

Deep upskilling in *21st Organisations with Productive Failure*



Professor Michael J. Jacobson

*Pallas Advanced Learning Systems
Sydney, Australia*

The University of Sydney

Challenges

- Global changes create a **societal challenge** to prepare:
 - Students for the future of jobs
 - Work force for the future of work
- **Organisational challenge**: Need to *upskill* the workforce for the dynamically changing world

“There is an upskilling dividend benefitting companies as they face an uncertain economy. Retaining the right talented people and enhancing their skills can help them survive today’s challenges and drives competitive advantage in the future.”

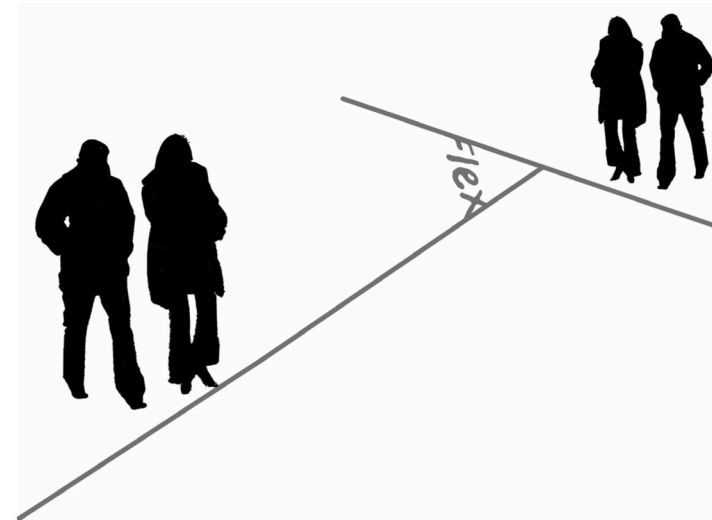


Bhushan Sethi
Joint Global Leader of PwC's
People & Organisation Practice

However, it is easy to “talk the talk” of upskilling talented people for the changing world for organisations,

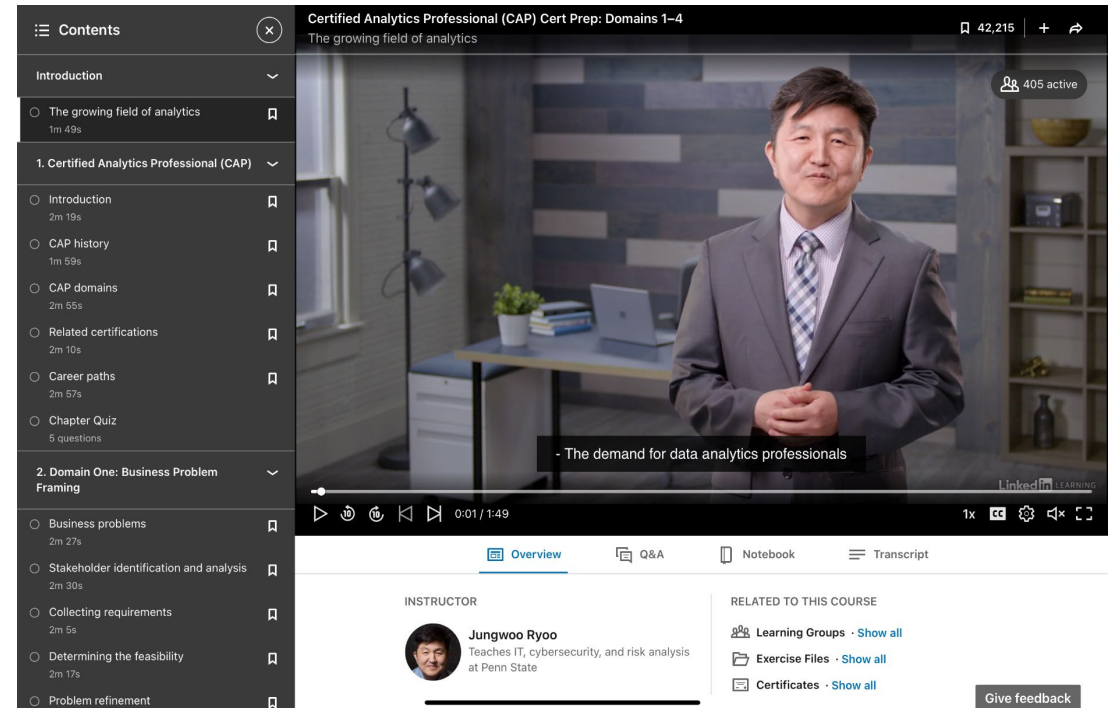
but:

***How to “walk the walk”
to actually do
“upskilling?”***



Upskilling with Traditional Training?

- Training may be in class or online
- Typically training is instructional followed by problem solving (I-PS)
- Considerable research shows limitations to I-PS approaches (Sinha & Kapur, 2021)
 - Mainly declarative and low level procedural knowledge learned
 - Limited deep conceptual learning
 - Poor transfer to new situations
- AND, most adult learners do NOT like such training courses!



The screenshot shows a LinkedIn Learning course interface. The video player displays a man in a suit speaking, with a subtitle that reads '- The demand for data analytics professionals'. The course title is 'Certified Analytics Professional (CAP) Cert Prep: Domains 1-4' with a view count of 42,215. The left sidebar contains a table of contents with the following items:

Item	Duration
Introduction	
○ The growing field of analytics	1m 49s
1. Certified Analytics Professional (CAP)	
○ Introduction	2m 19s
○ CAP history	1m 59s
○ CAP domains	2m 55s
○ Related certifications	2m 10s
○ Career paths	2m 57s
○ Chapter Quiz	5 questions
2. Domain One: Business Problem Framing	
○ Business problems	2m 27s
○ Stakeholder identification and analysis	2m 30s
○ Collecting requirements	2m 5s
○ Determining the feasibility	2m 17s
○ Problem refinement	

Below the video player, the instructor is identified as Jungwoo Ryoo, who teaches IT, cybersecurity, and risk analysis at Penn State. There are also links for 'Learning Groups', 'Exercise Files', and 'Certificates'. A 'Give feedback' button is visible in the bottom right corner.

LinkedIn Learning Course

Innovative Upskilling: Use productive failure?



PF Research in Organizations

- Difficult to do with busy adults
- Hard to get funding
- Entrenched training approaches
- Unlikely to get large corpus of empirical research in organizational settings
- Suggest case study as a method



Mini-case Study of PF in an Organisation: Upskilling at an International Consulting Firm

Upskilling for Junior to Mid-level Consultants

Develop useable skills with core consulting frameworks for structured problem solving and communication of management decisions in different client companies



Upskilling for Junior to Mid-level Consultants

- Traditional upskilling training provided for these consultants
 - Felt **confident** they understood and they could do these skills
 - However, in observations with real clients, **unable to use these core consulting frameworks** at a professional level
- Compromised quality of the company's consulting services
- Cognitive science analysis:
 - Traditional training resulted in **inert knowledge**
 - Consultants demonstrated **knowledge transfer failure** in real world settings



Three Part PF Upskilling Session

- **PF Exploration phase:**

- Consultants worked individually writing their communication plans to the client
- Then formed groups of two or four when sharing their plans

- **PF Consolidation phase:**

- Lead by Principal Consultant (PC) with successful experience with company clients
- PC commented on:
 - Strengths and weaknesses in team plans
 - Use of the core consulting framework elements
- PC explained the rationale for successful client implementation plans as well as lessons learned

- **PF Knowledge Assembly activity:**

- Consultant teams worked on a different client challenge area using the core consulting frameworks
- Teams shared their new implementation plans with each other
- PC explained how he would approach this new challenge differently in some cases



Feedback and Reflections about PF Upskilling Session

- Participants found the PF upskilling session to be very *engaging* and *effective*
- Greatly preferred this type of session to a traditional training approach
- Benefits for topic experts:
 - Found it natural to pick up PF approach with little intervention
 - Simply needed to hear the PF formula of:
 - When to talk about what
 - When to provide what type of challenge
- ***After three years, this PF program found to be:***
 - ***More effective than traditional training***
 - ***Still in use for bi-weekly and day long company offsite upskilling sessions***



Conclusion

- Qualitative results of the consulting company PF case study align with empirical findings from secondary through university levels studies
- Positive perceptions of participants and leadership about the **engagement and efficacy** of PF for upskilling training needs, especially for **transfer**
- Implementation **viability**
 - Participants enjoyed PF session
 - Upskilling content experts found PF easy to do
- Recommend:
 - Further case studies of PF approaches in various organizational settings
 - Triangulate qualitative case study findings with PF empirical studies and theorizing
- Discussions!

