

# *Self-Management: Separating Facts from Fiction*

10th IEEE/IFIP Conference on  
Network Operations and Management Systems  
(NOMS 2006)  
Vancouver, BC, Canada  
April 2006

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## *Self-Management*

- Fact #1: It's about systems operations
- Fact #2: Systems are extremely large, very complicated, and software intensive
- Fact #3: Workloads highly variable, difficult to predict, difficult to plan for
- Fact #4: Beyond the comprehension of any reasonably sized team
- Fact #5: Storage is incredibly cheap but network bandwidth is not
- Fact #6: Process local, manage global

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# Implications

- System dependability is key
- (Semi-)Automated systems are essential
- Statistical analysis/learning/control promising
- Pervasive monitoring is enabling
- Only decentralized/p2p approaches can scale
- Observe-Analyze-Act: figure out what to do it and do it fast enough ...