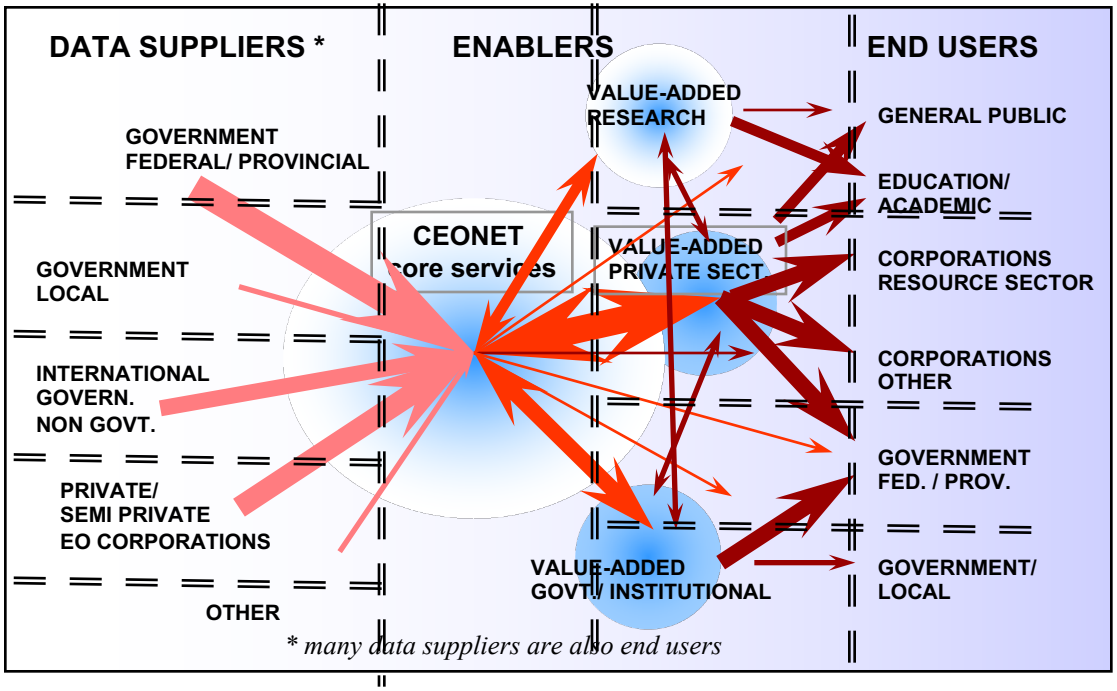
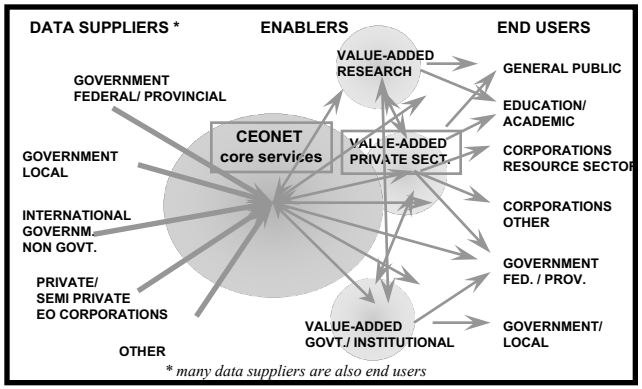
CEONET BUSINESS MODELS AND EVALUATION FRAMEWORK

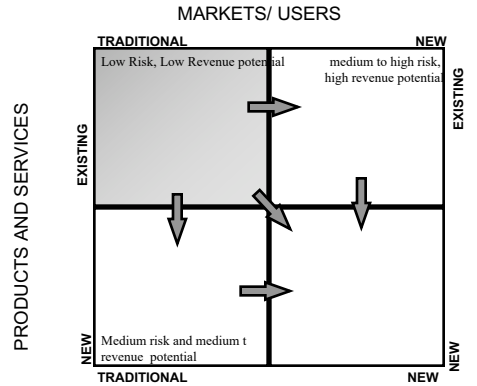


Introduction

- This study was carried out as part of a series of initiatives to develop and implement the Canadian Earth Observation Net. This initiative is a part of the Canadian Space Plan and implemented through the Canada Centre for Remote Sensing.
- CEONet Objectives:
  - Improve access to Canadian EO goods and services by national and international clients;
  - Provide a forum to advertise and an avenue to distribute Canadian 'value-added' information products and services;
  - Develop a Canadian industrial capability to exploit the growing international market for EO management and distribution systems.
- Study Objective:
  - leading edge development and implementation of CEONet requires an strategic and adaptive management approach , which combines a long term strategic vision about client needs and technology potential with a process of continuous learning and performance measurement. This study reviews two important components of this long term vision with the intent to define actions to "accelerate the future" by means of CEONet.
  - The two components are: Business Models and a Performance Evaluation Framework. Both of these are looked at from the VAS perspective:
    - Innovative Business Models: Assessment of Value-added sector business models and development of CEONet strategies and activities to facilitate and empower the development and successful operation of these business models.
    - Innovative Evaluation Framework: Measuring performance against the right indicators

APPROACH





Market strategies risk and revenue potential

VAS STAKE HOLDER MODEL → MARKET & P&S OPPORTUNITIES

PRESENT VAS BUSINESS MODELS → FUTURE VAS BUSINESS MODELS

CEONET V0- V1-V target empowerment strategies; recommendations for initiatives

APPROACH continued

- A visual stakeholder model concept was developed to show the relationships between data suppliers, CEONet, Value-Added Sector and end users;
- A market and products and services model is used to explore opportunities for expansion of EO data and services;
- Present business models are described using the stakeholder model as framework;
- Future business models are explored by combining the possible empowerment strategies of CEONet with market and product and services opportunities;
- The combination and of these four elements provides the basis for a series of strategies and actions CEONet can undertake to facilitate and accelerate the realization of these opportunities.
- Business Models
  - focus on VAS Gov., academic, private
  - look for immediate action benefits, what can we do to improve CEONet for BD
  - use Stakeholder workshops
  - contracts between CEONet and data suppliers
  - the concept of "empowerment"
- Performance measurement
  - Ryerson report
  - contracts for Canadian companies
  - use index/ company list
- Discussion
  - strength and weakness of various models (gov. research vs private sector)
  - What is success? of CEONet
    - public good , market expansion,
    - competitive Canadian industry

The Role of the VAS

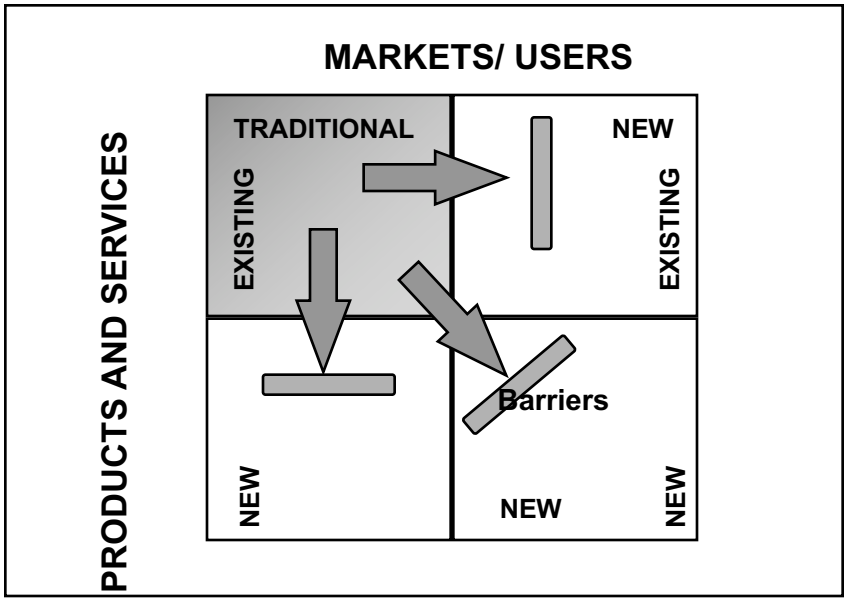
- Data on its own has little value for use. It has to transformed into information and knowledge before it can be applied in management and decision making. The process of transforming data into a product or information for use is usually called : Value-Adding. Many large data suppliers in particular large government, private sector and research organizations do the value-adding for their own use in pursuit of their own mandate. Data are provided to other users as a public good in support of development or a revenue generating service to defray the cost of collection and storage.

- Value-adding is the primary strategy to transform data for use. The Value -Added Sector should therefore be the prime tool to increase the use and benefits of EO data.

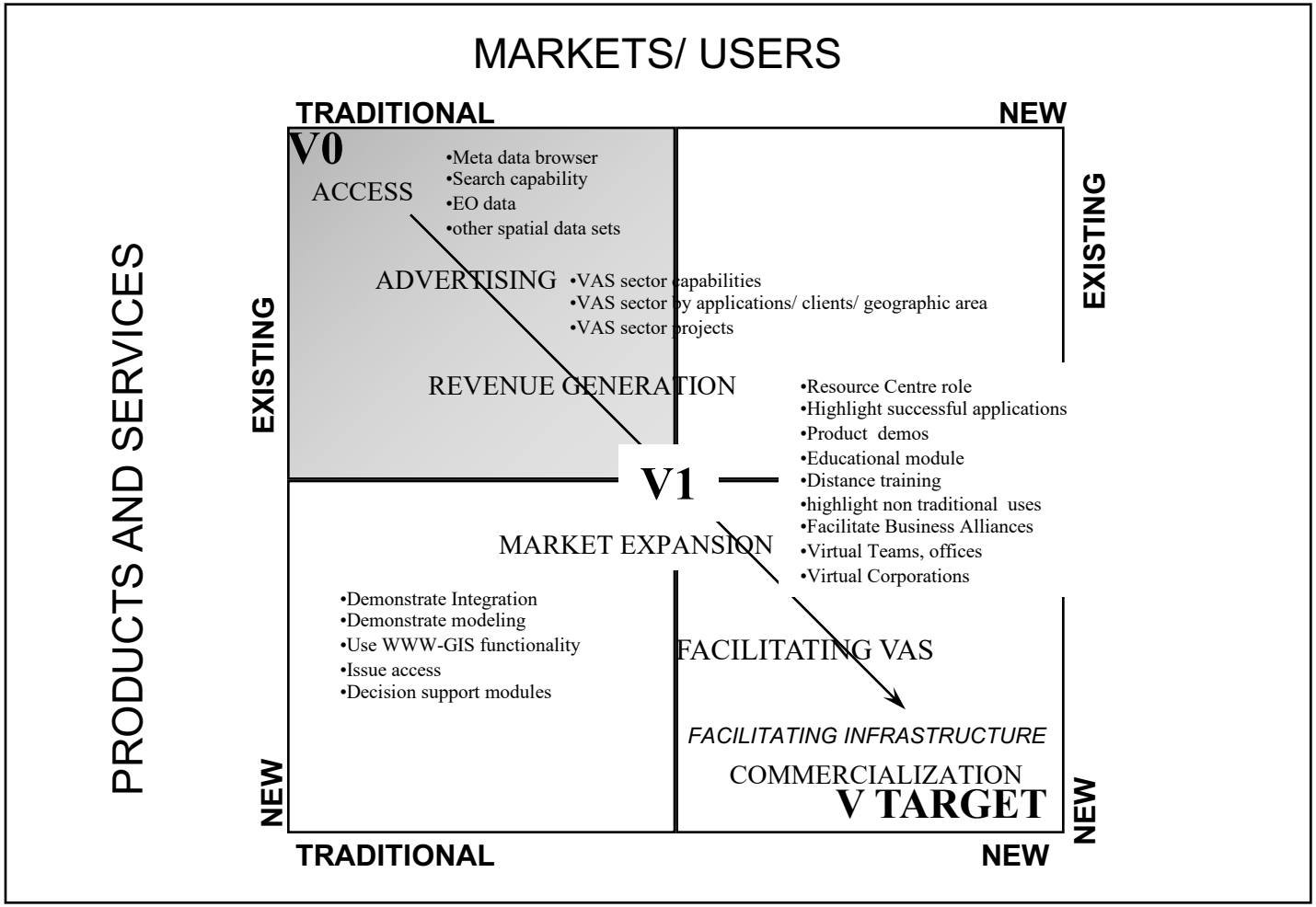
- The Value -Added Sector includes in this definition all entities (private sector consultants, manufactures, government and academic).

CEONET AND VAS MARKET OPPORTUNITIES

- The quadrant to the right gives a visual representation of how market and products and services strategies can impact on 'business expansion'
- Users, markets, demand, need, "pull" for certain products and services , providing opportunities for Canadian business to provide.
- Barriers exist to the realization of these opportunities; some of these barriers can be reduced trough CEONet strategies.
- The illustration on the next page outlines a number of these CEONet strategies/ initiatives, some of which are implemented as part of V0, and some which should be part of V1, V2 etc.
- The specific initiatives are linked to the quadrant of market or P&S expansion. This concept was developed by Geomatics International as part of the MDA CEONet contract, but expanded and elaborated for this specific contract.



FROM V0 TO V TARGET, A MARKET MODEL



CEONET AS CATALYST OF BUSINESS OPPORTUNITIES

- ORGANIZATIONAL EMPOWERMENT: CEONet empowers all organizations using EO data, by providing a powerful and easy form of access to data , data sources and VA services to assist in the use and application of these data assets.
- Specifically it can empowers:
  - individuals within organizations or on their own,
  - the knowledge worker / analyst as well as the data provider,
  - virtual teams inside or outside organizations (the web),
  - virtual organizations/ companies,
  - "mining of data",
  - small operating/ business units in relation to large ones,
  - individuals and organizations involved in integration of data, information,
  - traditional integration, but more importantly non- traditional,
  - vertical integration; from data to knowledge to decision making,
  - the visualization of data/ information,
  - Decision Support Systems,
  - real time , dynamic access,
  - globalization; for individuals, small companies, large companies; development of "networks" of specialists , services and companies.; an infrastructure to export
  - it empowers niche marketing

In summary it empowers the individual and the small team or network of individuals inside or outside an organization and it empowers integrators. The more comprehensive CEONet, the more empowering it becomes. Why? because it removes some of the major barriers.

CEONET ENABLING STRATEGIES/ FEATURES

EMPOWERMENT STRATEGIES

PRESENT

- Domestic, N-Am. markets
- Traditional Clients
- Resource applications
- Products,
- Limited VA services

…….
…….

SHORT TERM
MARKET PLACE:
Access to N-A EO data
Access to Global EO data
Meta Data Browser
Advertising of Canadian VAS capabilities
Data Supplier Information system
Traditional Clients
……..

MEDIUM TERM
Traditional and New Clients/ Markets
Interlinking with other spatial data sets
Integration of VAS information bases
Meta Data Browser with limited "quality " information descriptions
Thematic Data Base Browser links
Value- Added Information System
Real Time Information Strategies
Facilitation of Marketing: Resource Centres
Facilitation of Canadian Competitiveness: Virtual Teams,
Companies Virtual,
Canadian Success Stories
Integration with Spatial Data Infrastructure
……..

LONG TERM
Integration with Knowledge Infrastructure;
linking with Decision Support Systems
Real Time DSS
New applications

FUTURE

- Globalization
- Sustainable resource management
- Real time input in decision making
- Integration into corporate information management
- Virtual Teams
- Virtual Corporations
- Virtual Marketing
- Issue response
- Crisis Management
- New applications
- Integration into DSS at multiple levels, from operations to policy

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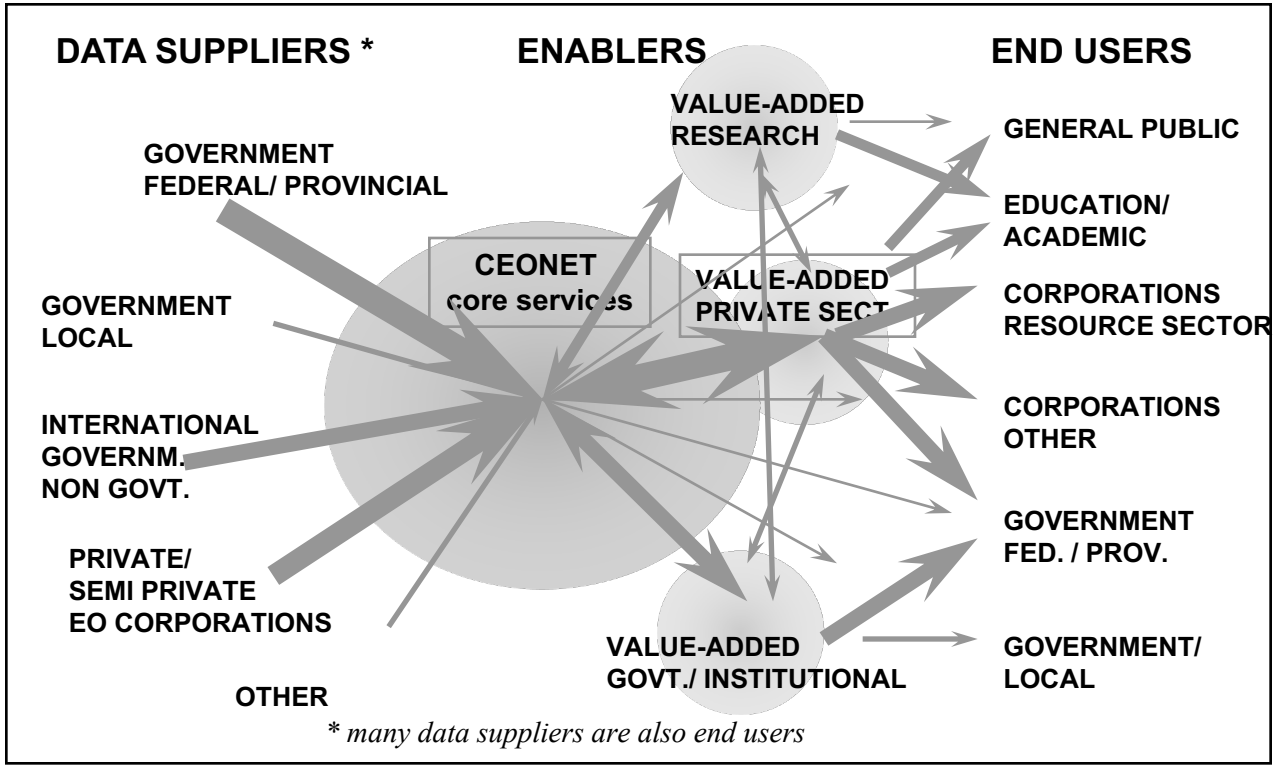
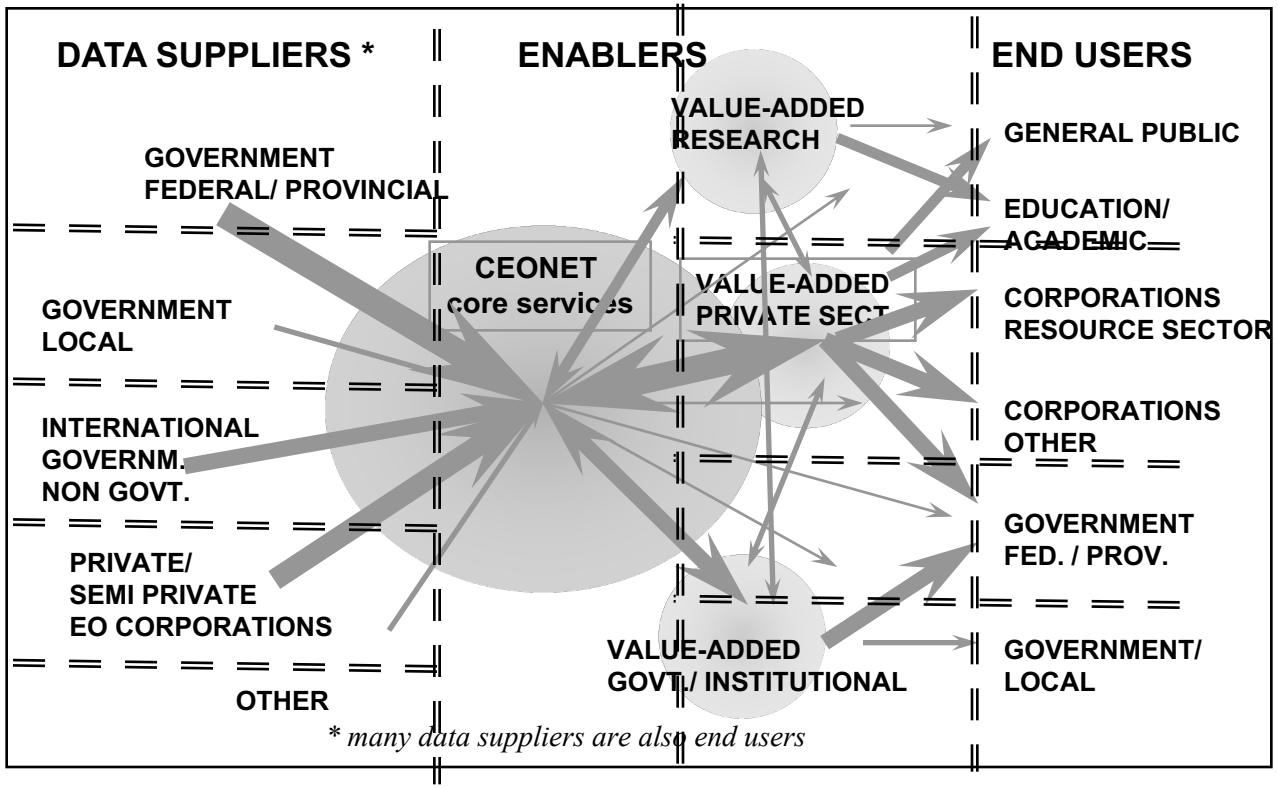
STAKEHOLDER MODEL AS BUSINESS MODEL FRAMEWORK



The principal stakeholders in CEONet and their relationships are graphically displayed in this figure. Three groupings are possible, the Data Suppliers, the 'Enablers', and the end users. Arrows identify direction and relative importance of relationships. Both CEONet and Value-adders play a strategic gateway role in reaching end users. It is clear that the VAS sector is a prime partner in achieving CEONet objectives

STAKEHOLDER MODEL AS BUSINESS MODEL FRAMEWORK



The compartments in the model are used to discuss the various business model approaches in this study.

SOME CONSIDERATIONS RELATED TO CEONET BUSINESS MODELS

- PRESENT SITUATION
  - Federal leadership
  - Special source of project resources (Space Plan) which will disappear.
  - partnerships, loose alliances between government agencies (federal / provincial)
  - Involvement of private sector in development and implementation of project(s)
  - possible operation of CEONet by private sector
  - problems with cost recovery, and revenue vs. public good
  - problems with financing updating and inclusions of new technologies,
  - lack of resources and revenues to maintain data bases (generic problem)
- MARKET DEMAND/ ISSUES
  - user needs extend beyond CEONet
  - global market expansion and exports
  - need for data integration and Value-added analysis
  - reaching non traditional users
  - demand for integration of non EO data sets
  - demand for Global/ international EO data access
  - need for national infrastructure leadership essential to maintain Canada's competitive position
- STRATEGIC/ CHANGE FACTORS
  - management of CGDI infrastructure; Where is the leadership?
  - increasing need for integration of data sets
  - increasing need for integration in decision support models which include integrated data sets, integrated models: Decision support systems
  - All partners in alliance / Consortium have significant Web presence and their own access and coat recovery mechanisms
  - CEONet is designed for the present and near future rather than the "Future"
- FUTURE BUSINESS MODELS/ CONCLUSION
  - Managing a concept vs managing a project; or a combination of the two
  - Government role essential re development of infrastructure, including R&D, and the management of the infrastructure
  - Government weak in area of cost recovery
  - private sector relative weak in research and development, leadership roll
  - private sector strong in export of approaches
  - private sector strong in the development of applications and introduction of new technologies

VALUE-ADDED RESEARCH BUSINESS MODELS

PRESENT BUSINESS MODELS

•University Departments, "Centres"
•Centres of Excellence
•Government: "Units" in Institutions, Depts
•Private e Sector: limited; small groups, usually very applications oriented

FUNDING:
•primarily from Government, direct or indirect
MANDATES:
•mostly sectoral focused on narrow mandate of funding agency; few with cross-sectoral mandates
ORGANIZATION:
•usually very small units with little depth.
PRODUCTS & SERVICES:
•Research in technology development, applications development; teaching, training; some contract research. Specific sector products, few interdisciplinary concepts;
REVENUES:
•usually no direct revenues, some spin-offs in the private sector, some government funded contract research

FUTURE BUSINESS MODELS

Within, or building on the traditional organizational structures a number of new models will develop which are enabled by CEONet and Internet, WWW etc.

Virtual R&D Teams (within disciplines)
Virtual R&D Teams across disciplines
Virtual R&D Teams across organizations, in particular governm./private/ univ.
Virtual companies which integrate "Centres of Excellence"
Agile Teams and Institutions
Entrepreneurial R&D

FUNDING: increase of funding from private sector for entrepreneurial R&D
MANDATES: Cross sectoral; global applications,
PRODUCTS & SERVICES
niche P&S with large market or public good potential, global .

CEONET INITIATIVES TO FACILITATE THE FUTURE BUSINESS MODELS

•Establish R&D module in "market place"
•Develop R&D strategic architecture framework
•Develop R&D potential applications development and risk framework
•Advertise and Canadian "Market" R&D capability
•Facilitate demand and offer of R&D

FUTURE DIMENSIONS

MARKET NEEDS
•High resolution applications
•Rapid development of new P&S
•Rapid Tech. transfer to private sector and Governm.
•Integration of EO with multi-disciplinary dada
•Scaling from local to Global
•Integration into Decision Support Systems
•Integration with GPS
•Export of R&D models to other ecosystems/ regions/ cultures
•Socio-economic/ business geographics applications
•Strong R&D needed to remain competitive
•Closer link between R&D and private sector
•Need for integration of multiple skills and technologies
•Need for Virtual Product and Services Teams
•Global teams
•Global companies

VALUE-ADDED GOVERNMENT/ INSTITUTIONAL BUSINESS MODELS

PRESENT BUSINESS MODELS

•Surveys and Monitoring Centres
•Assessment and interpretation components of renewable/ environmental resource agencies
•Government: "Units" in Institutions, Depts
•Utilities with role and mandate of quasi government agency.
•Private e Sector: NA

FUNDING:
• from Government, direct or indirect
•significant downsizing, often facilitating a more significant private sector role
MANDATES:
•mostly sectoral focused on narrow mandate of funding agency; few with cross-sectoral mandates
ORGANIZATION:
•can vary from very small units (which contract in or out to larger National or Regional Centres of Specialization, excellence
PRODUCTS & SERVICES:
•Interpretations and assessment of EO data for very specific applications according to the mandate of organizations. Specific sector services/ products, few interdisciplinary concepts;
REVENUES:
•usually no direct revenues; some form of cost-recovery for interpreted data/ information.
•no significant increases in revenues possible

FUTURE BUSINESS MODELS

By definition most of the "business models' remain within government; CEONet and Internet will facilitate significant more efficient and effective cooperation between various governm./ inst. levels (from national to Local). Within traditional institutions a network of :
•Virtual Teams, Virtual Offices, Virtual Services Agencies can develop.
•Traditional partnerships between agencies , usually build on sectoral mandates will be enhanced by cross-sectoral partnerships and networks, building on virtual cooperation and networks;
•Contracting of government services to the private sector will become more efficient, specifically for standard services.
•Both vertical and horizontal integration is more common and effective
FUNDING: Government; MANDATES: Government, more cross-sectoral; P& S: traditional, electronic at lower cost, more access to data base assets.

CEONET INITIATIVES TO FACILITATE THE FUTURE BUSINESS MODELS

•Access to EO data
•Effective Meta Data descriptions ; also of other spatial and non spatial data sets.
•Link EO data to Decision Support Systems in Govern.
•Facilitate link with R&D
•Offer low cost data for testing
•Publish list Experts
•EO Resource Centre on the WEB
•Web based Training Module

FUTURE DIMENSIONS

Real Time Data Collection, integration, access
High to low resolution applications
Landscape , community, ecosystem approach
Sustainable development
Integrated Resource Management
Information for Public Participation in Decision Making
•Integration of EO with multi-disciplinary dada
•Scaling from local to Global; resource dependent communities
•Visualization
•Integration into Decision Support Systems
•Integration with GPS
•Export of R&D models to other ecosystems/ regions/ cultures
•Socio-economic applications
•Closer link between R&D and Government
•Need for integration of multiple skills and technologies
•from policy to operations
•Linking provincial, national, continental and global programs
•……..
•……..

VALUE-ADDED SERVICES BUSINESS MODELS

PRESENT BUSINESS MODELS

•Small to medium sized business units/ companies
•Sectoral focus (narrow markets, specific niche products and services
•For profit
•focus on operational applications
•relative weak R&D efforts (financed from revenues or government support programs
•EO/GIS analysis systems
•some expansion into new markets and new sectors
•origin is domestic market and applications; export to different geographic/ global areas
•limited alliances/ cooperation

FUTURE BUSINESS MODELS

•Building on traditional models, CEONet/ Internet facilitates the development of different business models and approaches
•Virtual Companies
•Virtual Marketing
•Virtual Client Support
•Virtual Teams and offices within corporations or virtual companies
•Virtual R&D Teams
•Virtual R&D Teams across disciplines
•Virtual R&D Teams across strategically allied companies
•Virtual companies which integrate "Centres of Excellence"
•Entrepreneurial product development for global markets
•building products on vertical and horizontal integration
•Global Alliances/ companies

CEONET INITIATIVES TO FACILITATE THE FUTURE BUSINESS MODELS
•Access of EO data, NA and Global
•Access/ Reference to non-EO data sets, spatial and non-spatial
•Advertising / Marketing feature
•National/ Global Resource Centre Concept
•Distance Training Concept
•Success stories of leading edge VAS applications
•Facilitation of establishment of 'Canadian' Virtual Teams , companies alliances;
•focus on Decision Support systems and EO

FUTURE DIMENSIONS

MARKET NEEDS
•High resolution applications
•Rapid development of new P&S
•Virtual Marketing
•Virtual Client Support
•Rapid Tech. transfer to clients
•Integration of EO with multi-disciplinary dada
•Scaling from local to Global
•Integration into Decision Support Systems
•Integration with GPS
•Export of R&D models to other ecosystems/ regions/ cultures
•Socio-economic/ business geographics applications
•Strong R&D needed to remain competitive; fast learning curve for companies
•Closer link between R&D and private sector
•Need for integration of multiple skills and technologies
•Need for Virtual Product and Services Teams
•Global teams
•Global companies
•Total information Management and decision making

SUMMARY OF VAS SECTOR RECOMMENDATIONS/ STRATEGIES

CEONET INITIATIVES TO FACILITATE THE FUTURE VALUE-ADDED R&D BUSINESS MODELS

- Establish R&D module in "market place"
- Develop R&D strategic architecture framework
- Develop R&D potential applications development and risk framework
- Advertise and Canadian "Market" R&D capability
- Facilitate demand and offer of R&D

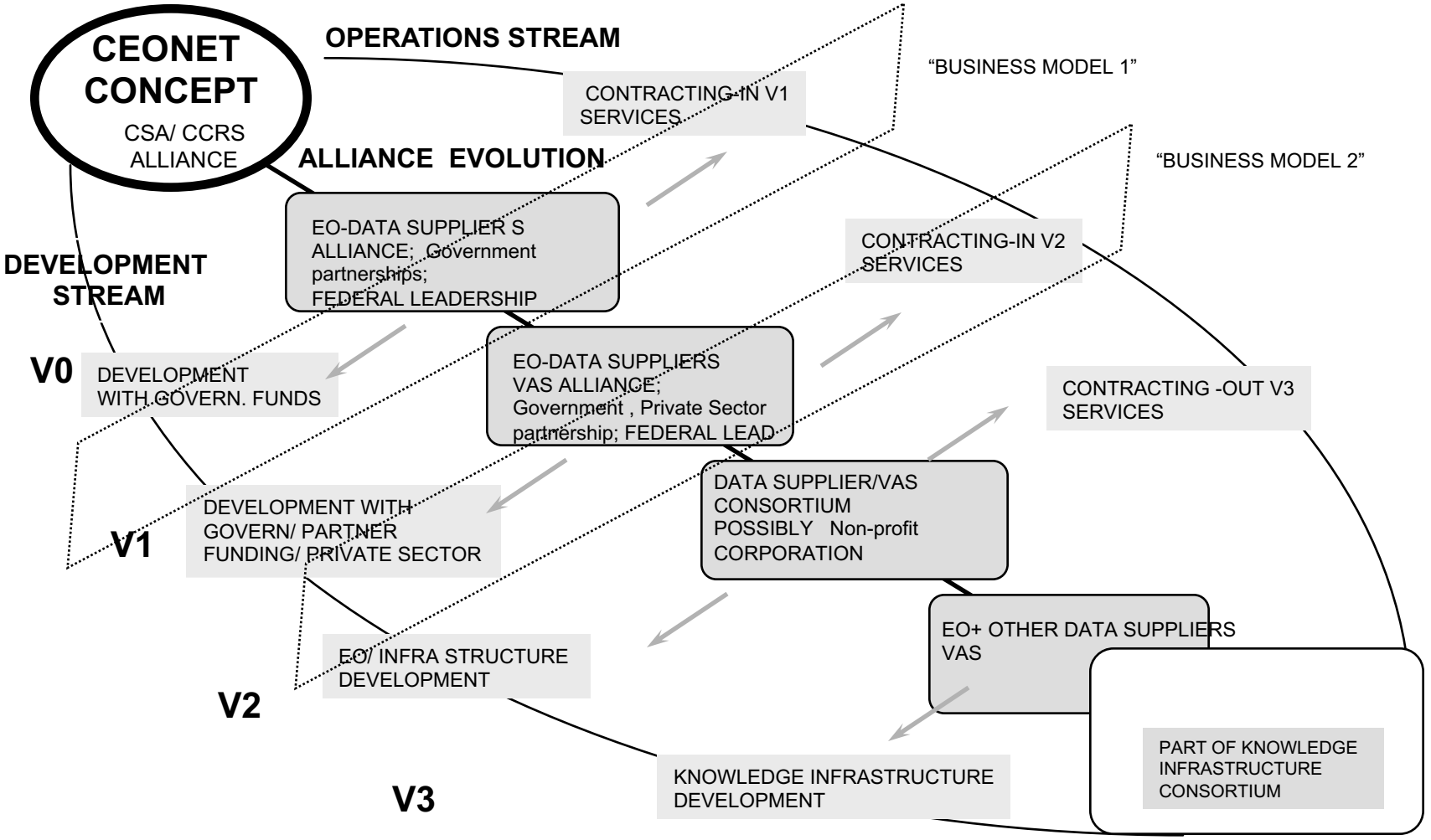
CEONET INITIATIVES TO FACILITATE THE VAS PRIVATE SECTOR BUSINESS MODELS

- Access of EO data, NA and Global
- Access/ Reference to non-EO data sets, spatial and non-spatial
- Advertising / Marketing feature
- National/ Global Resource Centre Concept
- Distance Training Concept
- Success stories of leading edge VAS applications
- Facilitation of establishment of 'Canadian' Virtual Teams , companies alliances;
- focus on Decision Support systems and EO

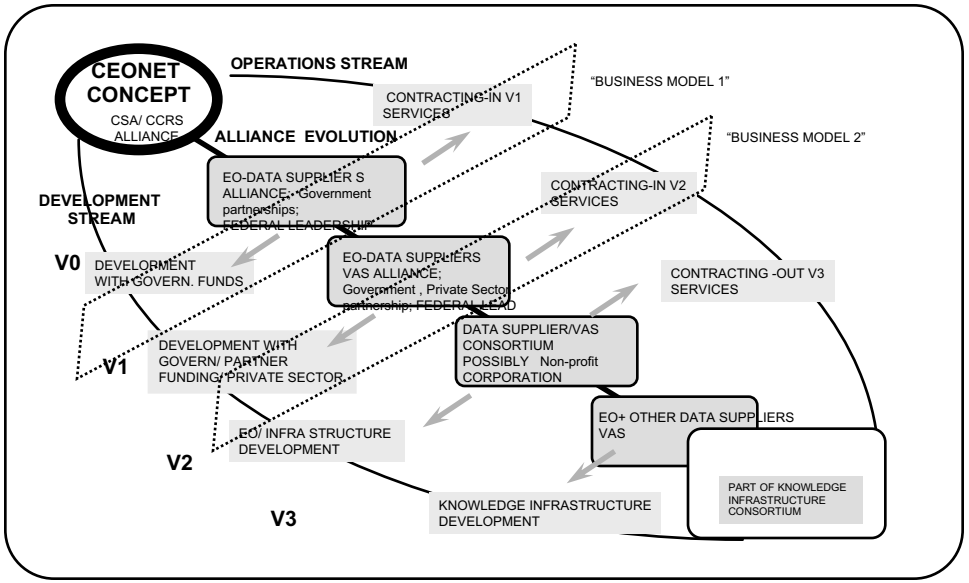
CEONET INITIATIVES TO FACILITATE VAS GOVERNMENT / INST. BUSINESS MODELS

- Access to EO data
- Effective Meta Data descriptions ; also of other spatial and non spatial data sets.
- Link EO data to Decision Support Systems in Governm.
- Facilitate link with R&D
- Offer low cost data for testing
- Publish list Experts
- EO Resource Centre on the WEB
- Web based Training Module

CEONET BUSINESS MODEL CONSIDERATIONS/ STRATEGIES/ EVOLUTION



CEONET BUSINESS MODEL CONSIDERATIONS/ STRATEGIES/ EVOLUTION



- The actual business model for CEONet itself is more difficult to define. Development and implementation of CEONet requires a different form of management than is exercised at present. It requires CONCEPT MANAGEMENT.
- In this figure three predominant development and implementation streams are identified , all fundamentally important to CEONET success. Each may have its own optimum business solution at a particular time phase of evolution.
- Clearly operational functions can be operated in some sort of private sector environment. However the strategic leadership role required to put the alliances and partnerships in place requires some sort of "government" lead role.
- The R&D functions, development and implementation are essentially a part of a much greater "Spatial Infrastructure Initiative"; A government lead remains important.
- Within five years Knowledge Infrastructure will become the driving force initiatives of this nature. This will mean that EO will become a smaller subset , and may take a back seat to far more comprehensive information management schemes.

PERFORMANCE MEASUREMENT FRAMEWORK AND INDICATORS : PMF & I

NEED:

- For planning, reporting and management tool
- Practical Analytical Approach
- Framework with evolving indicators of performance
- Impact on development and implementation of CEONet
- Compatibility with Departmental and CSA approaches

APPROACH:

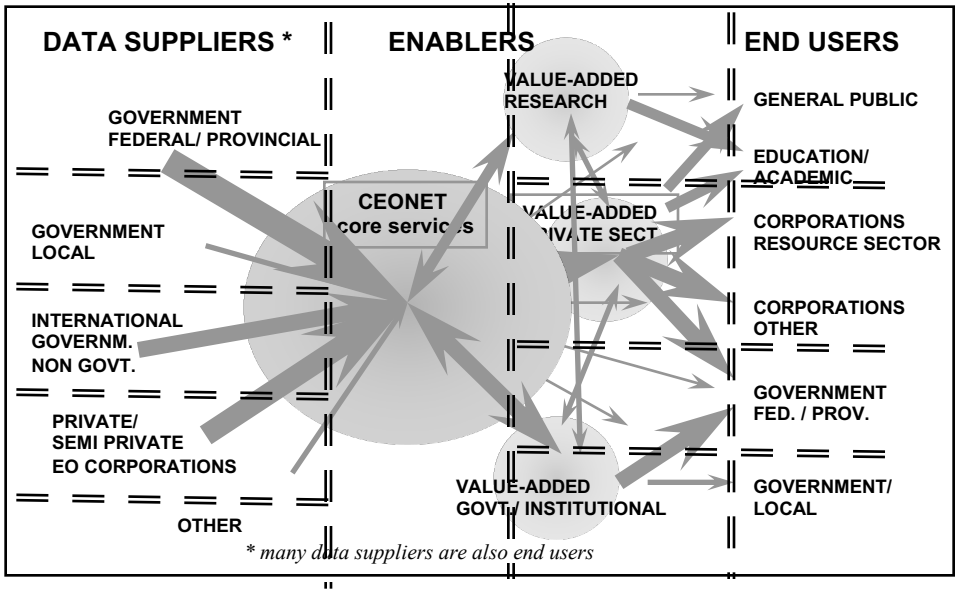
- Measure across a performance spectrum
- Use qualitative before quantitative approach
- involve stakeholders in measuring performance
- Demonstrate Value-added impact
- Link outcomes to costs
- Show trade-off among performance goals
- link strategic directions to work plans

Approach modified from approach developed by Steve Montague, Performance Management Network Inc. This approach is presently being implemented in the Canadian Forest Service Science and Technology Networks.

PMF & I: IMPLEMENTATION

- Part of CEONet planning and management framework
- Develop pilot approach
- Performance Spectrum of Questions (source S. Montague):
  - HOW?
    - inputs
    - activities
    - outputs
  - WHO?
    - Stakeholders: users/ clients/ co-deliverers, beneficiaries
  - WHAT DO WE WANT?
    - short term outcomes
  - WHY?
    - longer term outcomes/ impacts
- Steve Montague: Managers must measure across spectrum. How? should be related to Who?, What? and Why?

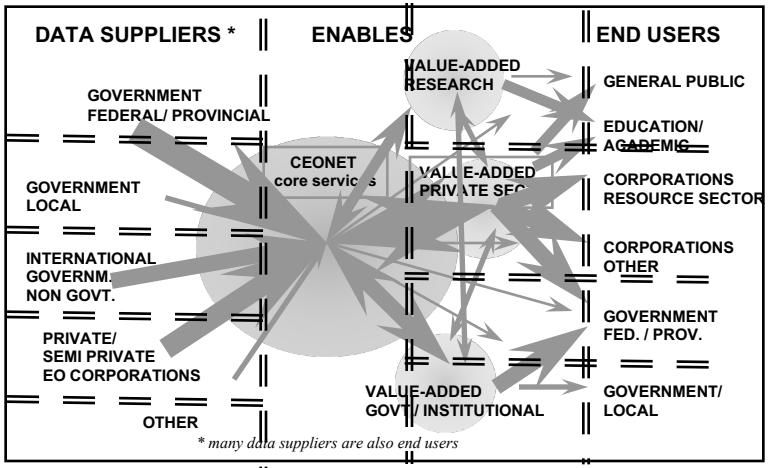
PMF & I: the Stakeholders Model As Framework



PERFORMANCE MEASUREMENT FRAMEWORK

Measuring of the HOW, WHAT, WHO, WHY?
Performance measurement should include indicators for all stakeholders.
In essence each of the ARROWS in the figure to the side should have a number of indicators, moving from a qualitative to a quantitative approach.
Performance objectives have to be made more specific than the three simple objectives presently directing the CEONet project.

PMF & I: the Stakeholders Model As Framework

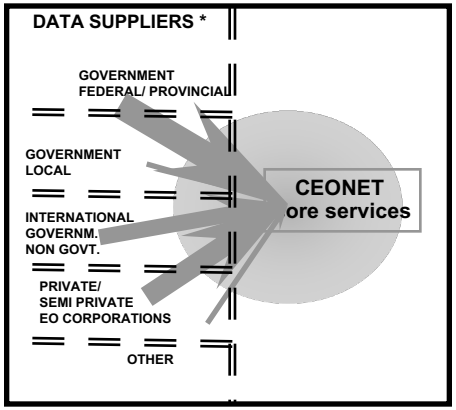


- For each of the stakeholders the desired state has to be identified
- For each the present state has to be described
- For each of the "objectives= desired states" indicators have to be agreed on
- This is a participatory process, and participation of project managers and clients is of critical importance.
- The development of performance indicators can be one of the most powerful consensus building exercises in a team or with partners.
- In the same sense , performance measurement and reporting provides an excellent opportunity to highlight success stories

PMF & I: PROPOSED INDICATORS FOR CEONET AND DATA SUPPLIERS

SOME EXAMPLES OF CEONET PERFORMANCE I INDICATORS RELATED TO DATA SUPPLIERS

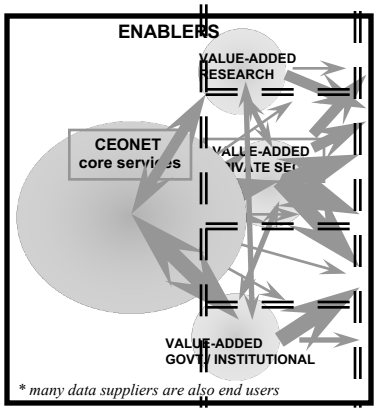
- HOW?
  - inputs: 1) agreements, 2) resource contributions, 3)
  - activities: cooperative projects, sharing of resources; cooperative strategies, cooperative marketing, etc
  - outputs: Integrated interfaces, integrated search mechanisms, integrated purchase systems
- WHO?
  - Primary Clients: depends on data supplier; number of clients reached trough CEONet; Diversity of Clients; traditional vs. new clients, direct or indirect; source : Server Stats
  - Co-deliverers: Such as VAS or other Data Suppliers; agreements between them facilitated trough CEONet; Web based interactions between these groups using server stats.
  - users/ clients/ co-deliverers, beneficiaries
- WHAT DO WE WANT?
  - short term outcomes: incremental increases in target interactions, increase in DS orders; increases in DS cooperation;i ncreases in DS contacts; increases increases in revenues; increases in non-traditional clients; increases in global inquiries . Increases in purchase % of browsers. etc.
- WHY?
  - longer term outcomes/ impacts: Revenue generation for data base updating; revenues to cover operational and development cost, wider use of public good data assets; Integration of EO in decision making



PMF & I: PROPOSED INDICATORS FOR CEONET AND VAS IMPACT

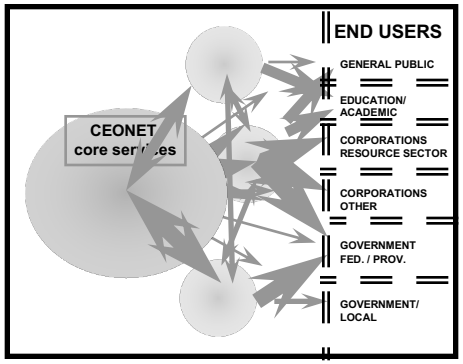
SOME EXAMPLES OF CEONET PERFORMANCE I INDICATORS RELATED TO VAS

- HOW?
  - inputs: 1) agreements, 2) data/ information contributions, 3) "subscriptions",
  - activities: cooperative projects, sharing of resources; cooperative "strategies, cooperative marketing, etc; facilitating virtual teams etc.
  - outputs: VAS links, VAS services and client interactions, VAS success stories;
- WHO?
  - Primary Clients: (VAS) number of clients reached trough CEONet, directly or indirectly; Diversity of Clients; traditional vs. new clients, direct or indirect; source : Server Stats
  - Co-deliverers: Such as VAS or other Data Suppliers; agreements between them facilitated trough CEONet; Web based interactions between these groups using server stats.
  - users/ beneficiaries: Educational users, resource managers, provinces, local agencies, private sector , education
- WHAT DO WE WANT?
  - short term outcomes: incremental increases in target interactions, increase in VAS contracts; increases in VAS cooperation;i ncreases in VAS contacts; increases in revenues; increases in non-traditional clients; increases in global inquiries .
- WHY?
  - longer term outcomes/ impacts: Revenue generation for private sector; maximizing benefits for Canadians from data base assets; exporting of Canadian know-how globally; ; improved competitiveness; new markets; revenues to cover operational and development cost, wider use of public good data assets; Integration of EO in decision making.



PMF & I: PROPOSED INDICATORS FOR END USERS IMPACT

SOME EXAMPLES OF CEONET PERFORMANCE I INDICATORS RELATED TO END USERS

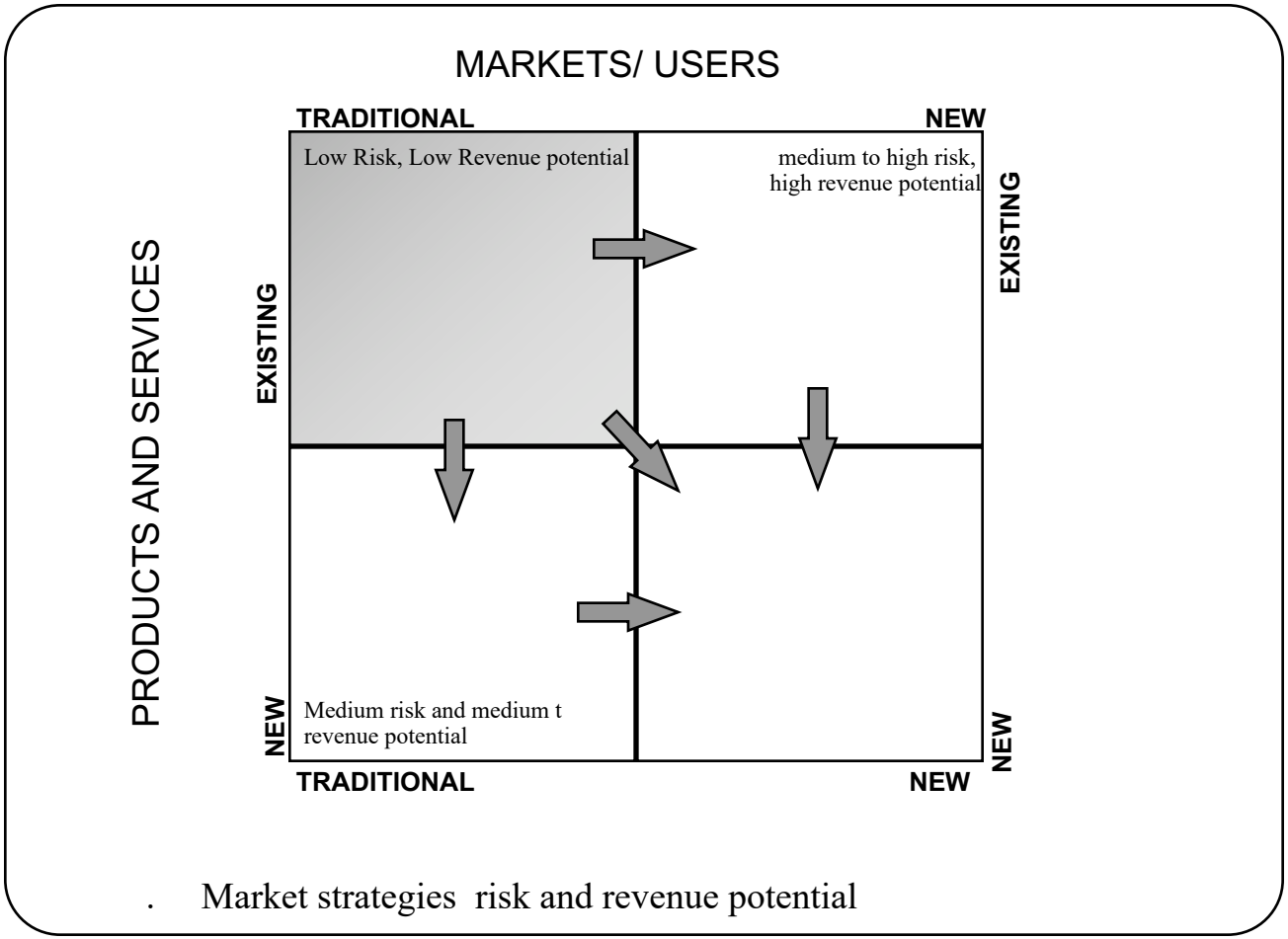


- HOW?
  - activities/ outputs: advertising, marketing, search engines, data browsers, targeting clients and applications, linking clients with VAS and data providers, international, success stories, training facilities, user support
- WHO?
  - Primary Clients: categories of end users reached reached trough CEONet, directly or indirectly; Diversity of Clients; traditional vs. new clients, direct or indirect; source : Server Stats
  - Co-deliverers: Such as VAS or other Data Suppliers; agreements between them facilitated trough CEONet; Web based interactions between these groups using server stats.
  - users/ beneficiaries: Educational users, resource managers, provinces, local agencies, private sector , education
- WHAT DO WE WANT?
  - short term outcomes: incremental increases in target interactions, increase in VAS contracts; increases in VAS cooperation , increases in revenues; increases in non-traditional clients; increases in global inquiries .
- WHY?
  - longer term outcomes/ impacts: Revenue generation for private sector; maximizing benefits for Canadians from data base assets; exporting of Canadian know-how globally; revenues to cover operational and development cost, wider use of public good data assets; Integration of EO in decision making., EO a household concept.

PMF & I: Conclusions and Recommendations (Preliminary)

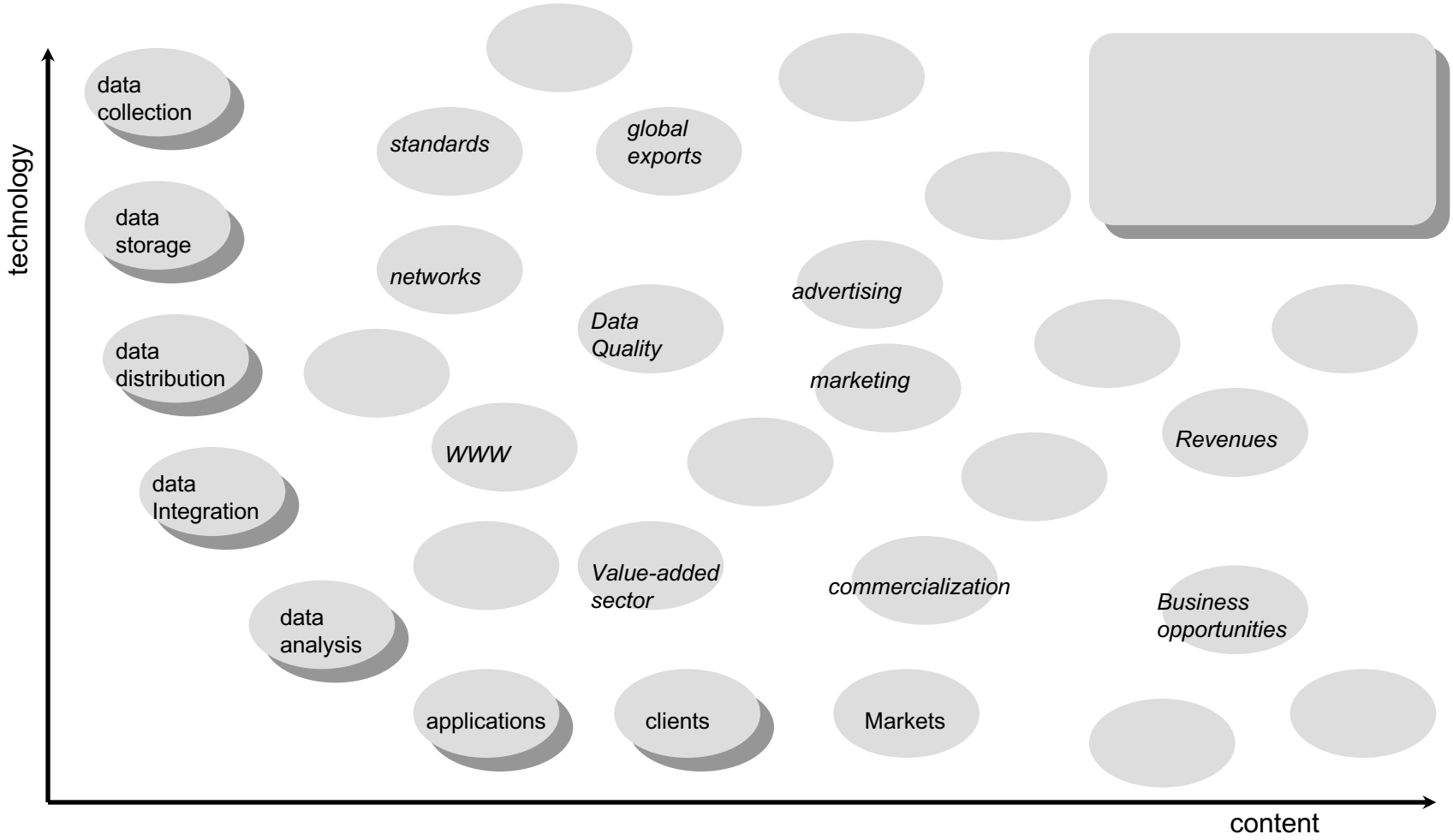
- The development of a Performance measurement framework is an critical part of CEONET project implementation
- The Performance Indicators outline in this study are very preliminary and should only be used as a discussion reference.
- Stakeholder involvement in development of indicators is seen as one of the most powerful ways of building partnerships, cooperation, buy-in, and build consensus in the project team
- It is recommended that the present round of soft consultations with stakeholders, the so called " Stakeholders Model" is replaced by a consultation round focused on performance measurement.
- Performance consultation provides significant more focus and direction than "feature" consultation.
- Performance consultation involves stakeholders directly and transfers some of the implementation responsibilities to the stakeholders .

ANNEX: MARKET OPPORTUNITIES RISKS AND REVENUE POTENTIAL

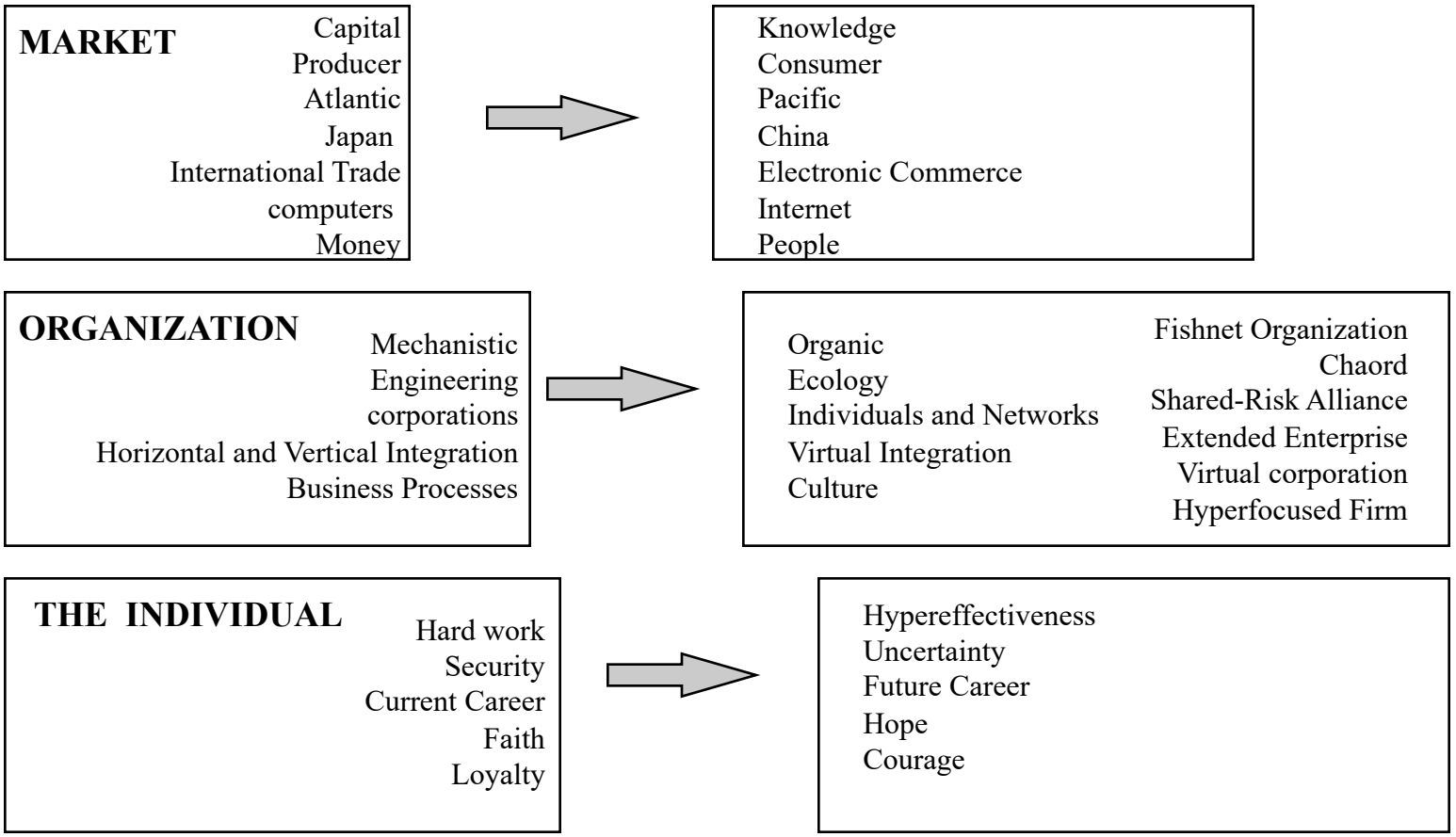


. Market strategies risk and revenue potential

ANNEX: CEONET Development of a Strategic Architecture
Key Components



ANNEX: FROM FIRST CURVE TO SECOND CURVE (adapted from I. Morrison)



ANNEX: TAKING ADVANTAGE OF CYBERSPACE (adapted from James Martin , Cybercorp)

- CYBERCORP: a corporation designed for fast change, which can learn, evolve, and transform itself rapidly; capable of reacting in real time to changes in its environment, competition and customer needs, with virtual operations or agile linkages of competencies in different organizations.
- Just-in-time everything
- continuos monitoring of what is important
- minimization of concept to cash time: from identifying product need to bringing it to markets satisfy changing demands
- strategic speed : strategic decisions need to be made fast and implemented fast
- Intercorporate networks and intercorporate computing are fundamentally changing world patterns of commerce
- Virtualness of corporation
- building capabilities that make it uniquely competitive
- Agile Webs: dynamic assembly of core competencies from different corporations, to react to fast changing demand/ markets; changing patterns of virtual relationships
- Global Reach: from being geographic specific and product diversified to geographically diversified and product specific.
- Cybercorp needs knowledge infrastructure to capture create knowledge , store it, improve it, clarify, disseminate and put to use
- Not simply speeding up the old economy, but a fundamental new kind
- Must grow human potential as fast as we grow technological potential
- inventing new types of operation
- Core Competencies: critical skills or enabling technology should be the central building block of corporate strategy ; in our context critical skills, data/information/ knowledge, enabling transformation and applications models
- Strategic Value Streams is a unique capability that enables a corporation to move must faster or better than its competition
- Strategic thinking is not limited to senior management; strategic value-teams are often more alert to changing needs and opportunities provided by innovations.
- Combining caring dedication to local customer support with world-class global support
- Contracting-out of bread and butter activities allows corporation to focus on strategic capabilities
- Virtual Components: (1)Virtual Space , electronics integrates geographically scattered employees ; (2) Virtual Business; employees in different companies may be linked as though they were in the same company; (3) Virtual research organization, a network of affiliates to carry-out R&D, on contract, or “in-house” ,