The Economics of "Green"

• The greatest IT economic opportunity ever.
• Utilization of these global data sets could be the
  strategic IT linkages for greater distribution and
  dedicated to keeping these systems state-of-the-art
  into the future.
• NASA and the International Space Science Community
  - Climate Change:
  - Global Warming and an IT Economic Opportunity

2001

Australiana IT Directors' Summit
What will ASPS look like in five years?

What will Space Technology look like in five years?

Strategic IT Implementation

Space Technology's Need for IT Strategic Thinking

AMS Research Center

Australian IT Directors Summit

2001 NASA
Napa Valley Grape Study


Undamaged Areas in Study Site Results
- Damaged Areas in 1993
- Damaged Areas in 1992
- Damaged Areas in 1991
- Damaged Areas in 1989

Ames Research Center

2001
Australian IT Directors Summit

NASA
- CSIRO, ACRES, etc...

Models from International Space Community

bureaucracy

- Very small, localized, and encumbered by

NASA Models

2001

Ames Research Center

Australian IT Directors' Summit
- Winner of the Next Space Race
- Economics and IT
- Risk Assessment/Management
- IT Content Security
June 6 2001
Sea Surface Temperature Map

2001
Australian IT Directors Summit

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NASA
- Retaining Strategies
- Perspective

- Evaluating Strategies from the Owners'
- Perspective

- Evaluating Strategies from the Policyholders'
- Articulating Strategies
- Assessing Risks

Risk Assessment/Management
**ROW = Rest of the World**  
**CAGR = Compound Annual Growth Rate**

<table>
<thead>
<tr>
<th>Source: IDC</th>
<th>ROW</th>
<th>Asia Pacific</th>
<th>Western Europe</th>
<th>United States</th>
<th>Worldwide Content Security Forecast By Region, 1999-2004 ($M US)</th>
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<td>1999-2004</td>
</tr>
</tbody>
</table>

Austrian IT Directors Summit
Potential Markets Areas

International Market

50% of these Services are forecast for the

Forecast for Commercial Services is estimated at $281B US 1999 - 2005

Australm IT Directors Summit

2001

Ames Research Center

NASA
Just imagine...

and around the clock,
community now trades around the world,
wide, and the international financial
every day of the year, the Internet is world-
The technology is already orbiting the earth
NASA and the international space community need access to the achievements of realized, the financial and investment communities for the full potential of these markets to be realized.

and international space agencies.

better insight into the market. Future than national financial and investment communities have.

Technology itself does not change things.
Next Space Race is in IT

The next Space Race will be in the economic applications from space and science technology. As NASA science and technology has global application; IT is global, economics is global; surely there are great untapped potentials in finding the IT links of commonality among these three. The Economics of IT will continue to depend upon solution providers creating new methods that capitalize on linking information and information centers with the applications community for business and economic functions.

New and innovative IT vendors who's increased efforts to apply evolving technologies and principles that power the e-business revolution are now seeing the business of government being transformed in a similar fashion. NASA will be a prime example of IT transformation.

Potential benefits of e-government are identical to the benefits of e-commerce, which start from value derived from capabilities and assets. The capability and asset wealth of NASA technology and data mass scattered through hundreds of archives will one day provide incredible economic benefit across international and corporate boundaries. Yet the ability to economically benefit from bridging the gap between capability to billable service has yet to find it's first major market.

A primary aspect of NASA has been to gather, research and comprehend mass information as the primary function for decision making prior to putting people in orbit, administrative and even basic budgetary functions. NASA has greatly benefited from IT, yet still needs creation of public service Internet portals equivalent to AOL or Yahoo. IT solutions are needed to first organize what information and which evolving technologies are first to benefit global economic methods and systems. Next, IT solutions are again needed to bridge the gap between technology providers and the true user community, and provide an on-line delivery system.

If cost reduction is one important motivation for the economics of IT, so is the requirement to respond to new expectation of government for deliverables and service. The single problem in dealing with government is the mass of complexity and reorganization efforts due to shrinking budgets. Yet the boundary distinction between the commercial world and government is slowly dissolving as both have growing dependency on the identical IT solution provider technologies and methods.

The users should not need to know anything about the way government is organized and still access needed programs and services. The personalization of IT is essential to allow rapid access to frequently needed services on-line. Yet scrutinized budgets make it difficult at each government agency to adopt a common technology infrastructure that evolves with the needs of the nation as well as that agency. The fear is re engineering existing systems for government IT systems rather than applying evolving systems that commercial groups have grown to expect. Validity will be seen in cost reduction for e-
government and profits in e-commerce. These linkages need to be made, and IT networks will be essential.

Ultimately the role of government, science, and technology linking to the business world will find greater dependence from this increasingly common ground of IT solutions and technologies. Therefore the future role of the IT industry may be as much administrative as technical, ultimately of critical importance furthering the role of science into application.