

Approaches to Measuring Performance

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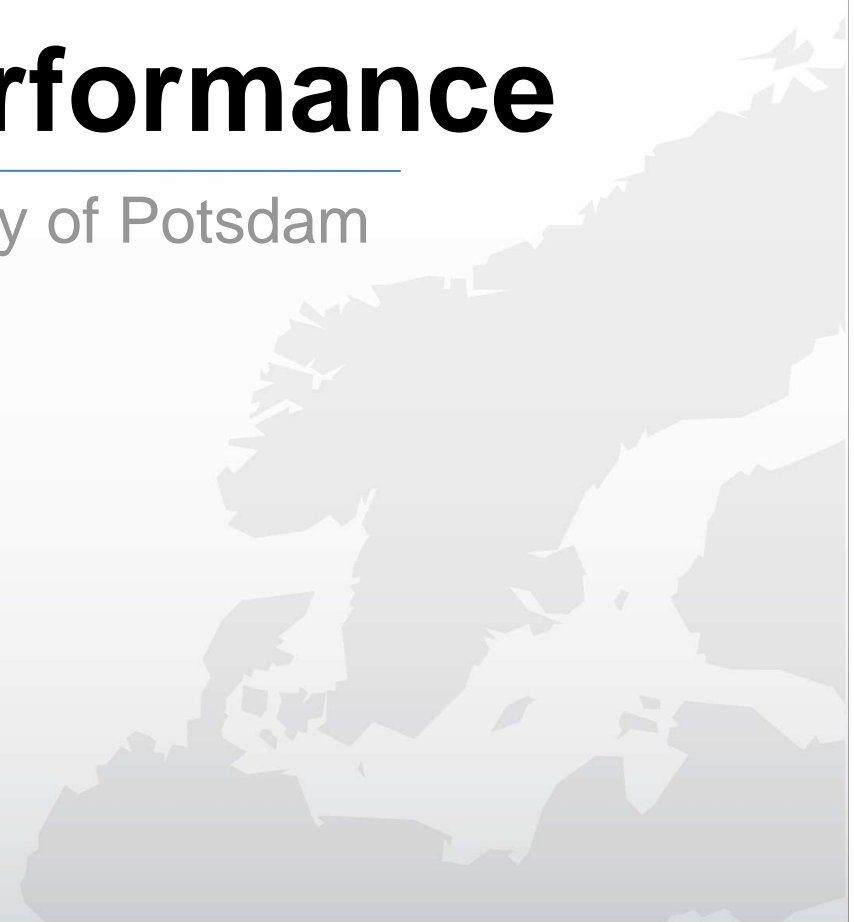


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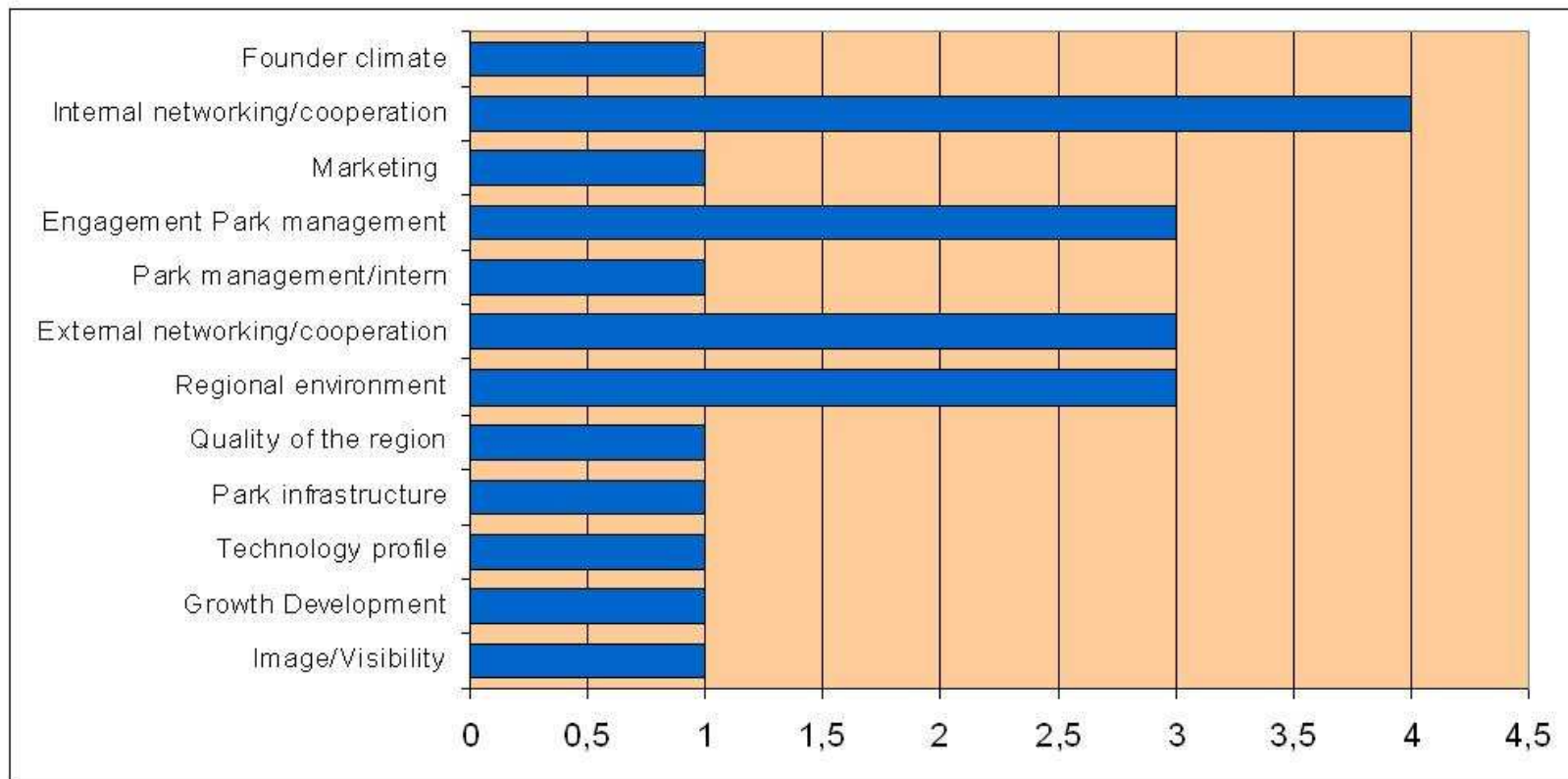
Achieved Results from the Benchmark Project

- How can we determine a specific park profile, in order to find matching twinning partners?
- How can we extract more information out of the given figures?
- How can we bundle questions into sets to create new standard profiles?



Types of Science Parks

Type C: Science to business transfer center



















Achieved Results from the Benchmark Project

- The scope of these sets has to be narrow
 - Limit to 4 questions per profile
 - Define new standard profiles
- Enables us to
 - Compare and perhaps rank the parks according to profiles
 - Show specific strengths and weaknesses
 - Find matching twinning partners

Achieved Results from the Benchmark Project: Example

- Ex.: What is the most innovative Park?
 1. Innovation potential
 2. Cooperation with the scientific-community
 3. Connections to scientific community
 4. Renowned companies/science institutes

	Basic 1	Standard 2	Professional 3	Excellent 4
Innovation potential	The technology fields/areas of application/branches represent the prevalent state of the technology 	The control of these technology fields/areas of application/branches represent a decisive competitive advantage in the current market 	The technology fields/areas of application/branches are considered forward-looking due to their innovation potential 	The technology fields/areas of application/branches could be the base for a technological revolution/a new technology era 
Cooperation science-industry	none 	There exist formats for discussion between Science & industry; joint projects on individual level 	Institutionalised personal transfer Science Industry 	Strategic programmes for Cooperation, exchange and industrial membership; multiple joint projects 
Connections to scientific community	informal 	>25 % of the SME have research coop at. regional level 	>25 % of the SME have research coop at. national level 	>25 % of the SME have research coop at international level 
Renowned companies/science institutes	The companies and science institutes are regionally known due to their competence and ability to innovate 	The companies and science institutes are nationally known due to their competence and ability to innovate 	The companies and science institutes are internationally known due to their competence and ability to innovate 	Success stories of companies and science institutes or the origin of a technology stand internationally in direct association with the science park 

Achieved Results from the Benchmark Project: Example

	1	2	3	4	Σ
Berlin	3	4	2	2	11
Copenhagen	3	2	2	2	9
Sophia Antipolis	4	4	4	4	16
Helsinki	4	4	4	3	15
Stockholm	4	2	4	4	14
Tallinn	2	2	4	3	11

- Sophia Antipolis, Helsinki and Stockholm would be providers in questions of innovation
- Berlin, Copenhagen and Tallinn would be takers
- The same can be done with other question sets:
 - Cluster
 - Best firm oriented services
 - Founder climate
 - International appeal
 - ...

Achieved Results from the Benchmark Project: Conclusion

- The existing benchmark will continue to be used, giving us a ready-to-use tool
- By acquiring company feedback we hope to receive relevant figures for partnering and the development of services

Further Existing Approaches

- Other attempts to rank the performance of science parks & regions:
 - IASP Strategigram
 - OECD Science, Technology and Industry Scoreboard
 - European Scoreboard
 - TSB Branch Statistic
 - Innovation Index
- Most of these rankings work with public and private databases, e.g. Eurostat, regional bureau of statistics, MARKUS, etc.

OECD Science, Technology and Industry Scoreboard

- Published every 2 years
- Over 200 internationally comparable indicators
- Measures the progress of national innovation strategies
- The scoreboard informs about:
 - The international mobility of researchers and scientists
 - The growth of the information economy
 - Innovation by regions and industries
 - ...

European Scoreboard

- Success is measured by a number of possible factors of competitiveness suggested in the literature, i.e.:
 - GDP
 - R&D expenditure
 - Working population
 - Personnel employed in R&D
 - Employment in high-tech sectors
 - Number of students
 - Number of people involved in tertiary education
- The objective is to see whether it may be possible to replicate the higher level performance in some regions in other, less competitive, regions
- Weakness: Only submitted numbers are taken into account

TSB Branch Statistic

- Primarily based on turnover and employment figures from commercial databases. Gaps were filled by conducting a survey
- The statistic aims to give an account of the subjective assessment of the industry's future development, regional location factors and the importance of individual markets

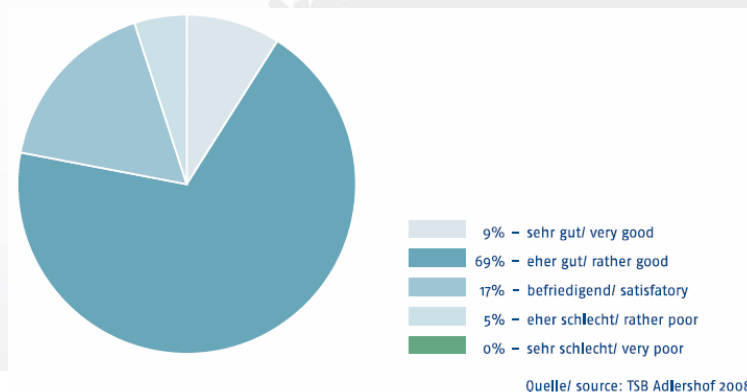


Abb. 23: Beurteilung der derzeitigen Geschäftssituation
 fig. 23: assessment of current business situation

The Berlin-Brandenburg region is an excellent location for companies from optical technologies and microsystems technology! I ...



Innovation Index

- Compiled by the Baden-Württemberg statistics agency
- The innovation index compresses six innovation indicators into a single score. The indicator consists of
 - R&D spending,
 - R&D personnel,
 - Share of personnel in high-tech industries,
 - Knowledge intense service industries,
 - Research / technical jobs,
 - Number of patents.
- Easily comparable results as the score is a single number

T1 Innovationsindex für die Länder bzw. Regionen der Europäischen Union Wertebereich: 0 bis 100						
EU-Land bzw. -Region	Innovationsindex (100 %)		Niveauindex (75 %)		Dynamikindex (25 %)	
	Indexwert	Rang	Indexwert	Rang	Indexwert	Rang
Baden-Württemberg	70,0	1	79,5	1	41,7	35
Berlin	64,6	2	70,4	2	47,1	19
Schweden	62,0	3	70,3	3	36,9	51
Île de France (F)	60,3	4	70,0	4	31,2	63
Bayern	59,8	5	64,6	5	45,3	24
Finnland	57,1	6	62,5	6	40,8	39
Hessen	55,6	7	60,8	7	39,8	43
Dänemark	51,5	8	54,3	9	43,2	32
East of England (UK)	49,1	9	52,3	10	39,5	44
Hamburg	48,9	10	54,5	8	32,0	61
Rheinland-Pfalz	46,7	11	48,2	13	42,0	34
Nordrhein-Westfalen	46,2	12	46,3	16	45,9	23
Niedersachsen	46,1	13	46,9	14	43,7	31
South East (UK)	45,8	14	52,1	11	27,1	69
Bremen	45,8	15	50,2	12	32,5	60
Belgien	44,3	16	44,4	18	43,7	30
Sachsen	43,1	17	41,2	20	48,9	18
Centre-Est (F)	43,0	18	45,2	17	36,4	53
Niederlande	42,6	19	46,3	15	31,6	62
Luxemburg	42,2	20	40,6	22	47,0	20
Thüringen	41,1	21	36,6	27	54,7	6
South West (UK)	39,6	22	40,9	21	35,9	56
Méditerranée (F)	39,1	23	37,9	24	42,7	33
Comunidad de Madrid (E)	38,1	24	38,7	23	36,4	54
Schleswig-Holstein	37,9	25	37,5	26	39,1	45
Österreich	36,6	26	33,3	35	46,5	21
Est (F)	36,2	27	35,4	29	38,7	47
London (UK)	36,2	28	42,5	19	17,2	73
Brandenburg	35,8	29	30,5	38	51,6	13
Nord Ovest (I)	35,8	30	34,4	33	40,0	41
Saarland	35,5	31	34,5	30	38,5	48

Thank you!

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