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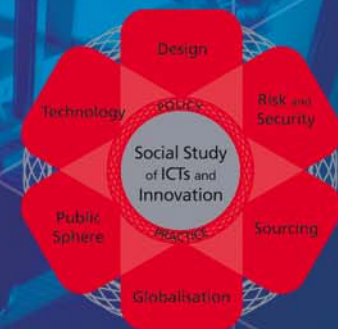
Open-Sourcing Innovation Models: *A Shift in Focus from Product to Process*

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Open-Sourcing

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1. **Outsourcing** – “The handing over of assets, resources, activities and/or people to third party management to achieve agreed performance outcomes. This can be distinguished from the buying-in of external resources to work under in-house management, and in-house sourcing where internal management and operational resources are used almost exclusively” (Lacity and Willcocks, 2006).
2. **Open-Sourcing** – “Outsourcing to a global but largely *unknown* workforce” (Agerfalk *et al.* 2006) – a “socioeconomic movement resulting from the marriage of the open source movement and the recent trend towards the international outsourcing of programming” (Anderson, 2005).





Reasons for Open-Sourcing

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1. Reduced lock-in into commercial software
2. Company-wide or even OS community access to expertise
3. Reduction in R&D costs
4. Speeds up time to market
5. Better code quality through scrutiny
6. Better quality product through visibility

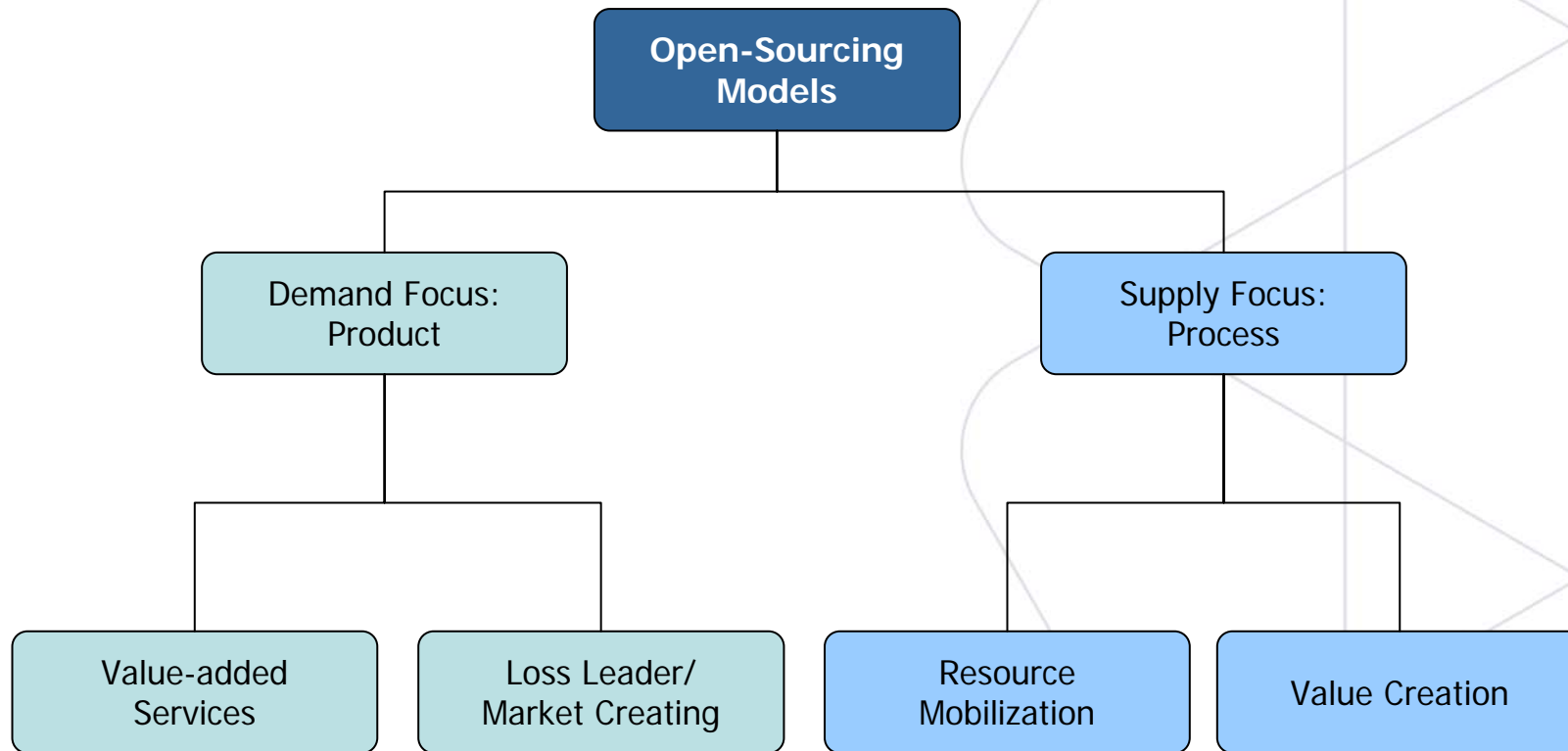




Business Models

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Business Models

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Product (demand)

Value-added service

- Charter-a-source
- Symbiotic source

Loss leader/Market Creating

- Mature source
- Coalition Sourcing

Process (supply)

Resource Mobilization

- Talent Sourcing
- Portal Source

Value Creation

- Open outsourcing
- Inner source





Product focused Open-Sourcing

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| | Open-sourcing Model | Characteristics | Possible Problems | Company Examples |
|---------------------|-------------------------|---|--|--|
| Value-added Service | Charter-a-Source | <p>Relatively inexpensive software.</p> <p>Able to scale down quickly.</p> <p>Access to developers from world.</p> <p>Greater transparency and accountability.</p> <p>Agile development.</p> <p>Coders have access to repository of code.</p> <p>Not usually/always open source software.</p> <p>Form of crowdsourcing.</p> | <p>Limited loyalty to develop code further in future.</p> <p>Little of the open source code is contributed back to the community.</p> <p>Commission of mediator is a deterrent to developers.</p> <p>Trend of undercutting bids by small amounts infuriating developers.</p> <p>Lower bids resulting in lower quality software.</p> <p>Little transparency in arbitration.</p> <p>Cultural and language difficulties with developers from different countries.</p> | <p>Rent-A-Coder, Code-with-Coder, FreelanceWebmarket, GetaFreelancer, LaunchPad Bounties</p> |
| | Symbiotic Source | <p>Provides supporting/needed code.</p> <p>Keeps version control.</p> <p>Collaborates in actual development.</p> <p>Provides additional services for fee.</p> <p>Greater transparency and accountability.</p> <p>Agile development.</p> | <p>Dependence and possible lock-in to middle man.</p> <p>Complexities of licensing and license proliferation.</p> | <p>Gluecode, Specifix (Gluecode has been taken over by IBM)</p> |



Product focused Open-Sourcing

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| | Open-sourcing Model | Characteristics | Possible Problems | Company Examples |
|---------------------------------|---------------------------|--|---|--|
| Loss Leader/ Market Creating | Coalition Sourcing | <p>Alliance of strategic convenience.</p> <p>Open source adoption used as marketing device.</p> <p>Cooperate to restrain competition.</p> <p>Access to larger pool of talented developers.</p> | <p>Could escalate organizational costs.</p> <p>Rising production costs.</p> <p>Cultural and language difficulties with developers from different countries.</p> | <p>Ingres aligning with Satyam (to restrain Oracle), IBM</p> |
| | Mature Source | <p>Open source software.</p> <p>Commercially mature, established product.</p> <p>OSI approved license.</p> <p>Cut development costs.</p> <p>Provision of add-on services for fee.</p> <p>Build user base.</p> <p>Low marketing costs.</p> <p>Able to scale down quickly and inexpensively.</p> <p>Greater transparency and accountability.</p> | <p>Not all code is open source.</p> <p>Patented source is difficult to mix.</p> <p>Complexities of licensing and license proliferation.</p> <p>Limited need to develop code further.</p> <p>Quality of contributions often dubious.</p> | <p>Niku (releasing Workbench as Open Workbench), Intalio</p> |



Process focused Open-Sourcing



| | Open-sourcing Model | Characteristics | Possible Problems | Company Examples |
|------------------------|------------------------|---|---|--|
| Expertise Mobilization | Talent Sourcing | <p>Company adoption of OS collective ideology.</p> <p>Build relationship with external communities.</p> <p>Access to larger pool of talented developers.</p> <p>Agile development.</p> <p>Greater transparency and accountability.</p> | <p>Lose top management support.</p> <p>Unable to sustain enthusiasm beyond short-term.</p> <p>Complexities of licensing and license proliferation.</p> <p>Retaining community links is tricky.</p> <p>Quality of contributions often dubious.</p> | Proctor and Gamble (Connect & Develop strategy), HP, IBM |
| | Portal Source | <p>Access to large pool of talented developers.</p> <p>Exploits distributed intelligence of global community.</p> <p>Cuts development and some organizational costs.</p> <p>Offers a collaborative platform for mediation.</p> <p>Portal offers real time monitor of status of project.</p> <p>Provision of version control and repository.</p> <p>Greater transparency and accountability.</p> | <p>Overheads in management of filtering poor contributions.</p> <p>Subject to both good and bad code updates.</p> <p>Over-reliance on external community can deteriorate in-house expertise.</p> | Allstream with SourceForge |



Process focused Open-Sourcing



| | Open-sourcing Model | Characteristics | Possible Problems | Company Examples |
|----------------|-------------------------|--|--|--------------------------------------|
| Value Creation | Open Outsourcing | <p>Open source philosophy. Open standards. Customers free to own the source. Limited to no vendor lock-in. Exploits distributed intelligence of global community. Greater transparency and accountability.</p> | <p>Complexities of licensing and license proliferation. Little or no code contributed back into open source community. Varying battle to gain acceptance for open source code for high security code like banking applications.</p> | NatureSoft |
| | Inner Source | <p>Increases idea generation Increases access to information. Greater transparency and accountability. Access to large pool of talented developers. Code releases and maturity more likely to match industry needs. Agile development. Keeps company-wide version control.</p> | <p>Need for restructuring in the organization can be onerous. Too many forks in the code and duplication of effort characteristic of open source projects. Free-riders on good code with little reciprocal contribution by all. Organizational acceptance for the change in mindset required for inner source to be successful. Problem of all members abiding by standards set by industry.</p> | Bell Labs, IBM, HP, Sun Microsystems |



Thank you!

Comments and Questions

