthood, they will have new kinds of experiences and will be confronted with a series of realities in the 2030 world (Figure 2 on next page).

• The accelerated pace of change in all fields of knowledge and endeavor means that everyone will be struggling to keep up with changes in their field.

This is somewhat true today but will be demonstrably more challenging by 2030. Nobody will be able to keep up by using just traditional human skills and intellect. Successful individuals will need to live a life in which technology-assisted capacities partner with and extend human intellect. All activities and processes will be hybrid, combining digital and physical elements. All processes will be digitalized.

Yesterday's traditional learning was based on scarcity of knowledge resources. Today's/Tomorrow's emerging model is based on abundance. Many sources and providers of insight will be distributed across the work-and-learning landscape. Embedded technology capacities include:

- ✓ Enhancements to personal intelligence, through the means of chemical (altering DNA and boosting cognition in other ways) and physical alterations;
- ✓ digital devices that are carried (smartphones), worn (glasses, goggles, devices embedded in clothing), and/or physically embedded (cochlear implants, chips, other devices);
- ✓ personal agents and sense-making tools to sort through ever-increasing, big-datadelivered streams of new knowledge and insight;
- "mixed" and "augmented" reality environments that bring people together to learn, train, and problem solve; and
- ✓ personal productivity tools that give individuals competitive advantage by sharpening performance and/or providing valuable know-how necessary totheir fields and emerging opportunities.

These tools will use artificial intelligence to find and synthesize new knowledge that individuals need. Also, they will improve the efficiency of processing the new knowledge and eliminate older knowledge that is no longer relevant.

• The struggle for personal competence will be complicated by continual evolution of jobs in every field of endeavor

Both blue collar and white collar fields and jobs will all be reinvented by embedded AI. Human intelligence will strive and struggle to become cognitive partners with machine intelligence. Concurrently, societies will seek ways to avoid massive, catastrophic job destruction. Some experts are optimistic about the prospects for humans and jobs in this evolution (Merisotis, 2021) while others are less sanguine (Autor, 2021). Some predict that 4 out of 10 jobs in existence will disappear; others predict an even greater impact.

One limiting factor will be that embedding AI in processes can be expensive and only make sense for applications that scale. However, this can be overcome in higher education by platform providers like Coursera, 2U (edX), and vendors providing licensed versions of AI-supported processes and content. Institutions will need to curate such capabilities to compete in providing the offerings and experiences adult learners will demand.



Figure 2 - Realities for Adult Learners in 2030

• Acceleration, disruption, and transformation will empower individuals to take greater control of their learning

Adult learning in the 2030's will be not just learner-centric but learner-driven. This will be made possible by the continuing evolution of both the Knowledge, Work, and Learning Ecosystem and of the roles, responsibilities, and collaborations of the participants in it.

Individual learners will rely on potent combinations of formal and do-it-yourself (DIY) learning. Much will be for free, or a combination of free and premium services (freemium services). Individuals will have control of their own personalized transcripts and portfolios of learning experiences, outcomes, credentials and microcredentials earned, competences demonstrated, and productivity enhancing tools which they are using to enhance performance. Employers will rely on the proofs of competency provided by these tools, plus their own enhanced testing and talent evaluation capacities to engage gig economy employees, make hires, and promote employees.

• Achieving greater equity and societal well-being will be a major challenge

The inequalities caused by existing digital divides in K-20 will be exacerbated without genuine, public commitments to closing the digital gaps in K-12, postsecondary, and adult learning. These commitments must begin in K-12 and undergraduate education. But they must extend to adult, perpetual learning. The reconfiguration of jobs will further complicate this situation because many currently disadvantaged learners will not have equal access to insights on the shifting job market.

The period between today and 2030 is likely to feature widespread rethinking of the nature of work and the structures of economies, worldwide. If greater equality and society well-being are to be achieved, clear, forward-focused thinking will be needed.



The Evolution of Personal Productivity Tools and Agents

Today we see the leading edges of new tools and capabilities for the adult learner. They are being developed by a wide range of Workforce Knowledge Facilitators, Learning Providers, and Technology Companies. Figure 3 depicts four types of these productivity tools and agents.



Figure 3 - Evolution of Personal Productivity Tools and Agents

• From "knowing the content from the course" to "achieving specialized know how for reflective practice."

Today's best courses and microcredentials move beyond mastering course content. They include understanding the application of insights in the real world and teaching learners how to achieve reflective practice in their evolving field. Some emerging providers plan to offer the premium insights as a continuing service. The best courses from edX and Coursera are coming to reflect this perspective of providing know how for reflective practice. By 2030 these will be standard for workforce -focused learning.

• Intelligent agents and next-gen search engines

Many Workforce Knowledge Facilitators are offering personalized search agents and premium services for individuals and/or organizations. Examples include:

- ✓ As one would expect, Google and its competitors are all working on the next generation of specialized search capabilities to add premium value for their customers. They are relentlessly seeking differentiating value propositions.
- ✓ The publisher Elsevier offers specialized searches of its publication and research data sets to provide institutions and individuals answers to questions yielding fresh insight, tailored to personalized needs:

"What is the latest, best research in my specialty?"

"What are the latest promising breakthroughs?"

"Which findings have the greatest commercial potential?"

"Whom do I need to know who is doing the best new work in my field?"

✓ Continuing Education operations like UCLA with extensive industry networksand advisory groups have established subscription-based, annual updates fordegrees and microcredentials. This service answers the questions:

"What are the latest developments in my degree field and/or new pathways to micro-credential(s)?" "What's on the horizon?"

"What looming disruptions threaten my field?"

- ✓ Cambridge University and many other research universities have developed or curate electronic lab book tools for bench scientists that use personal agents to build and maintain resources on "What's new in my area of research" and enable the practicing scientist to maintain electronic records of her work and accelerate productivity. These tools have been customized to fit other academic and practice disciplines and personalized to fit individual needs.
- ✓ Amazon, Google, and Microsoft and others are all working individually and in partnership with learning providers to embed specialized insights on new practices and competences for use in Siri, Alexa, and YouTube- type environments. Sample queries:

"Alexa, what is the newest research development in optimizing student success in public regional colleges?"

"Siri, what is the most widely used source of competence-based guidance in my field?"

• Mixed reality environments

Many Workforce Knowledge Facilitators are working to use virtual and augmented reality to create augmented reality environments for teamwork, research, learning,

designing, and prototyping. These environments can be used to bring teams together from multiple locations, using virtual/augmented reality googles or headsets, cell phones, tablets, PCs, or other devices.

An example is Microsoft MESH, a mixed reality environment that offers to bring together both physically present and remote participants. It enables participants to see, share and collaborate in ways that use eye contact, facial expressions, gestures, and body language to enhance understanding. Think of a holodeck on a desktop. Microsoft sees evolving versions of its TEAM and MESH platforms as key ingredients in the need to retrain the 100+ million Americans that will be affected by job reinvention and require retraining – and hundreds of millions more, globally.

• Personal productivity tools for sense making and analytics

By 2030 Big data, analytics, artificial intelligence, and machine learning will combine to provide tsunamis of insight, but only if frontline users have the perspectives, and skills to launch, utilize, and make sense of the outcomes. Leaders, staff, and faculty in higher education will all need access to training, experience, and sense making tools that enable them to use these knowledge flows intelligently. The most technically complex skills will reside in a small cadre of experts. But all front-line users will need fresh tools and training that will vary dramatically, based on the individuals' responsibilities. The pace of use and deployment will accelerate dramatically. Many current higher education employees will have difficulty in making the transition from the Knowledge Age to the Artificial Intelligence Age – also to be known as the "Augmented Intelligence Age.

Many gig employees will need their own analytics productivity tools to enhance their competitiveness in achieving continuing assignments at a high level, independent of their current employer. Potential employers will demand proof of competence and capacity to perform at high levels.



Conclusion: What Do Leaders Need to Do to Prepare for the 2030 Learner?

If the world of the adult learner looks like the one we describe in this scenario, higher education leaders should craft insightful answers to the following questions. Then incorporate solutions into their strategic expeditions forward to 2030.

- 1. How can colleges and universities transform their learning and certification offerings to accelerate learners' pathways into the workforce? Then continue to engage adult learners throughout the span of the 60-year curriculum?
- 2. Will the needs of the 2030 adult learner change the Knowledge, Work, and Learning Ecosystem in the transformative ways described in Chapter II and this Scenario for the Adult Learner in 2030? What new partnerships and collaborations will need to be forged by the open, engaged learning enterprise to serve these learners in the new ways described?
- 3. How can K-12 and higher education prepare coming-of-age learners for active, self- directed learning, using the productivity tools, platforms, and experiences described in this Scenario? How can learners acquire the habits of mind, body, and spirit to be empowered tooperate in the world of augmented intelligence?
- 4. How can K-12 and higher education use the tools and techniques described in this scenario and story to prepare all learners for success and reduce the equality gap in K-12 and higher education? Could this include a focus on early childhood development as part of regional revitalization? How can they produce equality in adult learning opportunities? How could employers and workforce marketplace facilitators play roles in this quest?



Storytelling: Pioneer Devices Deploys Affordable Mixed Reality Learning Environments (MRLE) by 2030

Case Summary: By 2030 many enterprises will have deployed affordable, next gen versions of Mixed Reality Learning Environments (MRLE). In our story, we describe a day in the working/learning lives of a team at Pioneer Devices during a Prototyping Sprint using Just-in-Time (JIT) learning experiences. The story also describes how Mixed Reality Learning Experience (MRLE) tools used in the Sprint can be used for large-scale training and reskilling across the enterprise. Pioneer's story concludes by discussing the additional perpetual learning and personal productivity activities individuals will pursue to remain cutting edge in 2030, using the Pioneer team as a case.



Mixed Reality Learning Environment

Why Read This? By 2030 many enterprises will use similar versions of MRLEs (sort of a miniature "Holodeck" like in Star Trek) to fuse JIT learning into daily work experiences. Employees will also engage in perpetual retraining aided by such tools and be expected to undertake perpetual individual learning. These are demonstrated in the Story of Pioneer Devices. This Story fits into the context explained by the Scenario exploring the growing importance and influence of participants in the Adult Learner-Centric World of 2030. The Scenario and Story should be read together.

<u>The Story</u> (Referenced in Chapter II)

The challenges and opportunities of adult learning in 2030 can best be understood by experiencing a day in the life of a team in an enterprise operating in the 2030 world. We use this description to portray three modes of learning in the 2030 Workplace at a hypothetical company, Pioneer Devices, in Austin Texas:

- *Anticipatory Training and Reskilling* that can be engaged in by lone individuals or across an entire enterprise,
- **Just-in-Time**" (JIT), **Real-Time Learning** achieved through ongoing projects and/or other work assignments that fuse work and learning experiences, and
- *Perpetual Learning Activities of Individuals*, supported by personal performance and productivity tools, and learning experiences with learning providers and certifiers.

Taken together, these means of continuous adult learning enable Pioneer employees to maintain the talent edge needed to succeed in the 2030 Knowledge, Work, and Learning Ecosystem.



Anticipatory Training and Reskilling

Over the past decade, Pioneer went through an extensive and accelerating program of reskilling for its employees and gig employees. Its traditional modes of training became inadequate for the changing needs of Pioneer's industry. Pioneer used its MLRE to roll out reskilling for its employees and for gig employees who needed specific competencies for the tasks they were undertaking. Pioneer worked with a variety of learning providers to tailor offerings to the MRLE and to develop offerings unique to Pioneer.

Just-in-Time, Real-Time Learning Tools And Experiences

The second mode of learning we describe in this story illustrates the intense just-in-time (JIT) learning that occurs involving the team as a whole, in addition to the individual, perpetual learning activities that constantly engage the team members as a prerequisite to participation in the 2030 workforce.

This story describes the work of a Product Team engaged by Pioneer Devices in Austin, Texas and consisting of regular, full-time employees and "gig employees" – temporary, consulting, episodic employees. Pioneer has been serving the global market for medical devices since 2005. In 2019 Pioneer substantially reinvented its approach to recruiting, talent development, and staffing. It also recrafted the processes for designing, discussing, prototyping, and launching its products and services. These processes are now being continuously refined.

Like most employers, Pioneer Devices was profoundly influenced by the COVID experience. It has sharply reduced its dependence on face-to-face meetings and requirements for staff to commute to employment centers. Pioneer also uses a distributed network of "gig" employees from Texas and around the globe. Some of these have long-term relationships with Pioneer. Using its new approaches, Pioneer has dramatically reduced the time required for product design, launch, and refinement.

Figure 1 illustrates the Product Design and Development Process that a Product Team at Pioneer Devices has been using on for several weeks to design, create, and launch a new medical device. The Team is currently in the Prototype phase of the process.



Today is an important workday, called a Prototype Sprint. All members of the team are engaging throughout the day to assess and refine several prototypes for the new device – a

DNA Diffractor. Figure 2 portrays the seven members of the work team and describes their roles and locations. They are pictured gathered around a "Mixed Reality Learning Environment" that links members wearing holographic googles as if they are gathered around a "real" prototype of the medical device they are prototyping. The core Austin-based team consists of three Pioneer employees:

- *Artemis Jones,* Team Leader, who leads and orchestrates the work of the Product Development Team;
- *Kiki Watanabe,* Design and Strategy Expert, provides design expertise and facilitates design sprints;
- *Samuel Ledbetter,* Prototyping Expert, participates in design sprints and staffs prototyping projects at Pioneer Devices;

These three employees live all in the Austin Metropolitan area but often work at offices at home. Today they have all come to headquarters to participate in the prototyping sprint, operating in the Mixed Reality Learning Environment. In addition to the core team, four "remote employees" support the efforts of the Project Team:

- *Lexi Anders*, Data Scientist, provides continuous insight on design, performance, and viability of the Product; she operates out of College Station, Texas and has been working with Pioneer over a five-year span;
- **Rowena Justice,** Marketing and Commercial Viability Expert, provides ongoing insighton new marketing data and the commercial viability of the project, she operates from Solomon's Island, Maryland, and has been working with Pioneer as a remote employeefor Pioneer for over a ten-year span;
- *Dr. Arlene Kopenhaver,* provides science and medical insight concerning the prototype, working from Copenhagen Denmark; and
- *Lokesh Venkat* is a JIT Learning Agent and provides a continuous flow of JIT, real-time learning materials and experiences germane to the needs of the Project; he works out of Mumbai India and has been associated with Pioneer for five years.

Design sprint prepared for the prototyping sprint

Leading up to the Prototyping Sprint Phase, the team completed the Design Phase of the project and absorbed a continuous flow of information on the DNA diffractor product, its commercial viability, and prototyping options. During the Design phase, Venkat, Justice, and Anders provided continuous flows of JIT learning, market information, and performance data. They entered the Prototyping Sprint with several prototypes already simulated, with tools available to simulate and evaluate performance of several others. Their goal for the Prototyping Sprint day was to have three to five prototypes simulated and assessed for viability.

The day of the prototyping sprint

At 9 am, Jones, Watanabe, and Ledbetter entered the Mixed Reality Learning Environment room, donned their holographic googles, and were shortly joined by the remote participants -Anders, Justice, Kopenhaver, and Venkat, also operating with googles. All the participants were represented in the holographic space as though they were there, with facial expressions and gestures available.





Artemis Jones led the discussion of the day's plan of action and the expected roles of participants. Existing prototypes and simulations were reviewed by Jones, Watanabe, and Ledbetter, with data support from Anders. From the beginning of the day, Venkat began his role as JIT learning agent, observing the proceedings, and providing fresh insight throughout the day. Anders, Justice, and Kopenhaver were available during the day, providing information and insight when requested by the core team, or at predetermined times, depending on progress.

Outcomes

Existing prototypes were fully evaluated, refined, and fresh simulations generated by Anders and Justice. Several new prototype ideas were also developed and simulated. By the end of the Prototype Sprint day, five viable prototypes were discussed simulated and assessed, with more detailed assessment to be completed before the end of the week. Each member of the core team and the remote participants had engaged in significant JIT learning during the day, focused on learning needs that emerged in real time during the day's activities.

Conclusions about Just-in-Time Learning Fused with Work

Using tools like the MRLE, distributed teams can fuse work and learning in their daily activities. They can convene whenever needed to work as a team, supported by remote JIT agents (operating independently or managed by JIT Learning Agents like Venkat). These activities are enriched by the learning that individuals perform as part of personal reskilling and use of personal productivity and performance tools. In addition, tools like MRLE can be used to support continuous training and reskilling not directly associated with projects like the Design and Prototype Sprint.



Perpetual Learning Activities of Individuals

In addition to the JIT learning associated with the Product Prototype project, and the anticipatory training and reskilling mentioned above, each individual team member deployed their own AI- and analytics-supported tools. These supported the individual's own perpetual learning, enabling them to build, refresh, and certify competences needed for their Jobs.

The personal productivity tools used in 2030 are suites of software applications that individuals embed in their digital devices to manage the collection and integrating of fresh knowledge flows with existing knowledge. These applications deal with the accelerating tsunami of knowledge that challenge decision makers. They are a form of augmented intelligence that enable individuals, teams, and organizations to stand out in the 2030 world.

Figure 3 summarizes the three modes of learning described at Pioneer Devices.



Figure 3 – Modes of Learning at Pioneer Devices

Figure 4 on the next page summarizes the roles, responsibilities, learning experiences, productivity tools, and current perpetual learning activities of the individuals on the Product Design and Development Team. Taken together, these descriptions portray how the active adult learner of 2030 will use next gen productivity and learning tools to accelerate the pace, scope, and nature of their human development.

Figure 4: Roles, Responsibilities, Learning Experiences, Productivity Tools, and Current Perpetual Learning

Name/Title	Role/Responsibilities	Learning History/Experience	Personal Productivity Tools and Current Perpetual Learning
Artemis Jones Product Wizard	Team Leader Orchestrates the Project Team <i>Employee</i>	B.S. Leadership, University of Houston (UH) 10 Postgraduate Competence Certifications in Product Design, Digital Leadership (SNHU, UH) 7 years of experience at Pioneer Devices	Receives Ongoing Updates from UH and SNHUUses Personal Performance Tools to Enhance Productivity Continuous DIY Learning, Pursuing Two NewCompetence Certifications Maintains Personal Competence Portfolio
Kiki Watanabe Design Diva	Design and Strategy Expert Provides Design Thinking Expertise and Facilitates Design Sprints <i>Employee</i>	Certificates in Design and Strategy, WGU After employment, 12 certificates completing B.S. 8 years of experience at Pioneer Devices	Receives Ongoing Updates from WGU Certificates International Community of Practice- Design Continuous DIY Learning, Pursuing Certification in One New Micro-Competence Maintains Personal Competence Portfolio
Samuel Ledbetter Prototype Guide	Prototyping Guide Participates in Design Sprints, Staffs Prototyping Projects at Pioneer Devices <i>Employee</i>	Certificate in Design and Prototyping, Austin CC (ACC) Portfolio of 10 micro-credentials 5 years of experience at Pioneer Devices	International Community of Practice in Designand Prototyping - "What's New in Proto- typing," "What Do I Need to Know" Maintains Personal Competence Portfolio
Dr. Arlene Kopenhaver Researcher	Science Expert in the Science and Medical issues concerning the Prototype <i>Remote Employee</i>	 B.S./Ph.D. in Biochemistry, MD, Univ of Copenhagen (UC) 20 years bench research experience, 3 years supporting Pioneer Research Collaborator in UC Global Research Comm of Practice (CoP) 	UC Community of Research Practice – Workson Research Projects and Publications in cross-disciplinary projects Personal Productivity Tools/Services – Performance Enhancement, What's New, What Breakthroughs Are Coming
Rowena Justice Marketing Maven	Commercial Viability Researcher Provides Ongoing Insight on the CommercialViability of the Product/Prototype <i>Remote Employee</i>	B.S. Marketing - Univ Maryland Global Campus (UMBC) 20 micro-credentials in Data Science and Marketing 15 years of experience, 8 years as gig employee with Pioneer	Receives ongoing updates from UMBC Continuous DIY/Free Range Learning Service Provides Competence Portfolio
Lexi Anders Sense Maker	Data Scientist Provides Continuous Insight on Latest Data on Design, Performance, Viability of the Product <i>Remote Employee</i>	B.S./M.S. Data Science, University of Washington (UW) 15 micro-certificates of competence 10 years as Data Scientist at Microsoft	Pursuing three new cross-disciplinary micro- competences in sense making, machine learning International Community of Practice in DataScience provides "What's New Service" Personal agents synthesize topics of interest
Lokesh Venkat JIT Learning Agent	Learning Agent Throughout the Design and PrototypingProcess, provides JIT learning on new developments germane to the process <i>Remote Employee</i>	 B.S. Engineering, Indian Institute of Tech (IIT) 6 Micro-credentials in digital learning and online research techniques 10 years of experience, Tata Consulting 5 years with Pioneer 	Super-user of next-gen search products, smartagents, and analytics productivity tools Continuous DIY/Free-Range Learning Portfolio of Demonstrated Competences