

# On the Value of Access Control Models

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SACMAT Panel, June 14, 2018

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Attributes? Roles? Relationships? **or no model at all?**  
Model base vs Learnt Policies:  
Finding balance between expressible and usable policies

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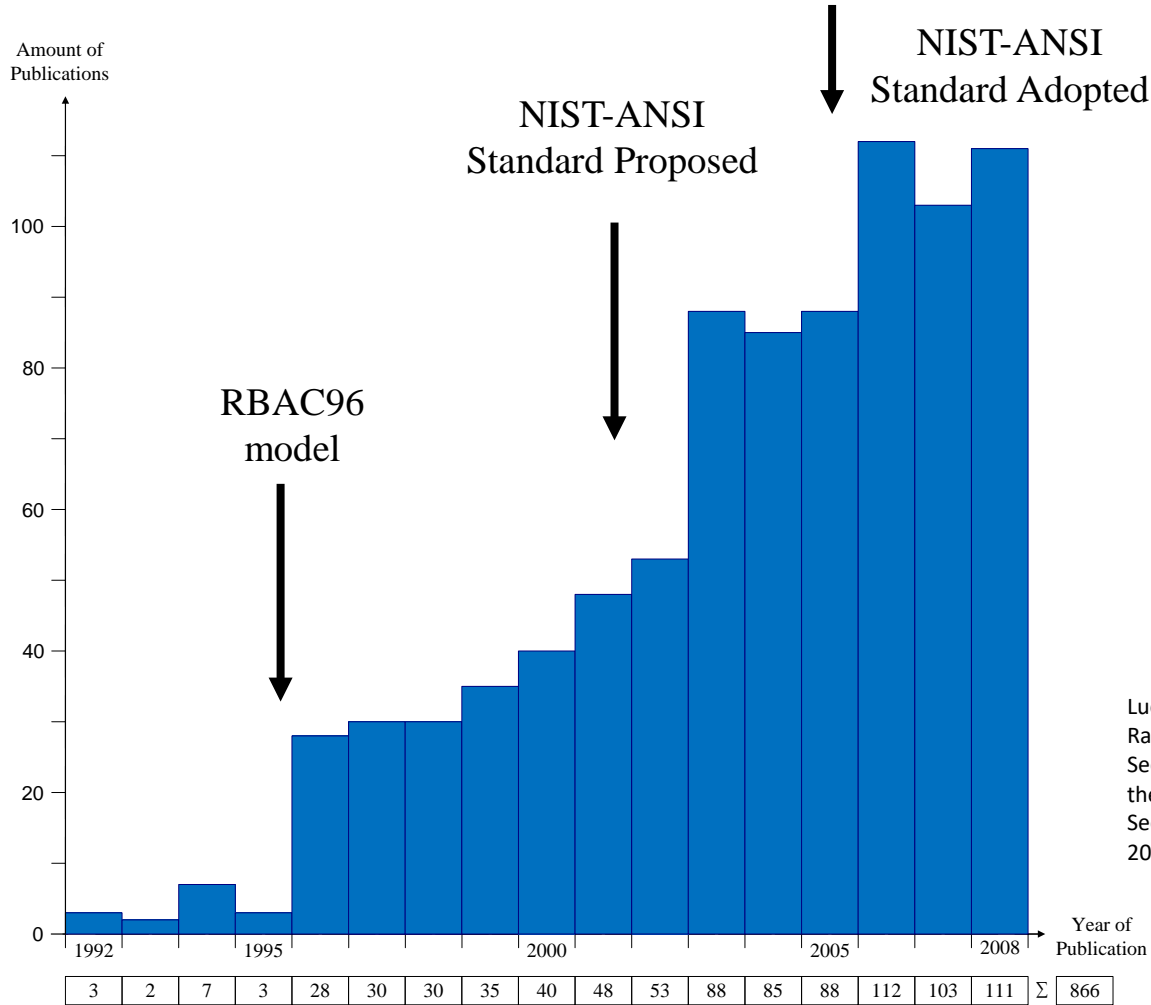
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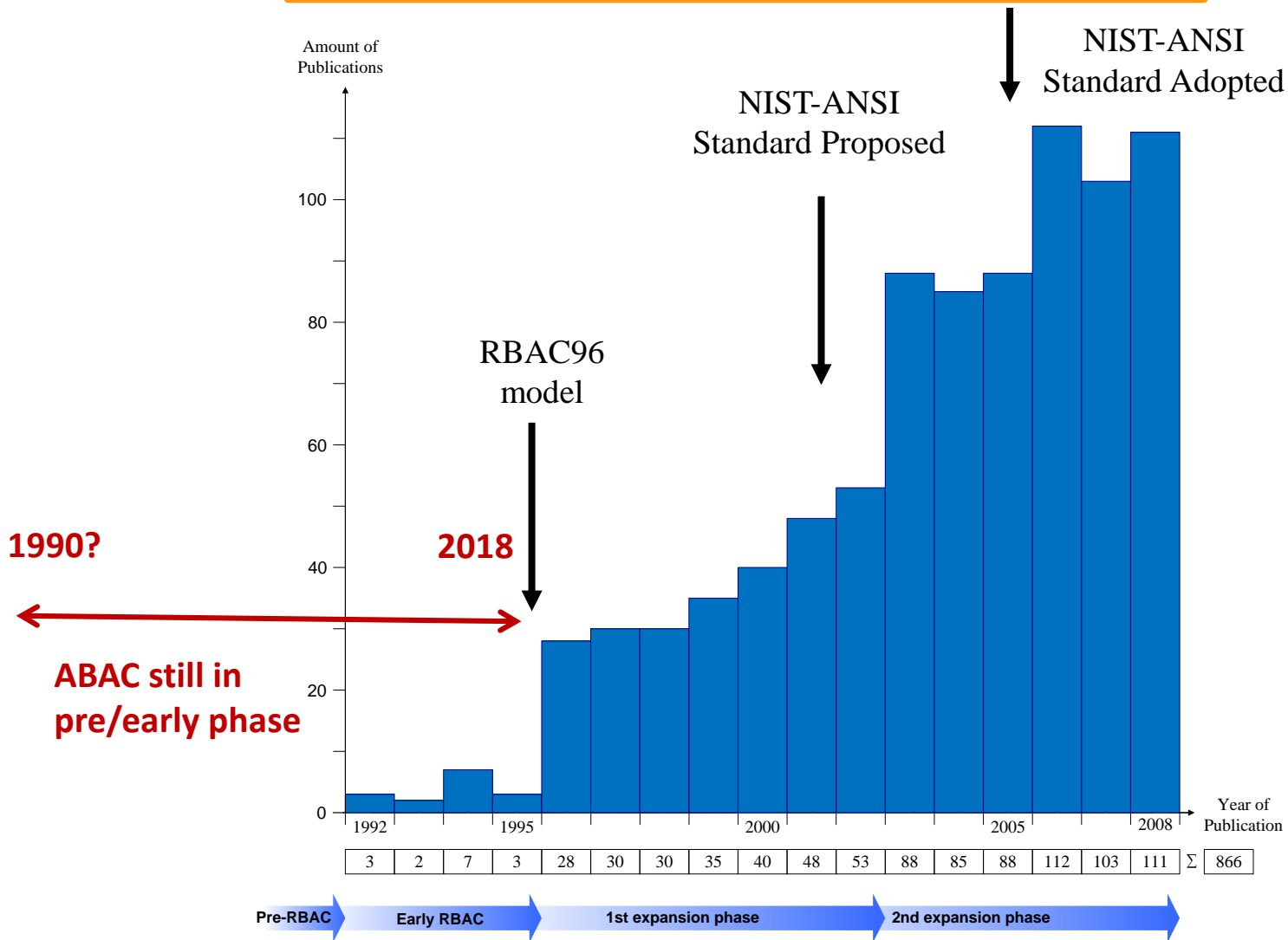
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Ludwig Fuchs, Gunther Pernul and Ravi Sandhu, Roles in Information Security-A Survey and Classification of the Research Area, Computers & Security, Volume 30, Number 8, Nov. 2011, pages 748-76

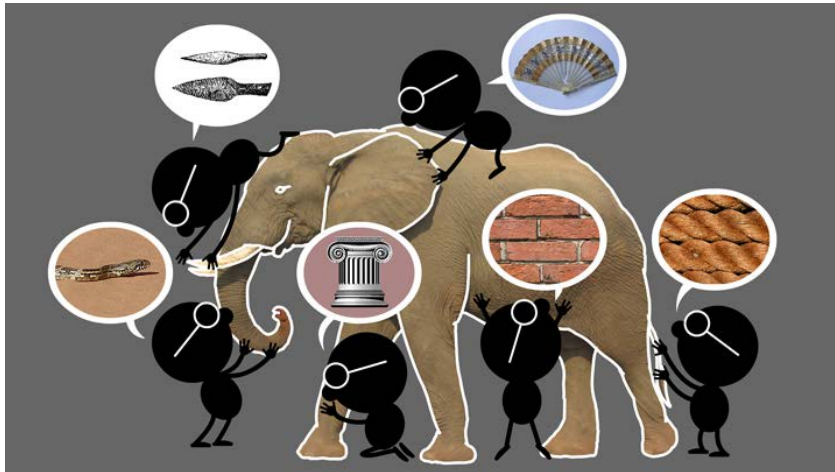




## Good model is missing

- Incomplete model:
  - ❖  $ABAC = XACML$  **X**
  
- Enforcement model:
  - ❖  $ABAC = ABE$  **X**

## Elephant Problem



## Cyber-Elephant Problem



## Natural vs Cyber Science