### Framing Vision for IOOS Business Model(s) & FAC Roles

Why should FAC envision improved business models?

- Business models as means to recruit new national & regional industry partnerships
   Means to recruit and recognize appointment of leaders
- Stronger business models strengthen RA sustainability, thus attractiveness to industry
   Without compromising free flow of collaboration and altruism
   While preserving the spontaneity of serendipitous interactions & innovations
- New business models expected to alter revenue basis away from solely top-down
   Promote accountability upward, inward and outward to customers
   Standardization of nationwide capacity to continue, yet be complemented by...

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Summit breakout discussion yielded more questions than answers, great diversity
 For example, participants offered polar opposite answers to status inquiries
 They asked for templates, precedents, data at no cost assumption, Justin adds?...
 We sense opportunity to address these gaps and others
 Via efforts of whom?

Why should FAC envision improved business models?

To promote behaviors above and beyond natural interactions

Altruism has been relied upon to an extent approaching detrimental enabling

NOAA & RAs have intrinsically different constituents to serve, ie S&L and customers

To formalize basis of, and consensus, on revenue flow

Revenue slicing and dicing has been friendly in absence of business exactitudes

Top-down legacy straightforward.

Bottom-up apparently de minimus thus far.

Why should FAC envision improved business models?

Alignments of agreements and interactions to achieve synergy beyond components
 Required for PPBES accounting of federal awards

LMI report:

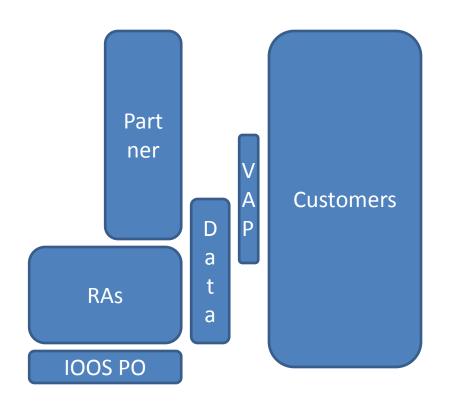
recommended BM as means to ensure performance-based RAs focused toward development & ops of RAs integrated with national IOOS noted "...lack of guidance below strategic level that would support regions" noted only 8 of 11 would support performance based metrics noted that 6 RAs pleaded for establishment of a singular leadership structure

• Is it valid assumption that IOOC is open to future where RAs have tailored shapes?

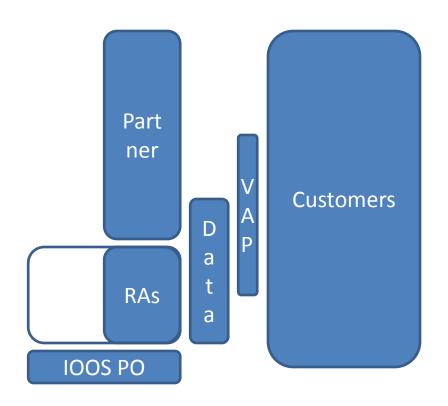
Why should FAC envision improved business models?

- Models can be scaled to operate at R&D project, sensors, VAR, RA, National IOOS
   Pause thinking national reqs long enough to wear shoes of the customers
   FAC may choose to adjust models to better recruit inter-agency partnerships
   FAC may choose to invent models to better recruit industry investments
   FAC may choose to promote models to account value to customers + VARs + public
- Does FAC agree business models can be tailored to operate differently at levels?

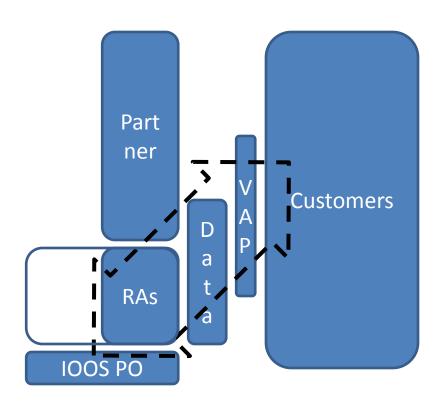
IOOS public-private partnership business elements – example1



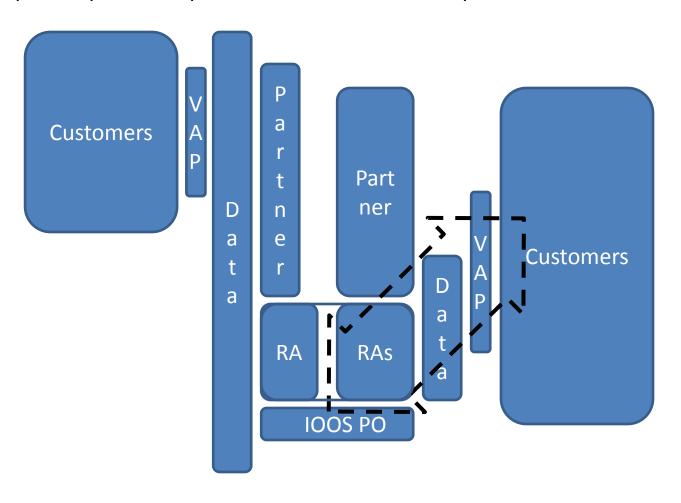
IOOS public-private partnership business elements – example1 create value together



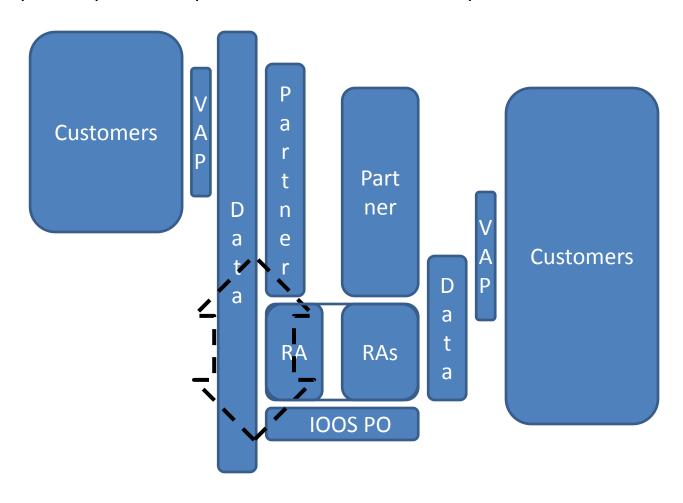
IOOS public-private partnership business elements – example1 Search and Rescue?



IOOS public-private partnership business elements – example2 – extend data coverage



IOOS public-private partnership business elements – example2 WeatherFlow?



Why should FAC envision improved business models?

- Sound business models beget viable business plan tactics
   Models ≠ tactics. Models align assets. Models beget tactics (beyond HQ control?)
   We seek tactics by stakeholders & partners that attract satisfied paying? customers
   We seek tactics by stakeholders that attract motivated partners
   We seek tactics by stakeholders that focus on chosen targets, not be all for all.
- Federal business models account for funds relative to partners' outputs via PPBES
   LMI report focused on model oriented for topdown funding
   LMI =strategy-struct-reqs-plans-investments-communications-evaluations
   Based on structrs-procs-syst-capability to create value w/in national requirements
   Existing general models adjustable to continue to fulfill federal missions

   Experience with models also instructive as to what they don't cover well enough

Why should FAC envision improved business models?

Industry relies on business models that optimize partners' I/O to value propositions

Inputs:	Processes:	Outcomes:
Technology Knowledge	Federal Funding	Lives, GDP, ↓Risk, Enjoyment
Capital Equipment	Organizational Structures	Education, Preservation
Intellectual Property	Observations	Technical Knowledge
Cash	DMAC	Data
Labor Hours	Modeling & Analyses	Value Added Products
Leadership	Communications	Intellectual Property
Market Knowledge	Delivery	Revenue
Relationships	Evaluation	Market Knowledge
		Δ Equity

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• Industry relies on business models that optimize partners' I/O to value propositions

Inputs:

tecKnowl, CapEqp, IP

Why should FAC envision improved business models?

Industry relies on business models that optimize partners' I/O to value propositions

Inputs:

(tecKnowl, CapEqp, IP) × \$Inv × LaborHrs

Why should FAC envision improved business models?

• Industry relies on business models that optimize partners' I/O to value propositions

#### Inputs:

 $(\sum_{partners} (tecKnowl_i, CapEqp_i, IP_i) \times $Inv_i \times LaborHrs_i)$ 

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### Inputs:

 $(\sum_{\text{partners}} (\text{tecKnowl}_i, \text{CapEqp}_i, \text{IP}_i) \times \$\text{Inv}_i \times \text{LaborHrs}_i)^{\text{Leadership}} \times \max_i \times \text{Relations}_i$ 

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### Inputs:

 $(\sum_{partners} (tecKnowl_i, CapEqp_i, IP_i) \times \$Inv_i \times LaborHrs_i)^{Leadership_i \times marKnowl_i \times Relations_i}$ 

**Outcomes:** 

partners partners  $\Delta tecKnowl_i$ , Data,  $VAP_i$ ,  $IP_{ii}$ ,  $Rev_i$ ,  $\Delta marK_i$ ,  $\Delta Eqty_i$ 

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#### **Outcomes:**

partners partners  $\Delta tecKnowl_i$ , Data,  $VAP_i$ ,  $IP_{ii}$ ,  $Rev_i$ ,  $\Delta marK_i$ ,  $\Delta Eqty_i$ 

public partners Scustomers Lives, GDP, ↓Risk, Enjoy, Preserve, Educate

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### Inputs:

$$(\sum_{partners} (tecKnowl_i, CapEqp_i, IP_i) \times \$Inv_i \times LaborHrs_i)^{Leadership_i \times marKnowl_i \times Relations_i}$$

#### **Outcomes:**

partners <  $0.80 \times_{partners} \int \Delta tecKnowl_i$ , Data, VAP<sub>?</sub>, IP<sub>i?</sub>, \$Rev<sub>i</sub>,  $\Delta marK_i$ ,  $\Delta Eqty_i$  public <<  $0.01 \times_{partners} \int^{customers} Lives$ , GDP,  $\psi$ Risk, Enjoy, Preserve, Educate

### Potential FAC Actions to Promote IOOS Business Models

Roles FAC may serve to realize benefits of business models

All seems within strike zone of FAC mission. Anyone see it otherwise? (aside from LOE)

Investigate, Brainstorm, Confirm, Explain outward, Suggest upward

Are BMs key to recruit co-investors?

Are compelling value propositions gap?

What will co-investors input?

Are value proposition customers gap?

Are value proposition products gap?

Inventory, Primer, Opp Assmts, Intervention, Big Marketing, Interviews, Review Leadership

### Potential FAC Actions to Promote IOOS Business Models

Roles FAC may serve to realize benefits of business models

Possible end-states FAC could aspire to nearterm:

Definitions and examples of business models and value propositions

Best practices

Recommend Partnership Business Model Utility/Feasibility SOW to IOOC

Situation assessments done centrally

Possible end-states longterm:

Legislative adjustments to address obstacles to co-investment

Accountability expanded beyond PPBES to include ROI, Customer Satisfaction

### Potential FAC Actions to Promote IOOS Business Models

Roles FAC may serve to realize benefits of business models

FAC Resources to bear on promoting business models

FAC member experiences to lend

Industry friends to meet with (shipping, insurance, preparedness, seafood...)

Candidate external appointees to engage [on FAC Subcommittee?]

Likely timelines necessary to bring these improvements to fruition

• Action-oriented scoping of possible FAC tasks and vetting chosen FAC roles/products

What steps would RAs take to transform into new business plans?

What could a FAC workplan look like to promote suitable business models?

Seek concurrence/approval from Steering Committee?

Seek concurrence/approval from RA Association and or testbed RAs?