Open Source and Cloud Computing Business Models

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Open Source and Cloud Computing

Open Source Business Models

Cloud Computing Business Models

Open Source and Cloud Computing Definition

Open Source [1]

- Legal definition

  - Available in source code form

  - Rights to use, modify, distribute

  - Realized by various licenses

- Process definition

  - Peer production

  - Transparent process

  - Hinders vendor lock-in

Cloud Computing [2]

- A model for enabling

  - ubiquitous,

  - convenient,

  - on-demand

- network access to

  - a shared pool of

  - configurable computing resources

- that can be

  - rapidly provisioned and released

  - with minimal management effort
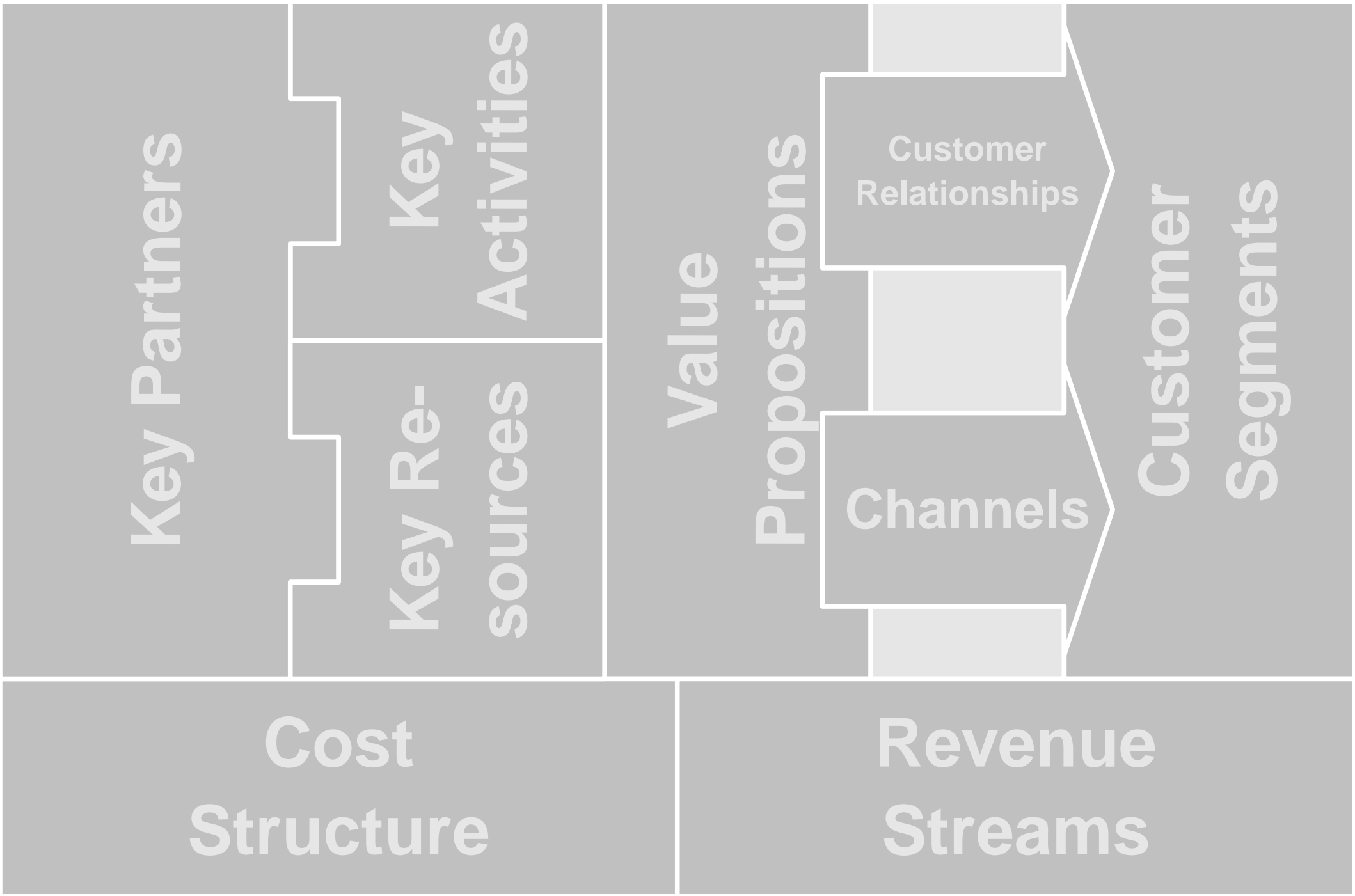
  - or service provider interaction.

3

[1]   Open Source Initiative. See http://www.opensource.org.
[2]   NIST. Special Publication 800-145 (Draft). Self-published, 2011.

Definition of Business Model

A **business model** describes the rationale of how an organization creates, delivers, and captures value.[1]

[1]   A. Osterwalder et al. Business Model Generation. Wiley, 2010.

Business Model Canvas

Key Partners	Key Activities		Value Propositions	Customer Relationships	Customer Segments
	Key Resources			Channels	

Cost Structure

Revenue Streams

Types of Business Models in this Context

1. **Innovation**
2. **Enablement**   } open source and cloud computing business models

3. **Support**

Difference between innovation and enablement: In the first case, you need to educate your customers that they need your product

Pragmatic (Not Fundamental) Difference

Innovation

- Sales and marketing
  - Growing the actual market
  - Customer land grab

- Prod. mgmt. and engineering
  - Unclear requirements
  - Experimentation, pivoting

Enablement

- Sales and marketing
  - Growth in existing market
  - Customer acquisition harder

- Prod. mgmt. and engineering
  - Understood requirements
  - Execution

Example Businesses (and Models)

Open Source

- Innovation examples
  - Distributor models: **Red Hat**, SUSE, **Eucalyptus**

- Enablement examples
  - Open core: **SugarCRM**, Alfresco
  - Pure service models

- Support examples
  - Black Duck, Palamida

Cloud Computing

- Innovation examples
  - SaaS: iCloud, Dropbox, Pandora
  - PaaS: App Engine, Force.com
  - IaaS: Amazon EC2

- Enablement examples
  - SaaS: **SugarCRM**, Salesforce

- Support examples
  - **Eucalyptus**, **Red Hat**, VMware
  - Hardware: IBM, Dell

8

Open Source is not a Business Model [1] [2]

Open source is not a business model.

Open source is a distribution and development methodology.

[1]   Matt Aslett. "Open Source is not a Business Model." The 451 Group, 2008.
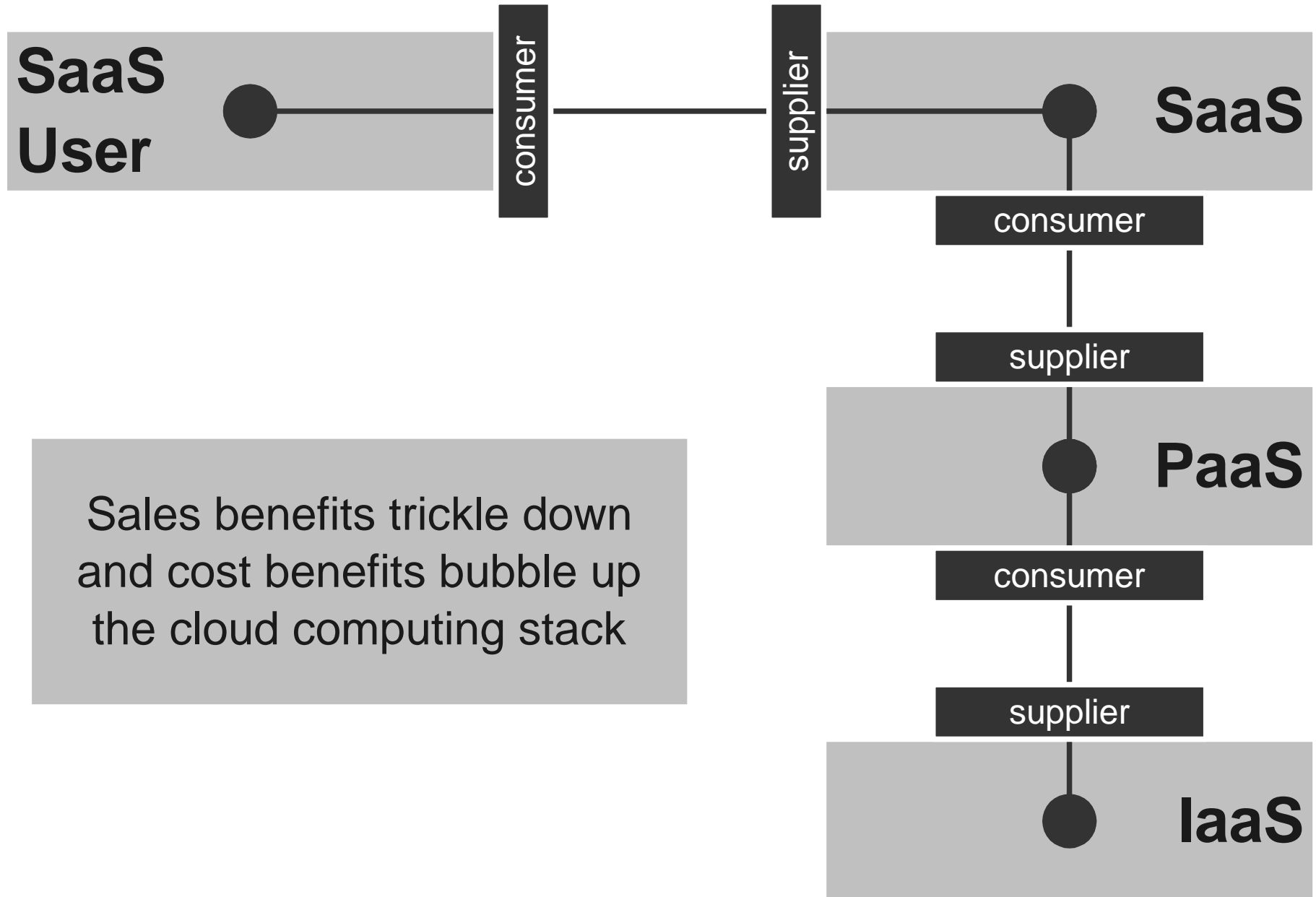[2]   Marten Mickos. "Open for Business." PARC Forum Talk, 2010.

Cloud Computing is not a Business Model

Working assumption:

Cloud computing is not a business model.

Cloud computing is (mostly) a distribution methodology.

Repeated Consumer / Supplier Relationship

SaaS User — consumer — supplier — **SaaS**

consumer

supplier

PaaS

consumer

supplier

IaaS

Sales benefits trickle down and cost benefits bubble up the cloud computing stack

Sales and Marketing 1/2: The Sales Funnel

Open Source

Download

Install

Use

Lead

Prospect

Sale

Customer

Cloud Computing

Sign-up

Configure

Trial / Pay

Lead

Prospect

Sale

Customer
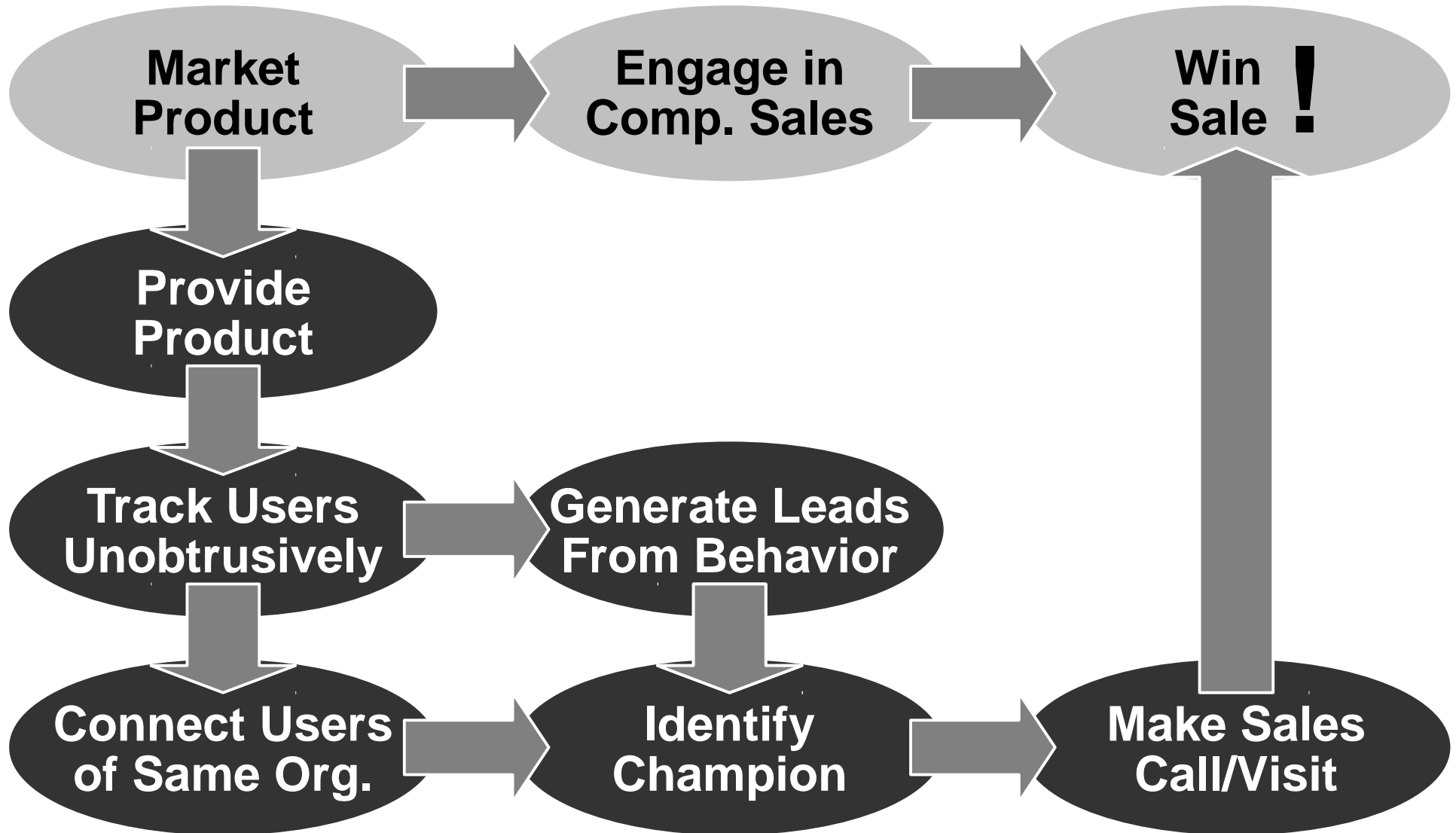
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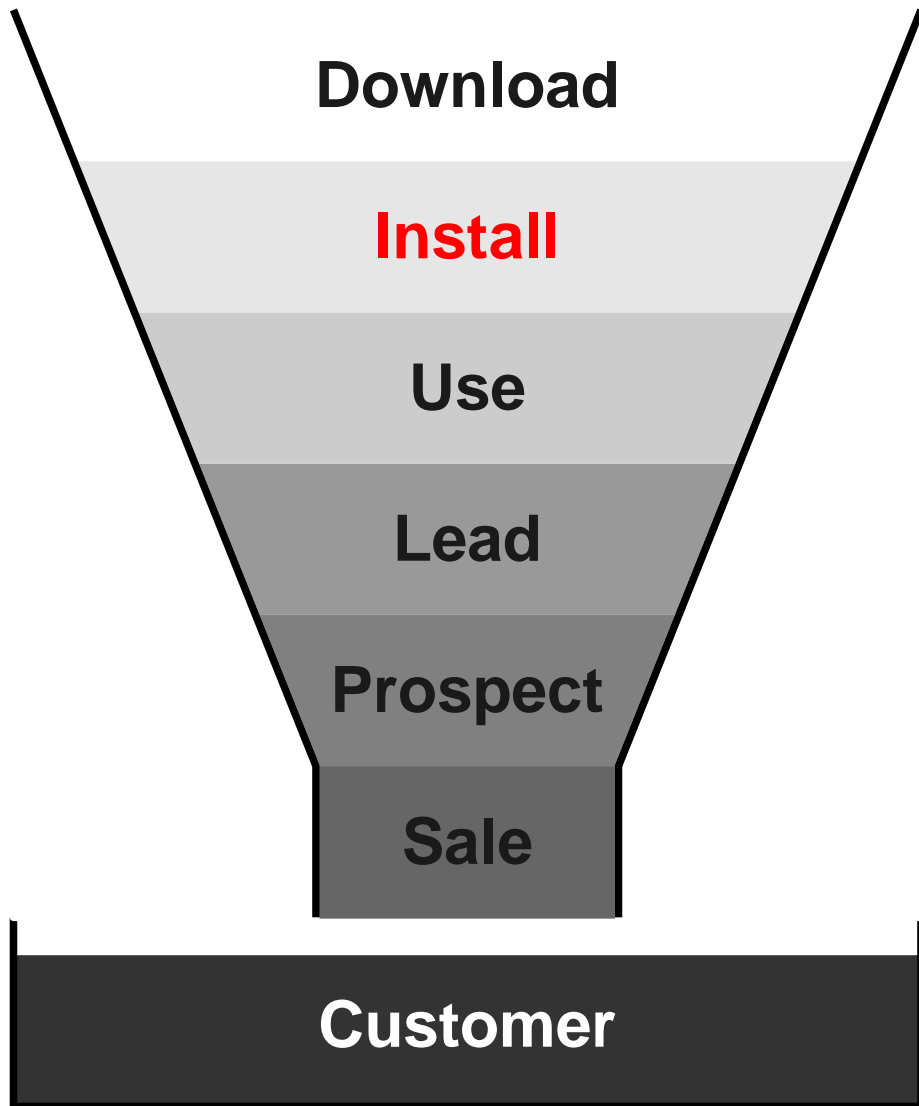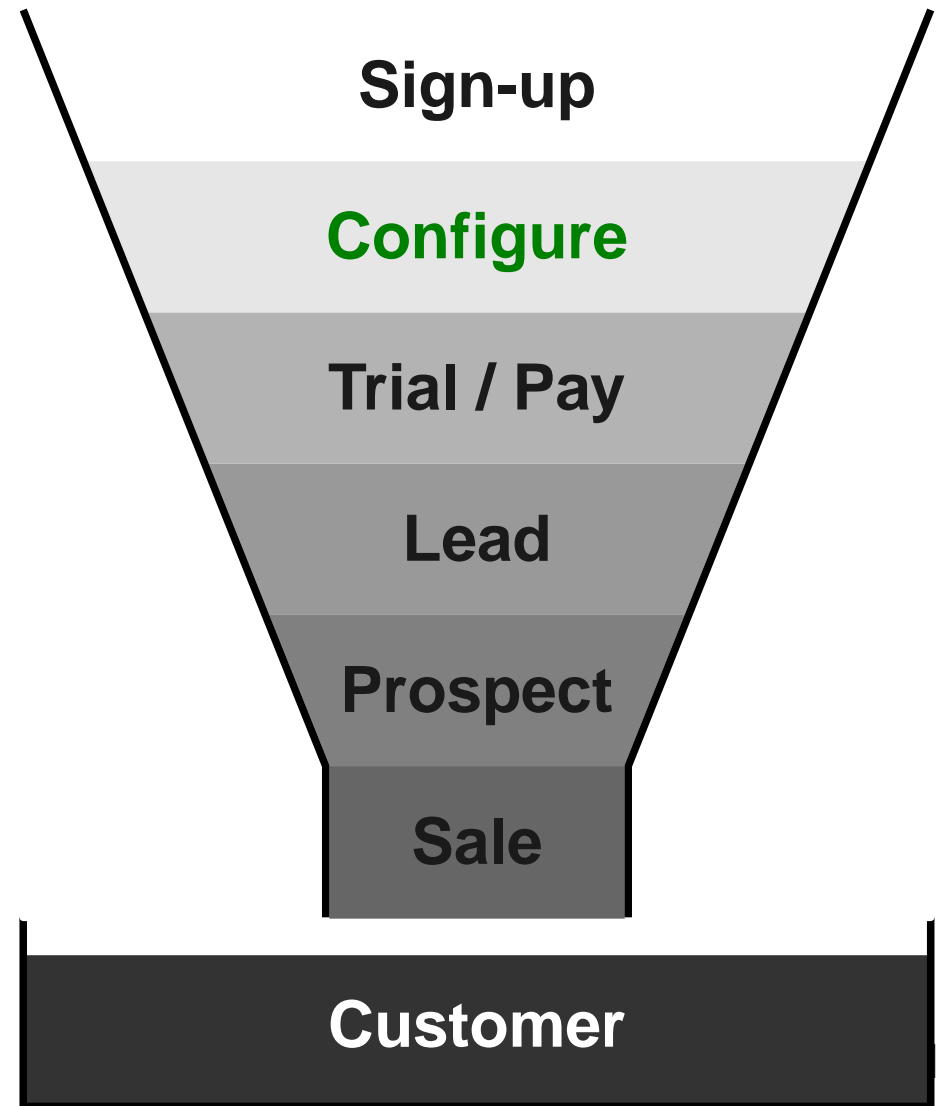
Sales and Marketing 2/2: Making the Sale

Other Business Functions in Comparison [1]

Open Source

- Business development

  - Better business development through community input

- Product management

  - Better product through increased user innovation

- Engineering

  - Faster-better-cheaper engineering through engaged community

- Operations

  - N/A

Cloud Computing

- Business development

  - (Better through easier and increased consumption?)

- Product management

  - (Better through easier and increased consumption?)

- Engineering

  - (Better through easier and increased consumption?)

- Operations

  - Cheaper through cost savings through the whole stack

[1] Point of reference are traditional closed source on-premises software products.

Open Cloud Principles [1] and Challenges [2]

Official Definition

- Open formats and interfaces
  - Make all data available
  - Must follow open standard

- Open standards
  - IP exclusion rights excluded
  - Open source implementation

What's Missing

- Needs open process
  - Leads to agreed-upon standards
  - Mentioned, but not required

- Learning from the ASF
  - Multiple independent participants
  - Competing projects

"Every real-world specification is an underspecification."

[1] Open Cloud Initiative. "Open Cloud Principles." Self-published, 2011.
[2] D. Riehle "On the Open Cloud Principles." Self-published, 2011.

More Typing of Business Models
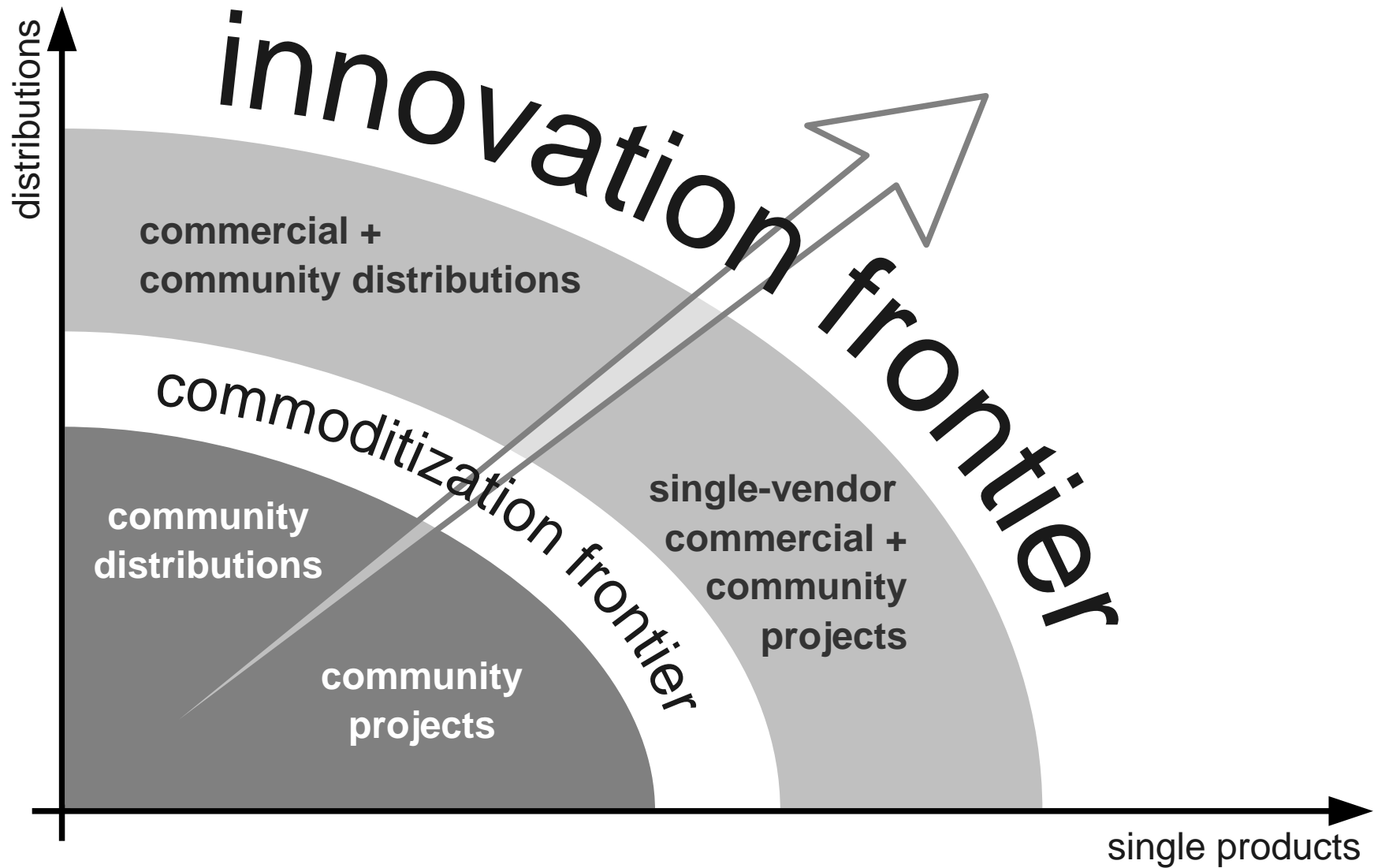
Open Source

- Open source distributor

    - Does not own source code

    - Provides commoditized software

    - Differentiated by service quality

- Single-vendor open source firm

    - A.k.a. "open core", "dual licensing"

    - Owns and maintains source code

    - Differentiated by software

Cloud Computing

- Utility computing

    - Standardized software stack

    - Differentiated by service quality

    - Adheres to Open Cloud Principles

- Single-source cloud computing

    - Uses proprietary software to differentiate offering + service

    - Adheres to Open Cloud Principles only in name; locks in
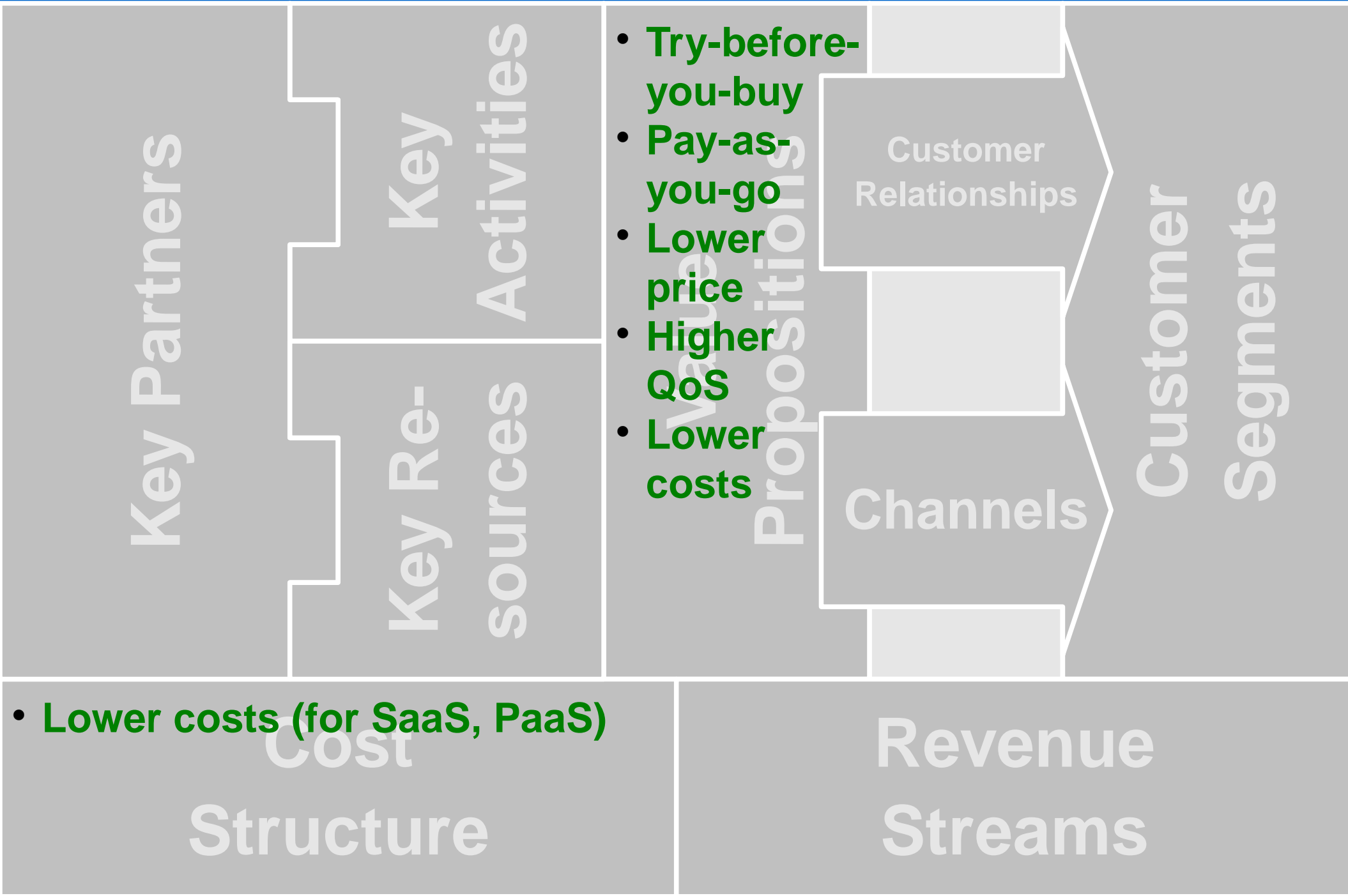
The Innovation Frontier

distributions

innovation frontier

commercial + community distributions

commoditization frontier

community distributions

single-vendor commercial + community projects

community projects

single products

Generic Open Source Business Model Canvas

Key Partners

Key Activities
- **Community management**

Key Resources
- **Engaged community**

Value Propositions
- **Try-before-you-buy**
- **Pay-as-you-go**
- **Lower price**

Customer Relationships

Channels
- **Engaged community**

Customer Segments

Cost Structure
- **Lower costs**

Revenue Streams

Generic Cloud Computing Business Model Canvas
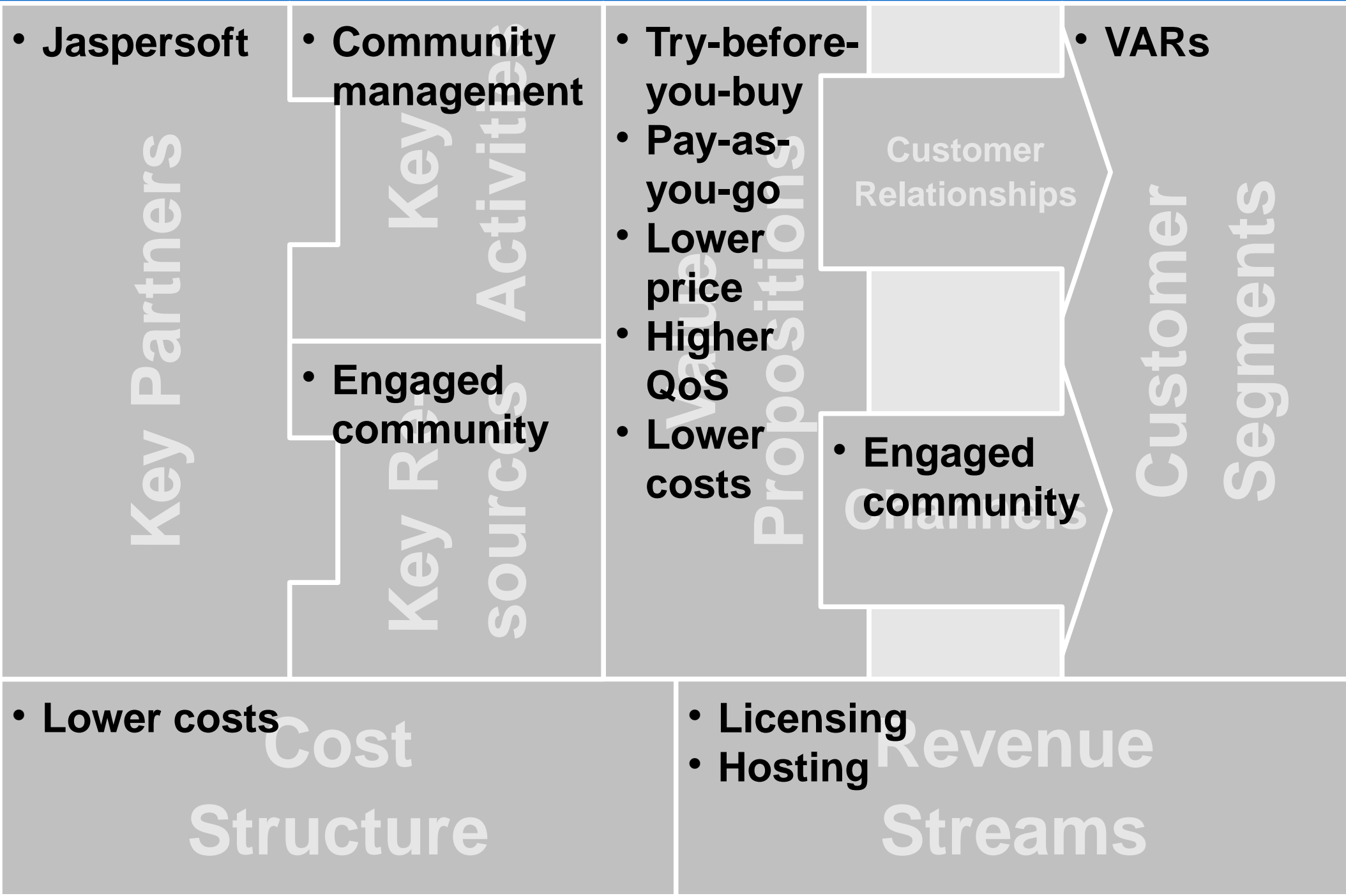
Key Partners

Key Activities

Key Resources

Value Propositions

- **Try-before-you-buy**
- **Pay-as-you-go**
- **Lower price**
- **Higher QoS**
- **Lower costs**

Customer Relationships

Channels

Customer Segments

Cost Structure

- **Lower costs (for SaaS, PaaS)**

Revenue Streams

SaaS Example: SugarCRM

Key Partners
- Jaspersoft

Key Activities
- Community management

Key Resources
- Engaged community

Value Propositions
- Try-before-you-buy
- Pay-as-you-go
- Lower price
- Higher QoS
- Lower costs

Customer Relationships

Channels
- Engaged community

Customer Segments
- VARs

Cost Structure
- Lower costs

Revenue Streams
- Licensing
- Hosting

Conclusions

Cloud computing...

- **is not a business model**

- **but an enabler of new models**

- **with open source synergies**

Thank you! Questions?

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