

# Focus on Flexibility

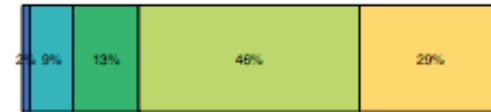
Analysis with Software Industry Survey data  
Eetu Luoma & Pasi Tyrväinen, JYU

# Why flexibility?

- Research has demonstrated positive impact of flexibility to company performance under economic cycles.
- Wildly successful firms like *Apple* and *Amazon* have been able to enter adjacent market or create new markets. Applying existing resources to new purposes and organizing to new activities requires flexibility.

# Finnish software companies assess themselves as flexible in resources and adaptability

Our products/services are easily modifiable to new markets.



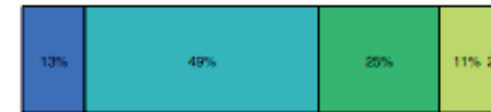
We are very fast in creating new products/services to new segments.



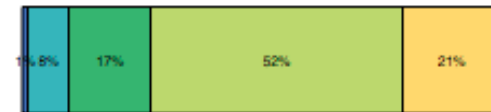
Modifying our products/services to new markets creates significant costs.



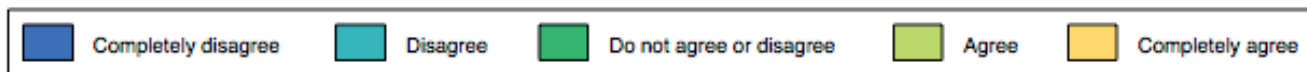
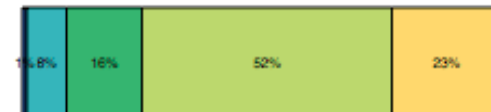
We are unable to utilize the resources of our company fast enough to respond to



We are able to organize into new activities quickly.



We can organize into new activities with our partners quickly.



N=306

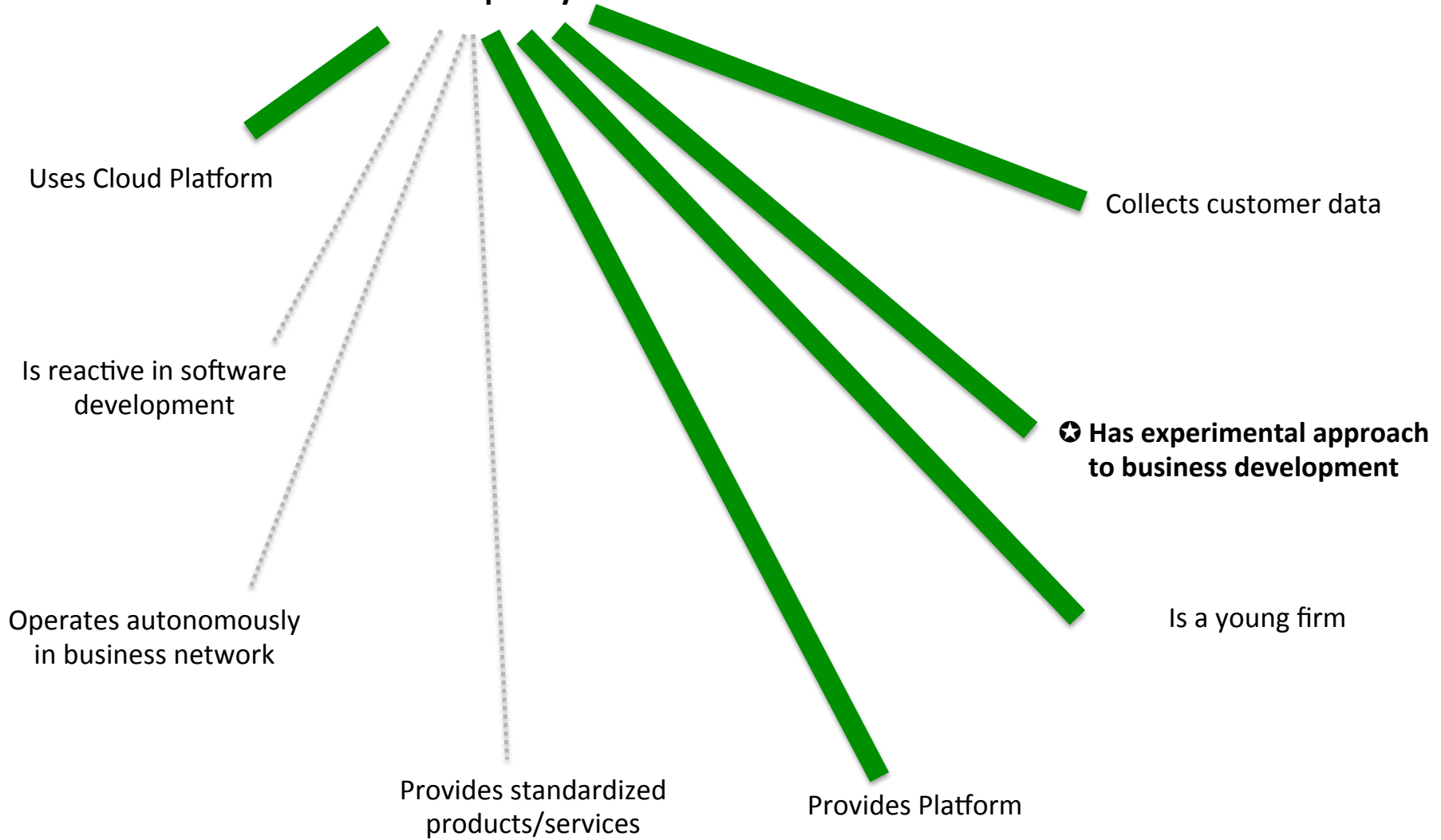
# Data and measures

- Software Industry Survey 2014, Collected in June/Sept. 2014, N=500
- Flexibility factors: Three indicators per factor based on Sanchez (1995,2004). Alphas .680 and .669.
- Other main factors: Min. three indicator per factor based on Kohli and Jarowski (1990,1993), Hart (1992), Chandler et al. (2011) and the Agile Manifesto. Alphas between .637 and .831.
- Cloud usage and platform provisioning as dichotomous variables. Age and revenue growth from the Finnish trade register. Int. revenue from the survey (self-reporting).

# Key results

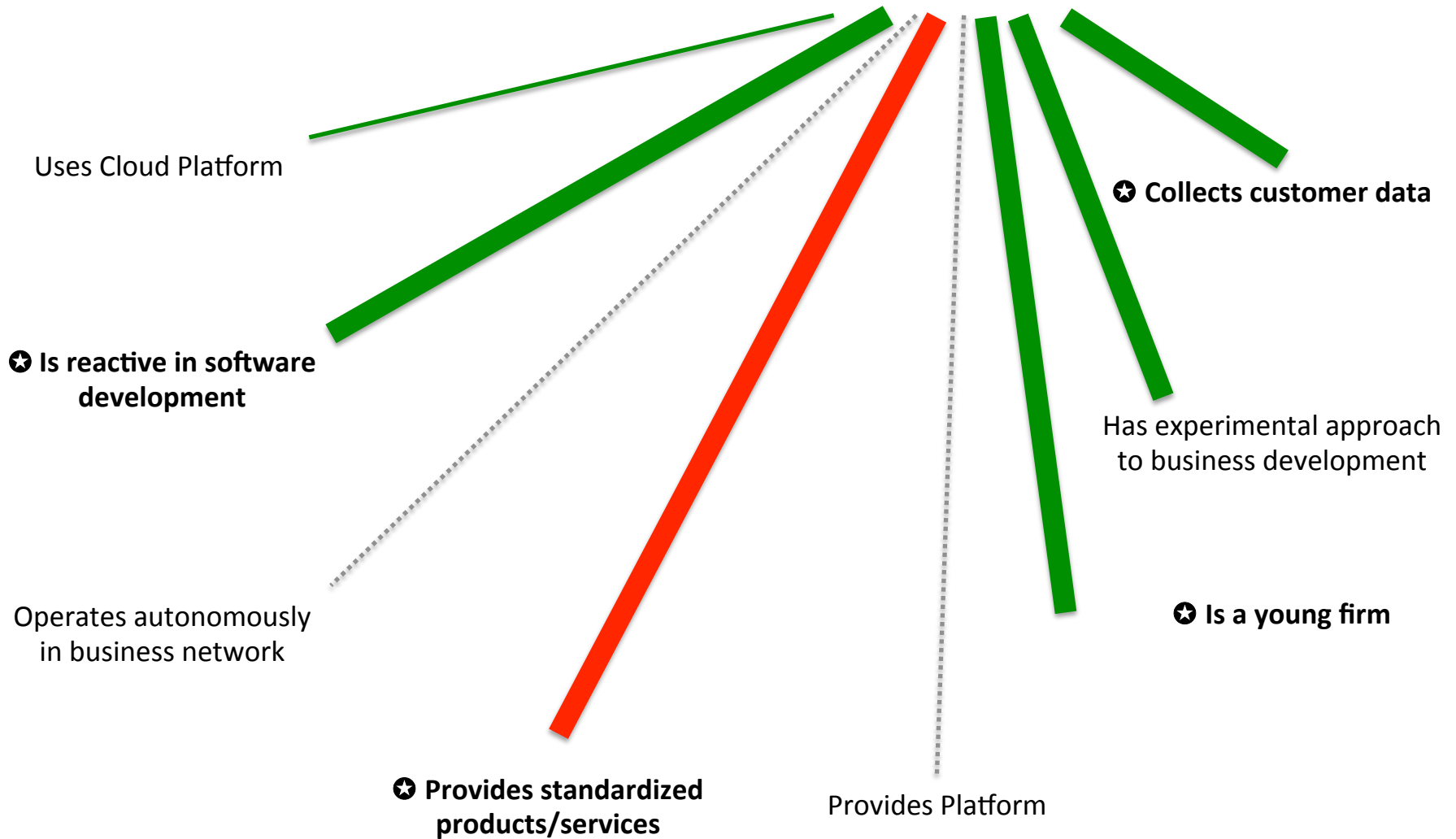
- ★ Identified three types of flexibility for ICT firms:
  1. Entering New Markets Quickly
  2. Organizing into New Activities Fast
  3. Reacting Fast to Changes in Customer Demand
  
- ★ Flexibility is associated with experimental approach to business development and with use of customer data.
  
- ★ Flexibility is partially but not clearly associated with revenue growth and international revenues.

# Enters new markets quickly



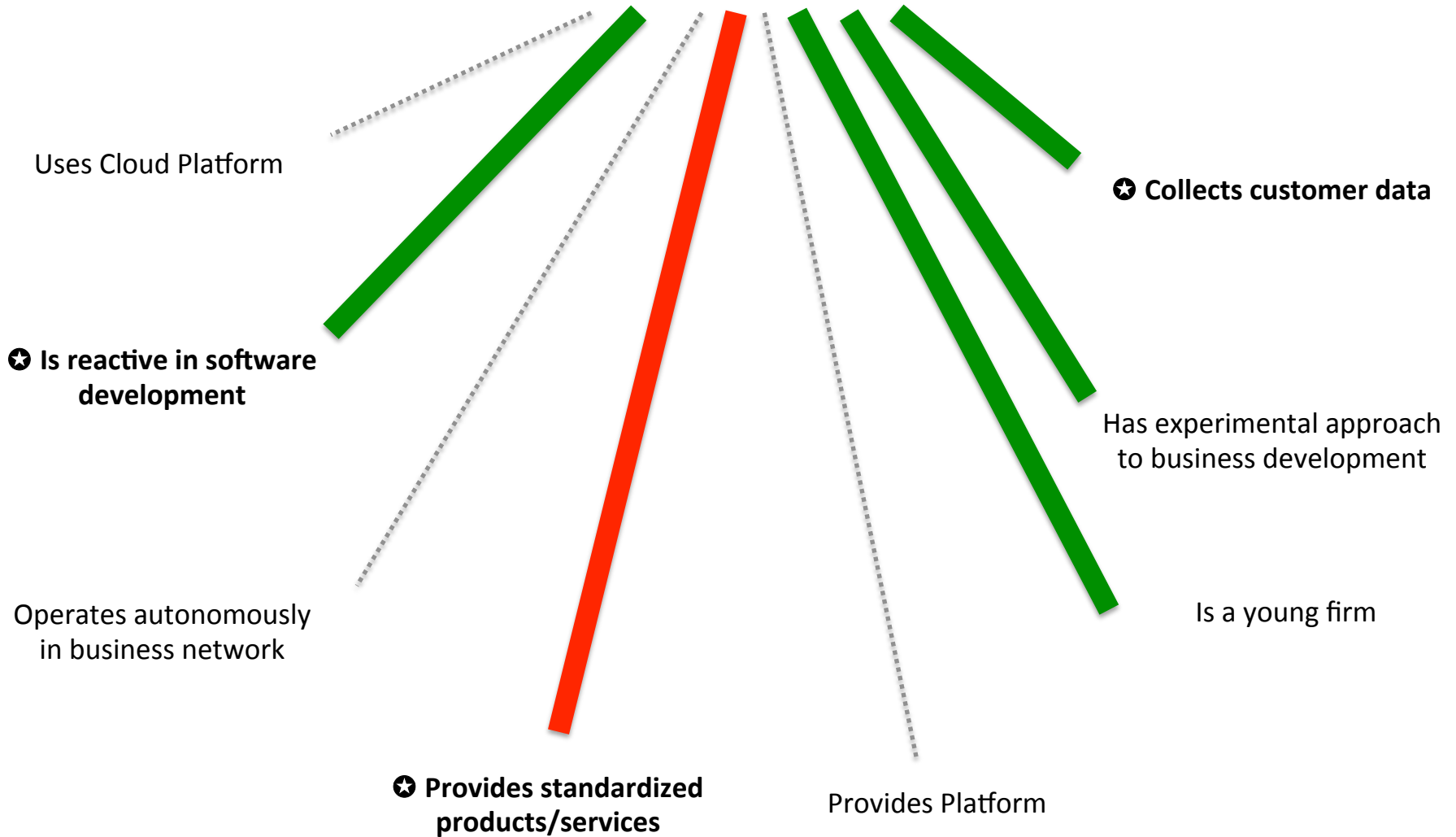
★ Most important factors      **█** Marks relatedness      ..... Not related

# Organizes into new activities fast



✦ Most important factors    **█** Marks relatedness    ..... Not related

# Reacts fast to changes in customer demand

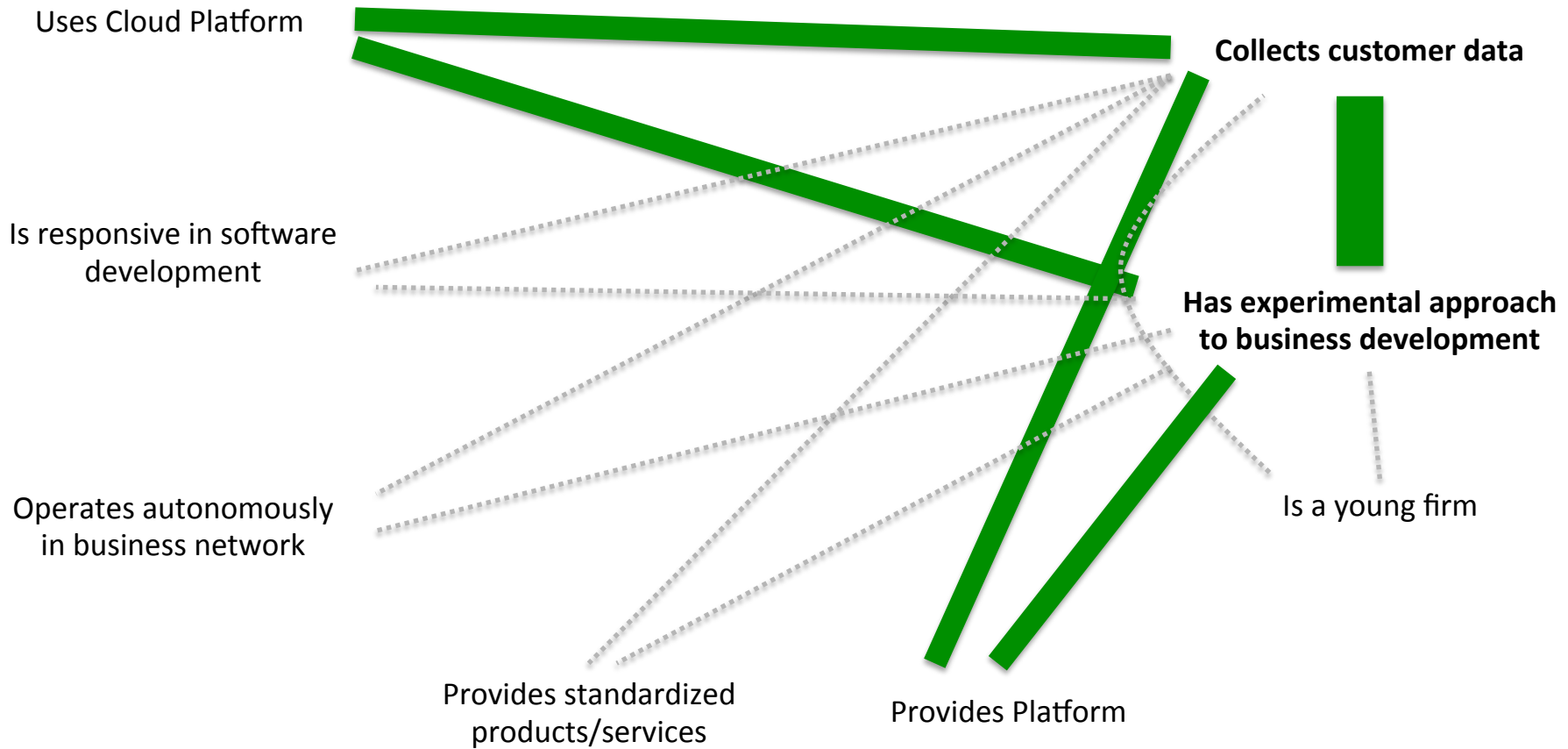


✦ Most important factors

█ Marks relatedness

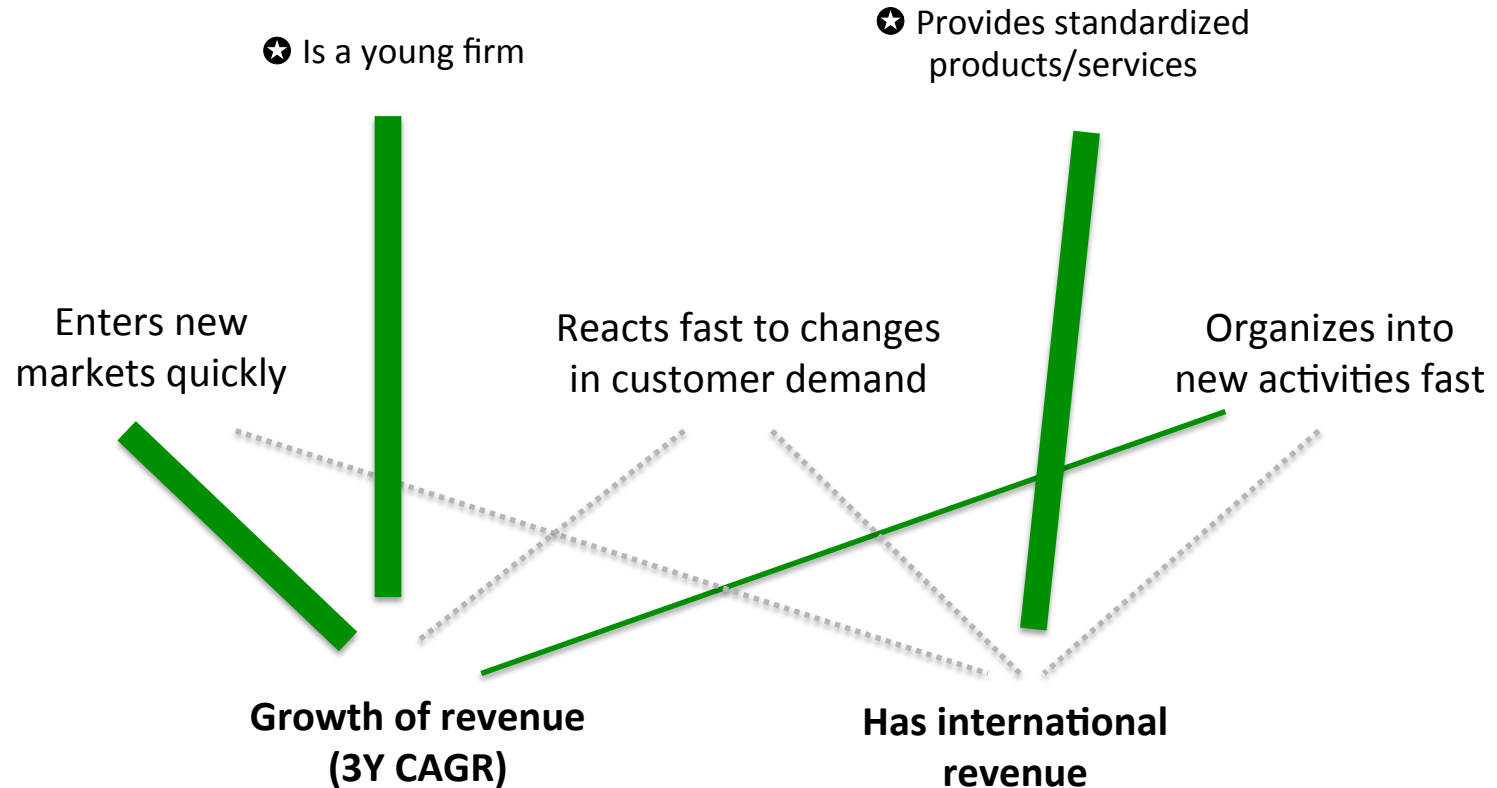
..... Not related





★ Most important factors    █ Marks relatedness    ..... Not related

# Flexibility is partially but not clearly associated with growth and internationalization



☀ Most important factors      **█** Marks relatedness      ..... Not related

# Key contributions

- ★ Identified three types of flexibility for ICT firms.  
*“Firms should use these as metrics for improvements in flexibility.”*
- ★ Flexibility is associated with experimental approach to business development and with use of customer data.  
*“Age was also a important factor, younger firms are more flexible. Combining the three, firms should investigate internal ventures and external startups”.*
- ★ Flexibility is partially but not clearly associated with revenue growth and international revenues.  
*“Capabilities to enter adjacent markets are worth investigating.”*