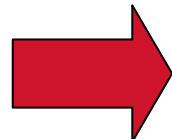
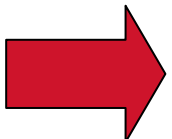
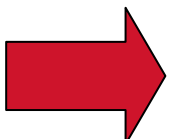




Commercialising Remote Sensing Applications towards the Green Economy

Dr Sam Adlen

21/05/2009

-  Current Status of the Remote Sensing Industry in the Context of the Green Economy
-  Can the Green Economy Stimulate the Market?
-  Opportunities from the Green Agenda



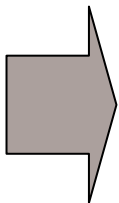
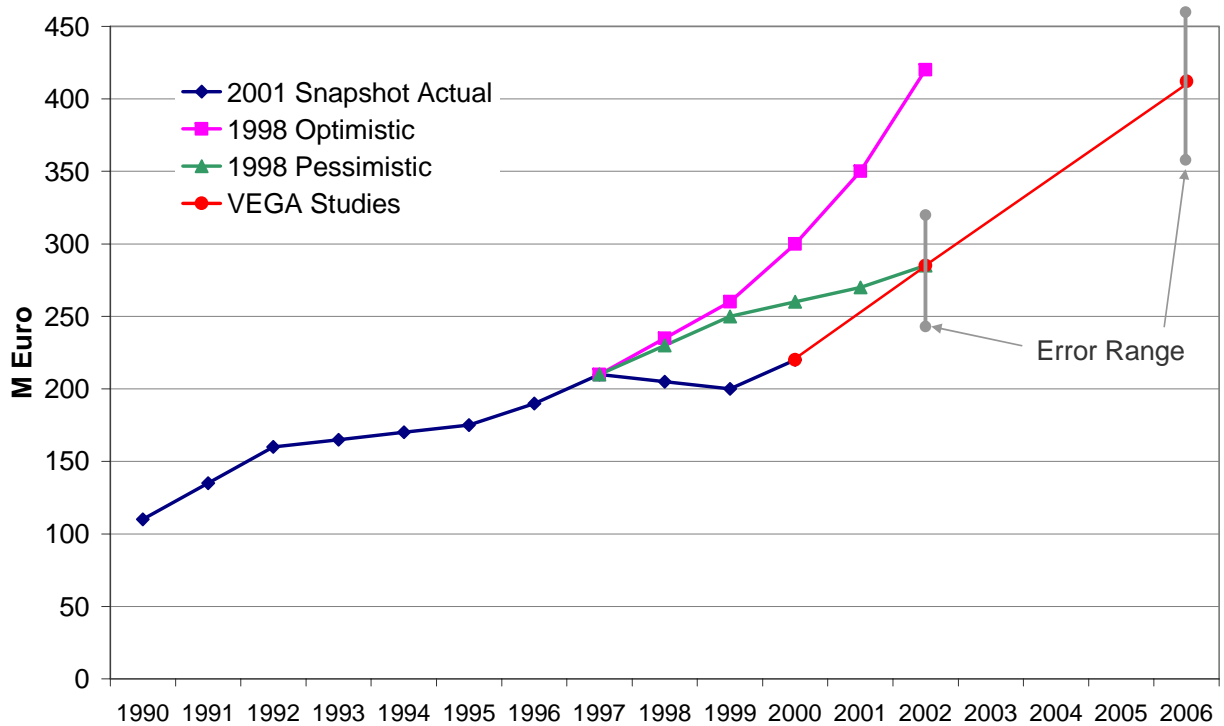
Current Status of the Remote Sensing Industry in the Context of the Green Economy

21/05/2009

The market for Remote Sensing is developing steadily

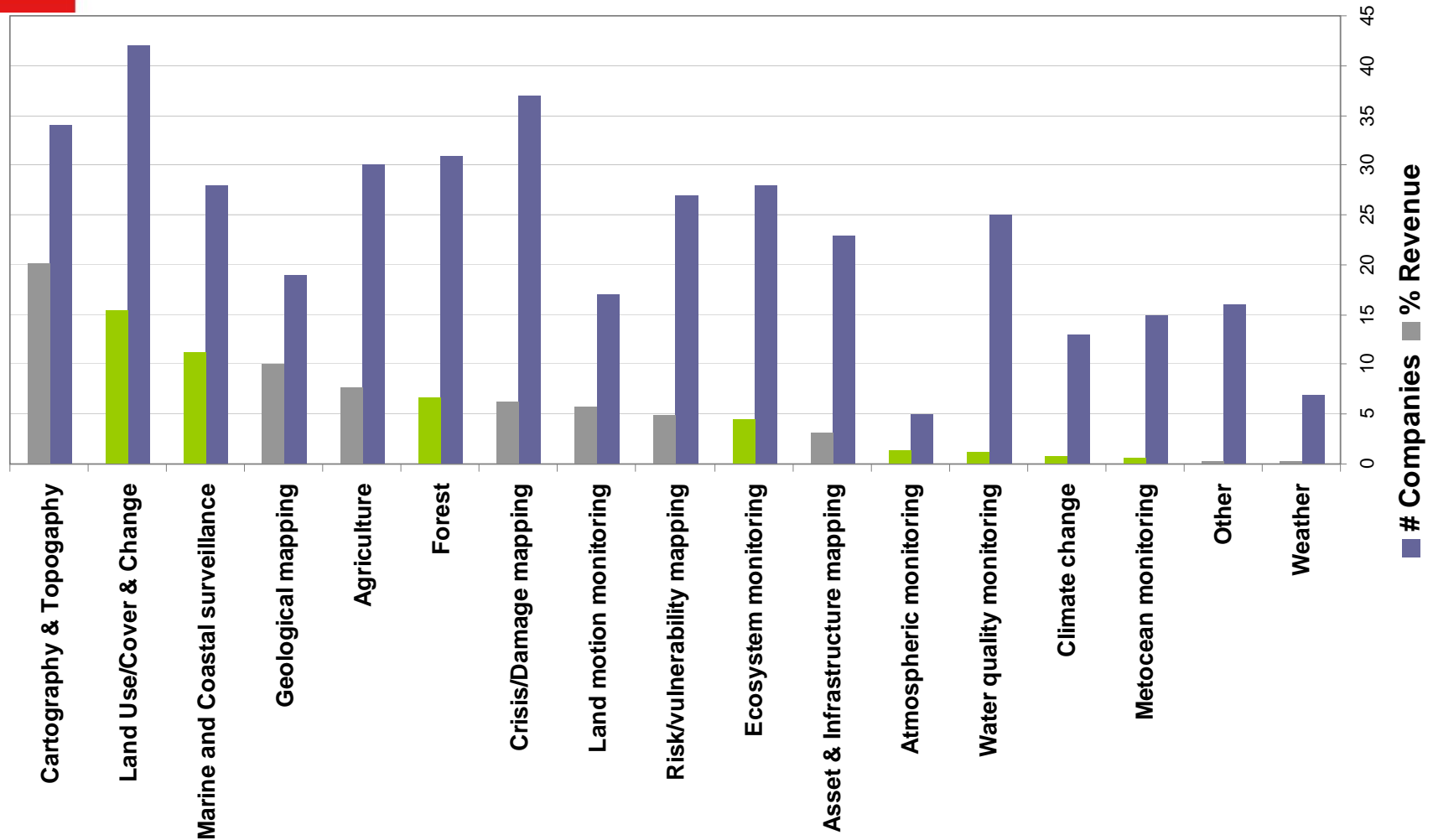


Significant progress has been made in the remote sensing sector and the drive toward the green economy is in no small part down to the evidence base that it has produced



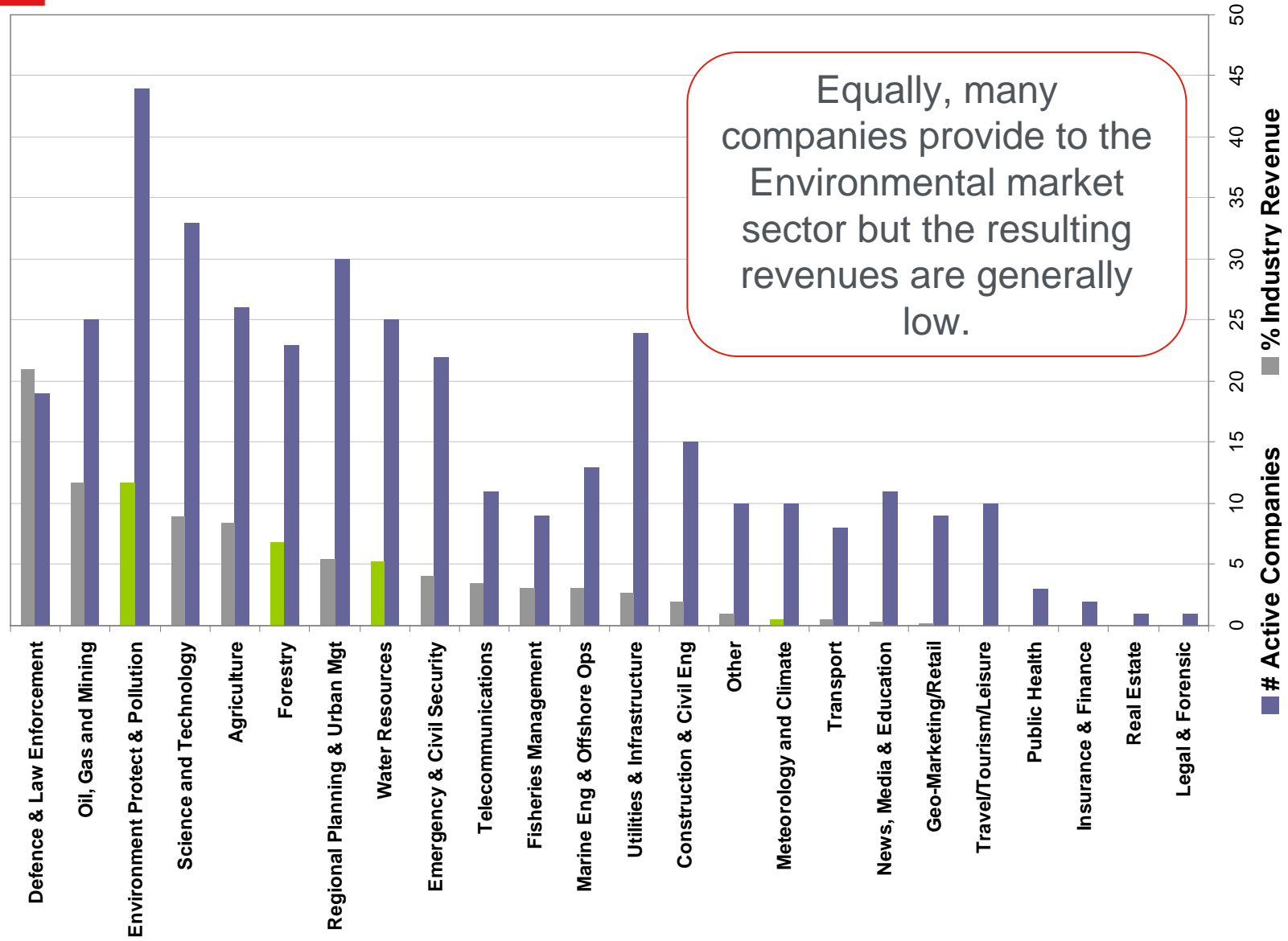
Despite this, growth in the sector remains limited.....

What does the green economy contribute at present?

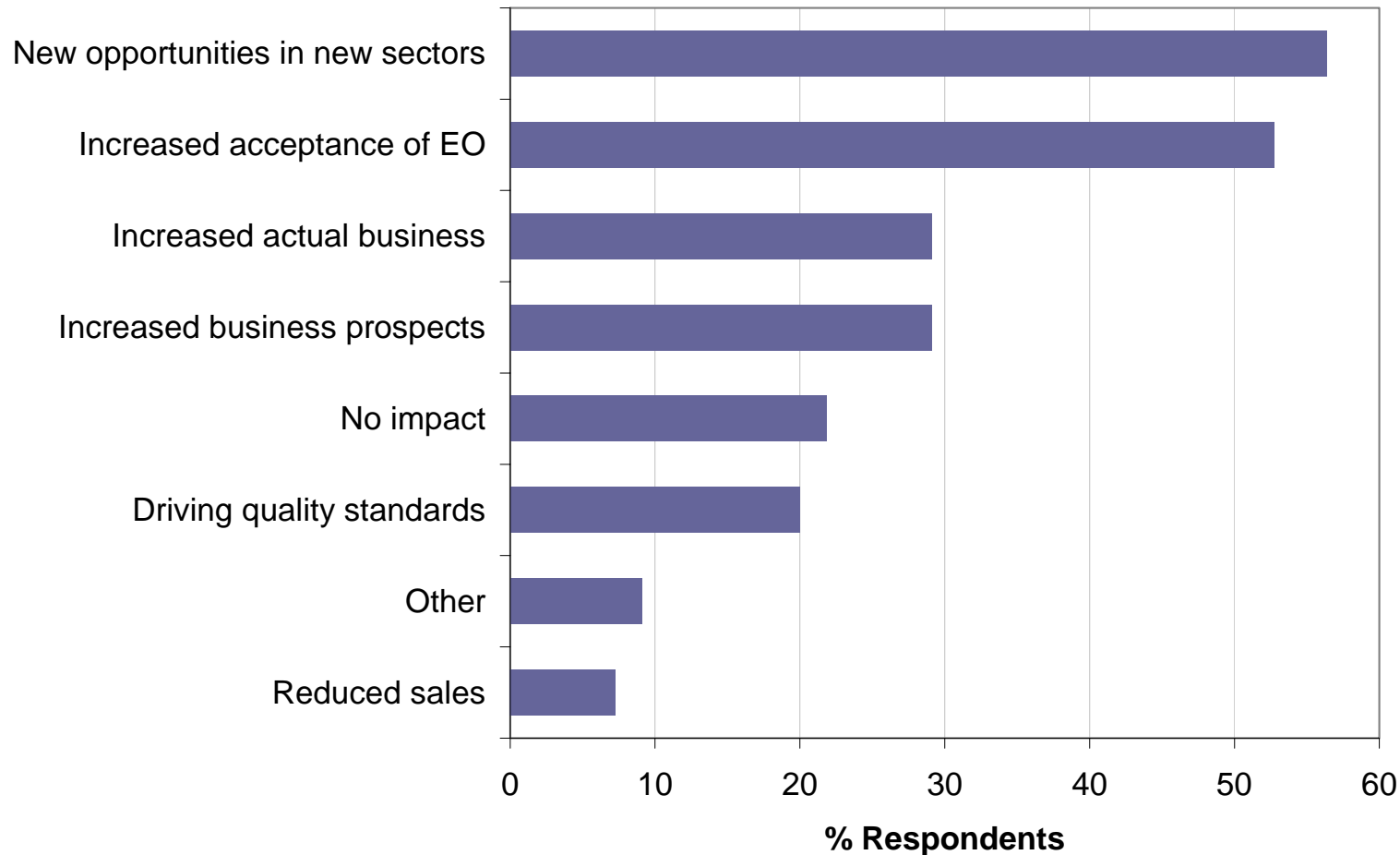


Whilst there are many companies looking at thematic applications toward the green economy, the revenue being realised from these applications is limited

Environmental organisations are buying in the market but resulting revenues are small



Impact of GMES, GEOSS and INSPIRE



External influences such as GMES, GEOSS and INSPIRE are generally viewed positively, more than half of respondents see them developing acceptance of EO solutions and stimulating opportunities for new business.



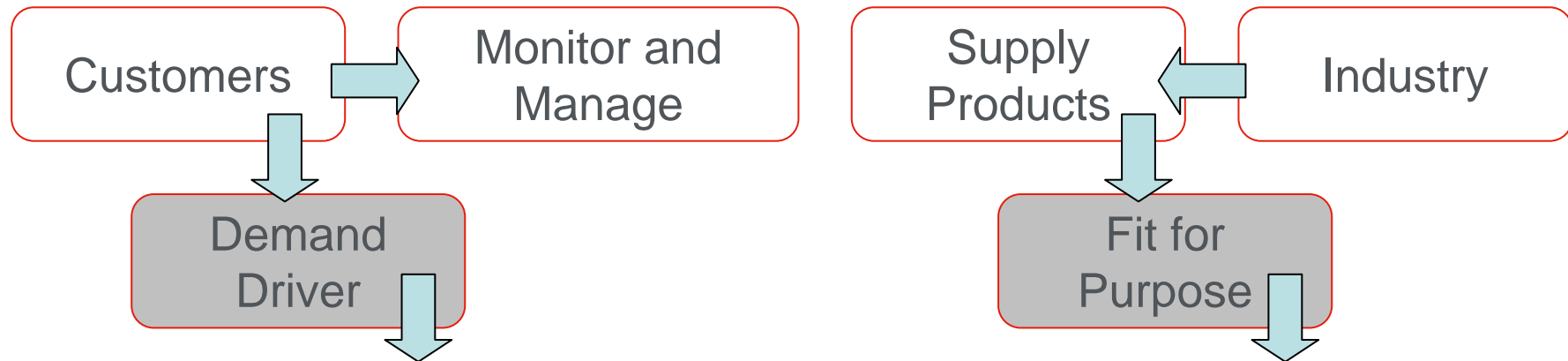
Can the Green Economy Stimulate the Market?

21/05/2009

Can the Green Economy help in stimulating the market?

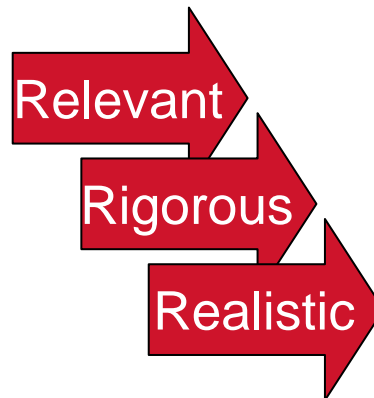


Green Economy - What do we need to do to stimulate the market?



- Market pull is essential

- In order to generate real commercial return, remote sensing applications need to be:

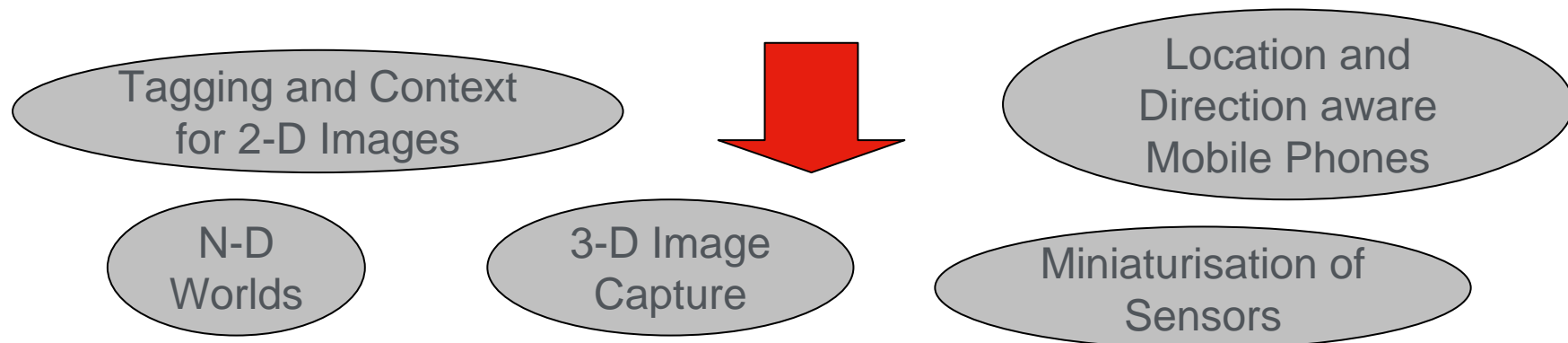


- Buyers are required
- Quality and usability are key
- Don't over promise

There will be a growing demand from public sector bodies but this is unlikely to generate huge returns

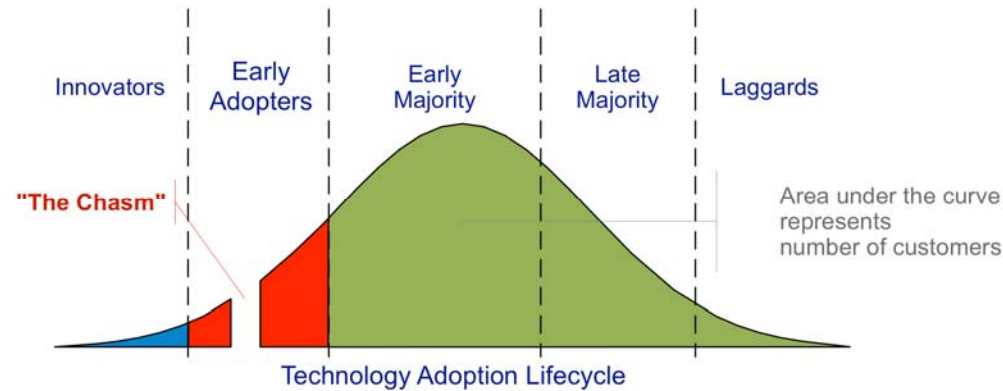
To make real returns, applications need to be relevant at a local level making the uptake scaleable

Applications for local condition sensing can be supported on the ground. A confluence of technologies makes this the right time to partner to improve usability, fidelity, availability and uptake.



Real time N-D worlds populated from mobile phones will happen. Partner to support and leverage these advances, build local applications and increase uptake.

Embrace all platforms to broaden acceptance and usability and “cross the chasm”



Use space capabilities to build acceptance and improve usability through ground based applications

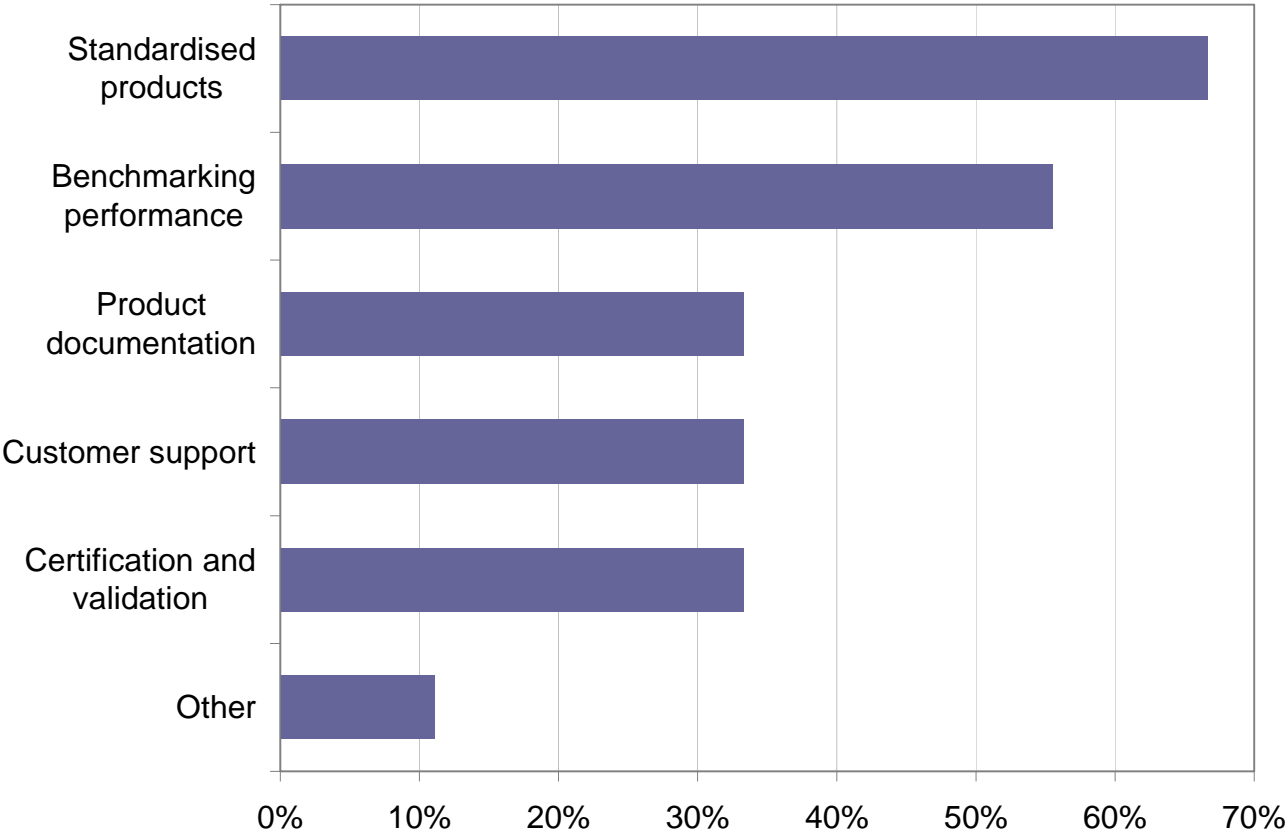
Unlock the power of a billion mobile phones (app store)



Transfer functionality back to satellites with technical advances

Quality and usability are key.....

Customers were asked for their suggestions regarding improving the perception of EO products



Over promising can damage the market.....

- As with economics, the remote sensing sector is brilliant at adding historical narrative but less so at predicting the future.
- Satellite remotely sensed satellite data will remain the fundamental way of attaining a global view of the Earth, affording the holistic view of impact and evolution.
- As uptake increases and the length of datasets improves, acceptance and trust will grow.
- Realism will create sustained uptake better than false promises. Beware the long-tail.

Legislation or Genuine Environmental Economics is Needed – Carrot or Stick

Environmental Economics

- The link between the environment and GDP is well accepted.
 - Stern report 5–6°C will result in a 5–10% loss of global GDP
- Establishing a carbon price, through tax, trading or regulation, is an essential foundation
- Equally important is pricing raw materials, vegetation and pollution with a long-term view and through life costs
- Reuters and Bloomberg – a financial analogy? People will pay for information if they can benefit from it.



Legislation

- Legislation likely to be needed to encourage everyone from governments to individuals.
 - The more locally this can impact the greater the effectiveness.
 - If organisations feel the pain in their pocket they will act – link taxes to green efficiency?
-
- Increased social responsibility will also contribute.





Opportunities from the Green Agenda

21/05/2009

Opportunities on the horizon...



Pursuit of the green agenda will realise opportunities for new applications

Clean Coal

- Monitoring clean coal objectives
 - carbon capture and storage (CCS) projects.
 - initially apply to 25% of power stations' output
 - 100% of output by 2025

Home Energy Use

- Insulation on houses/monitoring home energy use
 - Recent plans unveiled by the government to boost the energy-efficiency of UK homes have been described as a "huge task".

Others

- Support to energy parks/wind farms to predict power generation capability
- Individual energy use
- Social responsibility
- Air quality

- The market from the green economy is growing but revenues from existing customers are low
- Deploying space technologies at ground level can improve usability, provide local validation and stimulate scaleable applications at the local level
- Quality and usability of data is key, as is realism
- Opportunities will arise from the green economy but both carrot and stick are needed to increase uptake