

# Research and Cluster Profile of the Photonics Sector In Copenhagen

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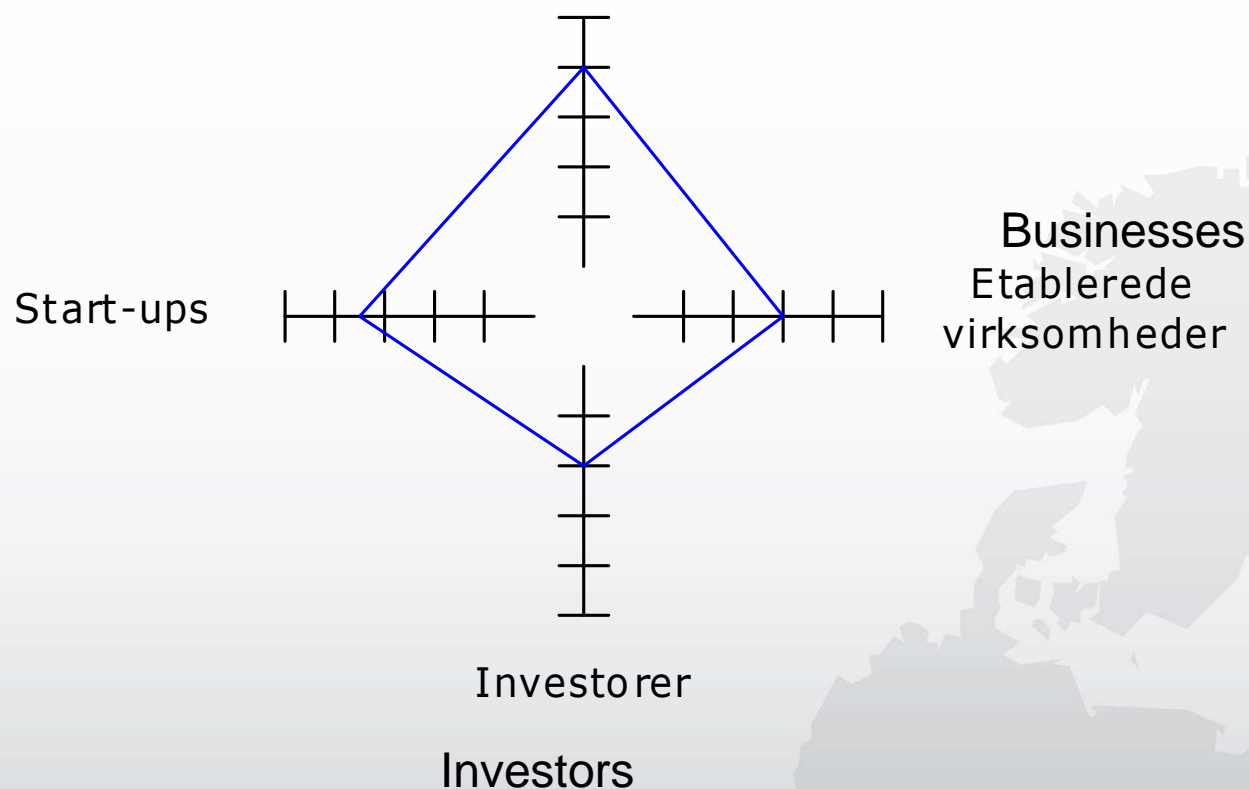
# Photonics businesses .....

- NKT Holding Photonics
  - Crystal Fibre, Koheras,
- Tellabs
- Ibsen Photonics, IPTronics
- OFS Fitel Denmark I/S
- Hymite A/S
- Kaleido Technology ApS
- LuKa Opto-scope ApS
- Stensborg ApS
- Copenhagen Sensor Technology
- Hymite A/S, Crystal Fibre A/S, KOHERAS, Tpack A/S, Alight Technologies A/S, Kaleido Technology ApS- - - - -

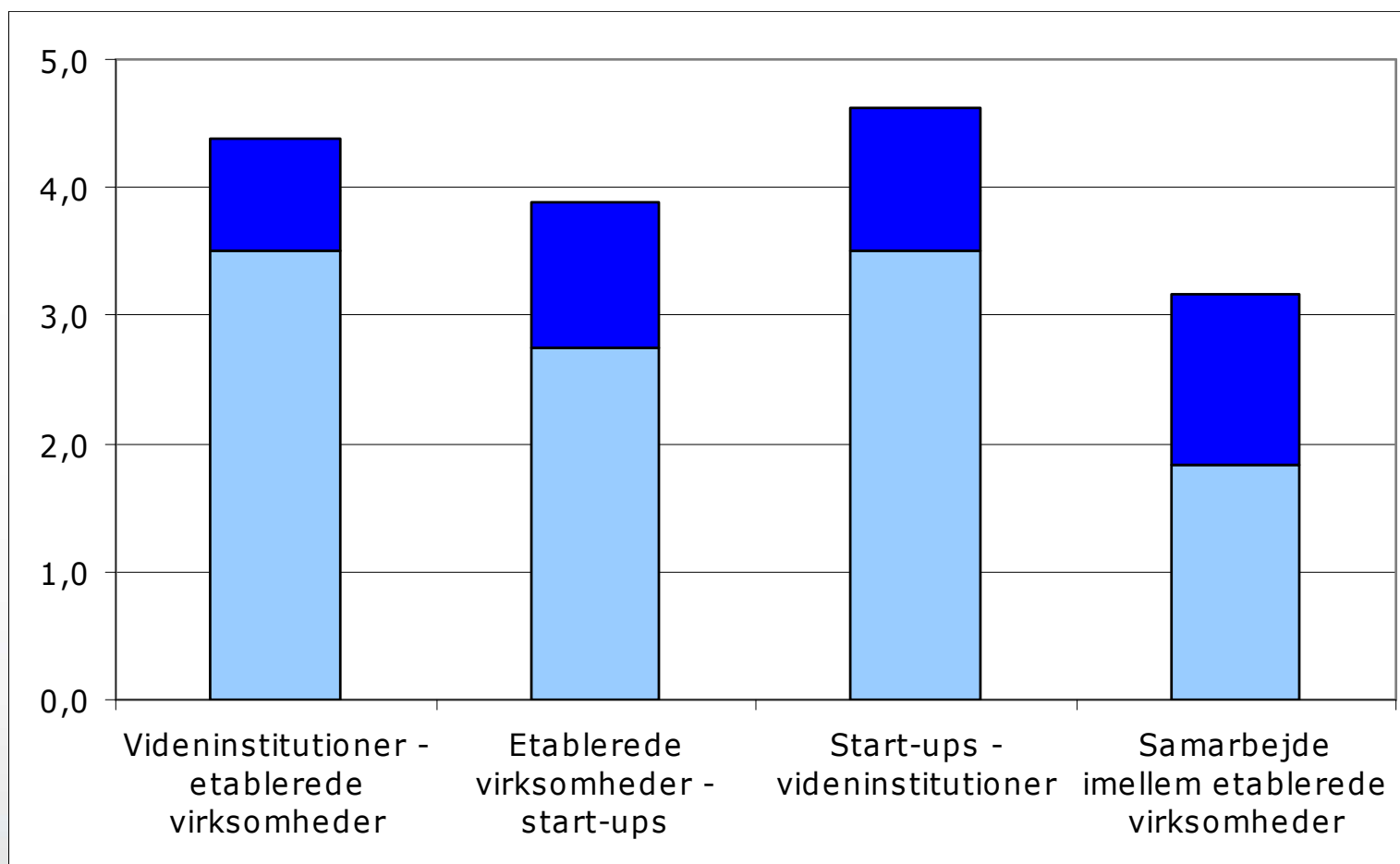
# Driving the Cluster in Copenhagen

Knowledge/research institutions

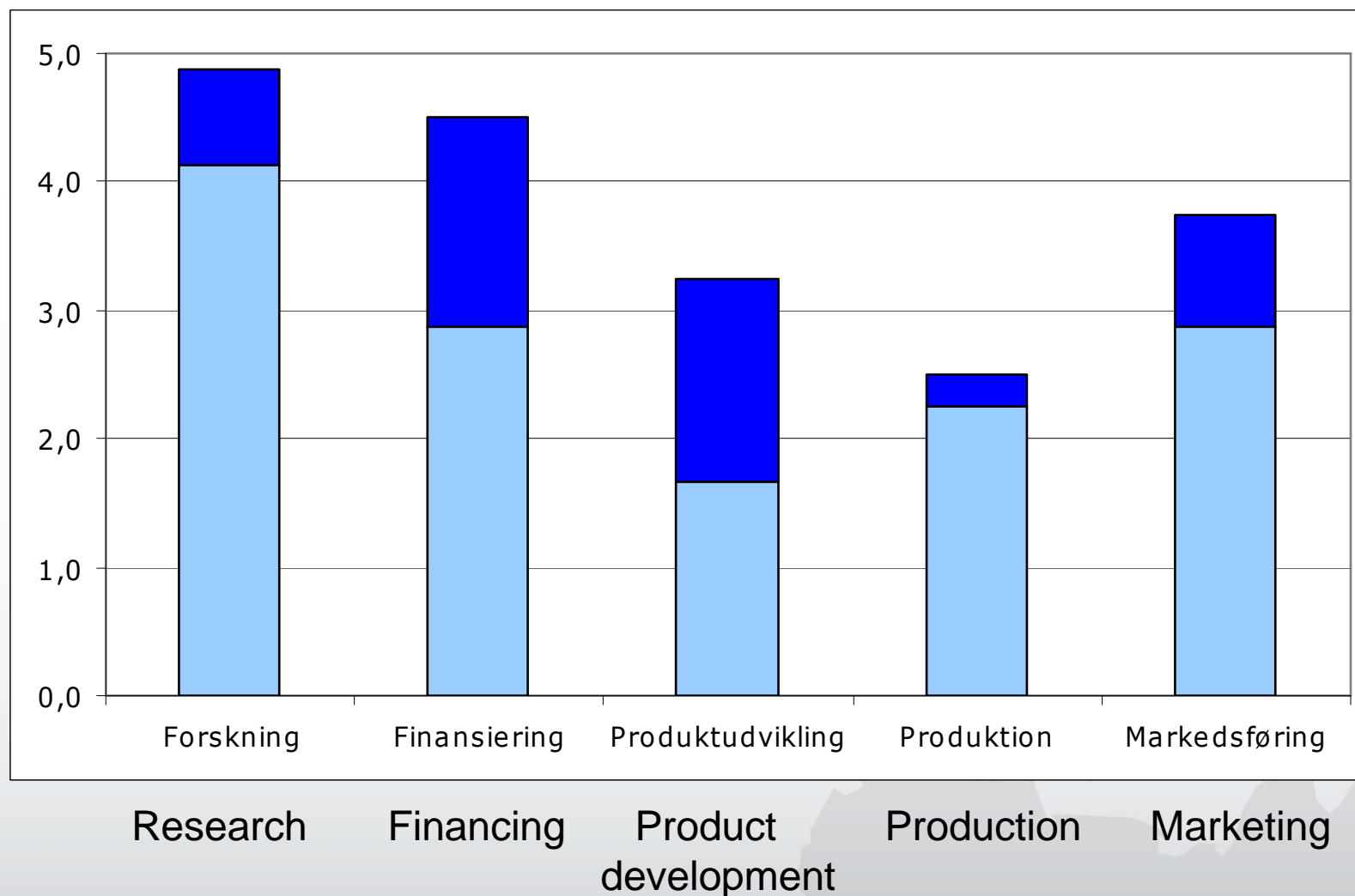
Videninstitutioner



# Sharing Knowledge



# Most important driving forces



# Photonics SWOT - Copenhagen

|   |   |
|---|---|
| <p style="text-align: center;"><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Cooperation between knowledge institutions and start-ups</li> <li>• High international level of research</li> <li>• Strong cooperation between the biggest players and the main knowledge institutions</li> <li>• Reasonable start-up activity – until 1½ year ago.</li> <li>• Shared facilities in the cluster</li> </ul> | <p style="text-align: center;"><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Close relations between the largest players</li> <li>• DK products late in the value chain – dependancy of customer development</li> <li>• Focus at the research institutions – they want to do everything</li> </ul> |
| <p style="text-align: center;"><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• More start-ups in niche areas</li> <li>• Bio optic – sensors – new products and standards</li> <li>• Utilisation of the strong research foundation</li> </ul>  | <p style="text-align: center;"><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Competition in main marcets</li> <li>• Many have been operating on unstable markets (tele communication, it)</li> <li>• Lack of investors</li> </ul>   |