Is Your Research Support Office Ready For The Future?

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Content

• On the horizon
  • Artificial Intelligence/Robotics
• Leadership demands
• "Training for the future" project
• Discussion
  • inspired by 6 statements/questions
On the horizon

• DISRUPTION/INNOVATION
  • Artificial Intelligence - Intelligent Automation
  • Richard and Daniel Susskind: The Future of The Professions - How Technology Will Transform The Work Of Human Experts
Example
Reviewing NDAs

- 20 lawyers reviewing 5 NDAs
- AI accuracy: 94% (highest 100%)
- Lawyer accuracy: 85% (highest 97%)
- AI duration: 26 seconds
- Lawyer duration: 92 minutes (51-156 minutes)
- Done beginning of 2018
SRAI-ARMS this Spring

• Disruptive Trends in Global Research Management
  • Introducing robotic process automation into our grants office: benefits and lessons learned
  • Proactively supporting our research - not just a tag line
  • Challenging Disruption Through Empowering our People
  • Think outside the "box", head in the "cloud" - Research Administration without physical space
  • Process automation/AI in research administration? It's a reality!
Our role

• Co-existence with machines
  • sharing work
  • freeing up time for better service/more complex tasks
  • chatbots and simple robotics
  • HAPPENING NOW

• Total disruption/innovation
  • loss of functions
  • not a job but portfolio of tasks
  • OVER THE NEXT 10-20 YEARS
Susskind: The future......

• Overall challenge: not enough professionals working traditionally to cover needs and in timely manner
• Systems and machines are becoming increasingly capable
  • no longer confined to grunt work/back office
• Decomposition of professional work
  • splitting work up in different tasks, processes and activities
  • find the most efficient ways of executing tasks
Evolution

Susskind: The Future Of The Professions
Production and distribution of expertise

• The traditional model
• The networked experts model
• The para-professional model
• The knowledge engineering model
• The communities of experience model
• The embedded knowledge model
• The machine-generated model
Competences

- Craftspeople
- Assistants
- Para-professionals
- R&D workers
- Knowledge engineers
- Process analysts
- Moderators
- Designers
- System providers
- Data scientists
- Systems engineers
Overlapping and Interacting Activities
The Knowledge Model

Knowledge Generation

Creation of Knowledge

Management of Intellectual Capacity

University Knowledge Base

Other Knowledge Bases

Knowledge Exchange

Use / Exploitation of Knowledge Base
The Leadership Demands

• Articulating vision and strategy
• Creating the environment
• Keeping on top of regulation
• Dealing with competition
• Enabling collaboration
Leadership and Research Priorities
Academic vs Non-Academic

Major Academic University:
- Research is automatic / central
- VP Research (many other VPs)
- Research Directors based on Subject Matter Expertise
- Emphasis on .... ?
- Limited focus on research operations

Non-Academic Systems:
- Research is ancillary
- Oversight assigned to Leadership
- Research Director is general Subject Matter Expert
- Emphasis on research roles for Institution and PIs
- Tremendous focus on research operations
# Does Size Matter?

<table>
<thead>
<tr>
<th>Larger Institution</th>
<th>Smaller Institution</th>
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</thead>
<tbody>
<tr>
<td>• Volume to process</td>
<td>• Capacity to respond</td>
</tr>
<tr>
<td>• Internal networks to manage</td>
<td>• External links</td>
</tr>
<tr>
<td>• Range of topics</td>
<td>• Niche / relevance</td>
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<tr>
<td>• Integration of (separate) functions</td>
<td>• Ability to influence</td>
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</tbody>
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- Automation / self-service
- Lifecycle integration and analytics
- Engagement of multi-professionals
Research and KE Lifecycle

Idea Development

- Idea generation
- Proposal development
- Negotiation and contracting
- Ensuring Integrity

Research Delivery

- Documenting findings
- Communicating results
- Developing skills
- Creating and managing partnerships
- Managing the money
- Collecting, managing & curating data

Outcome Enabling

- Translating results
- Enabling and capturing impact
- Delivering to customers
- Commercialisation
- Engaging the public
- Policy engagement

Ensuring Integrity
The RMA Role

• Adding value, not just processing transactions
• Building relationships and collaborating
• Understanding funders and customers
• Managing portfolios and removing barriers
• Reacting to requirements, demands, changes
• Identifying opportunities and creating demand
• Enabling compliance, governance, integrity
"Training for the Future" Project

• Changing culture of staff to be relevant for the future
Challenges

• Very little change in service for many years
• Lack of adaptation to new challenges:
  • innovation and research
  • impact
  • new political focus
  • broader span of service wanted
  • volume of work out of sync with no. of staff
• Local investments in staff at dept. level
Project goal

- Build stronger relations with PIs
- Become better at understanding where they come from
- Put your own tasks in perspective
- Become part of team not part of problem
- Go from reactive to pro-active
- Focus on practical application
Structure

• Activities spread over 1 year
• 100 participants
• Kick-off event
• 4 half-day courses focusing on training
• 4 inspirational talks by experts/PIs
• Learning groups between half-day courses
• Separate program for management
• Total price: USD 65,000 plus time invested
4 half-day courses

- Communication/human interaction
  - Professional questioning techniques
  - Professional control of dialogue - incl. domain theory
- Choice of
  - Feedback
  - Building and maintaining relations
  - How to say no
  - Negotiation
- How to handle simultaneous pressure from multiple sources
Project results

• Very mixed
• Lack of realistic self perception
• Individual reactions
• Be very concrete - make it relevant for each staff
• Change in lingo a sign of subtle change
• Slow change, constant focus, rephrasing
• Changing culture is sooooooooo slow
• QUALITY OF EXPERTS/CONSULTANTS
Discussion

• How do you provide value and not just compliance?
• What kind of other skill sets do we need?
• Will funders promote or hinder change?
• Quality service vs quantity: where does your priority lie?
• What are you going to stop doing?
• Ideas for new technology: chatbots, lifecycle analytics, TDM, .........
Questions?

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