

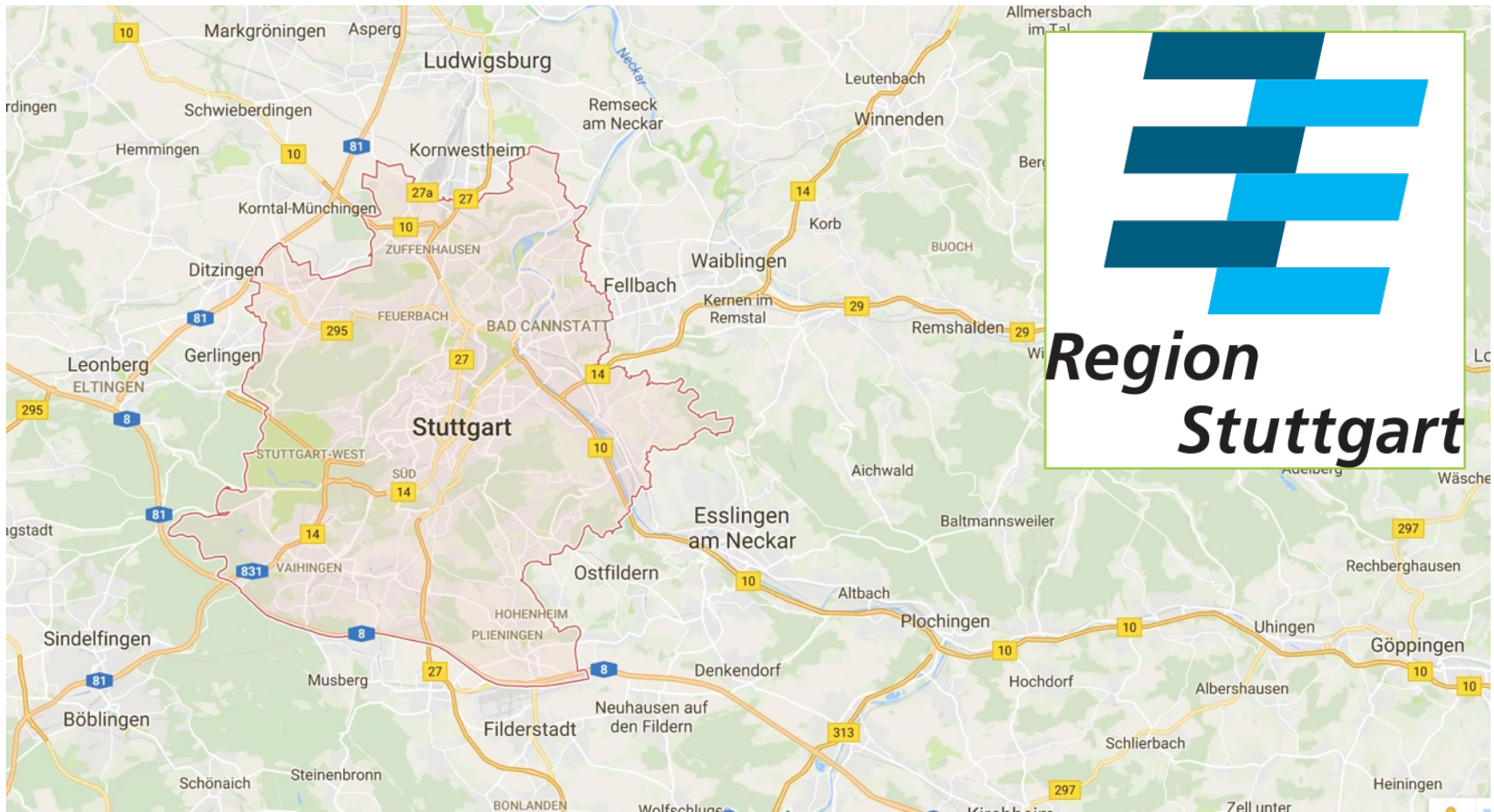


**Attracting Startups within Creative-Industries and the High-Tech Sector.
An Analysis of Location Factors from Stakeholders' Perspectives**

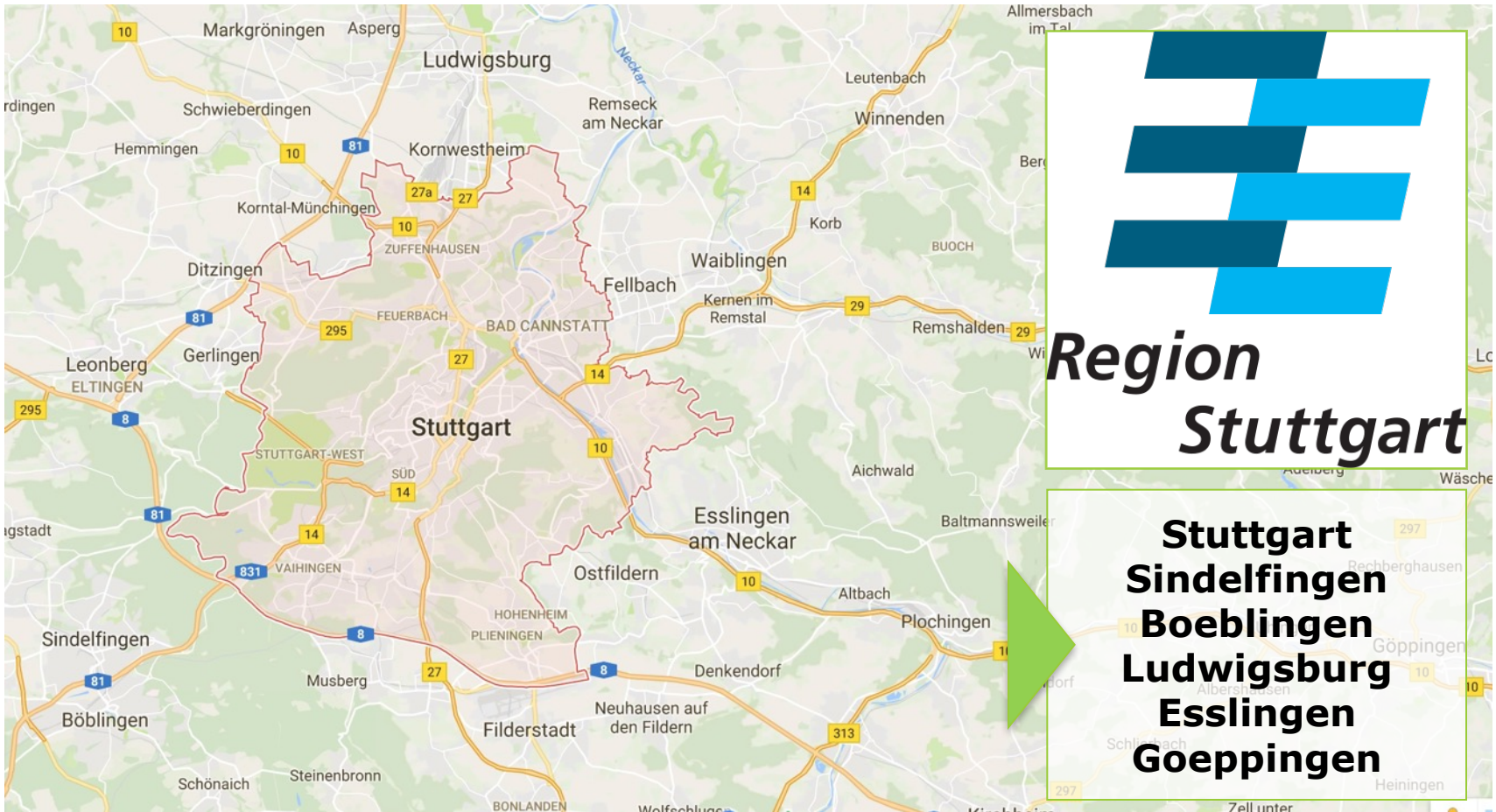
2016 IMMAA Conference in Seoul, 27th – 29th October

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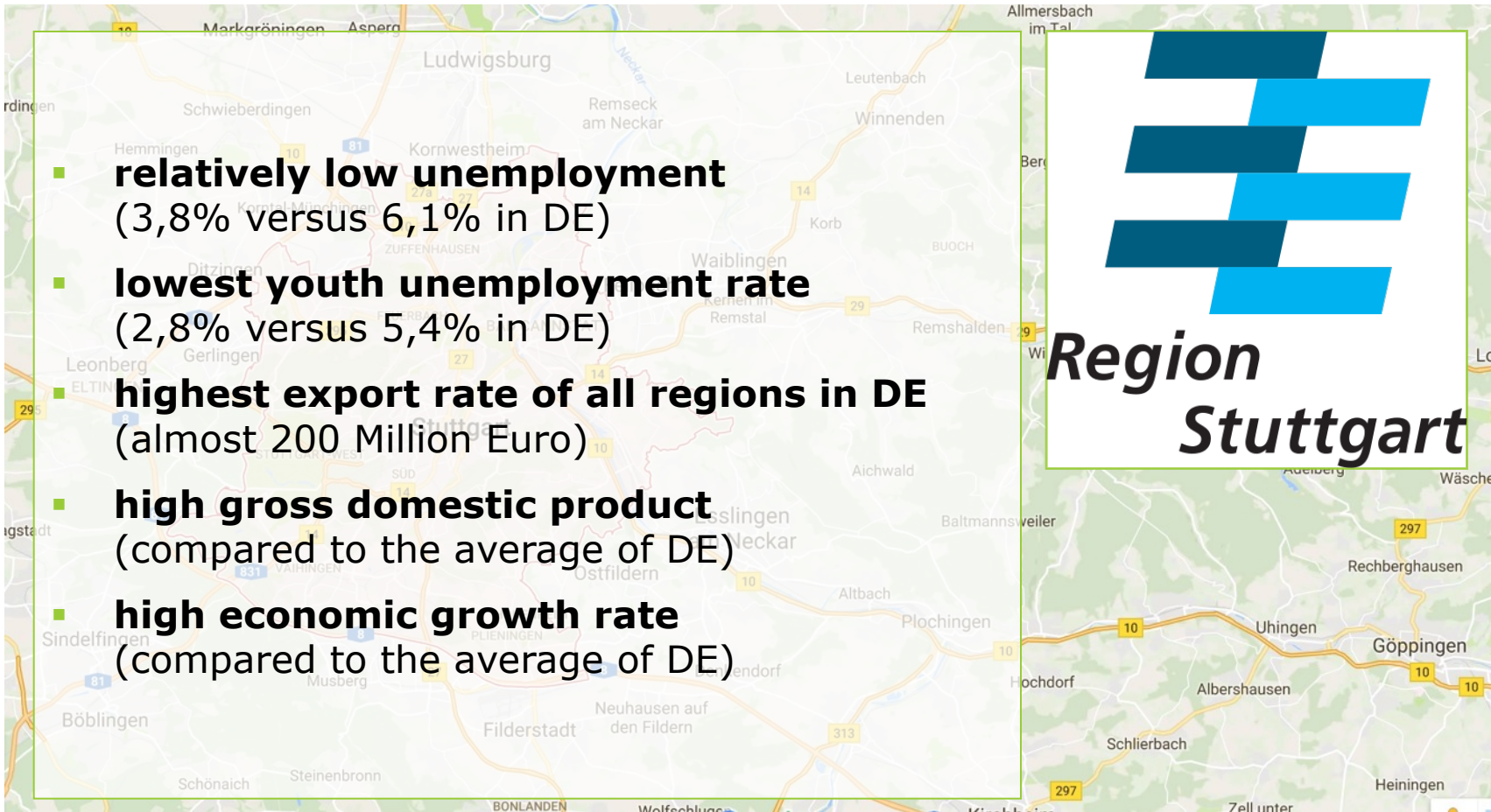
BACKGROUND – The Region Stuttgart



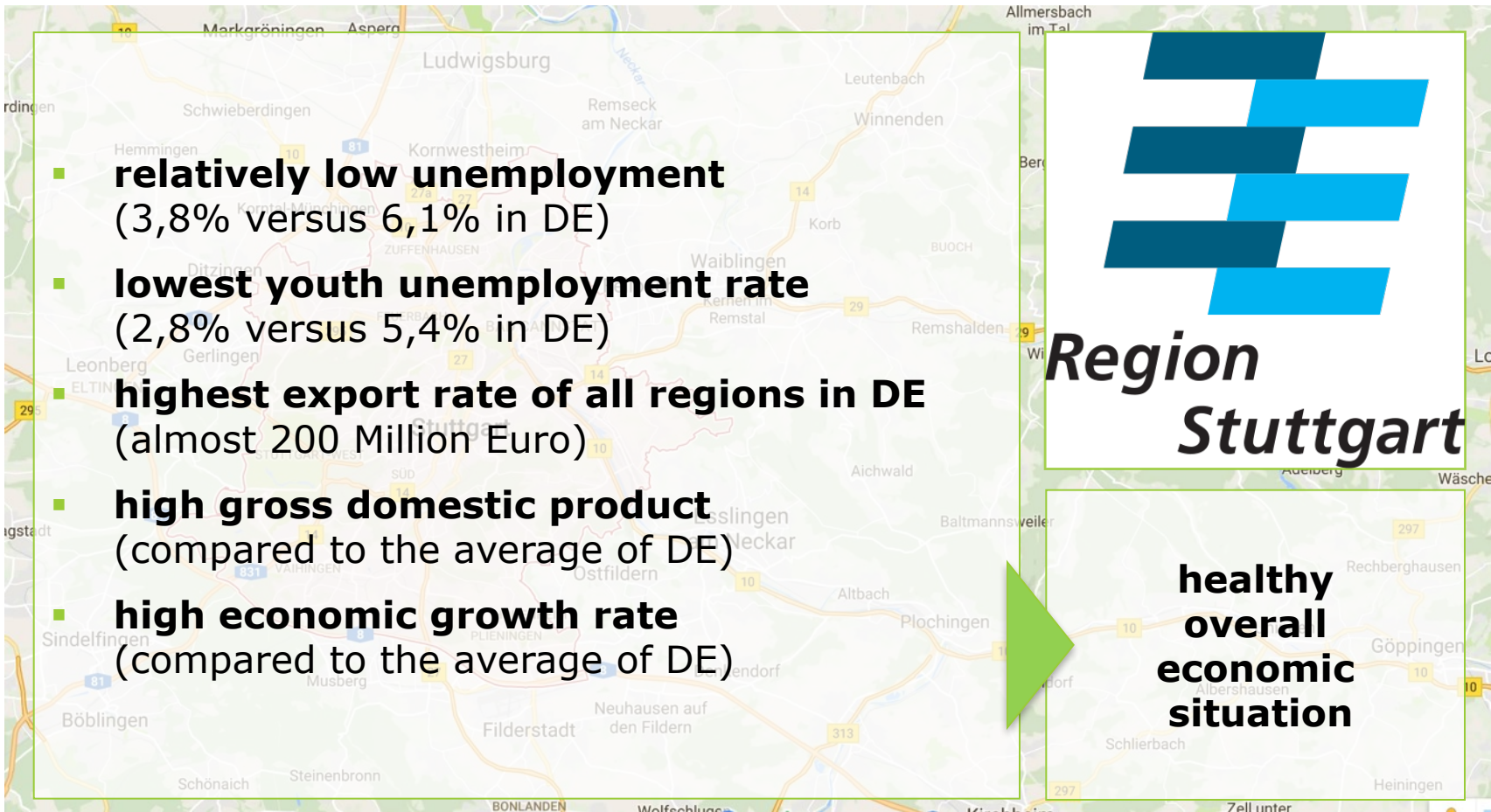
BACKGROUND – The Region Stuttgart



BACKGROUND – The Economic Situation in the Region*



BACKGROUND – The Economic Situation in the Region*



BACKGROUND – The Role of the Automotive Sector



BACKGROUND – The Role of the Automotive Sector



BACKGROUND – The Challenge for the Region



politicians, representatives and designers in charge of destination management and regional development are faced with two challenges:

- #1: **What can we do for our region to stay competitive and at the cutting edge in the automotive sector?**
- #2: **What can we do to become less dependent on the automotive sector?**



**Region
Stuttgart**

BACKGROUND – The Challenge for the Region



politicians, representatives and designers in charge of destination management and regional development are faced with two challenges:

- #1: **What can we do for our region to stay competitive and at the cutting edge in the automotive sector?**
- #2: **What can we do to become less dependent on the automotive sector?**

Region Stuttgart

this is where our study comes in

The image features a map of the Stuttgart region in Germany. A large green box on the left contains text and two numbered questions. A white box on the right contains the 'Region Stuttgart' logo, which consists of four horizontal bars of varying lengths in dark blue and light blue. Below the logo, a green arrow points to a smaller white box containing the text 'this is where our study comes in'. The map background shows various towns and roads, with a green border around the main text area.

GOAL – 4 Research Questions

- Regarding the general interest for the characteristics of the **Creative-Industries and the High-Tech Sector** and the startups within this sectors:
 - (1) Which are the **relevant location factors for startups** within the Creative-Industries and the High-Tech Sector?

- Regarding the challenges of **destination management and regional development**:
 - (2) Is there a **common understanding of the relevance** of particular location factors and their characteristics between the different stakeholders?
 - (3) What are the **expected and anticipated changes in the relevance** of the respective location factors in the near future?
 - (4) Are there any **interdependencies** between some location factors, the region and the development of a prosperous startup ecosystem?

METHODOLOGY – 5 Categories, 28 Location Factors*

Category Capital/Cost Structure

- Appropriate level of rentals and energy costs
- Appropriate level of taxes
- Availability of infrastructure
- Availability of specific infrastructure
- Appropriate level of infrastructure

Category Labor

- Availability of employees (quantitative)
- Availability of specific professionals
- Level of formal education of the labor force
- Availability of specific skills
- Availability of specific knowledge

Category Ambient

- Commonly positive image
- Commonly positive atmosphere
- Commonly positive quality of life
- Commonly positive quality of environment
- Established TIME-specific traditions
- Commonly positive economic conditions
- Specific promoting legal conditions

Category Information/Communication

- Closeness to universities and research institutions
- Availability of exhibitions, business events and conventions
- Availability of informal networks
- Availability of formal cooperation platforms
- Availability of specific sectors-/knowledge forums

Category Ground

- Technological infrastructure
- Transport infrastructure
- Established agglomeration and clustering
- Closeness to partners and suppliers
- Availability of land and space
- Closeness to markets and customers
- Closeness to competitors

METHODOLOGY – Quantitative and Qualitative Research

quantitative

75 experts (from the startup- and entrepreneurship-community) ...

- N=48 founders
- N=27 external experts/stakeholders* ...
 - N=14 business startup advisors
 - N=7 representatives of the economic policy
 - N=6 investors

time of online survey: 5. November – 3. December 2015

N=320 startups from a startup database were asked via email to participate in the survey

Selection of startups in Creative-Industries and the High-Tech Sector via NACE-Codes

qualitative

16 experts (from the startup- and entrepreneurship-community) ...

- guided interviews, analysis of the content

time of analysis: 5. November – 3. December 2015

Result #1: Technological Infrastructure and People

	N	Minimum	Maximum	Mean	Standard Deviation
„Top-5“					
Technological infrastructure	69	3	5	4.22	.745
Availability of specific professionals	75	1	5	4.19	1.009
Commonly positive atmosphere and mentality	69	1	5	4.00	.939
Closeness to universities and research institutions	69	1	5	3.97	.907
Closeness to markets and customers	69	1	5	3.93	1.048
„Flop-5“					
Availability of training and education opportunities	75	1	5	3.05	1.262
Appropriate level of taxes and charges	75	1	5	2.93	1.201
Established TIME-specific tradition	68	1	5	2.78	1.131
Closeness to competitors	69	1	5	2.52	1.145
Availability of land and space	69	1	5	2.16	1.146

Table 1: Overall relevance of the 28 analyzed location factors for startups within the TIME-sector (scale „1=totally unimportant“ up to „5=very important“)

Result #2: Differences Between the Two Groups (++)

		N	Mean	Standard Deviation
Entrepreneurs/startups				
Rank	Location factor			
1	Availability of specific professionals	48	4.15	.967
2	Commonly positive atmosphere and mentality	42	4.07	.973
3	Technological infrastructure	43	4.05	.785
...	...			
14	Availability of investors	48	3.54	1.184
External experts/stakeholders				
Rank	Location factor			
1	Technological infrastructure	26	4.50	.583
2	Availability of specific professionals	27	4.26	1.095
3	Availability of investors	27	4.22	.934
...	...			
10	Commonly positive atmosphere and mentality	27	3.89	.892

Table 2: The most important location factors from each subgroup's perspective (entrepreneurs and external experts) – comparison between the subgroups (scale 1="totally unimportant" up to 5="very important")

Result #2: Differences Between the Two Groups (--)

		N	Mean	Standard Deviation
Entrepreneurs/startups				
Rank	Location factor			
28	Availability of land and space	43	1.95	1.133
27	Closeness to competitors	43	2.19	1.075
26	Established TIME-specific tradition	41	2.27	.975
...	...			
22	Appropriate level of taxes and charges	48	3.06	1.278
External experts/stakeholders				
Rank	Location factor			
28	Availability of land and space	26	2.50	1.105
27	Appropriate level of taxes and charges	27	2.70	1.031
26	Closeness to competitors	26	3.08	1.055
...	...			
22	Established TIME-specific tradition	27	3.56	.892

Table 3: Unimportant location factors from each subgroup's perspective (entrepreneurs and external experts) – comparison between the subgroups (scale 1="totally unimportant" up to 5="very important")

Result #2: Dissent over Closeness to Markets and Partners

Location factor (seen as more important by external experts)	F	Significance
Technological infrastructure	6.489	.013
Availability of informal networks	4.526	.037
Closeness to partners and suppliers	10.337	.002
Established agglomeration and clustering	13.648	.000
Availability of specific sectors-/knowledge forums	5.631	.021
Availability of formal cooperation platforms	5.010	.029
Established TIME-specific tradition	30.322	.000
Closeness to competitors	11.284	.001

Table 4: Results from analysis of variance regarding the differences in assessment of the location factor relevance between the subgroups (entrepreneurs/startups and external experts) (significant: $p < 0.05$ and highly significant: $p < 0.01$)

Result #3: Good Economic Situation as Chance and Threat

Characteristics of a general positive economic situation	Disadvantages for startups and a startup ecosystem	Advantages for startups and a startup ecosystem
<ul style="list-style-type: none"> - low unemployment rate - high number of healthy and established enterprises - secure job situation - high level wages - high real estate prices and rental fees 	<ul style="list-style-type: none"> - less foundations - less entrepreneurial thinking - hard to attract good stuff - high costs for stuff - high costs for office spaces 	<ul style="list-style-type: none"> - high number of potential clients (especially in the B2B sector) - closeness to potential partners and clients - higher spin-off rate - "natural"/"automatic" pre-selection of bad business ideas and bad entrepreneurs - less but more successful foundations

Table 5: Characteristics of a general positive economic situation in a region and its disadvantages and advantages for startups and a startup ecosystem from experts' perspective

Summary, Discussion, and Implications

- **most important location factors**
“availability of specific professionals” and “technological infrastructure”
- less importance is attached to the factor – **in times of digital markets**
“availability of land and space”
- **diverging ideas** about the importance of some location factors between groups - especially closeness to markets and partners
- **dilemma** between a general positive economic situation and the development of a prosperous startup ecosystem
- **further research** investigating these trends in other sectors, regions and countries and development over time

Thank You!

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Result #4: No need for space and closeness to markets

location factors with an expected increase of relevance for the future	location factors with an expected decrease of relevance for the future
<ul style="list-style-type: none"> - commonly positive image - commonly positive atmosphere and mentality - commonly positive quality of life and leisure - availability of employees (quantitative) - availability of specific professionals - closeness to universities and research institutions - availability of subsidies and incentives - availability of investors - availability of informal networks 	<ul style="list-style-type: none"> - availability of land and space - closeness to partners and suppliers - closeness to markets and customers

Table 6: Expected changes in the relevance of the respective location factors