

Educating for the Future

Basel SDE

James McDermott

June 28, 2018

Working Group Mission

- The goal of this Working Group is to develop frameworks by which to educate the PhUSE community at large. The frameworks will be designed to educate the community on the importance of topics where we feel we have gaps, the details of the topics themselves, and how they can be used to drive innovation in the industry.



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Working Groups**



Co-Leads



Ian Fleming
Medidata Solutions



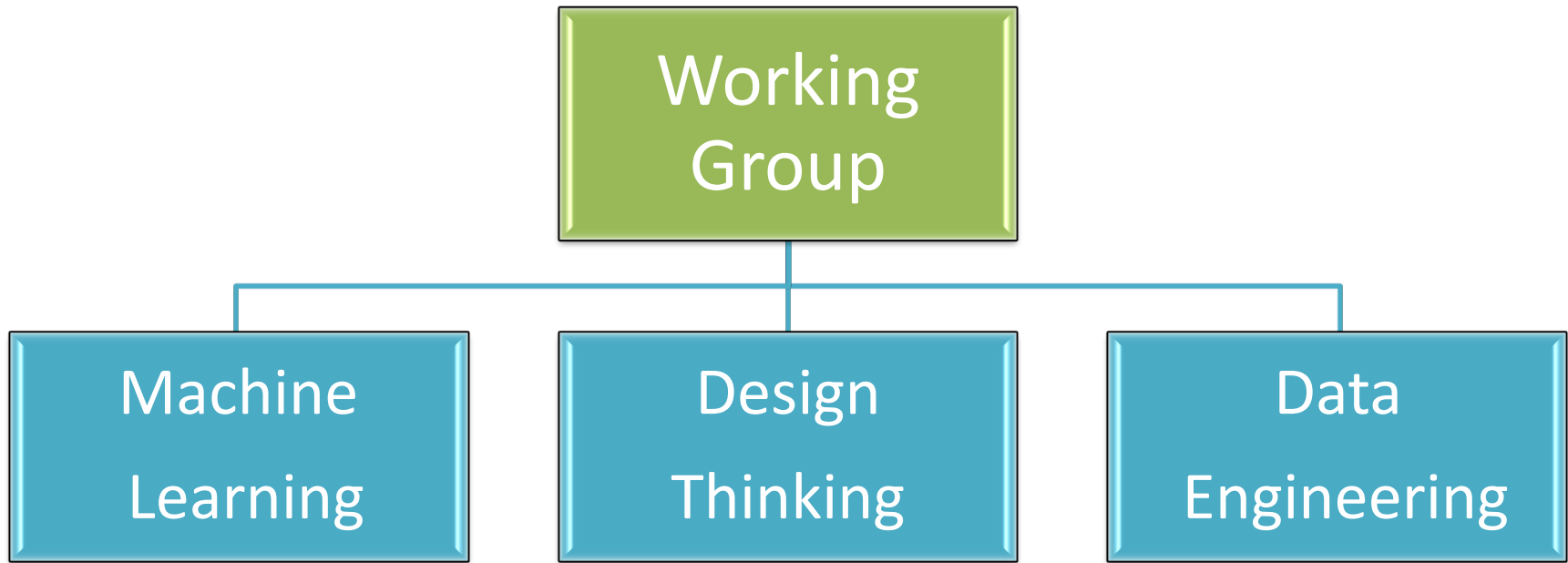
James McDermott
Achieve Intelligence



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Educating for the Future - Projects



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March 2018 CSS

After introducing the WG and individual projects, the members who attended the CSS session this year discussed collective needs, and agreed to a set of user/system requirements (at a high level) for our desired approach.

- User friendly
- Usage metrics analytics
- Many users & types
- Configurable

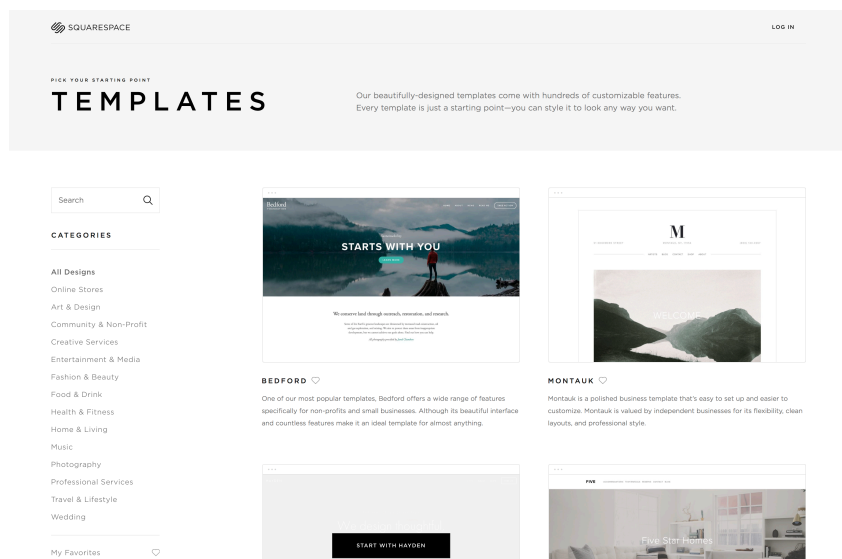


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Education Repository

Squarespace has been chosen as the tool to host the PhUSE EftF repository. It is a software as a service-based content management system, integrated website builder, and blogging platform.



- High level navigation and design is currently being built out
- Projects will begin populating content within the next few months



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Machine Learning and Artificial Intelligence

- Our goal is first to introduce ML & AI to the pharmaceutical industry. These concepts are foreign to most programmers and statisticians in the pharmaceutical industry. This project will help them to start ML & AI through educational materials. Secondly we will explore how ML & AI can foster innovative approaches in data-driven research and drug development, personalized medicines, faster drug discovery and more.
- Co-leads
 - Nicolas Dupuis, d-wise
 - Kevin Lee, Clindata Insight



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Design Thinking

- By definition, DT is 'a formal method for practical, creative resolution of problems and creation of solutions'. DT methods foster a way of thinking that reframes the problems and solutions we assume we have the answer to. It also puts heavy emphasis on experimentation, iteration, and user feedback to quickly develop solutions that derive maximum benefit for end users and the actual problems they are trying to resolve.
- Co-leads
 - Crystal Allard, FDA
 - Ian Fleming, Medidata Solutions



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Data Engineering

- This project will explore how established Data Engineering techniques, successfully deployed in other industries, could be utilized in our industry. From traditional data warehousing; to the arrival of the big data lake; with data marketplaces; ePRO and IoT; the challenge is on – to identify analytical value from all of these disparate data sources.
- Co-leads
 - Guy Garrett, Achieve Intelligence
 - Bev Hayes, Johnson and Johnson



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Data Engineering Project - Mission

To explore how established Data Engineering techniques, successfully deployed in other industries, could be utilised in our industry.



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Premise: The Speed of Change...

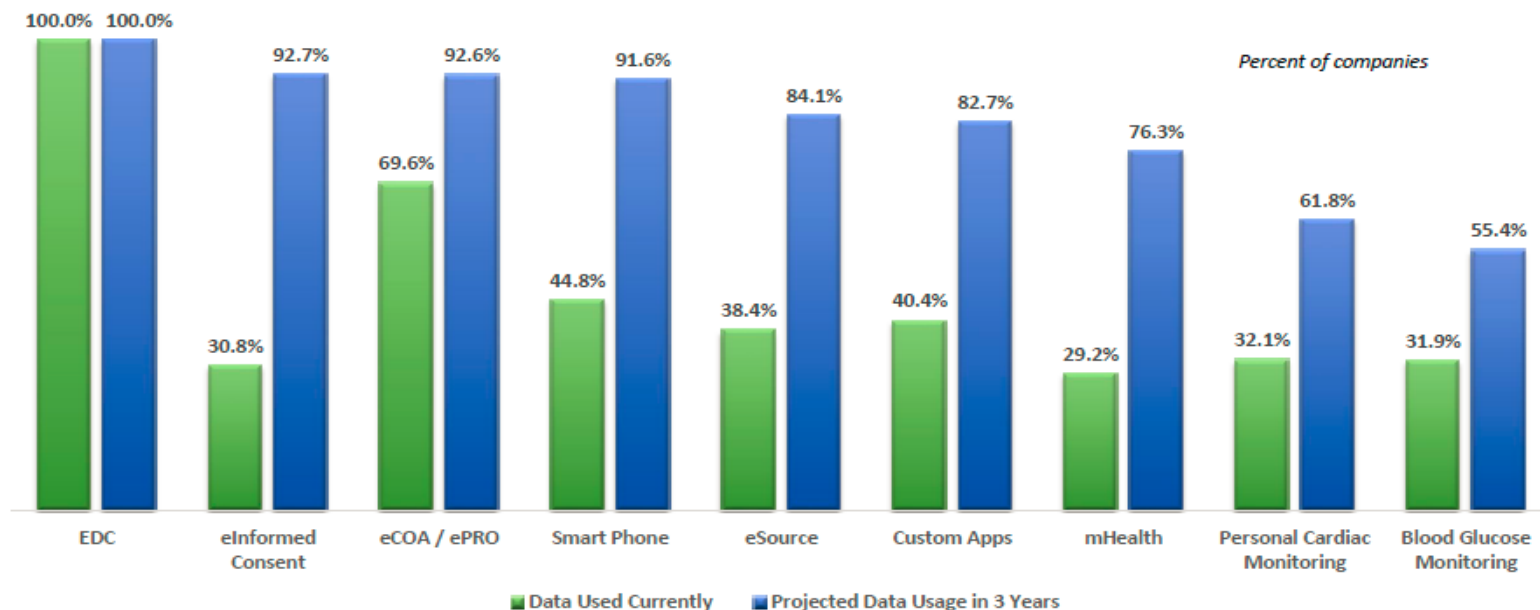
Realtime
Platform trials
FDA Biomarkers
eDiaries
RWE data
Define.xml-2.0
PMDA
HEcon
Wearables
Modelling
Simulation
ePRO
Transparency
technology



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Data Sources Used Currently and Projected Use in 3 Years



Select the frequency with which your organization utilizes data from the following sources currently and estimate the frequency of utilization in three years. (Data source utilization corresponds to frequencies of “always”, “often”, or “sometimes”)

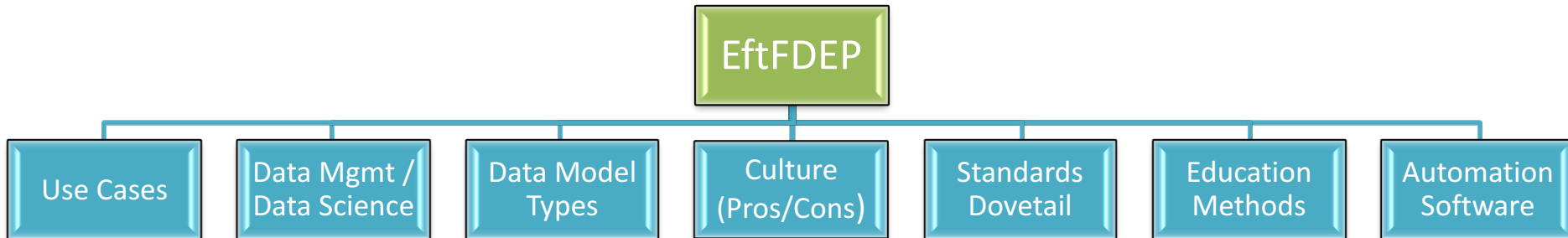
[Reference: Tufts-Veeva 2017 eClinical Landscape Study](#)



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Data Engineering - SubTopics



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4th-7th November
KAP Europa
Frankfurt, Germany

EU 2018

The Clinical Data
Science Conference



Data Engineering Project

60 min lecture session



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New Participants Welcome !

- Pharma and Outside pharma industry
- Link to [PhUSE wiki](#)
- To sign-up contact wendy@phuse.eu



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