

## **Workshop Title**

Enhancing Institutional Research Management with Advanced Analytics – Getting More Value with Your Data

## **Workshop Overview**

Many Fortune 500 companies are now using advanced analytics and “data science” to guide decision making. To remain competitive, companies have turned analytics into their “intelligence engines”, have hired “data scientists” to unlock the potentials of data. Many of the analytical techniques deployed in the commercial sector can be applied, either directly or with modifications, to research organisations. In fact, funding agencies around the world, including the National Science Foundation in the U.S., Research Councils in the U.K., and the European Research Council have all utilised advanced analytics within their research evaluation frameworks. Software vendors too are marketing their products as “research intelligence” tools.

Beyond the marketing hype however, a systematic and purposeful application of analytical techniques and software requires careful considerations of the time, cost, skills, methodological soundness, and goals of an organisation. In this interactive workshop, we will examine a range of advanced analytical techniques deployed by organisations to maximise the information and knowledge capital of data. We'll present a conceptual and methodological framework which will help us determine when to deploy which technique to achieve the relevant informational and organisational outcomes. Our goal is to map out relevant choices of analytical technique against desired organisational outcomes.

## **Workshop structure**

Participants will be given reading materials in advance and will be asked to bring their own mobile devices to engage and interact with other participants using cloud based collaborative tools during the workshop.

The format of the workshop will include a combination of (1) presentations, (2) breakout groups, and (3) an open forum discussion.

## **Experience level / target audience**

Research analysts who would like to go beyond routine reporting and standard research performance analysis will find new ideas to bootstrap new initiatives. Research managers who would like to build analytical capabilities and capacities will find the workshop useful to develop strategies and roadmaps.

## **Learning objectives:**

1. To learn about the current thinking and conceptual framework in building analytical capabilities.
2. To increase awareness and exposure to advanced analytical methods in addressing organisational problems.
3. To build understanding in the use of analytics in research management using international case studies.
4. To develop your analytical strategies for a range of questions and scenarios in a practical setting.

## **Workshop facilitators and presenters**

Jean-Francois Desvignes-Hicks is Solutions Consultant for Thomson Reuters, working in Australia and New Zealand to support organisations in research evaluations and assessment. Jean-Francois has over 10 years of experience in successive roles in government and the research sector. He is also a PhD candidate with the Centre for Transformative Innovation at Swinburne University of Technology, Melbourne, Australia.

Dr Anders Karlsson is Vice President, Strategic Alliances, Global Academic Relations at Elsevier. Prior to joining Elsevier in 2012, he spent 5 years as Counselor for Science and Innovation at Embassy of Sweden, Tokyo, Japan. For 10 years Anders was Professor in Quantum Photonics at the Royal Institute of Technology - KTH, Stockholm, Sweden - leading a team working on optics and information technologies.

Dr Steve Riddell holds a PhD in Pharmacology from the University of Sydney. Steven had worked as a researcher at University of New South Wales, Sydney Australia, and subsequently moved to the healthcare sector in a number of roles. He has worked for the last 2 years at Elsevier in Research Management and has brought his many years of experience in research and research metrics to his position.

Dr Paul Wong is a designated ARMS Training Fellow in Research Data and Analytics. Paul was formerly the Director of Office of Research Excellence at the Australian National University, and have consulted on a number of projects for Professor Ian Chubb, Dr Ken Henry, the Australian Research Committee, and the Australian and New Zealand International Ocean Discovery Program Consortium.