

E-leadership in SMEs: results from Interviews and E-leadership skills European survey

Prof. Kecheng Liu, Prof. Andrew Godley,

Dr. Maksim Belitski, Dr. Weizi Li

Henley Business School, University of Reading

Interviews

- 50 successful SMEs interviewed
- 10 different sectors
- SMACI
- 5 Partner Institutions

Did you know?

- Gazelles - both in IT and non-IT sector. They are acknowledged by the third party.
- All IT firms have CTO or CIO in addition to a formal IT strategy.
- Higher proportion of FTEs are employed in Production/Operations excellence (solutions for business architecture functions & operations), accordingly less FTEs are in CRM.
- Businesses buy and employ IT skills with more than a half non-IT companies outsource it to external provider (Mobile App, web-site, blog, trading platforms, hosting)

Investment in Technologies

- **IT companies** are more likely than non IT to employ a combination of SMACI:
 - Cloud and Data Analytics (up to 95% IT budget);
 - Mobile Apps, Cloud and Data Analytics (up to 90% IT budget);
 - Mobile Apps & Cloud (up to 75% IT budget)
- Investment in R&D to spill over with a new tech (1-3 years time) may take up to 40% of the firms IT budgets

SMACI

- Mobility and Mobile Apps – lower level of protection, new, expensive, limited supply.
- Cloud computing – new, still under-researched, fast growing but information security restrictions apply;
- Big data – computers are not yet powerful, supply of big data analytics specialist limited;
- Social media – more digital marketing skills needed as youtube, instagram, google plus, dropbox for nascent entrepreneurs and non-IT firms to connect to customers
- Internet of Things are of limited use, also will be used in the future. Lack of understanding where could be applied in SMEs.

Demand for E-leaders

IT dimension:

- Structure-based technology & cloud computing skills;
- Big data analysis, Mobility / Mobile Apps;
- New semantic technologies (e.g. text and unstructured data mining, content analysis, sentiment analysis, semantic web);
- Up to date latest “Microsoft” and other system development methodologies;
- Java, IoT, Data Analytics, IT Architecture, Web Development, Mobile Development, SQL, Cloud (VMWare), social media toolkits
- ...

Demand for E-leaders

Strategy dimension:

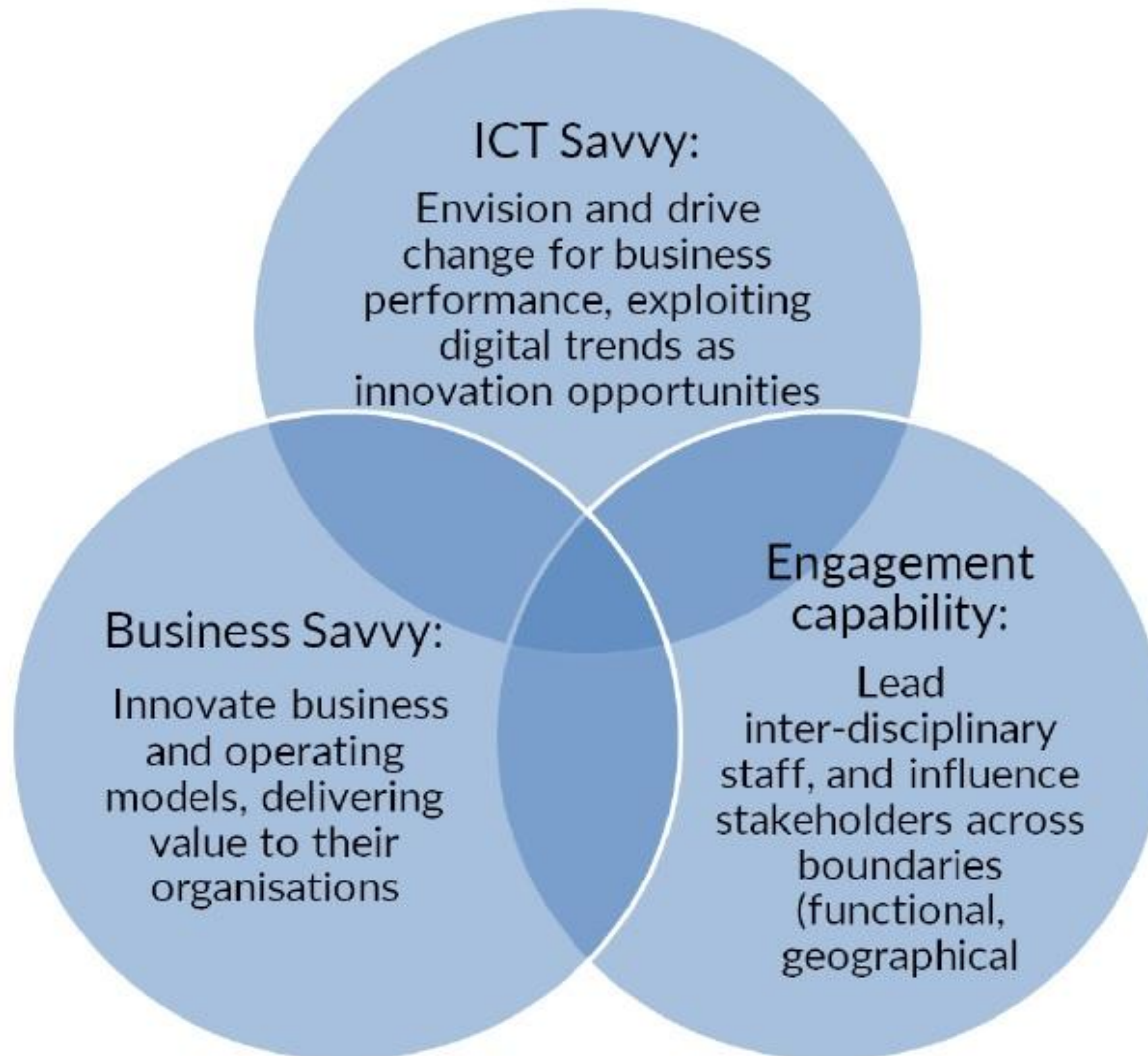
- Retaining and developing customers
- Agile approach to innovation
- Lean feedback and pivoting
- Multidisciplinary, creativity and high problem solving
- Multilingual, multicultural experience, internationally-ready - speaks 2+ languages
- Employing junior with real life experience, informal
- Strategic learning, obtain professional qualifications

Demand for E-leaders

Business and market dimension:

- CRM - engagement with customers to understand their needs, be able to guess, to foresee the demand;
- Digital marketing and market analytics skills;
- Communication skills, engagement mid managers to work closely with product developers, clients on new markets;
- Hybrid leaders: both specific ICT and general business knowledge and market analytical skills (economists +ICT; creative sector +ICT; marketing +ICT);
- UK market knowledge at various levels (geography, industry).

Defining e-leadership



European E-leadership skills survey

- 271 SMEs filled the survey
- 10 different sectors
- SMACI
- 20 countries
- 50+ global businesses

Did you know?

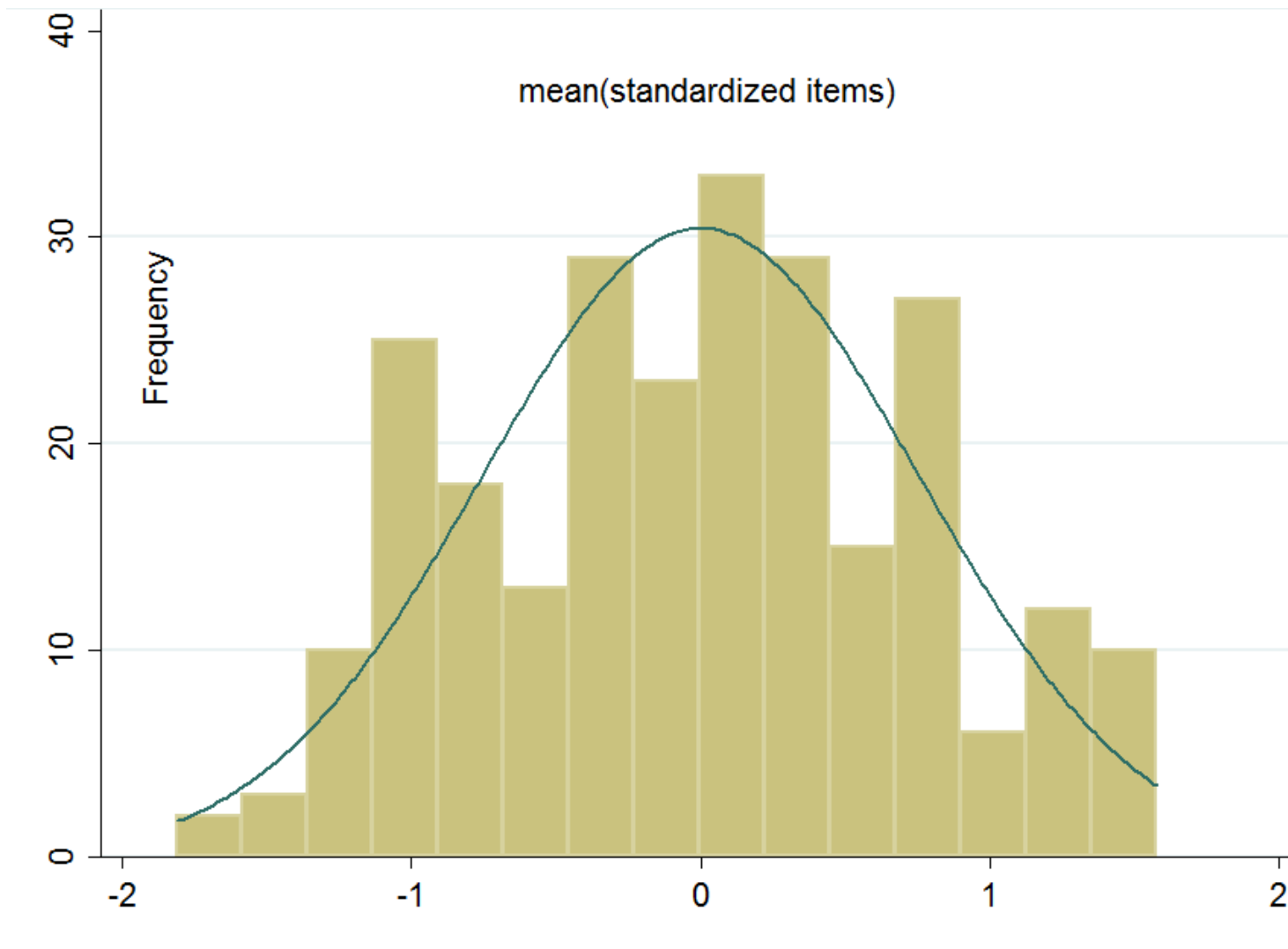
- Successful businesses (high sales) spend triple on developing new applications, on big data, double on mobile devices and applications; invest considerably in the Internet of Things (up to 14% in the UK).
- Successful businesses are 25% more efficient in development new apps within budget & scope; 15% more efficient in sharing data on product; 30% more efficient in IT investment and decision-making.
- Leading Innovators spend a double on developing new applications, triple on big data and business analytics, four times more on mobile devices and applications;
- Non-for profit, healthcare and Utilities and Energy companies have above a half of all their IT outsourced to external providers
- Companies that experience lack of e-leadership spend more on external service providers: 41% of IT budget share of companies in the UK, 47% in Denmark and 36% in Belgium paid to external service providers

Defining e-leadership (E-leadership online survey 2014 – 252 obs)

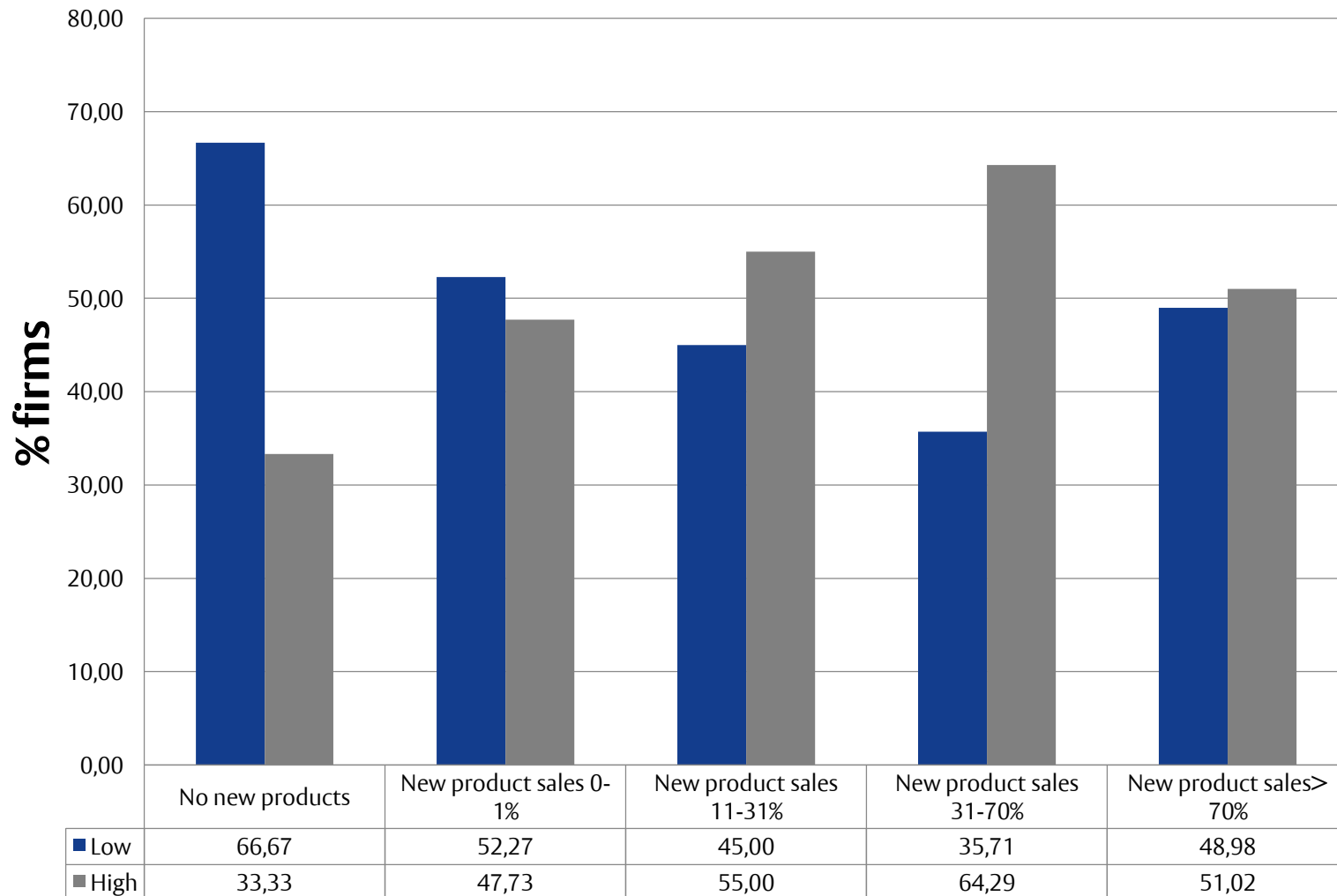
Firm reported variables on a scale from 0-5 are as follows:

- exec **getting involved in (engage)** IT investment and management decision-making (**management skills**);
- skills **to exploit** new ICT trends (**ICT skills**);
- skills **to innovate business models and drive change** (**business and market skills**);
- skills in **development innovative** IT applications and services (**innovation and IT skills**);
- skills **to lead** inter-disciplinary teams and influence stakeholders (**leadership and strategy skills**);
- managers who make growth **have ICT/management and entrepreneurship special training** (**entrepreneurship and multidisciplinary skills**).

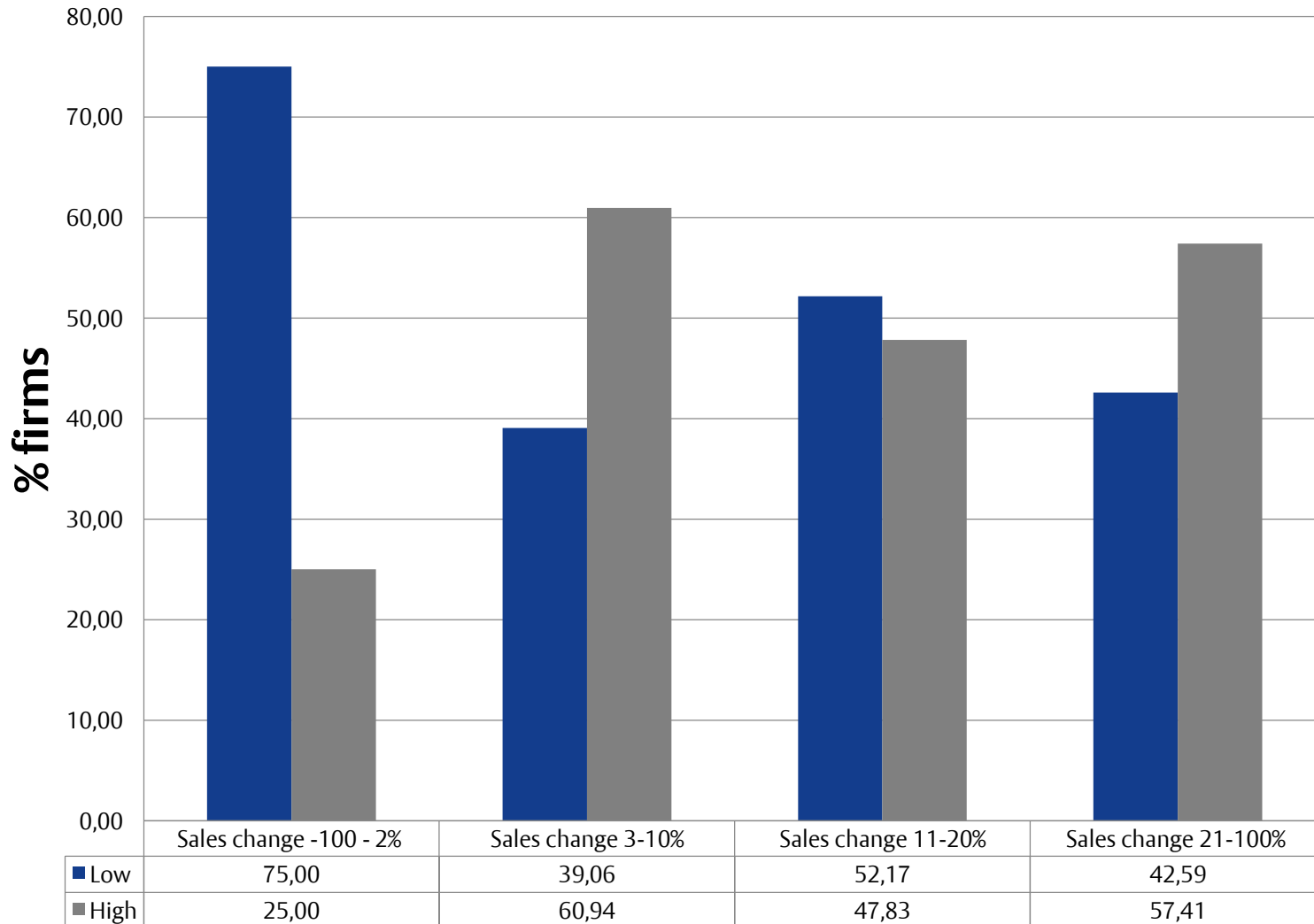
E-leadership skills distribution in a sample of SMEs



New product revenue and e-leadership



Sales change and e-leadership



Source: LEAD survey 2014 N= 220

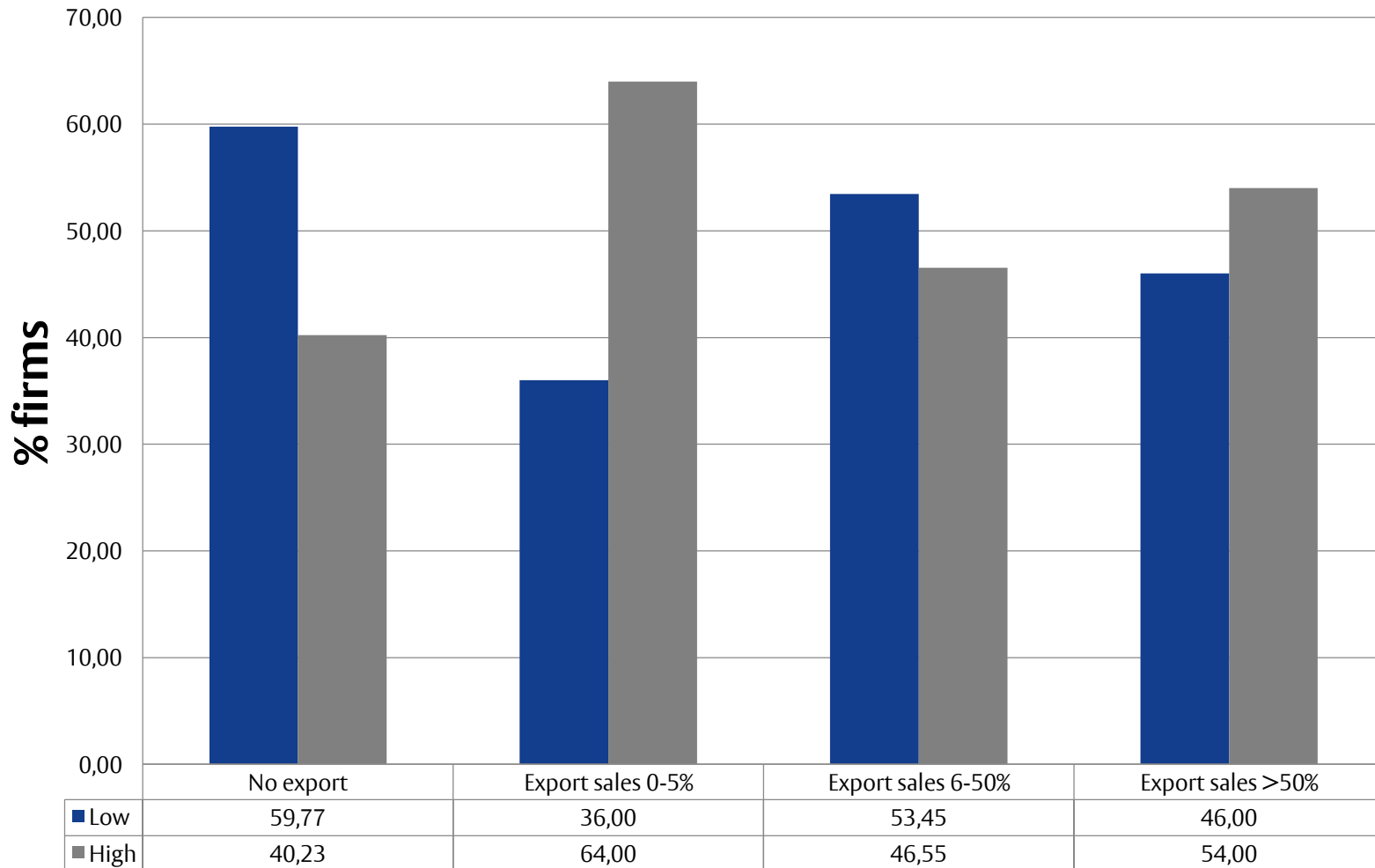
Our ambitions

- Better understand and develop metrics of e-leadership in organisations locally, nationally and internationally
- Identify important conditions as well as e-competences and capabilities which help e-leader to create a value –sell, export, introduce new products to market.
- Facilitate e-leaders in rising competitiveness at various levels of a IT and business alignment.
- Educate and grow e-leaders, create e-leadership thriving ecosystem at [Henley](#) and in the UK

Cronbach alpha method: e-leadership construction

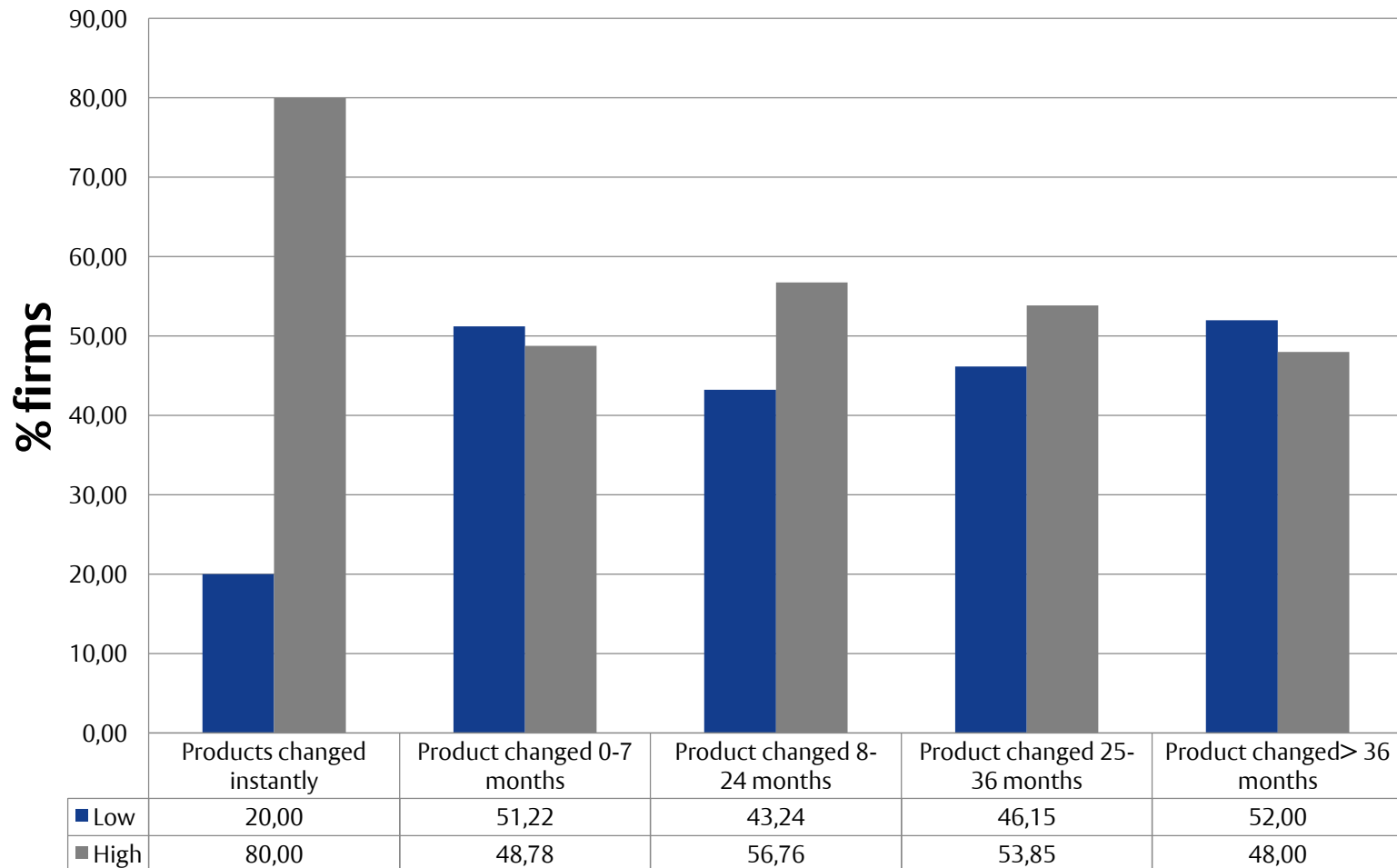
Item	Obs	Sign	item-test corr	item-rest corr	inter- item corr	alpha
management skills	251	+	0.67	0.51	0.51	0.84
ICT skills	252	+	0.80	0.70	0.45	0.80
market skills	254	+	0.80	0.70	0.45	0.80
innovation and IT skills	252	+	0.86	0.78	0.42	0.79
leadership and strategy skills	249	+	0.76	0.63	0.47	0.81
Multi-disciplinary skills	252	+	0.61	0.44	0.54	0.85
Test scale					0.47	0.84

Export sales and e-leadership



Source: LEAD survey 2014 N=220

Product change and e-leadership



Source: LEAD survey 2014 N= 201