



جامعة محمد الخامس بالرباط
Université Mohammed V de Rabat
Mohammed V University in Rabat



Digitalization & Research: Challenges & Opportuinites

Pr. Mohamed Dafir EL KETTANI

Vice President for Information System Organisation

Mohammed V University in Rabat

dafir.elkettani@um5.ac.ma

April 26th, 2017

Digital Transformation in the University

- Definition:
 - application of digital technology across the University and is critical to our future success as an institution
 - adopt new ways of working in order to continue delivering our mission in the face of changing technology, competition, audience needs and behaviour
 - Project examples: User-Centred Portal and Notifications, User Experience Services, Engagement & other projects, Enterprise Data Warehouse, etc.
- Actions from a research view point:
 - Rethinking the Business Model
 - Digitalize or Die?
 - Opportunities through the use of digital tools and solutions
 - Digitalization research areas
 - Digitalization & CyberSecurity
 - Barriers to digital transformation and how to eradicate them

Rethinking the Business Model

- More Consumer oriented
- More flexible
- Business processes more consumer centric

Digitalize or Die?

- Current challenges:
 - Increased efficiency demands on research and development activities
 - Increased customer demands regarding new products and services
 - Increased urgency to provide competition-critical future topics and technologies for operational use
 - Increased demands on speed in R&D processes and networks, internal and external of the organization

Opportunities through the use of digital tools and solutions

- Main objectives:
 - Time & Money optimization
 - Better quality of research
 - More innovative patents
- Support the management of technologies, future topics and R&D activities
- Support virtual collaboration
- Support the analysis and depiction of the economic viability of R&D projects
- Enable location independent coordination of R&D projects

Digitalization & Research areas

- Virtual Experimentation & Simulation
 - Enables multiple scenario testing
 - More efficient taking less time
 - Optimizing budgets
 - Better choices
- Big Data
 - Data Driven decisions, End User feedback, External factors
 - Machine learning techniques
 - Big Data will inform R&D activities, enable new R&D activities, disrupt traditional R&D
 - Help developing better research
- Collaboration in the digital age
 - Collaborative tools
 - Rethinking ways of thinking, brainstorming...

Digitalization & CyberSecurity

- Trust as Competitive Advantage
 - Demands for 24/7 operations
 - The ROI of Zero Trust in fully interconnected networks
 - A layered approach (Prevention/Detection/Reaction)
- Collaborative approach will be critical to combatting this persistent global threat
 - worst-case scenario is a state of perpetual cybercrime and cyber warfare, vulnerable critical infrastructure, and money losses

Summary

- R&D decision-makers expect digital solutions to provide decisive competitive advantages in terms of accelerated processes, strategic orientation of the R&D portfolio, and facilitated collaboration among its teams.
- Dealing with digitization strongly influences the future success of research and development.
- Digital tools and innovative software offer an important key to meet the increasing efficiency and performance requirements.
- Suitable digital solutions are designed to support research and development in the strategic orientation of R&D topics, accelerate its activities and effectively connect university members and partners.

Thank you