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**IT Service Platforms: Their Value Creation Model
and the Impact of their Level of Openness on
their Adoption**

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Outline

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1. Background

- ❑ **The technological diversity of cloud computing in terms of, different virtualization technologies, application programming interface, and programming languages makes it easy for providers to pick technology which is different from competitors.**
- ❑ **This makes the platform a closed systems, that does not allow to interact with other platforms.**
- ❑ **The customer's selection of such a closed IT system locks in the customer.**
- ❑ **Because of this lock-in effect, the adoption of cloud services is also limited.**

2. The Interoperability Problem

- ❑ Even though the issue is real, the **impact of interoperability and portability** are not fully covered by research.
- ❑ There are no clearly defined and identified **requirement** for open IT service platforms.
- ❑ **Research Objective**
 - ❑ This study analyzes the **impact of openness** i.e. interoperability and portability on adoption of cloud computing and develop the corresponding value creation model.
- ❑ **Research Question**
 - ❑ **RQ1. Who are the major stakeholders and what are their roles?**
 - ❑ **RQ2. How is value created in open IT service platform ecosystem?**
 - ❑ **RQ3. What are the requirements of open IT service platform?**
 - ❑ **RQ4. What is the impact of Interoperability and portability in adopting cloud computing?**

3. Modeling & Analysis Method

❑ The paper used

- ❑ **Value network methodology** for showing the value interaction between stakeholders.
- ❑ **System dynamics** methodology for analyzing the relationship between opening IT service platform and adoption of cloud computing.
- ❑ **Simulation** of IT service platform adoption, focusing on open and closed strategies of IT service platforms provider is developed.

❑ In detail

1. Identifying and defining network **entities** (Roles/Actors)
3. Gathering different **services** offered by open and closed IT service platforms.
4. Defining the **value** each entity perceives from being a network member, through such as knowledge, revenue, and service.
5. Identifying value **linkages**
6. Analyzing the shape

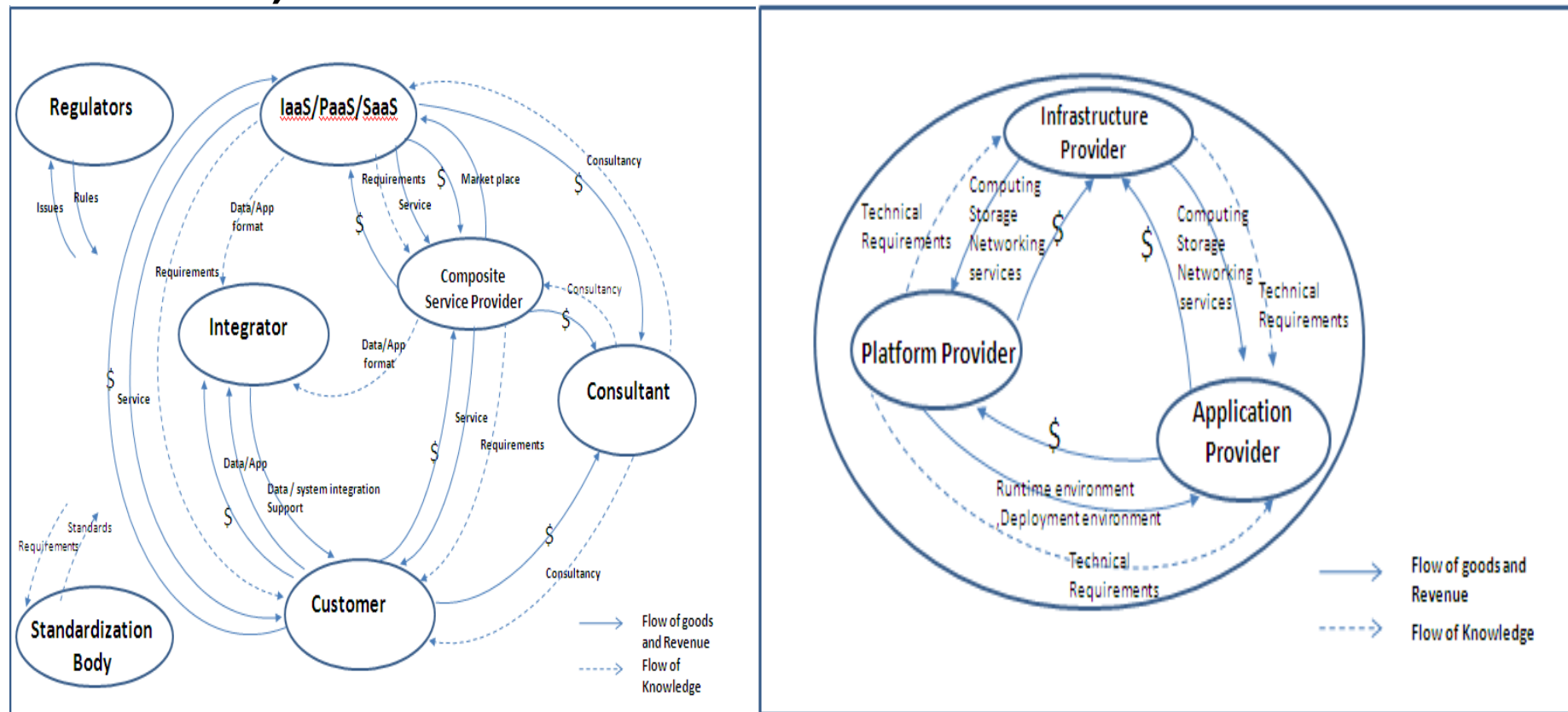
- ❑ **Based on the results of the simulation, the paper makes **policy recommendations**.**

4. The Value Creation Model

❑ RQ 1. Who are the major stakeholders?

❖ Identifying and defining network entities (Roles/Actors)

❖ Value Exchange between major providers



4. The Value Creation Model

❑ RQ 2. How value is created?

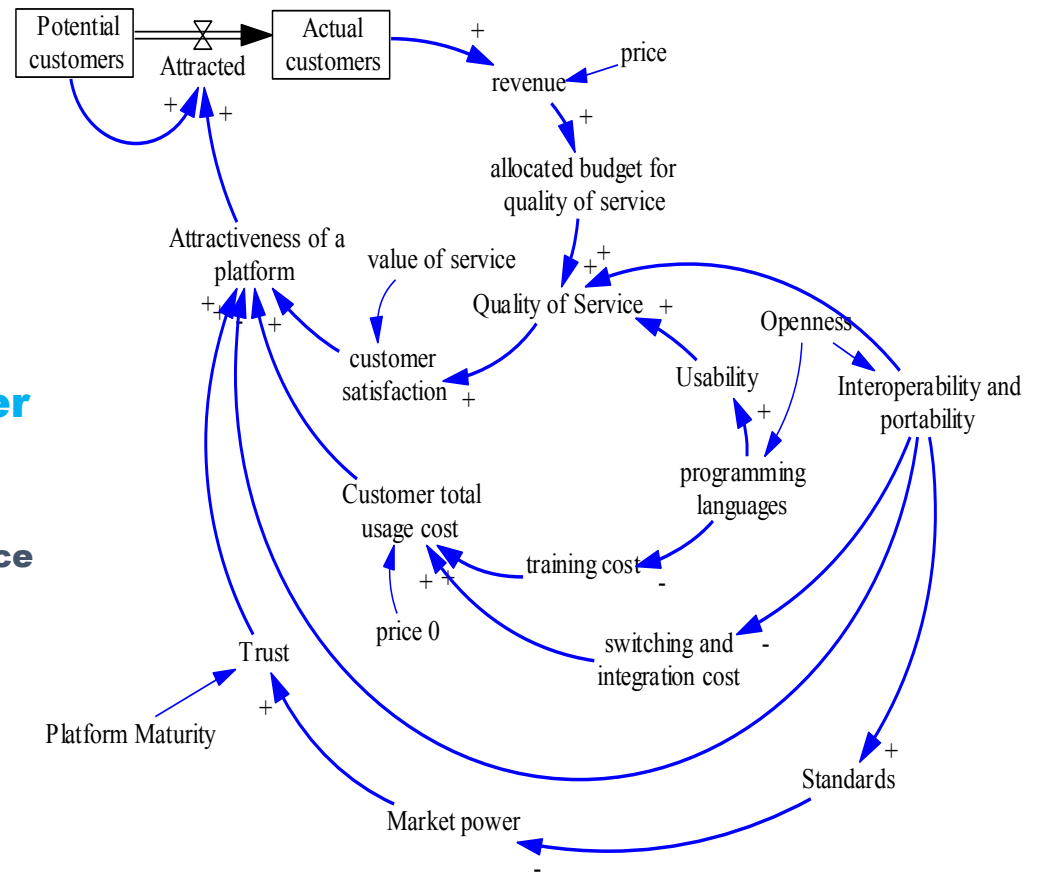
❖ Defining Value functions of IT Service Platform Providers and Customers

❑ Customer Value (Attractiveness)

$$\text{CustomerValue} = \text{ServiceValue} - \text{TotalCost}$$

❑ IT Service Platform Provider Value (Revenue)

$$\text{ProviderValue} = \text{NumOfCustomers} * \text{ChargeOfService} - \text{AllocatedBudgetForImprovQoS}$$



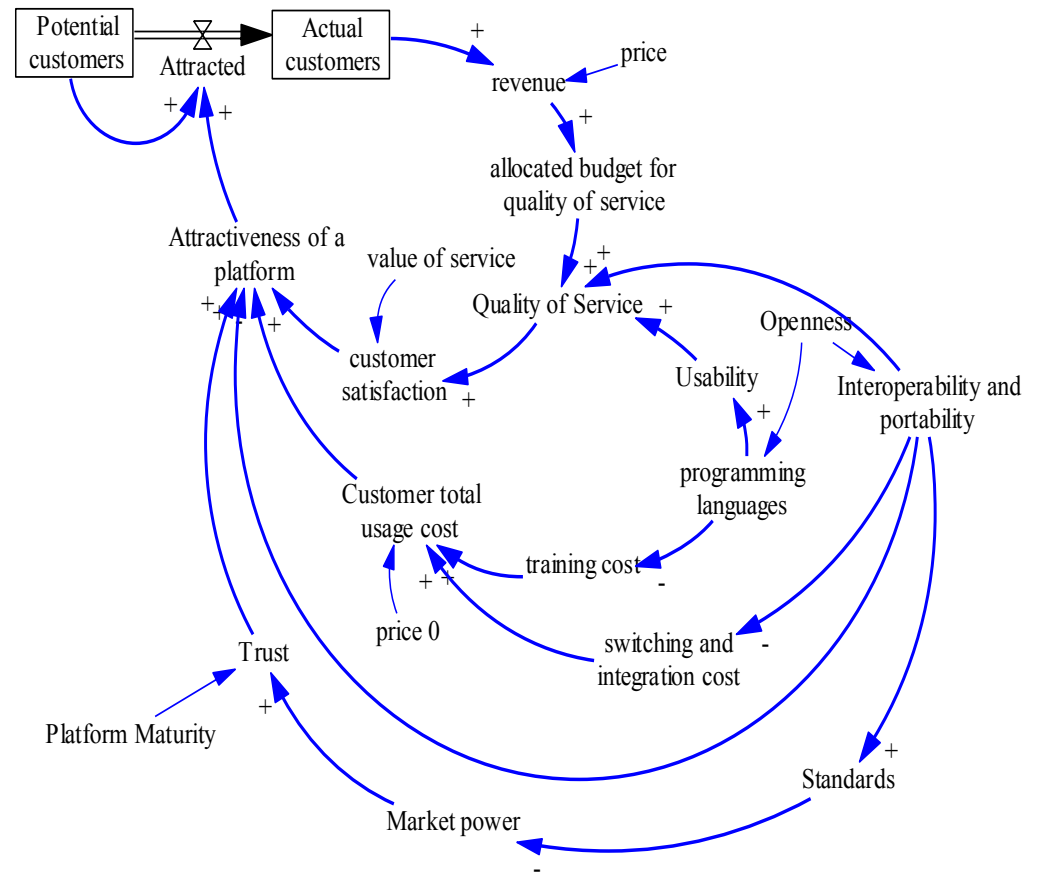
4. The Value Creation Model

❑ RQ 2. How value is created?

❖ Attractiveness of a platform

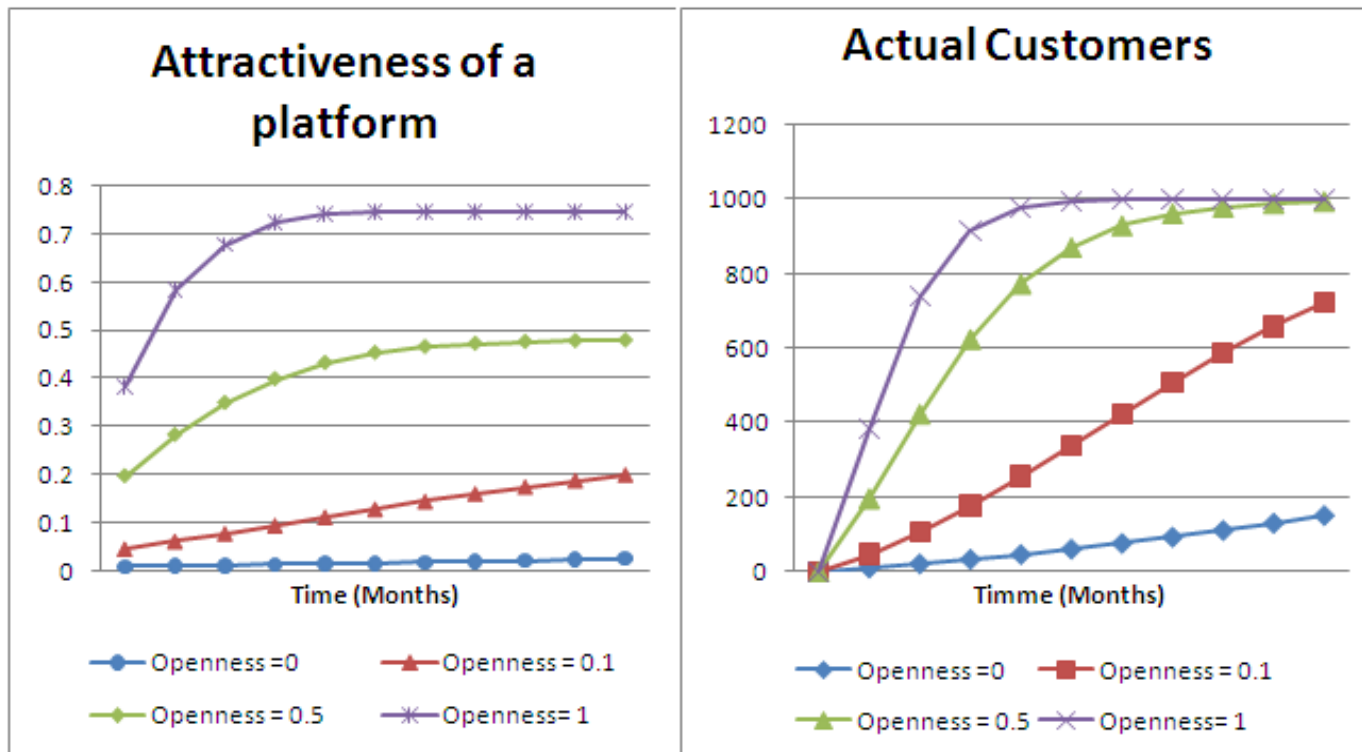
❑ **ServiceValue =**
 $\mu_1 * \text{InteroperabilityPortability}$
 $+ \mu_2 * \text{CustomerSatisfaction}$
 $+ \mu_3 * \text{Trust}$
 $+ \mu_0$

❑ ...



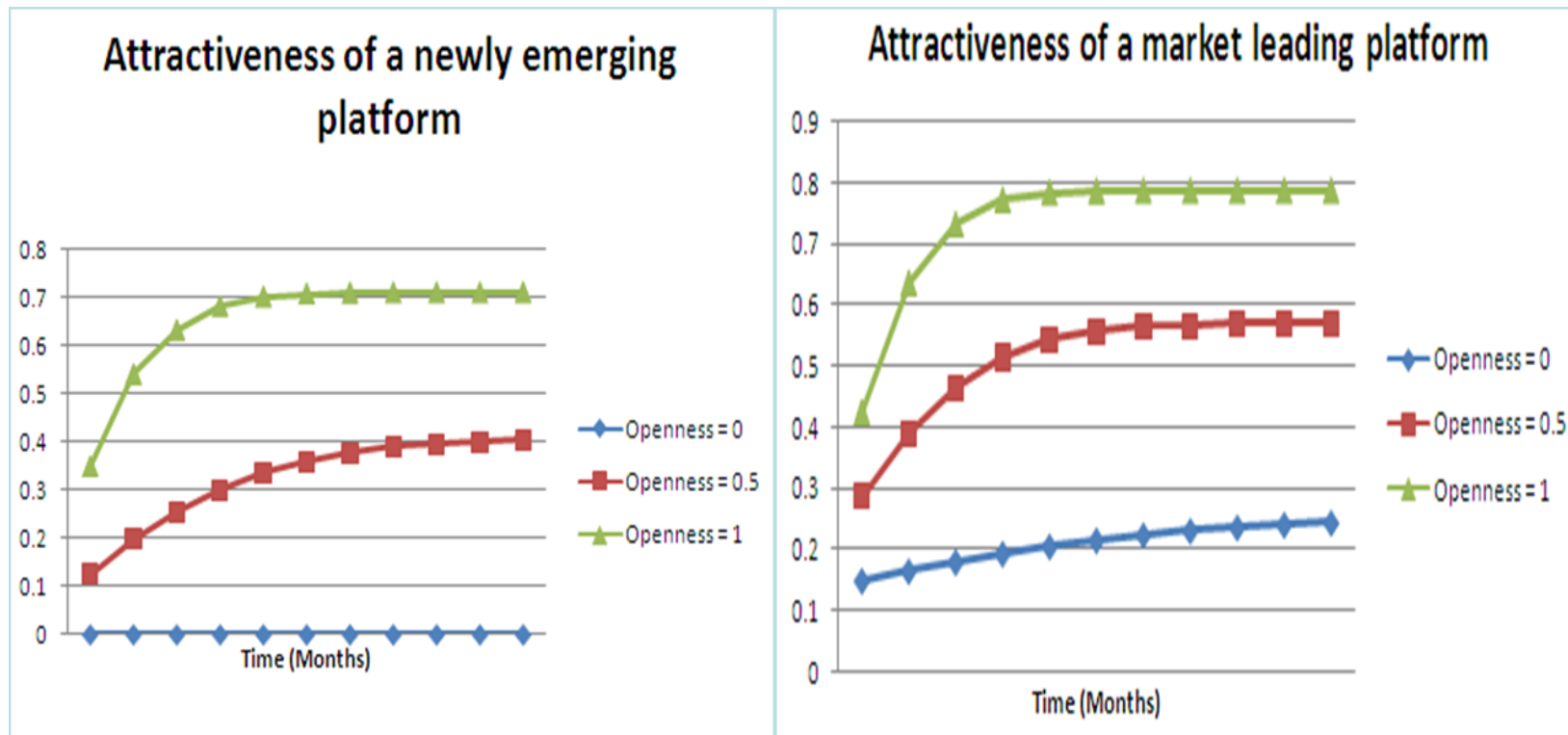
5. Simulation Results

- ❑ **RQ 4. What is the Impact of Portability and Interoperability?**
 - ❑ **The results show that, Openness i.e. Portability and interoperability between IT service platforms play a major role in improving IT service platform adoption.**



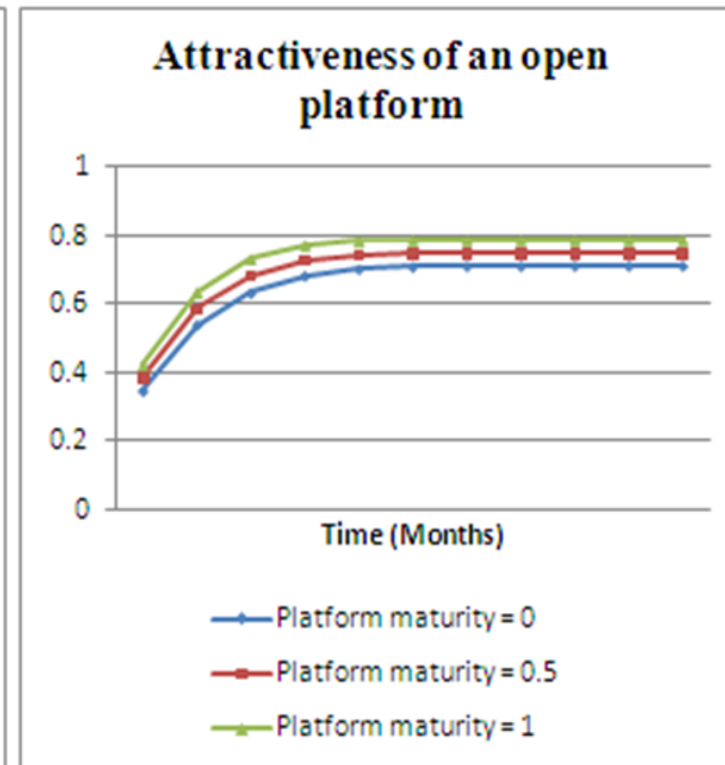
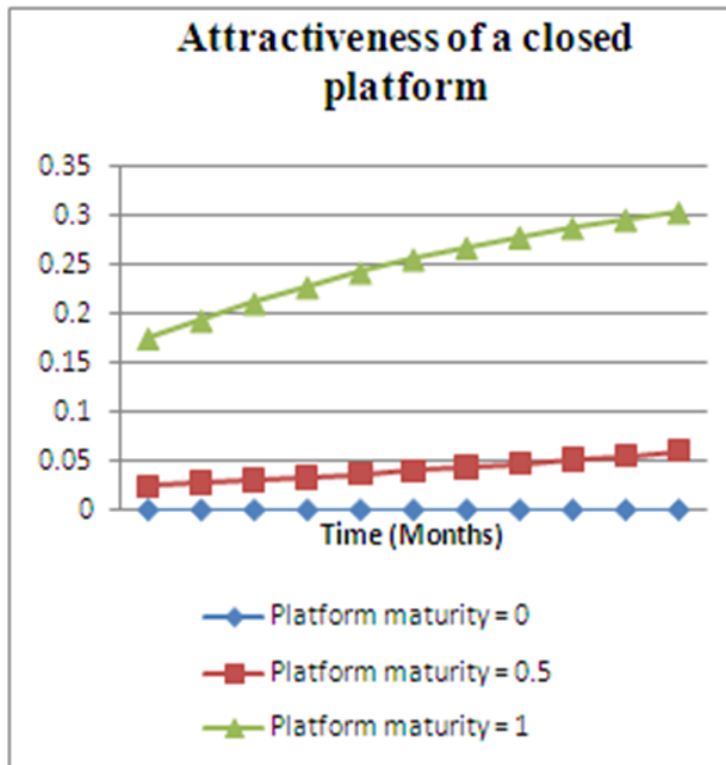
6. Simulation Results

- ❑ **RQ 4. What is the Impact of Portability and Interoperability?**
 - ❑ Providers, who have market power, **will be challenged by the interoperability** and portability of smaller providers and need to adjust their strategy to be competent and hold their position in the ecosystem.



5. Simulation Results

- ❑ **RQ 4. What is the Impact of Portability and Interoperability?**
 - ❑ **New emerging firms (i.e. platform maturity = 0) should **select openness strategy** to survive in the ecosystem.**



6. Conclusions

- ❑ In conclusion, the openness of IT service platforms allows the **seamless creation of a system** from across a wide range of compatible suppliers.
- ❑ If platforms start to be open, **blocking of data/application** portability and interoperability is **not a suitable strategy** for large providers anymore.

7. Future Research

- ❑ **What are the interdependencies between providers or services?**
- ❑ **What is the "cost" for a provider to switch to an open system?**
- ❑ **While standards evolve, following / updating the platforms to comply to new standards has associated cost.**
- ❑ **There are different cases for portability (i.e. data and applications). How can these different constraints be considered?**

Thank You!

Q & A