

ULEAD



UL COMPLIANCE TO PERFORMANCE
LEADERSHIP FORUM 2016

Philadelphia, PA | October 31 — November 2




xAPI - Building Smarter Courses

A Roadmap from eLearning to Performance Support

Rob Houck

Head of Technology Innovation



How do we support performers best?

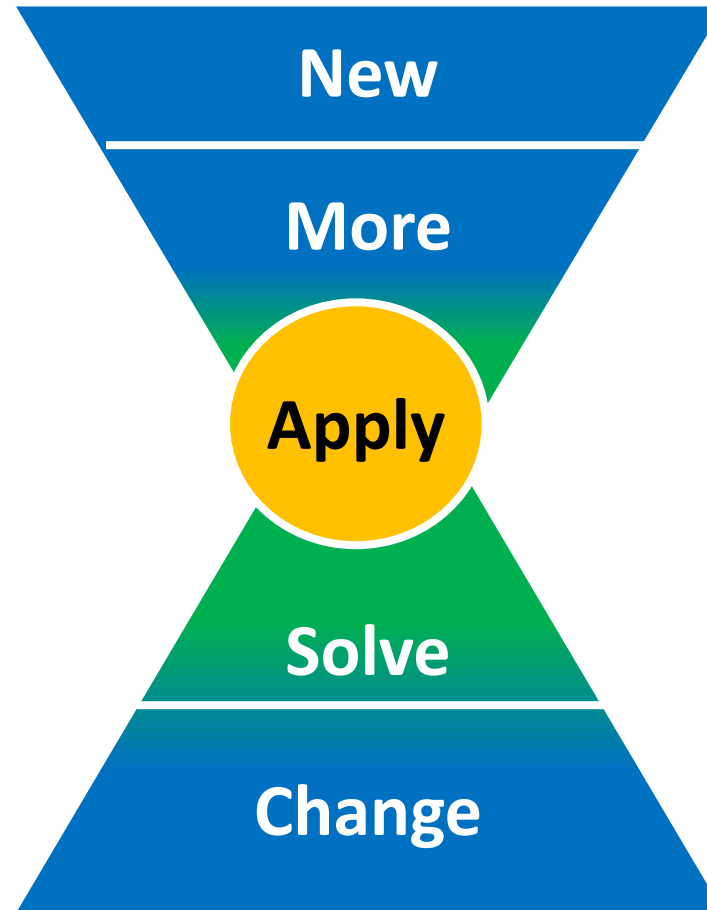
How do we know what they need?

How do we know what they're doing?

How do we know what works?



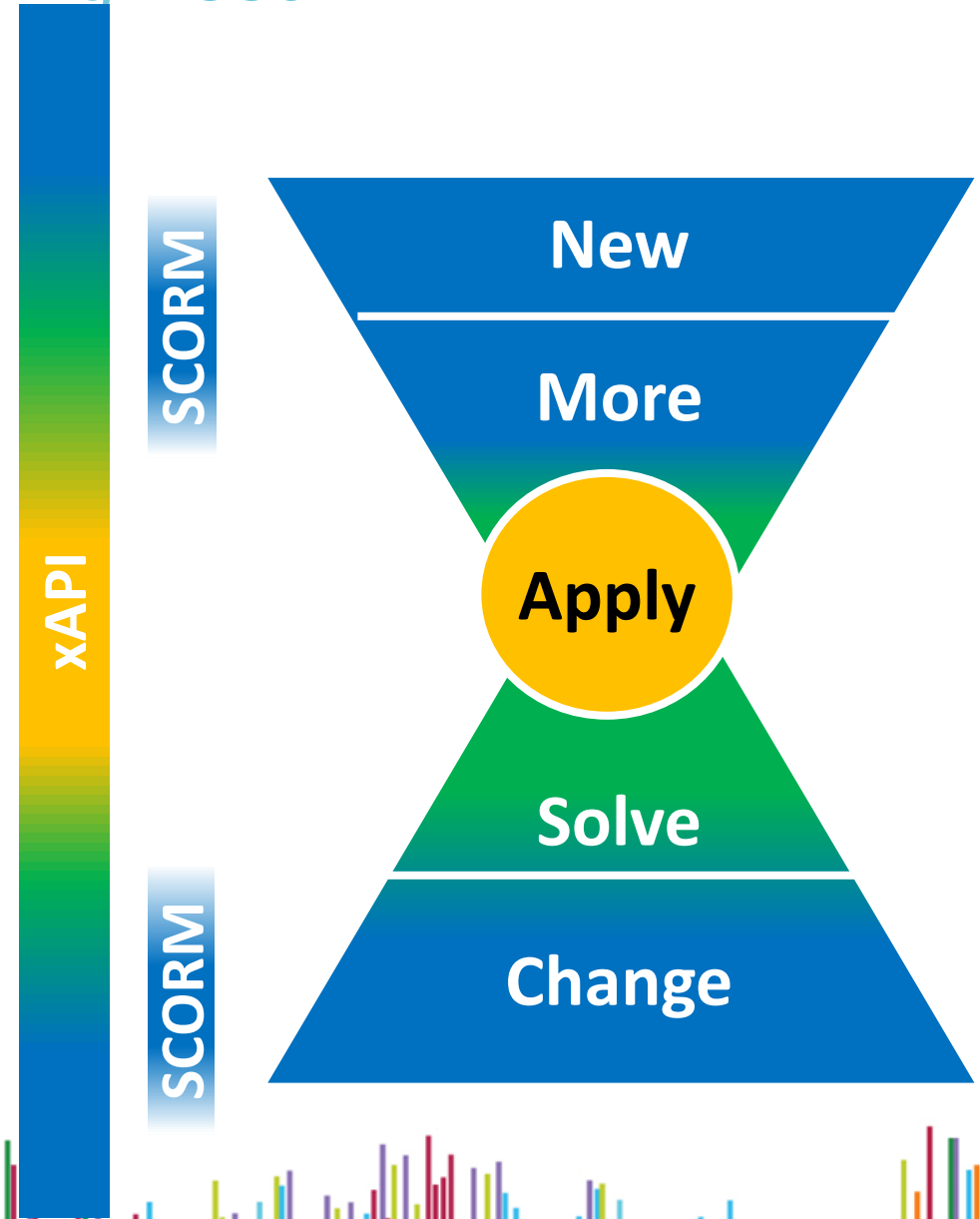
5 Moments of Learning Need



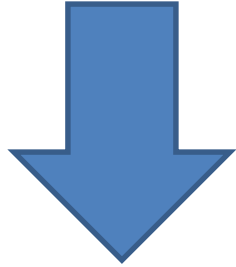
5 Moments of Learning Need:
Gottfredson & Mosher



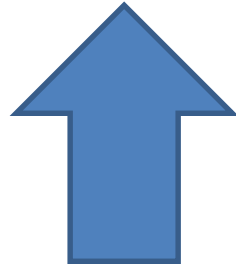
5 Moments of Learning Need



Formal,
PUSH

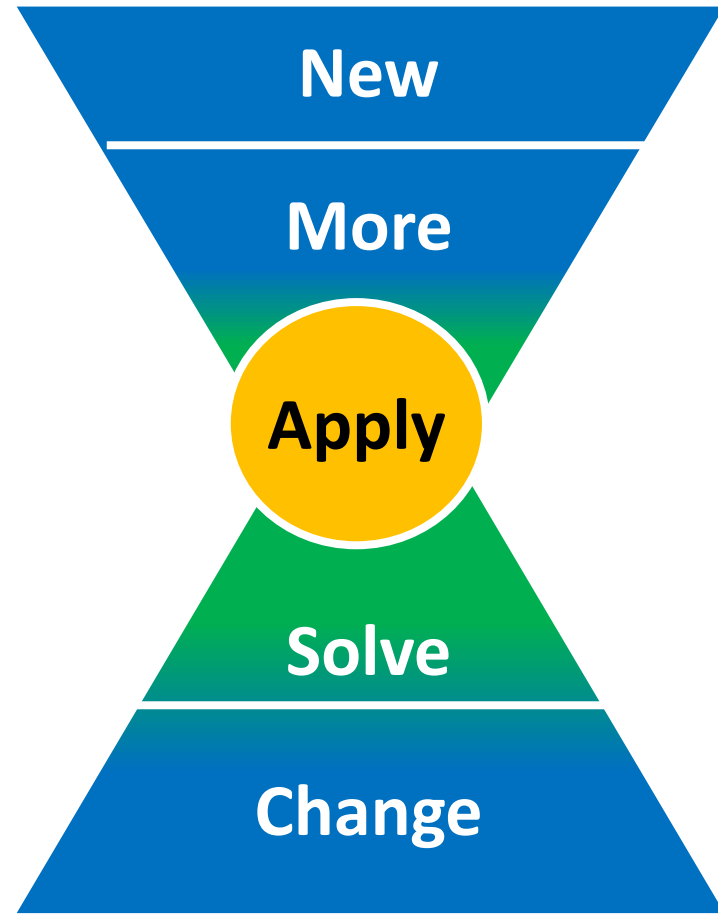


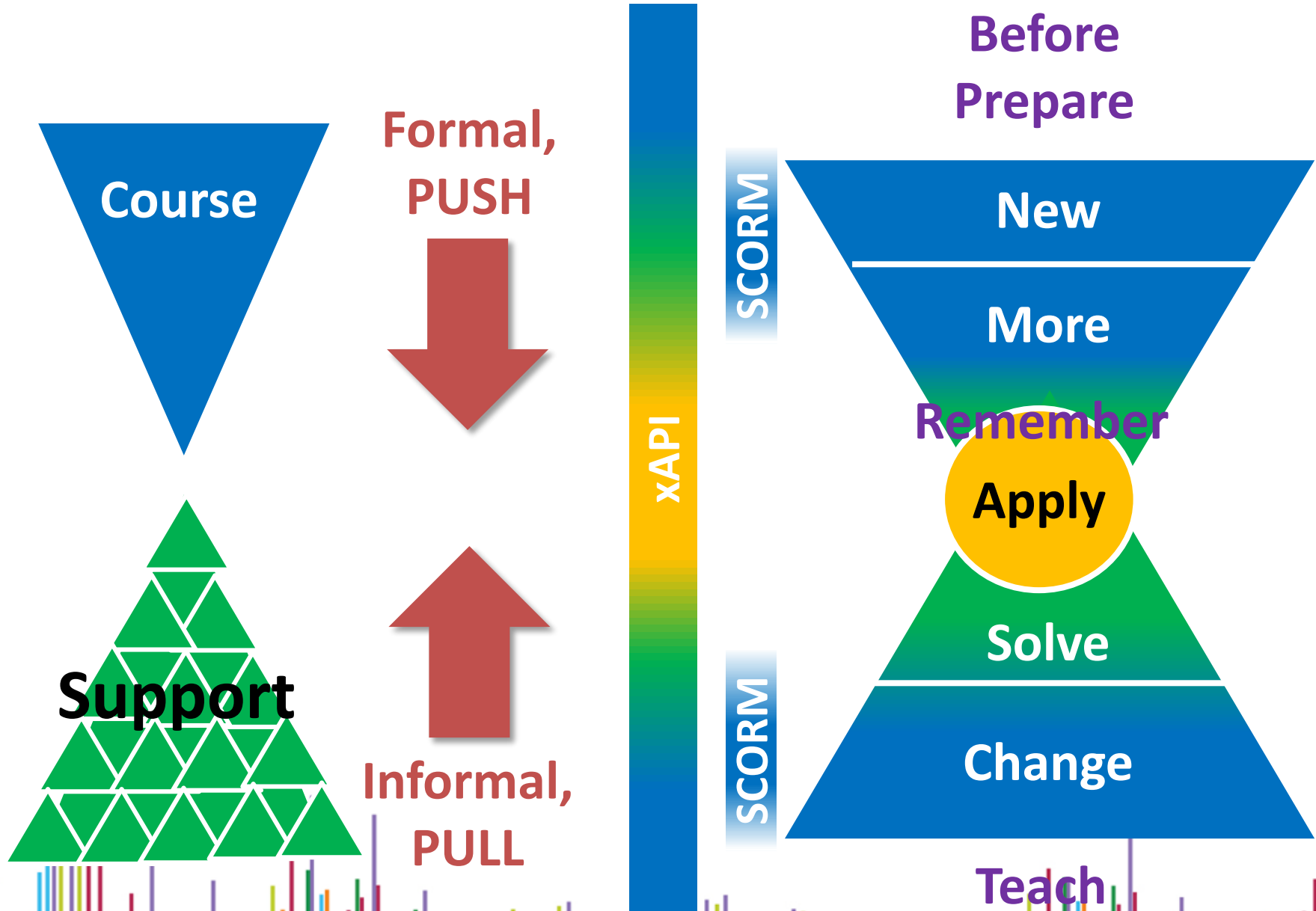
Informal,
PULL



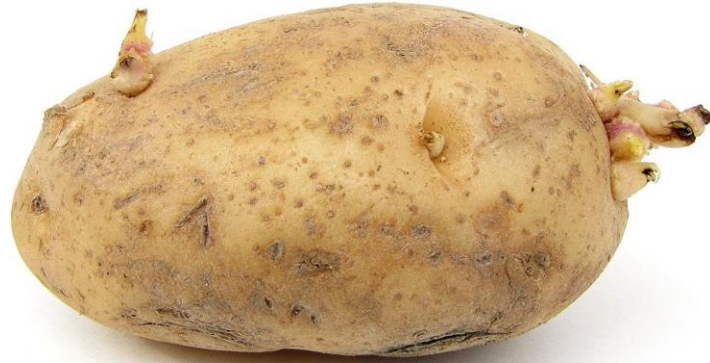
SCORM

SCORM

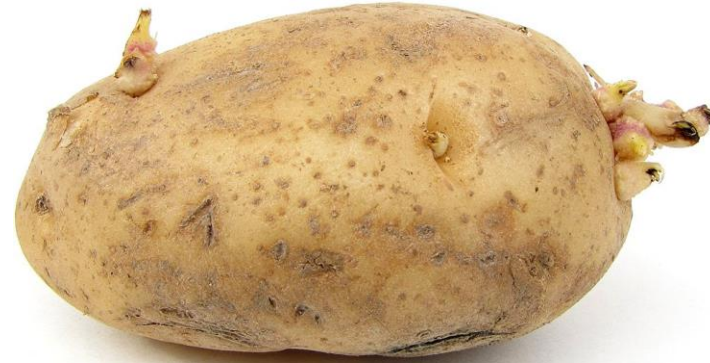




Me



You



Po-tay-to




Po-tah-to



To-may-to

To-mah-to





How do we support performers best?

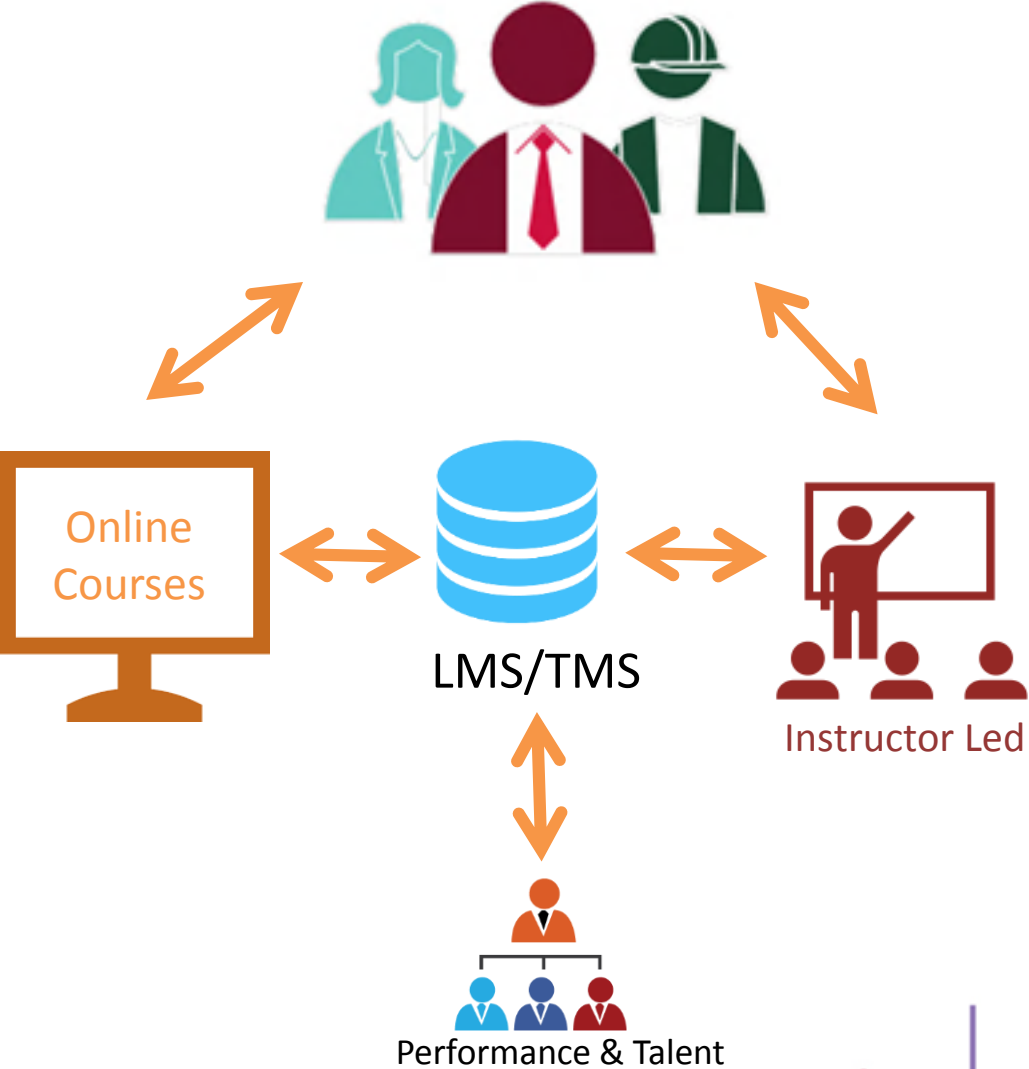
How do we know what they need?

How do we know what they're doing?

How do we know what works?



Legacy Model: LMS (and maybe TMS)



The Approach: Carpet Bomb

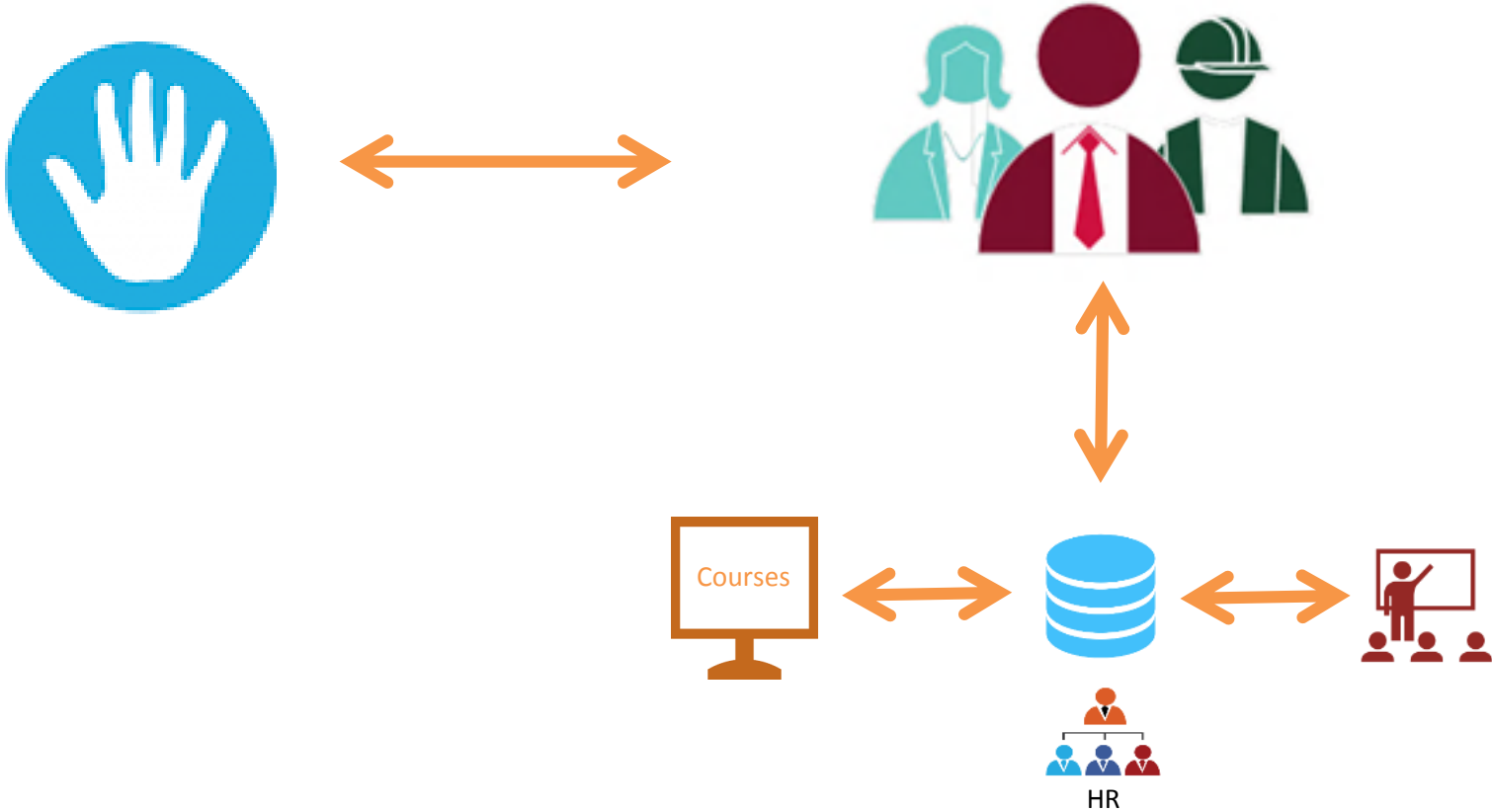


“We’re going to train you if you need it or not!”

(yes, this is an actual quote)



But what about what learners do in the real world?



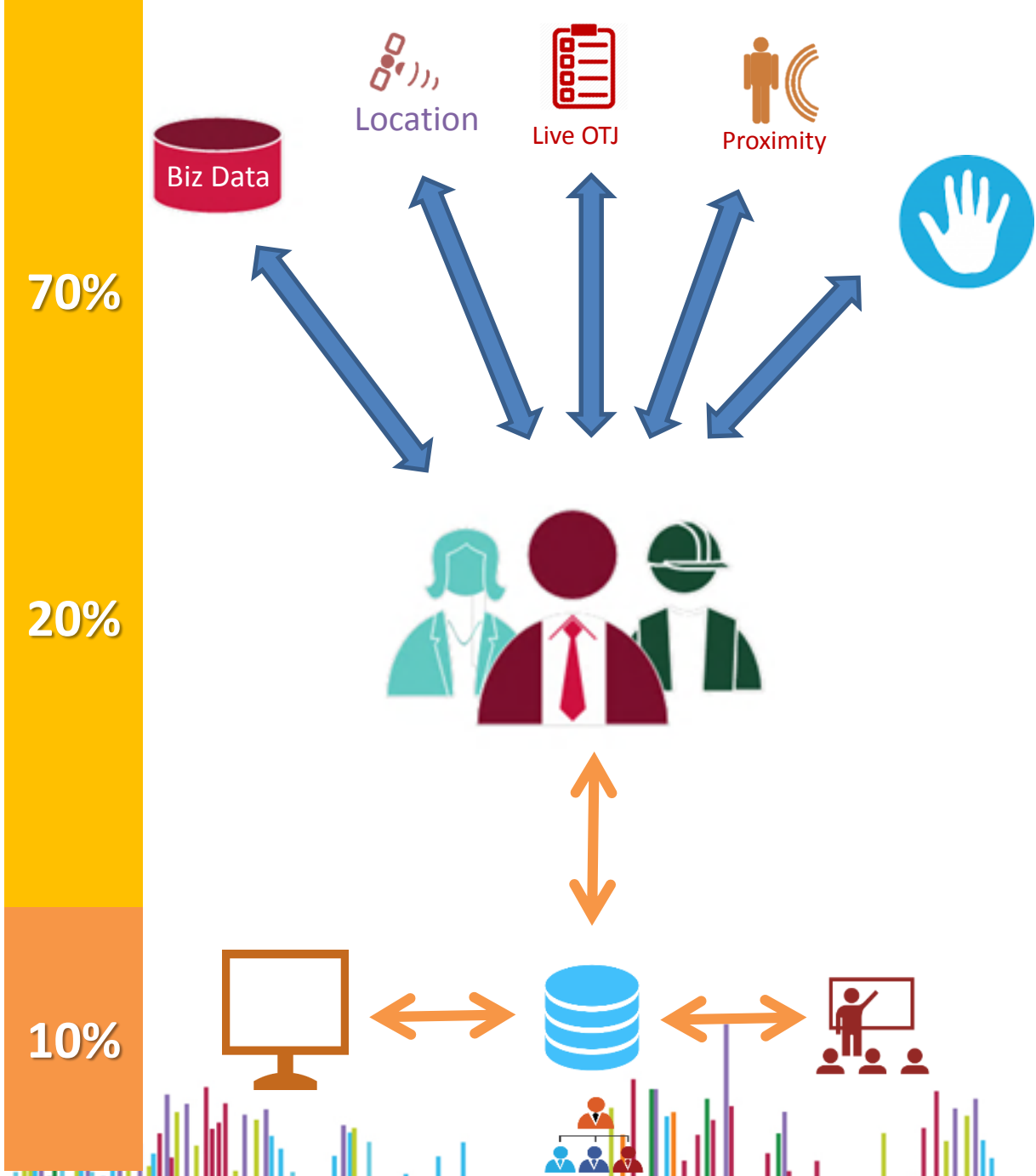
What if..?

knew who you were?
taken training?
actually performing?

It'd be a lot smarter.



New Model: powered by xAPI



All that real world data... makes the learning world smarter

Unlike prior standards like SCORM, xAPI does not “limit” what can be queried inside a course:

- It can read **prior completion information** (scores, times, interactions, etc.) from the current course
- It can read data about **other xAPI enabled courses.**
- It can read data from **other xAPI enabled data sources.**



Smarter 101: Using training history from this course or tool.

- **Make it challenging** - If someone has taken this path many times , branch to an advanced path.
- **Show current information** – I took the course last year, so fast-path me to the latest, greatest updates. (or give me a “test out”)
- **Leverage prior results** – You did well on this last time, so let’s not bother you again for the next 30 days.



Smarter 201: Using training history from **other** interventions

- **Adapt based on related course scores** - I passed the intro course with flying colors, my performance support path adjusts accordingly.
- **Look at topical data** – I saw the section on accounts payable transactions in another course within the last 60 days. I probably don't need that info again.



Smarter 301: Using employee demographic information

Work Location – I work in California, and there's more I need to know.

Job Role – I'm in a clinical role, so my HIPAA needs are more focused on that persona.
(Or, I'm in claims; what does HIPAA mean for me?)

Work Center – I work on specific machines. Help me focus on the safe handling of those tools as a priority.

Work Streams – Help me focus on processes that are more critical to my daily operations.



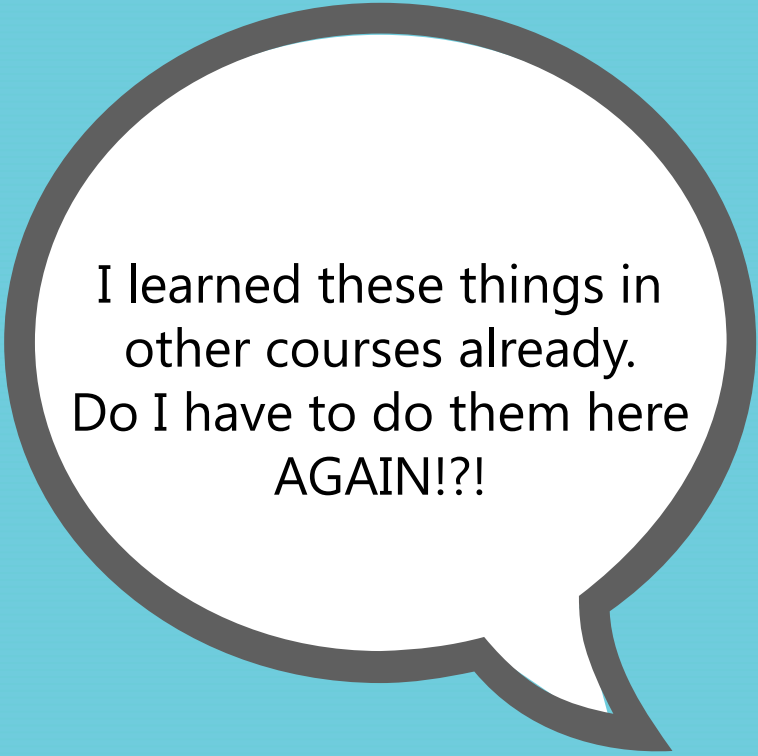
Smarter 401: Using data from other sources.

- **Adapt** – Branch based on last year's performance rating or current competency assessment data
- **Recommend** - My sales volume is 30% below my goal. Show me how to remediate that.
- **Micro-learning** – Surface materials for me that that can be quickly consumed, or reused as reference and reminders later on.





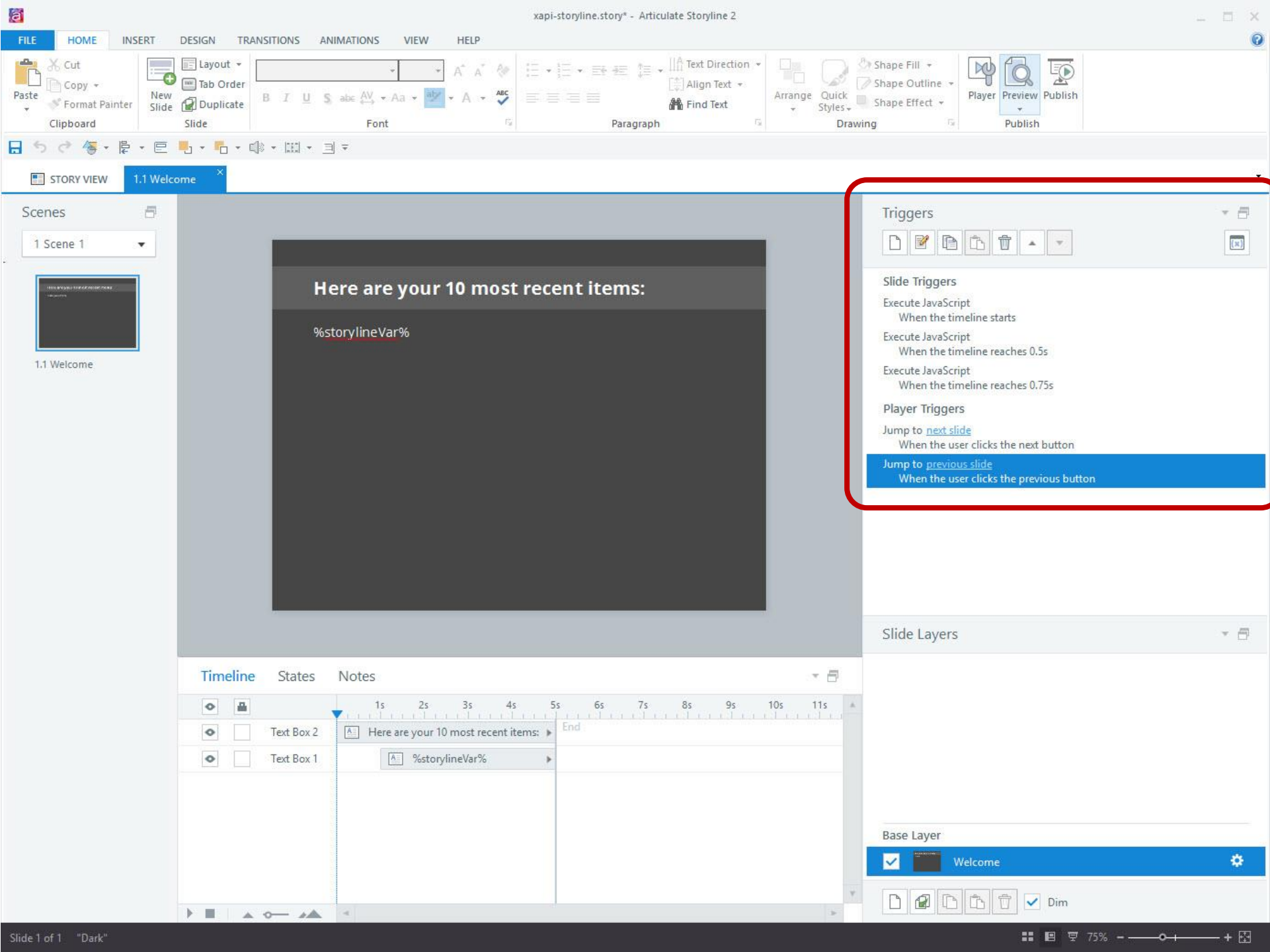
I get it.. But how?



I learned these things in
other courses already.
Do I have to do them here
AGAIN!?!

Smarter 101:
Drive the learner's path based on data
in the LRS.





Triggers

Execute JavaScript
When the timeline starts

Execute JavaScript
When the timeline reaches 0.5s

Execute JavaScript
When the timeline reaches 0.75s

Player Triggers

Jump to [next slide](#)
When the user clicks the next button

Jump to [previous slide](#)
When the user clicks the previous button

Timeline States Notes

Object	Start	End	Notes
Text Box 2	0s	4s	Here are your 10 most recent items:
Text Box 1	0s	4s	%storylineVar%

Slide Layers

Base Layer

- Welcome

Dim

```

1  function ExecuteScript(strId) {
2  switch (strId) {
3  case "5ekmyskezczy":
4  Script1();
5  break;
6  case "61HLEwecsFH":
7  Script2();
8  break;
9  case "5WPh4snJffe":
10 Script3();
11 break;
12 }
13 }
14
15
16
17 function Script1() {
18 var s = document.createElement("script");
19 s.type = "text/javascript";
20 s.src = "tincan.js";
21 document.body.appendChild(s);
22 }
23
24
25
26 function Script2() {
27 window.tincan = new TinCan({
28   url: window.location.href
29 });
30 }
31
32
33
34 function Script3() {
35 var player = GetPlayer();
36
37 tincan.getStatements({
38   sendActor: true,
39   sendActivity: false,
40   params: {
41     registration: null,
42     limit: 10
43   },
44   callback: function (err, result) {
45     if (err !== null) {
46       console.log('error:', err);
47       return;
48     }
49     var stmts = result.statements;
50
51     var storylineVar = [];
52     stmts.forEach(function (e) {
53       var thisActor = "You";
54       var thisVerb = e.verb.display.und || e.verb.display["en-us"] || e.verb.display["en-US"];
55       var thisObject = e.target.definition.name.und || e.target.definition.name["en-us"] || e.target.definition.name["en-US"];
56
57       var thisLine = thisActor + " " + thisVerb + " " + thisObject;
58       storylineVar.push(thisLine);
59     });
60
61     storylineVar.reverse();
62     storylineVar = storylineVar.join("<br>");
63     player.SetVar("storylineVar", storylineVar);
64
65   }
66 });
67 }
68

```

Get the code on Github:
<http://bit.ly/1WBQVfE>

Menu

▼ Scene 1

Welcome

xapi-storyline

Resources

Here are your most recent items:

You experienced Keep It Simple
You experienced Topic Areas
You experienced Summative Assessment
You experienced Assessment
You attempted xapi-storyline
You experienced Welcome
You completed xapi-storyline
You attempted xapi-storyline
You experienced Welcome
You completed xapi-storyline

**Get the code on Github:
<http://bit.ly/1WBQVfE>**



< PREV

NEXT >

Some non-course learning tools that are xAPI

- Survey Gizmo
- Learning Orchestra
- Train by Cell
- Moxtra
- Trek
- TES
- River



If I don't do
this job,
why do I have to
do this training?

Smarter 301
Serve up courses based on role,
performance and need



Business goal:

Managers build teams that perform well and stay with the company.

The LMS/LRS knows:

- If you're a new hire, so 8 hours of on-boarding are saved if you're not!
- Your job role (executive, director, individual contributor, etc.)
- Your department
- Your competency assessment scores
- Your performance review scores



Persona: New Manager

- I'm new to the company,
- I'm new to my role
- I work in sales,
- I have no history of assessment or performance appraisal

28 hours of training. The whole thing.

“Newbie” level supports are useful.



Soft Skills



Compliance



Onboarding



Persona: New to Role

- I'm **not** new to the company,
- I'm new to my role as supervisor
- I **do not** work in sales,
- I **have** history of assessment or performance appraisal

16 hours of training.

Experienced level supports are available.



Soft Skills



Compliance



Onboarding



Persona: New Exec

- I'm **not** new to the company,
- I'm taking on a **director** position
- I **do not** work in sales,
- I **have** history of assessment or performance appraisal

10 hours of training.

High level supports are served first.



Soft Skills

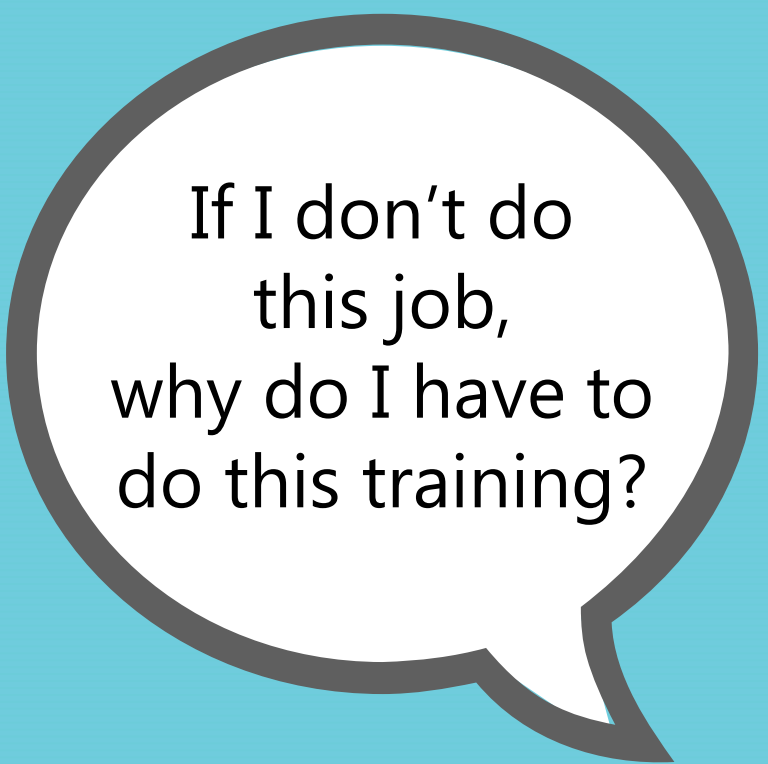


Compliance



Onboarding





If I don't do
this job,
why do I have to
do this training?

Smarter 401:
Serve up training & support tools based on
business data



Welcome, @MMTorrance!

MMTorrance, you're a Twitter rockstar!

1230 Followers

702 Following

1920 Tweets sent

7 Years you've been on Twitter

With rockin' stats like these, you've been waived from the following training topics:

101 Twitter for Dummies

201 You can do Twitter!

You've been enrolled in:

301 Twenty Tips for Timely Tweets

Recommendation: You could put your social media skills to good use by mentoring others.

Where's your data?

- Internal systems
 - Check with IT
 - Download, format, upload
- External systems
 - Will they use xAPI?
 - If not, download, format, upload
- Learning ecosystem vendors
 - Fight the good fight!



You can do this today...

- Use our “anything to xAPI” import
- Can import a text file (CSV) into xAPI transactions for your LRS/LMS.
- Very useful for
 - Importing data from reports, or Excel spreadsheets
 - Leveraging existing “feeds” to push data to the LRS/LMS for use in courses



Questions

