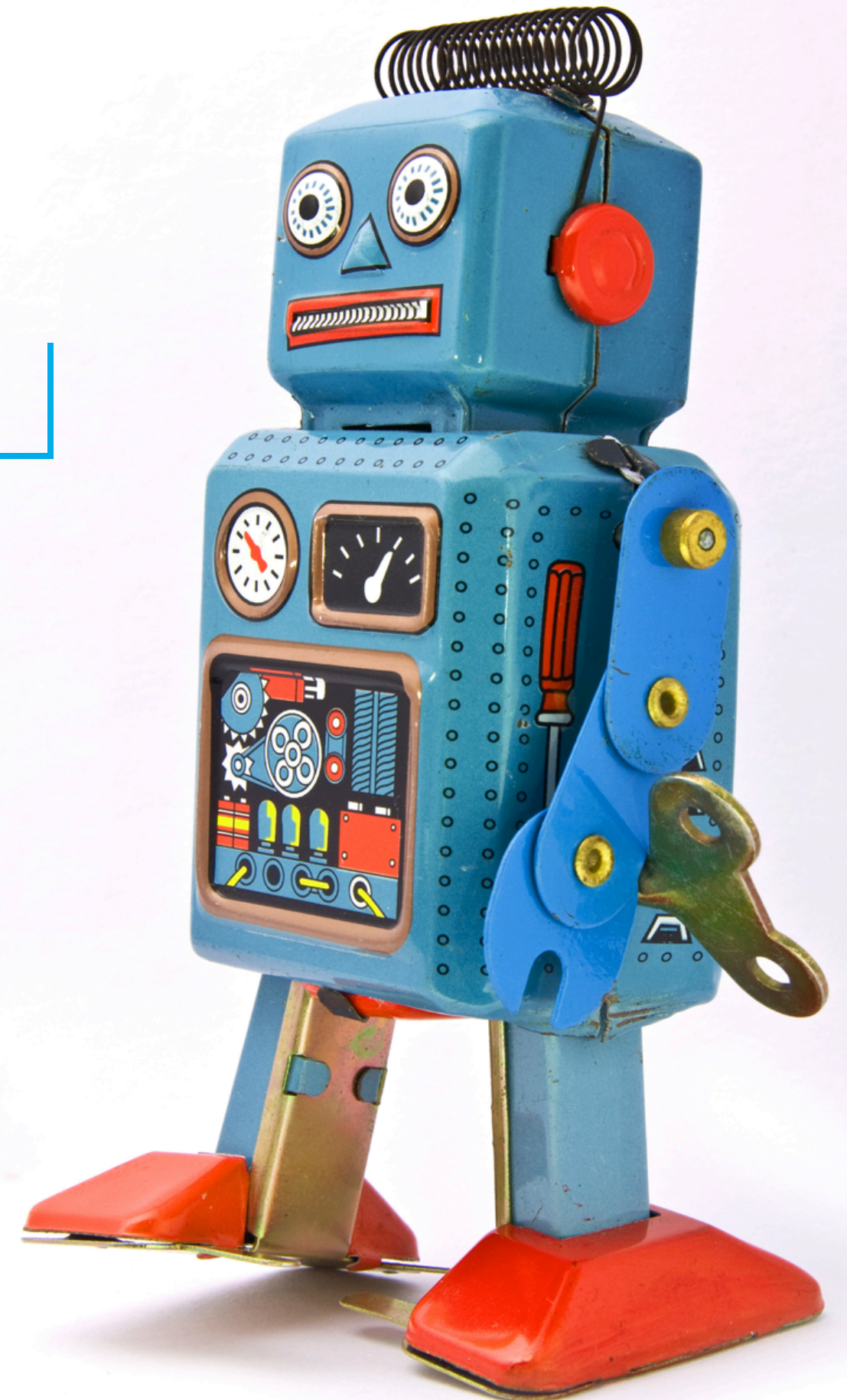


# Enabling Learning & Performance Analytics with xAPI



**Mike Rustici**  
Founder & CEO  
Watershed  
@mikerustici





*“Scalable learning is the  
new reason for large  
organizations to exist”*

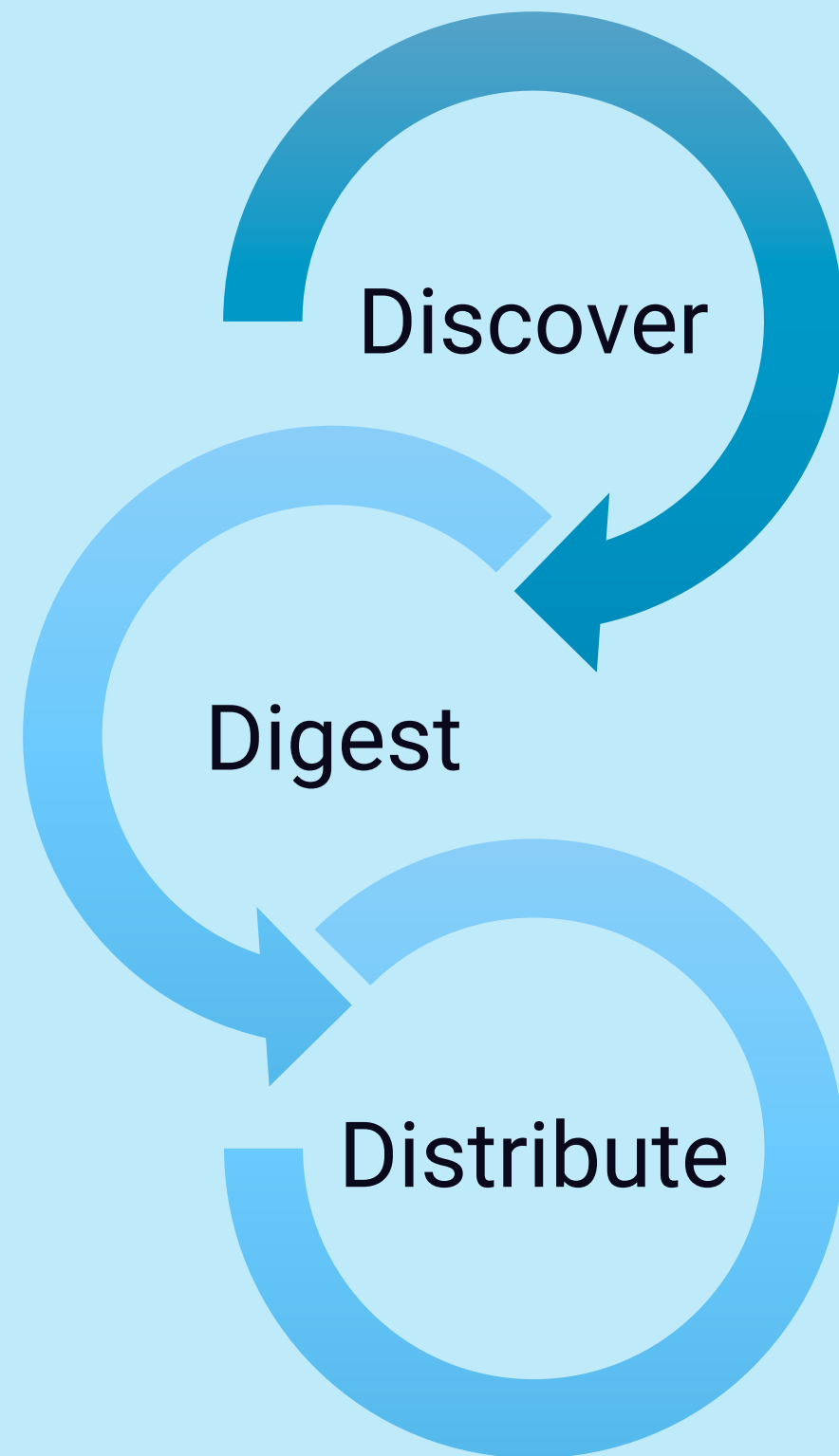
John Hagel  
Founder

Deloitte Center for the Edge Innovation



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# Learning Embedded Everywhere



## Discover

Discover new knowledge through study, experimentation and practice.



## Digest

Assess the validity of knowledge and ensure it has a positive impact.



## Distribute

Rapidly disseminate new knowledge to the entire organization.



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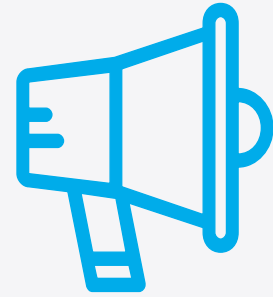
| ask  
yourself

**Are your learning systems going to  
get you there?**



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| isn't it  
because...



## Small moves, smartly made

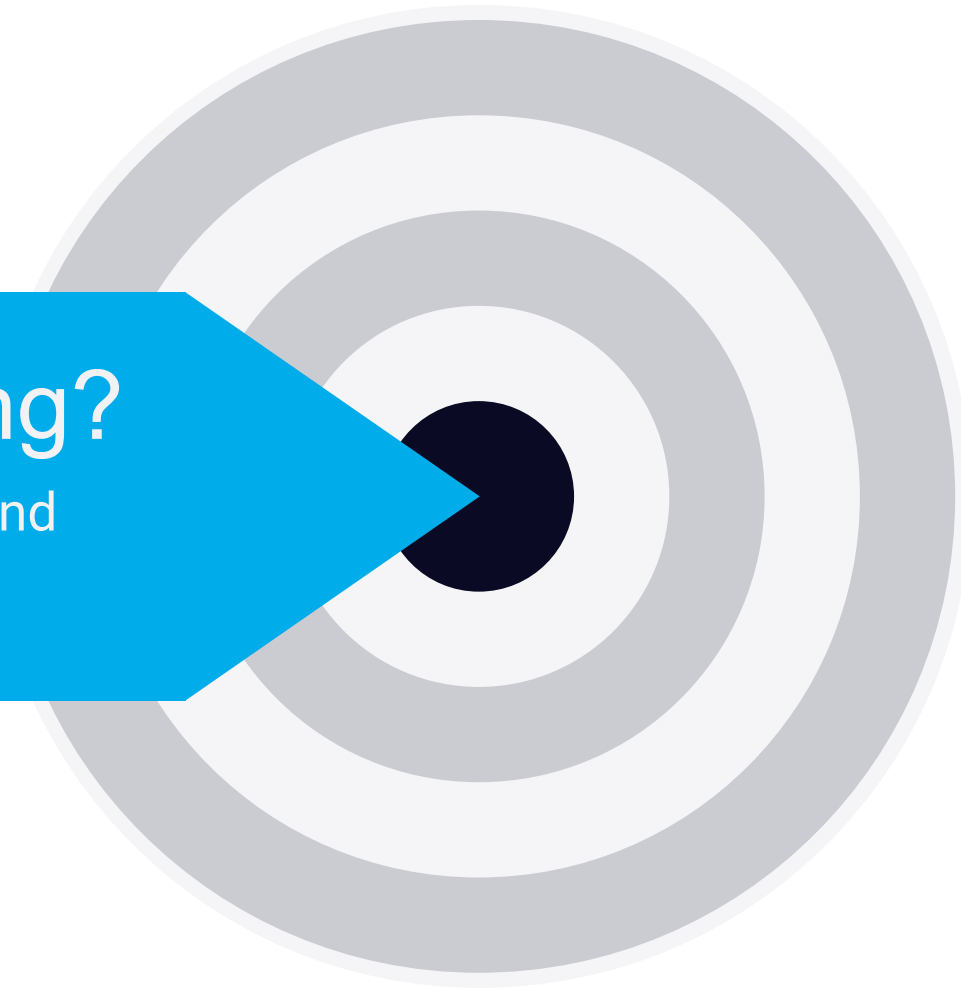
*"In an exponential world, small moves, smartly made can set big changes in motion" – John Hagel*



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## What is the biggest enabler of scalable learning?

What is the smartest move organizations can make right now to lay a foundation and set themselves on a path to becoming a scalable learning organization?







*“Without data you’re just  
another person with an  
opinion”*

W Edward Deming  
Management Systems Legend

# | xAPI is to learning technologies what USB is to electronic devices

## USB

USB is a technical specification that makes it easier and cheaper to connect electronic devices.

With USB, you normally need a computer to connect devices to.



## xAPI

xAPI is a technical specification that makes it easier and cheaper to connect learning technologies.

With xAPI you need a Learning Record Store (LRS).



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## | key takeaways



xAPI is to learning technologies what USB is to electronic devices.

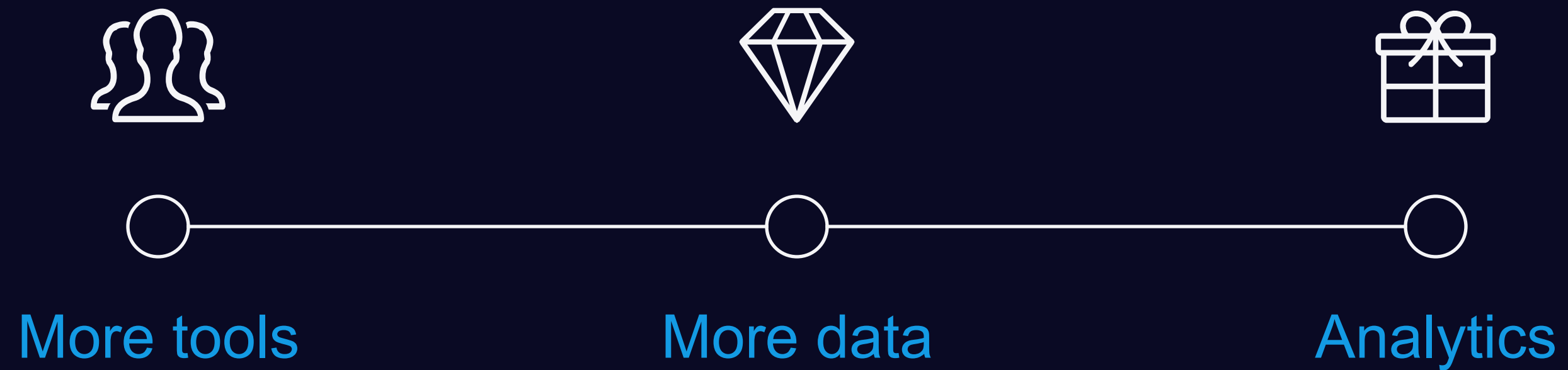


xAPI enables you to build a blended learning ecosystem using best-of-breed products.



xAPI can even be useful when working with products that have not implemented xAPI.



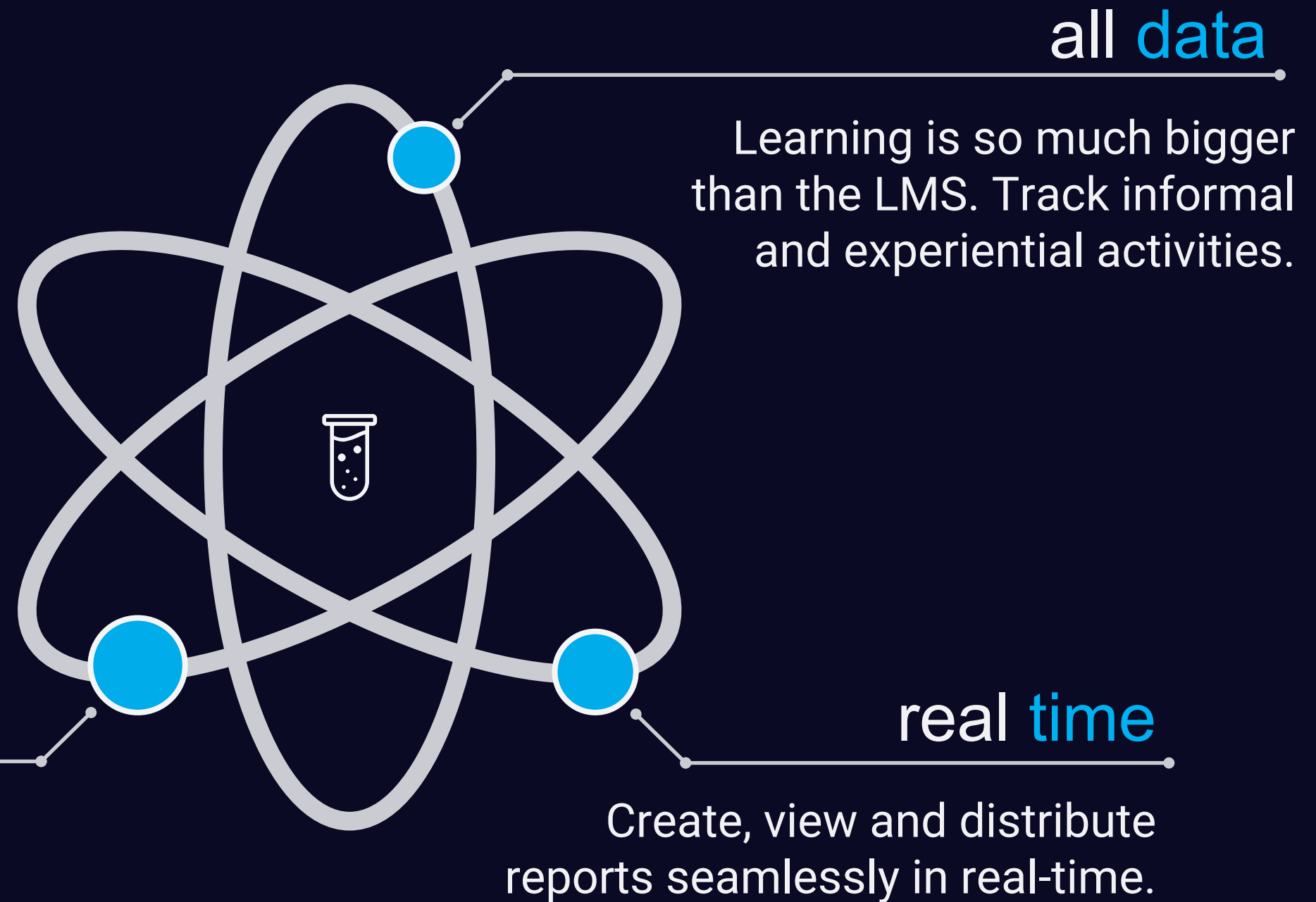


# xAPI & learning analytics platform

xAPI and the LRS present a transformative technology for learning analytics. Seamlessly bring all your data together in one platform and perform real-time analytics tailor made for L&D.

Include data about behaviors and performance in your learning analytics

business  
impact



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# Understanding learning analytics: Complexity



The simple act of tracking things and recording values. Can be passively or actively collected.

The process of trying to make meaning from the data measured. Descriptive analytics. Does the data mean something “good” or “bad”?

When data sets get large enough we can use advanced evaluation techniques to discover powerful insights. Data mining, AI, machine learning, etc.

Make predictions and decisions based on data and advanced algorithms. Recommendation engines are the best example of this in learning.



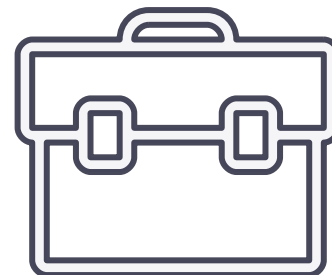


# Understanding learning analytics: Categories



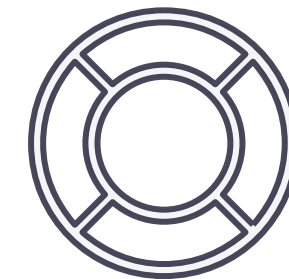
## Learning Experience

Understand more about a specific learning activity. Maximize effectiveness and spot problems.



## Learner

Understand a learner or group of learners. Ensure organizational readiness and compliance.



## Learning Program

Understand an overall learning program. Is this initiative helping to meet business objectives?



# Learning Analytics

LEARNING EXPERIENCE  
ANALYTICS

LEARNER  
ANALYTICS

PREDICTIVE AND PRESCRIPTIVE ANALYTICS

ADVANCED EVALUATION

DATA EVALUATION

MEASUREMENT

LEARNING PROGRAM  
ANALYTICS



# | Getting Started yes you can!

- 01 Gather your data**  
Just start collecting data in a common format in a central location. Make it low friction and ensure you have access.
- 02 Get to know your data**  
Understand what you have. What is out there, what is reliable and what is missing? Do some simple evaluations and create baselines.
- 03 Operationalize your data**  
Automate your way out of “Excel hell”. Define some interesting metrics and KPIs, start monitoring them routinely. What trends do you notice?

- 04 Explore your data**  
Starting to understand not just “what” is happening but “why”. Form questions and see if your data can answer them. Often the best answer another question. Can you see impacts on the larger business?
- 05 Experiment with your data**  
Start a new learning program with analytics in mind. Set up well controlled experiments and A/B tests to validate a hypothesis. Create a culture of continuous improvement.
- 06 Show off your data**  
We’ve long known that learning is vital, not we can probe it. Go forth and show the world!



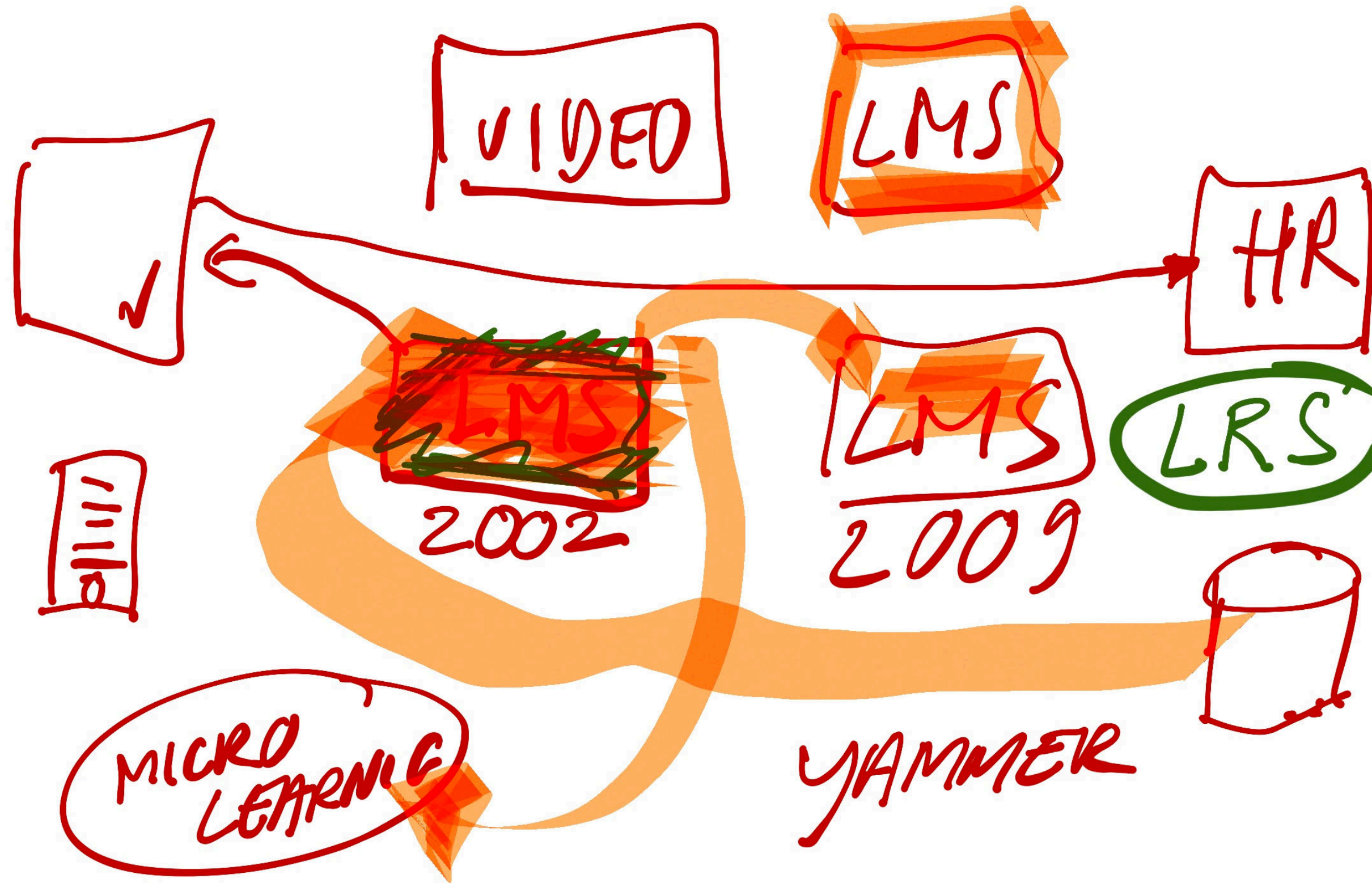
Five xAPI case studies presented by real practitioners



Visit [xAPIxAPRIL.com](https://xAPIxAPRIL.com) to register & view

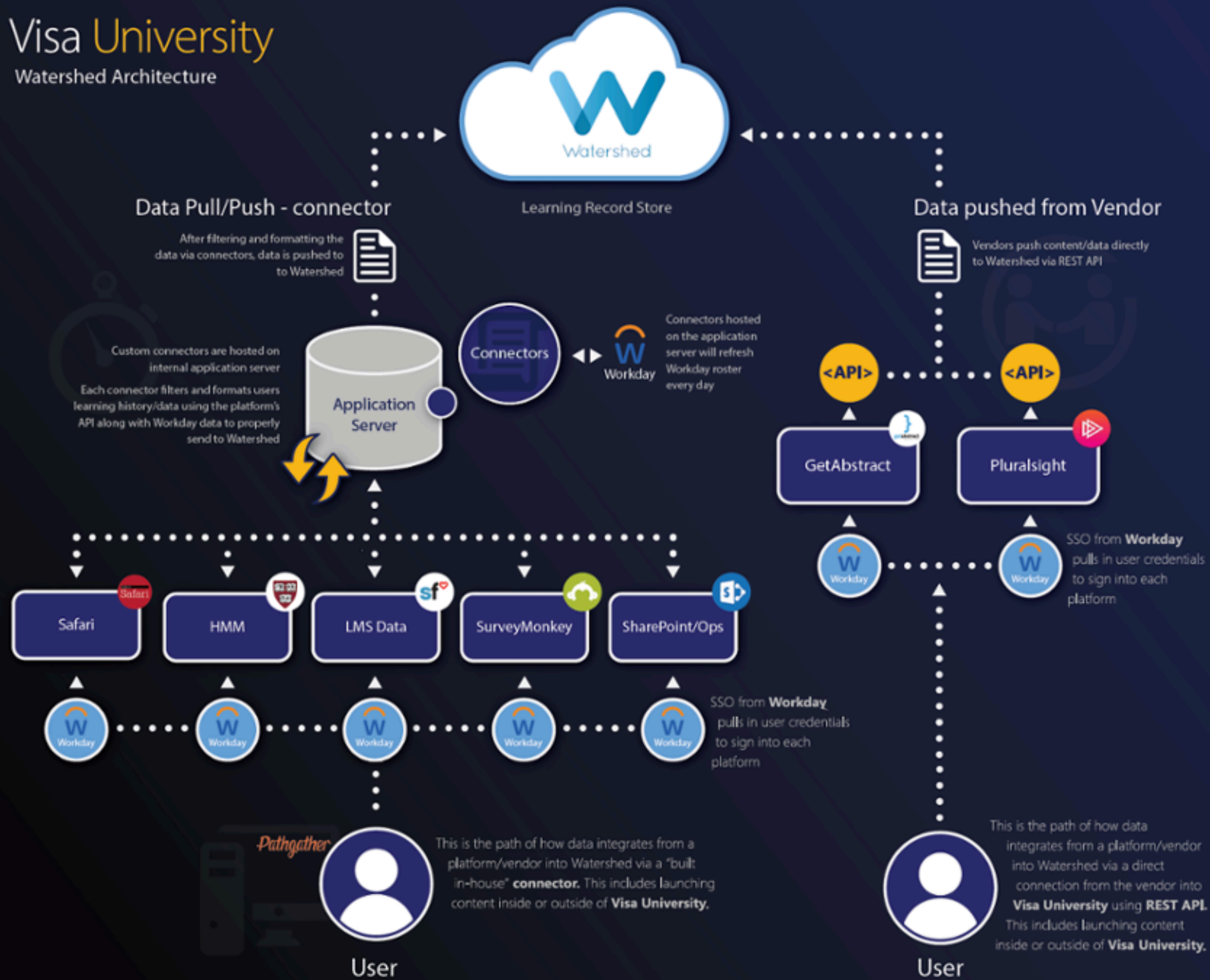


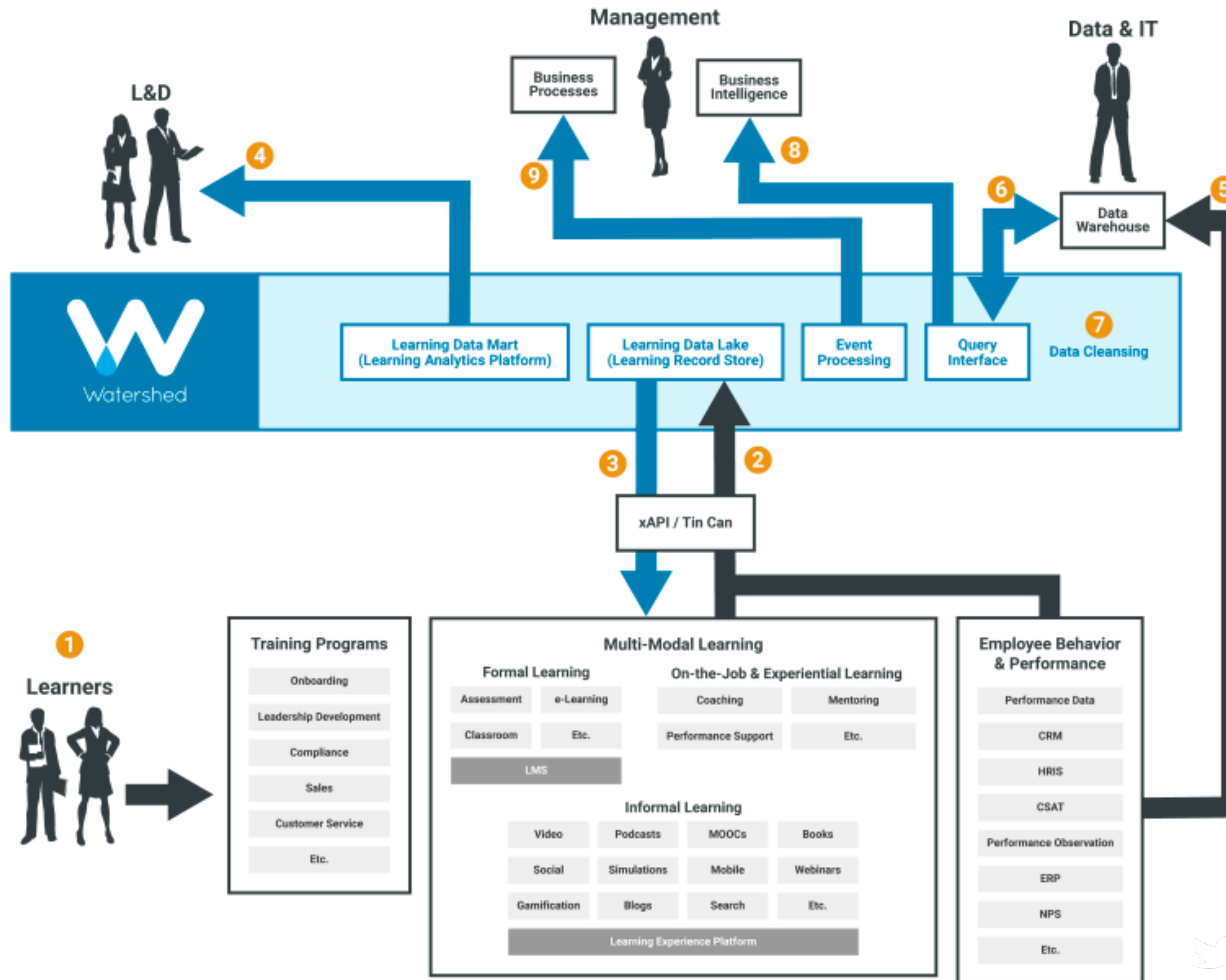
# Current state of real learning systems



# Visa University

## Watershed Architecture





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