## Microlearning

#### Promoting Measurable Engagement to Drive Business Performance



Dr. Jiani Wu

Helping businesses gain competitive advantages through **micro-adaptive learning** 





## **POLL: Before our journey starts, what are you most curious about?**

- A. How does microlearning increase learning retention?
- B. How does microlearning help tell the story of your business KPI and learning ROI?
- C. How can microlearning minimize business risks?
- D. How can Qstream help my business?



## Agenda

- Challenges of traditional enterprise learning
- Microlearning: The new solution
- 5 key microlearning engagement elements
- Microlearning analytics



Qstream microlearning technology





Q&A

# **POLL: What are your current training challenges?**

- A. Low learner engagement
- B. Only have completion data, but no real proficiency data
- C. Lack of deep data insights
- D. Other (feel free to put in chat box)



#### Short Term Memory is Fragile...

✓ Overwhelming information

Oistractions

Shorter attention spans

Short T., Memory Behavioral Sensory Memory Buolerm Change Memo  $\infty$ Ustream.

## Microlearning For...



- Fits busy schedules
- Sengage to learn
- Knowledge retention
- Self awareness
- Sehavioral change



- Deploy critical training at scale
- Measure success, learning proficiency (KPI/ROI)
- Identify skill gaps & deliver timely interventions
- Minimize risks & drive business performance



## **5 Key Engagement Elements**

Microlearning is a systematic approach





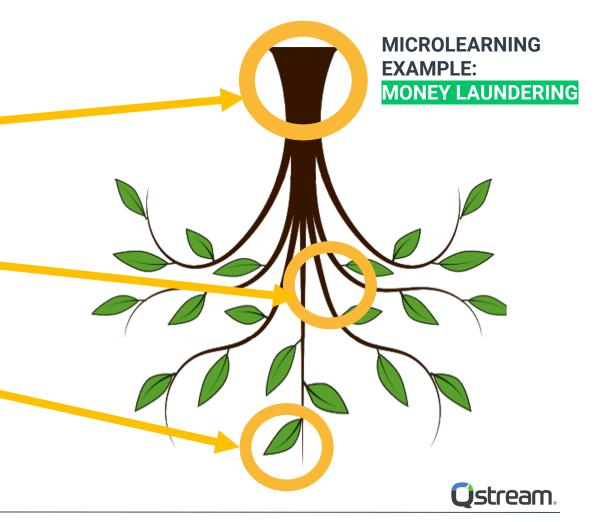


### **ML Objectives**

Business Goal Upskill Money Laundering Detection

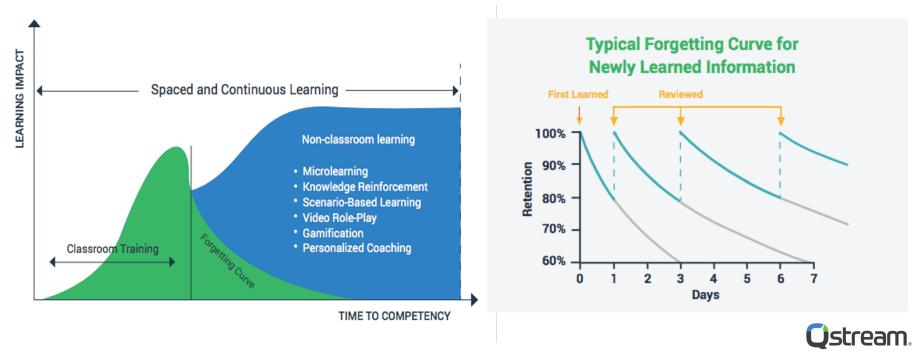
Training theme Identify, Report, Stop Money Laundering

Specific Business Skill mKPI Identify Early Signs of Money Laundering



#### **Microlearning and Spaced Repetition**

• Enhance learning retention especially for complex knowledge & skills



# POLL: How are you driving engagement with your L&D efforts?

- A. Integrating game mechanics
- B. Financial incentives
- C. Other (feel free to put in chat box)



#### **ML Content**

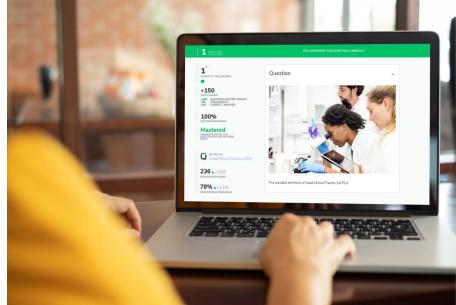
Scenario Based Learning & immediate feedback



Situational Awareness



Prime for Behavioral Change





#### **ML Content**

Scenario Based Learning & immediate feedback

#### 1. Push micro challenges out to engage

2. **Anchor** on micro-skill gaps through immediate feedback

3. **Pull** supportive resources to deepen the learning experience

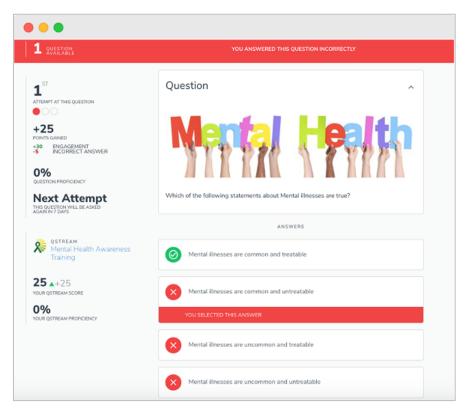
	•				
	Your next question is available! Index x			÷	Z
•	Qstream (Qstream) <noreply@qstream.com> 2:30 PM to me ≠</noreply@qstream.com>	l (0 minutes ago)	☆	*	:
	Qstream				
	Hello David, You have a new question:				
	Mental Health Awareness Training				
	Mental Health				
	Which of the following statements about Mental illnesses are true?				
	ANSWER				



## **ML Self Evaluation**

Scenario Based Learning & immediate feedback

- 1. **Push** learning out to engage
- 2. Anchor on micro-skill gaps through immediate feedback
- 3. **Pull** supportive resources to deepen the learning experience





### **ML Self Evaluation**

Scenario Based Learning & immediate feedback

- 1. Push learning out to engage
- 2. Anchor on micro-skill gaps through immediate feedback
- 3. Pull supportive resources to deepen the learning experience

•••

#### Answer explanation

#### Poor mental health & mental illness are not the same

Although the terms are often used interchangeably. A person can experience poor mental health and not be diagnosed with a mental illness. Likewise, a person diagnosed with a mental illness can experience periods of physical, mental, and social well-being, see more <u>Well-Being Concepts</u>.

#### Mental health Well-being Mental wellness Emotional health Mental capital Social / emotional wellbeing

#### **Mental illness**

Mental disorder Mental health problems/ challenges Emotional problems/ challenges Mental ill-health Psychiatric illness



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#### **ML Motivation**

Game mechanics

 $\langle \checkmark$ 

 $\langle \checkmark$ 

- Conquer new concepts and materials
- Competition and challenges
- Maintain High Engagement

		E QSTREAMS (1 OF 2)	/	
QSTREAM Leaders	ship Development Be	est Practices		
QSTREAM PR	OGRESS			
	SCORE	ATTEMPTED		
3 QUESTIONS				
RETIRED AND N	MASTERED 0 RETIRED NOT MASTERE	D 0 NEXT ATTEMPT	1 FIRST ATTE SCHEDULED	MPT <b>2</b>
LEADERBOARD				
	NAME		ATTEMPTED	SCORE
1			3	450
2	Learner's		3	111
	Nemes			
3	Names		2	86

~



# POLL: How are you measuring success for your training programs?

- A. Completion Data
- B. NPS (net promoter score) for training program
- C. Accuracy based on quizzes
- D. Other (feel free to put in chat box)



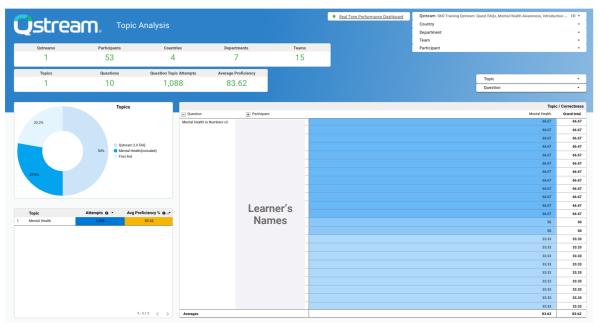
#### **Microlearning Analytics Benefits**



Deeper insights

- Targeted conversations
- Better informed decisions

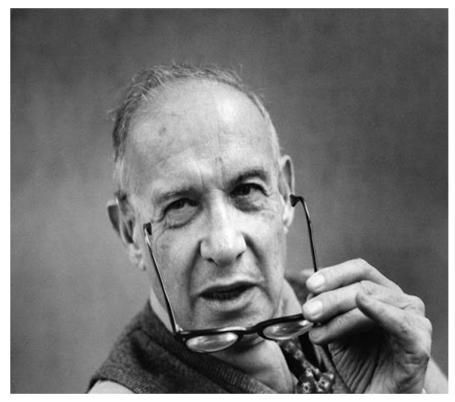
Less risk





## We can only manage **better** what we can **micro** measure.

- Peter Drucker





#### The Problem with Traditional Learning Analytics



Traditional learning tools don't let us detect specific skills related to each person

#### **Unknown Skill X**





### Traditional Learning Completion Rates Don't Provide Insights For Key Decisions and Risk Mitigation



Are there any specific skill gaps that require intervention?



How is the learning ROI on this skill training?



How does this training impact KPI?



Are there any severe learning-related risks that require attention?

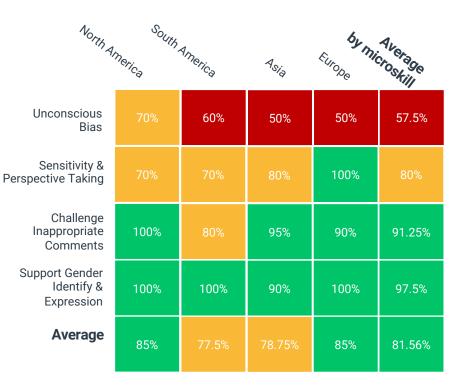


#### **Diversity and Inclusion Analytics Examples**

#### **Initial Proficiency**

**Current Proficiency** 

North A	South Ar,	herica	A <sub>Sia</sub>	Surope by mic	Average <sup>Sroskill</sup>
Unconscious Bias	40%	30%	20%	45%	33.75%
Sensitivity & Perspective Taking	50%	60%	70%	20%	50%
Challenge Inappropriate Comments	60%	35%	20%	60%	43.75%
Support Gender Identify & Expression	30%	40%	70%	80%	55%
Average	45%	41.25%	45%	51.25%	45.625





### **Proficiency Analytics to Inform Business Strategies**

- Is everyone on the team prepared to do the job well?
- Should I deploy my top performers differently to maximize competitiveness?
  - Do we need to be alert if growth fails to take place?



**Movie: Moneyball** 



## Examples of Proficiency Analytics to Improve Business

**Operations** Revise **SOP** based on proficiency data on safety training

- Enhance Manager-to-Workforce engagement focused conversations
- Foster **Cross-Department Collaboration** before or after important trainings





#### High Retention Knowledge Structure



 $\checkmark$ 

 $\checkmark$ 

 $\checkmark$ 

- Deliver micro content at scale
- Spaced repetition
- Immediate feedback
- Game mechanics



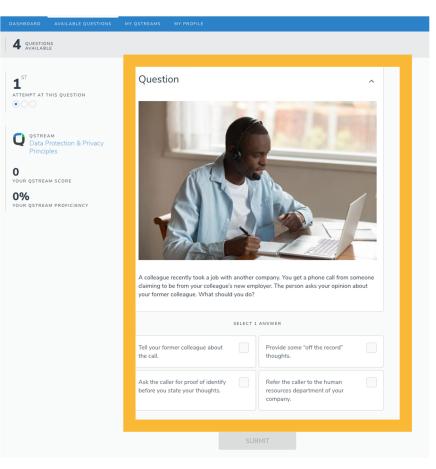


## High Retention Knowledge Structure

#### 1. Customize content to business needs

2. Immediate job improvement from micro feedback

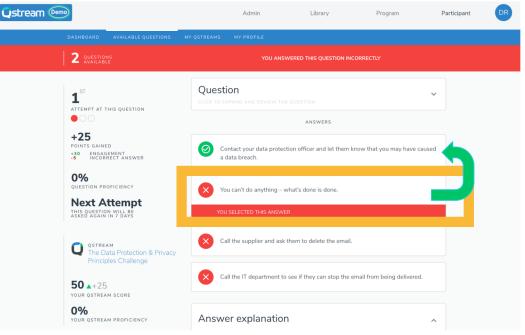
3. Spaced repetition reinforces and retains learning





#### High Retention Knowledge Structure

- 1. Customize content to industry
- 2. Immediate job improvement from micro feedback
- 3. Spaced repetition reinforces and retains learning





# High Retention Knowledge Structure

- 1. Customize content to industry
- 2. Immediate job improvement from micro feedback
- **3. Spaced repetition reinforces and retains learning**

		Admin	Library	Program	Participant	DR
DASHBOARD AVAILABLE QUESTIONS	MY QSTREAMS	MY PROFILE				
2 QUESTIONS AVAILABLE		YOU ANS	WERED THIS QUESTION INC	CORRECTLY		
1 ATTEMPT AT THIS QUESTION		tion Expand and review th			~	
			ANSWERS			
+25 POINTS GAINED *30 ENGAGEMENT *5 INCORRECT ANSWER		ontact your data prote data breach.	ction officer and let them k	now that you may have ca	used	
QUESTION PROFICIENCY	× Y	ou can't do anything –	what's done is done.			
Next Attempt This question will be Asked Again in 7 days	YO	U SELECTED THIS ANSW	ER			
Q STREAM The Data Protection & Privacy Principles Challenge	C C	all the supplier and ask	them to delete the email.			
50 ▲+25 YOUR STREAM SCORE	C C	all the IT department to	o see if they can stop the e	mail from being delivered.		
<b>0%</b> YOUR QSTREAM PROFICIENCY	Answ	er explanatio	n		^	



#### **Learning Progress**



Track learning progress through score & rank

Good Clinical	Practices Challen	ge		
QSTREAM PROGRESS				
RANK <b>13</b>	score <b>25</b>	114%	RETIRED %	
7 QUESTIONS				
RETIRED AND MASTERED	0 RETIRED NOT MASTERED 0	NEXT ATTEMPT SCHEDULED	1 FIRST ATTEMPT SCHEDULED	6



### **Learning Progress**



Motivate learners through leaderboard

QSTREAM PROGRE	SS		
RANK		ATTEMPTED RETIRED	•
10	1395	100% 10	0%
10 QUESTIONS			
RETIRED AND MASTE	RED 9 RETIRED NOT MASTERED 1	NEXT ATTEMPT 0 FIRST ATTEM SCHEDULED SCHEDULED	1PT 0
LEADERBOARD			
	NAME	ATTEMPTED	SCORE
T1		10	1500
T1		10	
			1500
T1		10	1500
T1 4			
	Learner's	10	1500
4	Learner's Names	10	1500 1490
4 T5	Learner's Names	10 10 10	1500 1490 1465
4 T5 T5		10 10 10 10	1500 1490 1465 1465
4 T5 T5 T5		10 10 10 10	1500 1490 1465 1465 1465



### **Actionable Analytics**



 Designers: content decisions & improvement

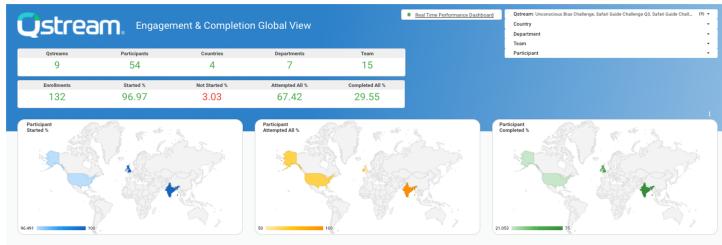


**Managers**: training ROI & KPI diagnosis





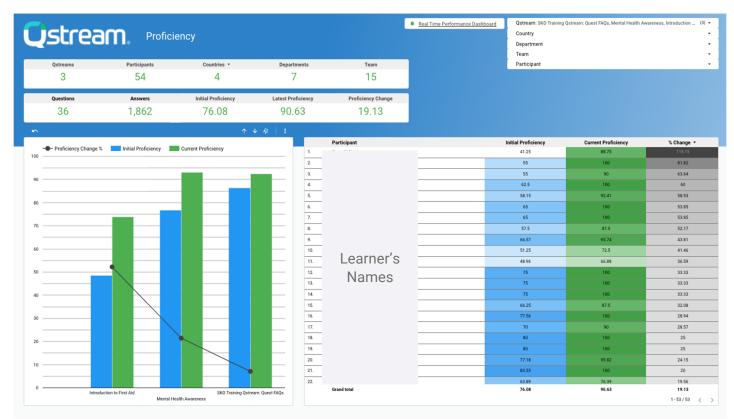
#### **Engagement and Completion Global View**



+ Country Name	Participation	Attempted %	Completed %
India	100	100	87.23
United Kingdom	95.32	96.43	67.86
Ireland	89.9	88.62	69.73
United States	89.23	83.63	60.31



#### **Proficiency Analytics**





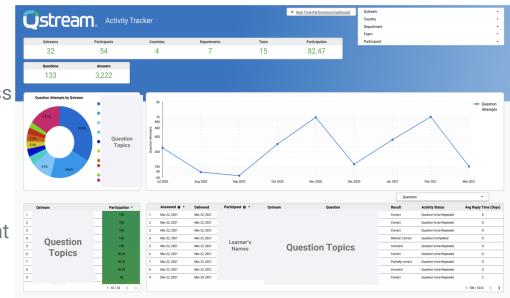
### Proficiency Analytics - Managers View

#### 1. Identify micro skill gap & strength

2. Track collective proficiency gain to assess engagement & training effectiveness

3. Managers: analyze KPI gaps & delegate interventions

4. Designers: develop, revise, update content based on real-time data





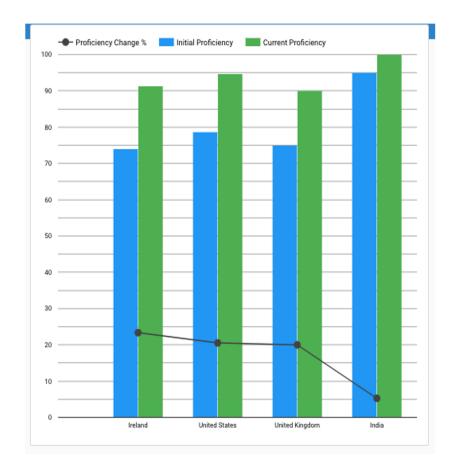
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### **Proficiency - Managers View**

- 1. Identify micro skill gap & strength
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Participant 20.	Initial Proficiency	Current Proficiency	% Change +
26.	 85	100	17.65
27.	 85	100	17.65
28.	 85	100	17.65
29.	 75	90	20
30.	 82.5	100	21.21
31.	 62.5	77.5	24
32.	80	100	25
33.	80	100	25
34.	70	90	28.57
35. Learner's	72.22	94.44	30.77
<sup>36.</sup> Names	75	100	33.33
37. INdiffes	75	100	33.33
38.	75	100	33.33
39.	75	100	33.33
40.	75	100	33.33
41.	65	90	38.46
42.	65	90	38.46
43.	65	95	46.15
44.	65	95	46.15
45.	65	100	53.85
46.	65	100	53.85
Grand total	 76.73	93.19	21.45
			1-53/53 < >



#### **Risk Management**



Real-time analytics on a global scale



Assess success based on ROI globally



Mitigate large-scale risks







## Global Real-Time Proficiency Data Also Informs Leaders Regarding Effectiveness of High Risk Training

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 $\checkmark$ 

time

Reduce blood pressure control mistakes for diabetic patients



Reduce lawsuits with new finance regulation



Reduce incidents of cyber threats



Reduce costly incorrect patient screening orders



Master communication for a product under recall

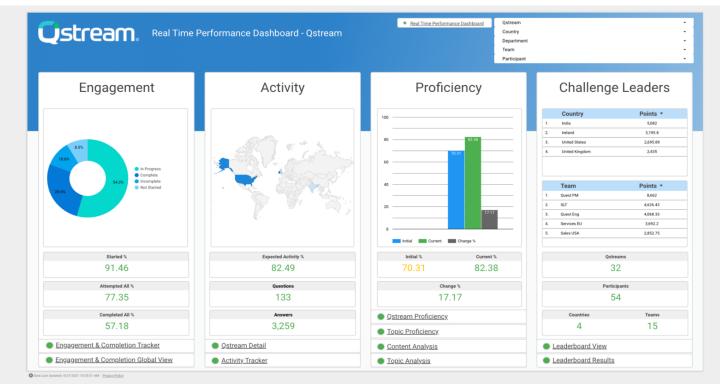


Master go-to-market strategy in a competitive market

Reduce finance audit mistakes and



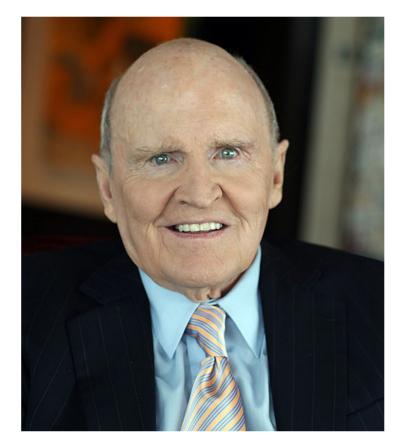
#### **Overview of Analytics**





Organization's ability to learn and translate that learning into action rapidly, is the ultimate competitive advantage.

- Jack Welch





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