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Introduction
our motivation

• the Web has been transformational
• we need to understand it
• anticipate future developments
• identify opportunities and threats
• we have established a new discipline: Web Science
Introduction

our aims

- understand the scientific, technical and social factors that drive the growth of the Web
- provide a global forum to collaborate on the first research effort specifically designed to study the development of the Web
- devise curricula for the new discipline of Web Science to train future generations of researchers
Introduction

institutions - joint venture

MIT’s CSAIL
Leader in North America

Southampton’s ECS
Leader in Europe

research / thought leadership / insight
Introduction

directors

research / thought leadership / insight

the reputations, experience and skills of our Directors enables us to work closely alongside academia, government, industry and donors to realize our aims
Introduction

advisors

- scientific council
  leaders in their disciplines
- strategic advisory board
  individuals with influence
- formulating corporate advisory board
  companies committed to Web Science
Web Science is interdisciplinary
Web Science is about emergence

- simple principles and protocols (e.g. links) create complex structures - the Web
- simple behaviors (e.g. Blogging) create complex phenomena - the Blogosphere
- we will anticipate new principles and behaviors
Web Science is a process of

- creative innovation
- design and engineering
- the social and the technical
- interpretation and analysis

research / thought leadership / insight
Web Science is for example

- creative innovation
- design and engineering
- the social and the technical
- interpretation and analysis
Web Science is not a pipe dream

• scale free
• power laws
• small worlds
• hubs and authorities
What we do

research

• the structure of the Web
• effective protocols for the Web
• social effects on the Web
• meaning in the Web
• fragmentation of the Web
• rates of change on the Web…
What we do research

- by understanding the scientific, technical and social factors that drive the growth of the Web we can understand past Web phenomena
  - e.g the Blogosphere
What we do
research

• by understanding the scientific, technical and social factors that drive the growth of the Web we can anticipate future Web phenomena
• e.g. the data Web
What we do

application research - provenance example

• Media Standards project
• creating protocols for media provenance
• development of basic journalism standards code of practice for digital media
• funding from MacArthur Foundation
What we do

thought leadership

- a global forum of experts to raise awareness, lead thinking and disseminate information
- provide corporations, governments and regulators with the capability to anticipate future developments
What we do
education

• collaborate to develop degree courses and curriculum
• modify and extend, evolve current courses
• build capacity for this new field
• motivated students tackling a real and important set of challenges
“Web Science represents a pretty big next step in the evolution of information. This kind of research is likely to have a lot of influence on the next generation of researchers, scientists and, most importantly, the next generation of entrepreneurs who will build new companies from this.”

Dr Eric Schmidt, CEO, Google Inc.

“Web Science research is a prerequisite to designing and building the kinds of complex, human-oriented systems that we are after in services science.”

Where we are
WSRI Operational Phases

Phase 1: Nov 06 to Nov 07
   Launched the concept and targeted activities
Phase 2: Dec 07 to Nov 08
   Establish a lean organization in America and Europe
Phase 3: Dec 08 onwards
   Build a global organization and expand activity base
Where we are

funding requirements

- early start up and phase one funding provided by MIT and Southampton
- project funding received, more in pipeline
- require $60m over three years to complete Phase 3
Web Science
why this matters

• the Web matters
• an essential part of humanity
• understanding the Web is a major challenge as big as any other global cause