

# 35 ISMOR: Themes and Trends

## A Personal Perspective

Dr Tony Sinden

Associate Consultant

Decision Analysis Services Ltd

This document is Copyright ©2013 of Decision Analysis Services Ltd.  
Its contents wholly or in part shall not be communicated or copied by any means  
whatsoever to any third party, individual or organisation or government without  
consent of Decision Analysis Services Ltd.

# 35 ISMOR Themes and Trends

- Themes – there are detectable themes, often viewable from more than than one perspective (e.g. analyst, military, decision maker, historian etc.)
- Trends – always difficult to say if there are trends, but I will offer some observations given I now have 5 years data; comparing ISMOR 31 through to ISMOR 35 (years 2014 to 2018)
- Some additional observations will be offered

# 35 ISMOR Themes and Trends

- For the previous three years, by way of an introduction, I have chosen a word that reflects the conference
- Previous selections were “wicked”, “acronyms”, “Lanchester” and I did think that “fake news” or “Brexit” might be a qualifier but have struggled to find a word repeated and repeated. However, I have settled on one that appeals to me!

?

# 35 ISMOR Themes and Trends

- For the three years, by way of an introduction, I have chosen a word that reflects the conference
- Previous selections were “wicked”, “acronyms”, “Lanchester” and I did think that “fake news” might (again) be a qualifier but have struggled to find a word repeated and repeated. However, I have settled on one that appeals to me!

My choice is : **GLUE**

Acknowledgements to the UK MoD’s Chief Scientific Adviser

A DISCLAIMER - Managing Expectations of my “analysis”

I will not be offering a comprehensive resume of each presentation, each session or even each day’ s efforts

Will not provide a full quantitative analysis of the content of the presentations

My perspective may not fit exactly with your impressions or conclusions (if at all) but, hopefully, it will strike a chord (or two)

As previously, I have assigned 2 to 4 “thematic descriptors” to each presentation or poster and added them up – these are the numbers you will see against the descriptors on the next slide

What I term my “Conventional view”, with the number of primary thematic descriptors encountered shown in parentheses –

- Modelling/Analysis\* methods (21) (*of which Wargaming (9)*) -
- Decision support (12) -
- Land Operations (11) -
- Value for Money (7) –
- Air Power & Systems (6) -
- Military Decision making (5) –
- Data evaluation and analysis (5) -
- Procurement (4) –
- Maritime (3) –
- Support to Operations (3) -

What I term my “Conventional view”, with the number of primary thematic descriptors counted across all presentations –

- Modelling/Analysis\* methods (21) (*of which Wargaming (9)*) – **rapid methods, better results presentation, data analytics**
- Decision support (12) – **remains a significant effort**
- Land Operations (11) – **rise, will it continue?**
- Value for Money (7) – **budget pressures continue**
- Air Power & Systems (6) – **slight up-tick, but not trend?**
- Military Decision making (5) – **understanding how decisions made still important**
- Data evaluation and analysis (5) – **seemingly on the rise?**
- Procurement (4) – **surprising considering activity in many countries**
- Maritime (3) – **similar to previous years**
- Support to Operations (3) – **low, reflecting operational pressures**

# 35 ISMOR Themes and Trends

Title	14	15	16	17	18	Title	14	15	16	17	18
Analysis/Models*	16	26	15	16	21	Weapons	2	2	5	4	0
Decision Support	10	10	17	9	12	Air Power	3	2	4	3	6
Support to Ops	9	5	4	3	3	Maritime	0	5	1	4	3
Capability Reqt's	6	5	6	2	2	Land	2	2	3	6	11
Military Decisions	6	5	4	3	5	Joint(ery)	0	3	1	0	2
Value for Money	5	4	0	6	7	Logistics & Supply Chain	0	3	3	1	2
Analysis for Management	5	0	4	1	0	Procurement	0	3	7	7	4
Data Evaluation	2	2	9	2	5	Cyber	3	1	3	2	0
Risk management				5	2	Lessons Learned	0	3	0	0	0
* Wargaming			2	4	9						



Theme based view (2018) –

- Operational Analysis of the conduct of Military Operations still lower than it was 5 years ago
- On the other hand Support to Military/Defence “decision making” continues to feature highly
- Understanding “soft issues” and “soft OA” has been featured (i.e. behaviours, reasoning, mental models, social impact) but has not featured as highly as last year
- Interest in faster and/or innovative techniques for complex conflicts remains significant, with some examples of progress
- Improving the ease of use & the transparency of analysis (for both analyst and customer) – the need for better communication is recognised, as it was in last 2 years
- Rise of war gaming continues!, Noted last year and obviously a feature this year

Are themes going to be trends? Using the perspective of 5 years it is possible to offer some observations although the “picture” on trends remains somewhat mixed:

- Budgets are still tight (except China, Russia) although NATO nations have agreed to modest increases (“Trump influence” or not?). VfM remains driver for OR
- Data evaluation, especially data analytics, likely to remain a feature. Driven by wider non-defence interest in exploring data?
- Recognition that conflicts are not getting simpler (definite trend, as noted before) and need for OR to examine complexity.
- End of major operations in Middle East (by NATO coalition) has reduced level of direct support to military but not wider decision support
- Tackling the current “problems” continues to elicit use of “older techniques” (re-use) and investment in “new and innovative”

# 35 ISMOR Themes and Trends



As in previous years I ask the question - Are these themes and trends relevant?

As in previous years I ask the question - Are these themes and trends relevant?

My perception is that they are, in large measure, but many conflicts around the world have both kinetic and non-kinetic aspects. OR studies largely focus on kinetic engagements. So I offer a couple of thoughts:

- Need to examine conflict avoidance and/or resolution, perhaps? (I have raised this before)
- Need to apply OR study to immediate post-kinetic phase of conflict? (Very interesting ISMOR sessions led by Chuck Hawkins on North Korea, exploring some of the issues surrounding post kinetic planning and operations)

So, in summary:

- Continuing down – (direct) OR support to military operations,
- Continuing as before – faster, simpler OR techniques, VfM, decision support
- On the rise – data analysis (analytics), wargaming
- But all studies should be not only relevant but demonstrate relevance

So, in summary:

- Continuing down – (direct) OR support to military operations,
- Continuing as before – faster, simpler OR techniques, VfM, decision support
- On the rise – data analysis (analytics), wargaming
- But all studies should be not only relevant but demonstrate relevance
  
- But given the rise in the capability of Artificial Intelligence, I anticipate that ISMOR 36 Themes and Trends talk will be brought to you:

So, in summary:

- Continuing down – (direct) OR support to military operations,
- Continuing as before – faster, simpler OR techniques, VfM, decision support
- On the rise – data analysis (analytics), wargaming
- But all studies should be not only relevant but demonstrate relevance
  
- But given the rise in the capability of Artificial Intelligence, I anticipate that ISMOR 36 Themes and Trends talk may be brought to you:
  
- Courtesy of a data mining algorithm and a hologram!

**THANK YOU**

**ANY COMMENTS?  
OBSERVATIONS?**



Then there are some issues that have arisen, some of which were covered in the Big Debate yesterday:

- Skill set requirements – is a broader set required? Does community have right skill set?
- Is OR relevant? – Questions raised on: visibility to senior leadership: communication of output: and, demonstration of added value of OR to decision maker
- Resources – money and staff (with relevant skills, experience). Is there enough?
- Collaboration and co-operation – need to do more but not always encouraged?
- Data – access, quality and techniques for analysis. Need for further investment?