

Entrepreneurial Challenge: Trends in Entrepreneurship

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Marburg Center for Innovation and
Entrepreneurship Support (MAFEX)



Entrepreneurship Trends (in Germany) – Overview

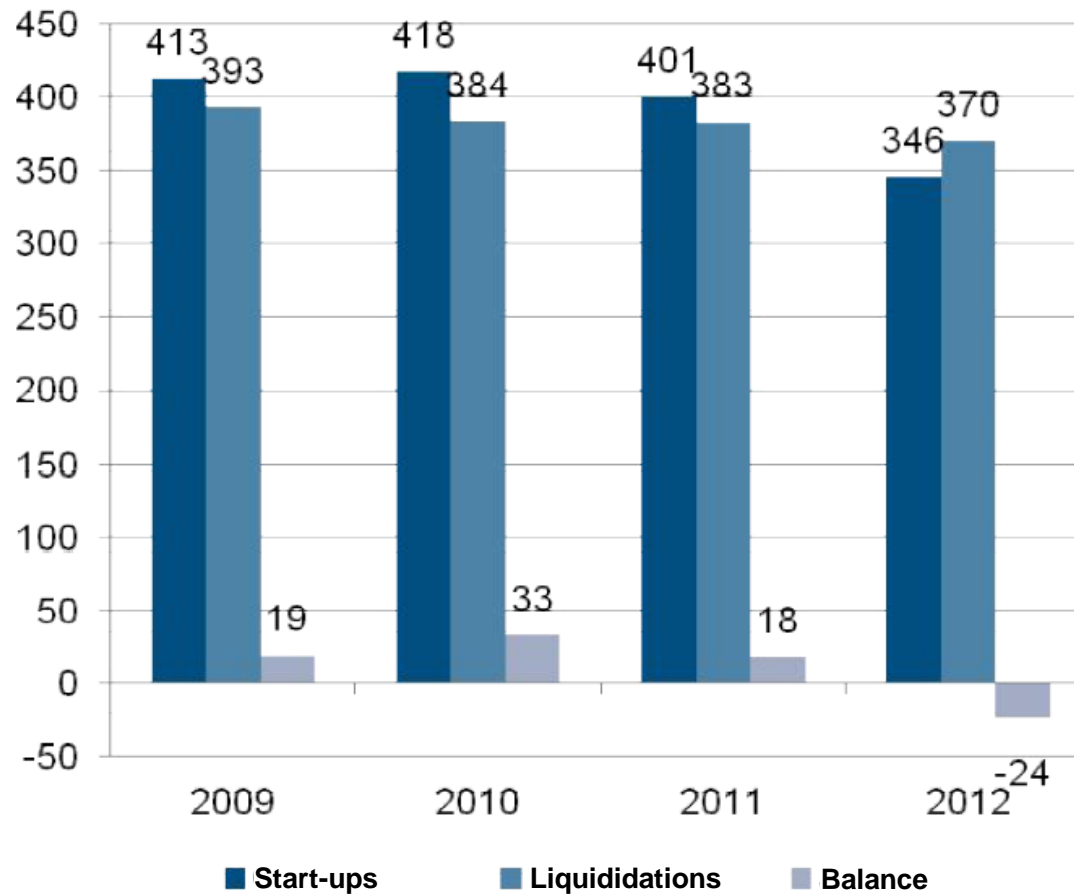
- 1. Start-up activities and trends in Germany**
- 2. New and innovative topics in the start-up scene**
- 3. Trends in entrepreneurship support and start-up financing**
- 4. Structures of start-up support at German universities**
- 5. Main challenge: Business plan(ning)**
- 6. Success factors and primary factors of failure of innovative start-ups**

1. Start-up activities and trends in Germany

**346,400 new start-ups in
Germany in 2012!**

1. Start-up activities and trends in Germany

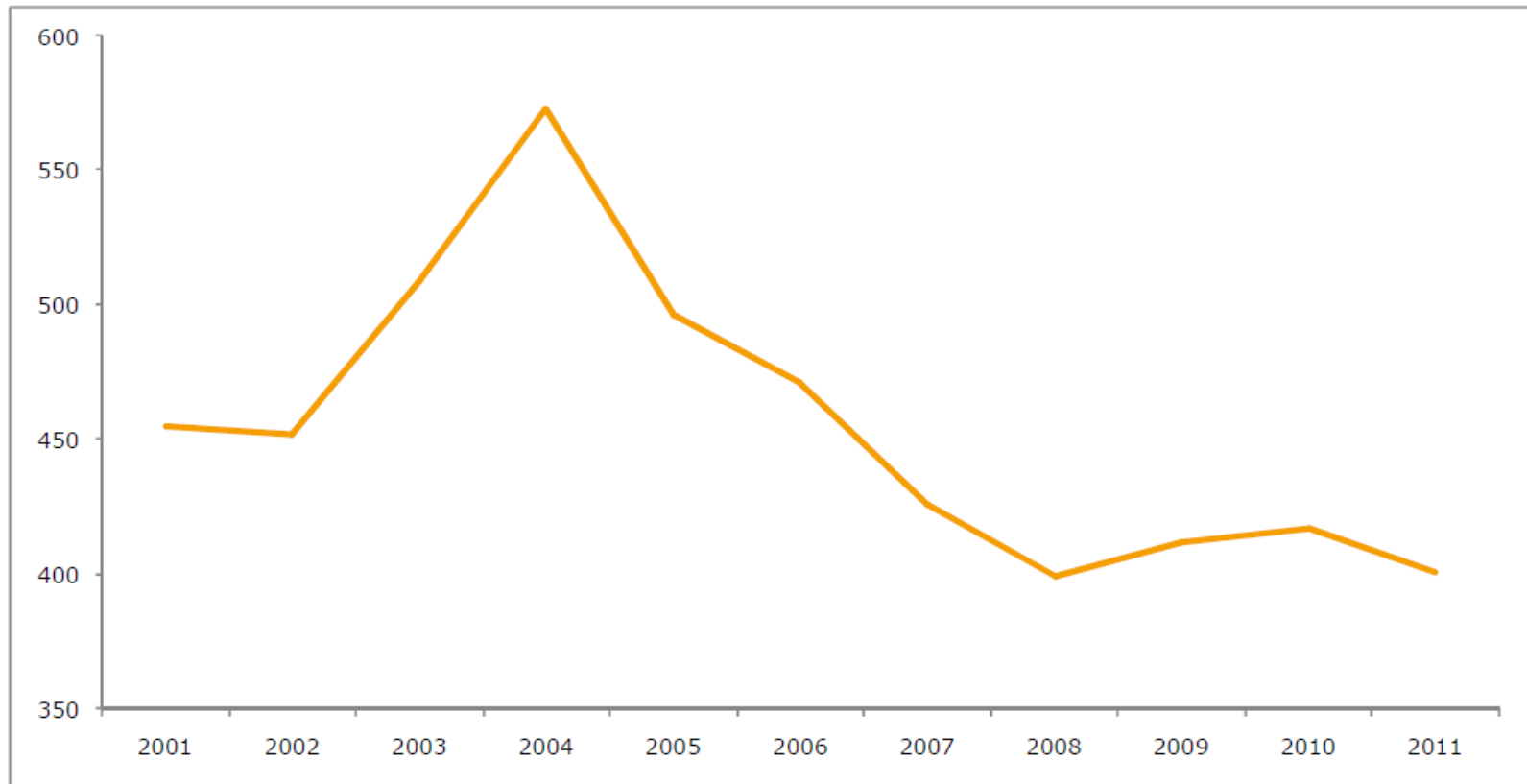
Balance of start-ups and liquidations (in thousands)



Source: IfM Bonn

1. Start-up activities and trends in Germany

Declining number of start-ups in Germany since 2004



Source: IfM Bonn

1. Start-up activities and trends in Germany

Fewer Start-ups – but better prepared

Again a decline in start-ups in 2012

Official statistics and estimates approximate a decline of 14 per cent in the number of start-ups

Main reason: Positive developments in the GER labor market

The sound situation in the German labor market leaves only little potential for necessity-driven start-ups. Qualified personnel (including university graduates) have excellent job perspectives in Germany

Reform of public start-up support

Since 2012, the German government grants start-up support only to those former jobless entrepreneurs, who have obviously little chances for getting a regular job (long-term unemployed people and migrants).

Start-ups are better prepared

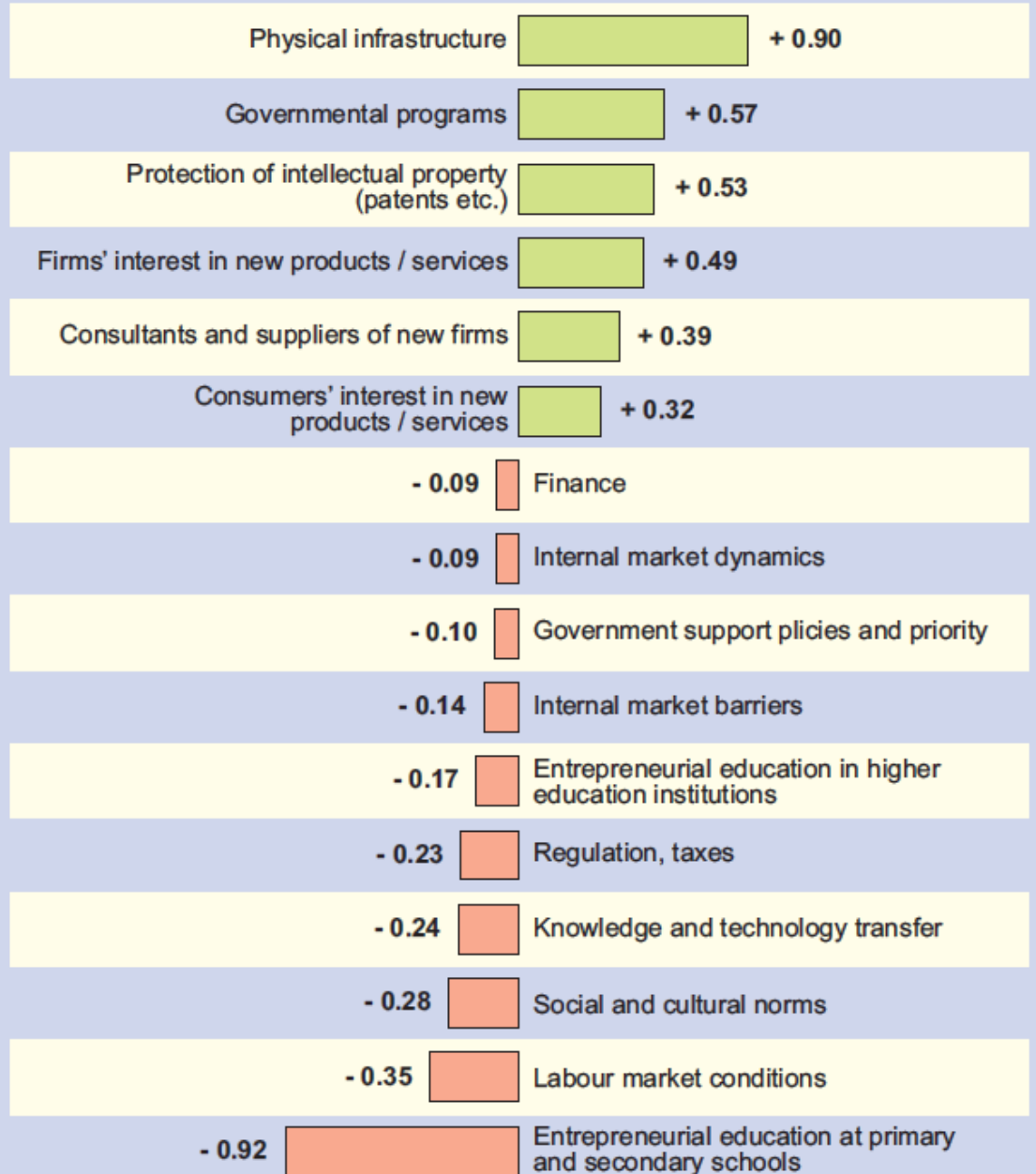
Stricter government regulations for granting financial support has increased the quality of the start-up concepts and business plans of entrepreneurs compared to previous years.

1. Trends in GER

General Economic Conditions for Start-ups in GER

Source:
Global Entrepreneurship Monitor 2012

Entrepreneurial Framework Conditions in Germany 2012



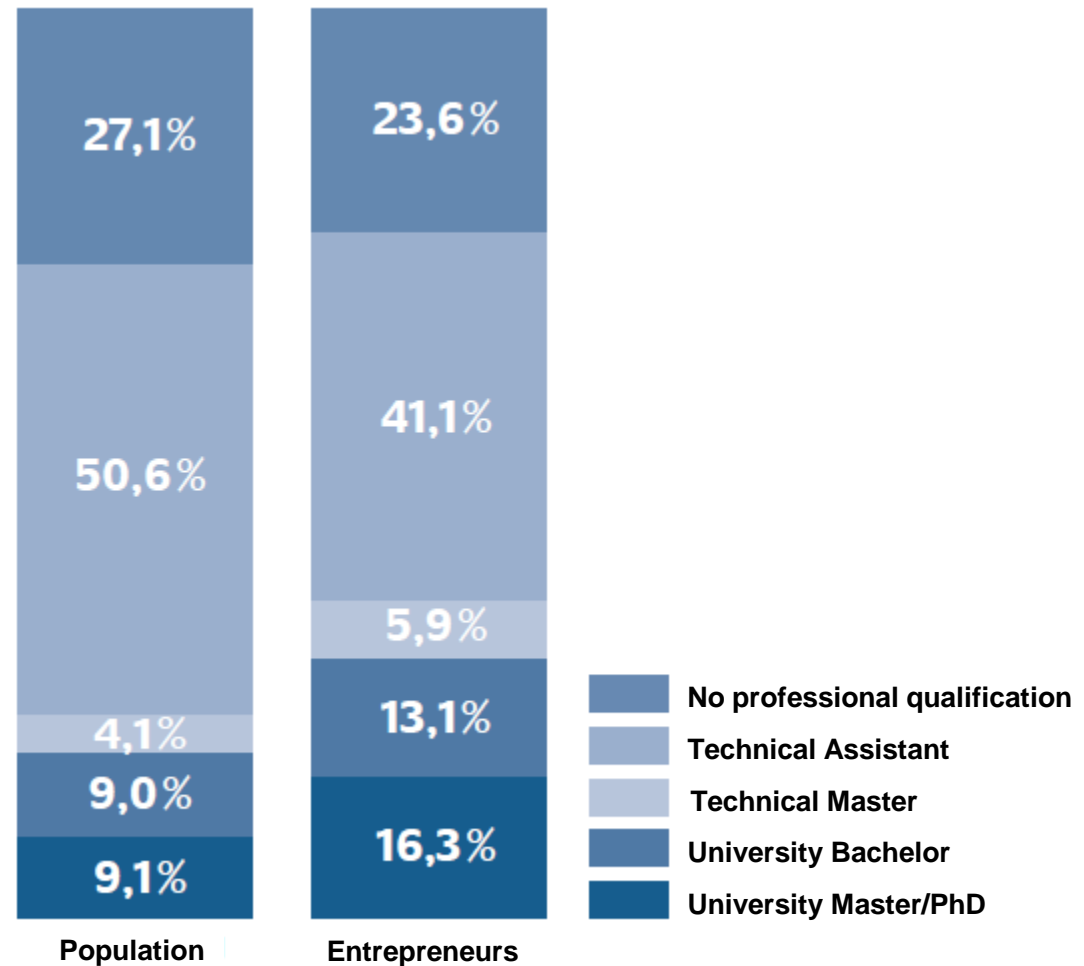
1. Trends: Entrepreneurial Climate in Comparison

SCALE: FROM (-) TO (+)					1 Finance, 2a Nat. Policy – General Policy, 2b Nat. Policy – Regulation, 3 Government Programs, 4a Education – Prim. And Second., 4b Education – Post-School, 5 R&D Transfer, 6 Commercial Infrastructure, 7a Internal Market – Dynamics, 7b Internal Market – Openness, 8 Physical Infrastructure, 9 Cultural and Social Norms											
1	2	3	4	5	1	2a	2b	3	4a	4b	5	6	7a	7b	8	9
MIDDLE EAST AND NORTH AFRICA																
Algeria						-			-	+	-		+		+	
Egypt									-	-	-	+	+		+	
Iran							-	-	-			+	+		+	
Israel						-	-		-			+			+	+
Palestine								-	-			+	+	-	+	
Tunisia						+		-					+	-	+	-
EUROPEAN UNION																
Austria								+	-			+	-		+	-
Belgium							-		-			+		+	+	-
Denmark					-	-		+			-	+			+	
Estonia						-	+		-	-			+		+	
Finland					-		+		-		-		+		+	
France						+		+	-		-				+	-
Germany								+	-		-	+			+	-

1. Start-up activities and trends in Germany

Which professional qualification do start-up entrepreneurs have?

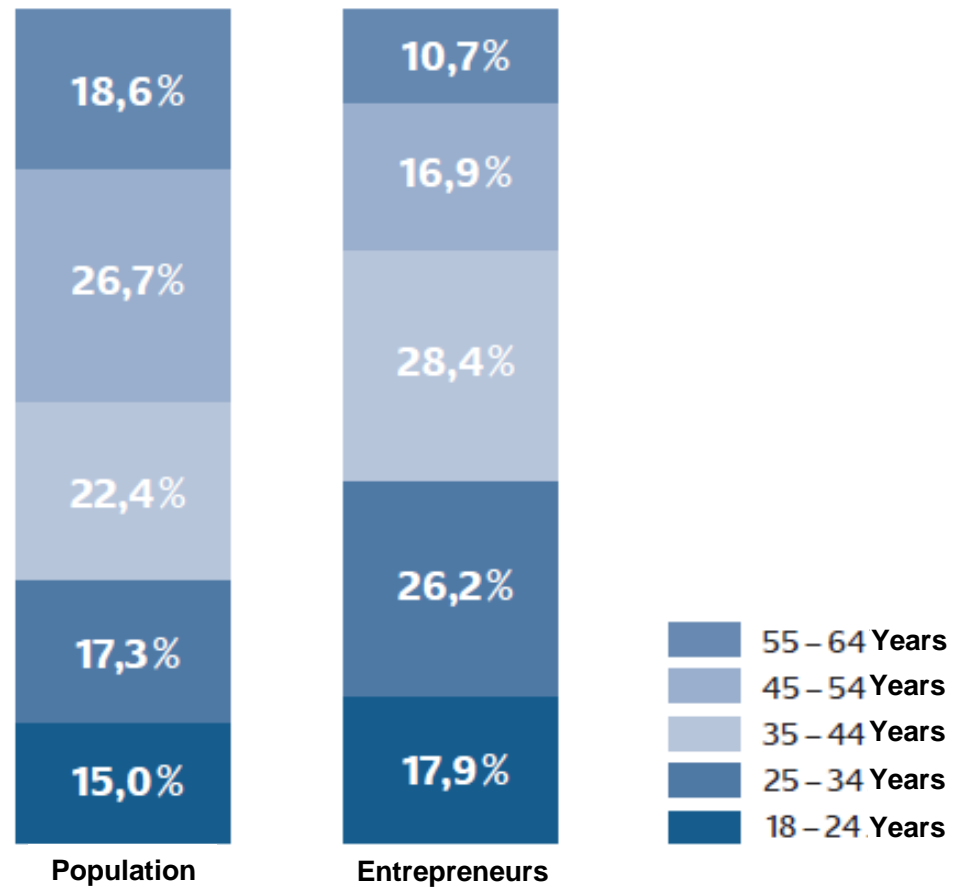
Source: KfW Gründungsmonitor



1. Start-up activities and trends in Germany

How old are Entrepreneurs?

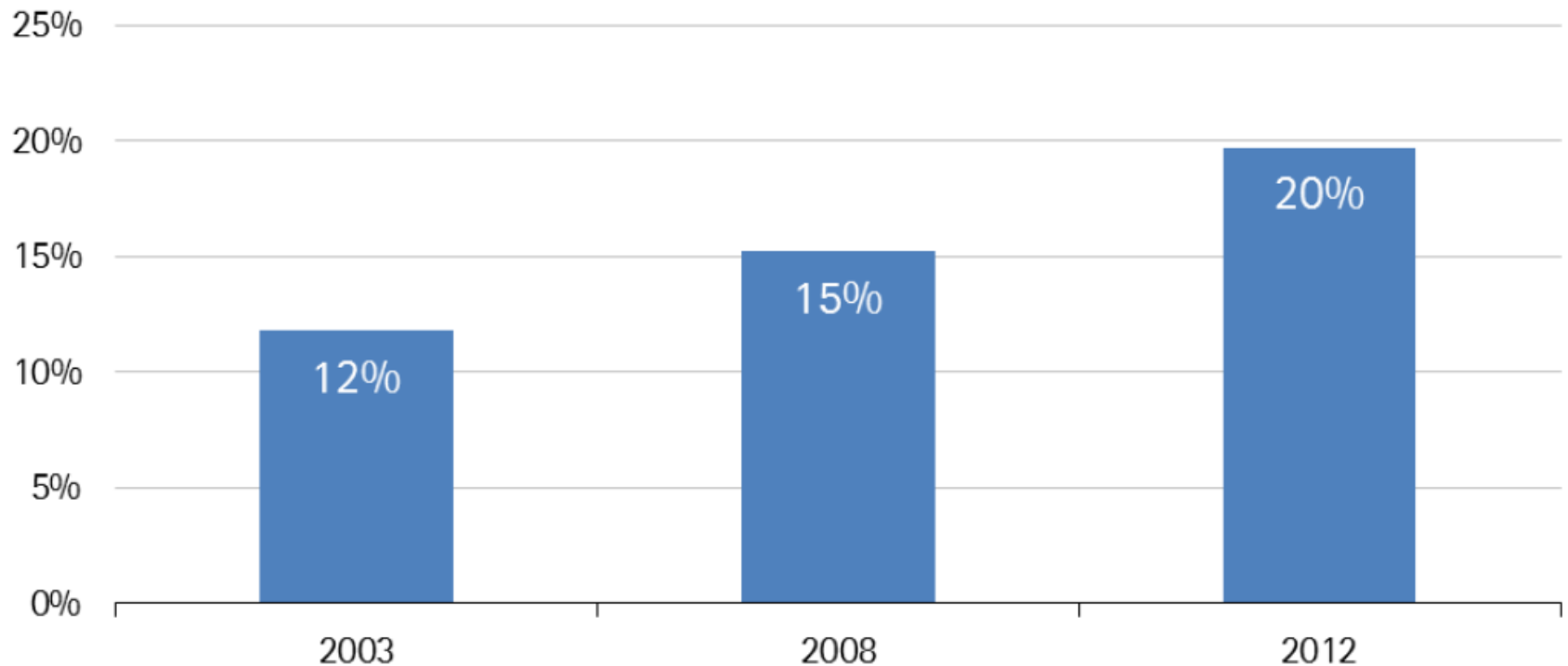
Source: KfW Gründungsmonitor



1. Start-up activities and trends in Germany

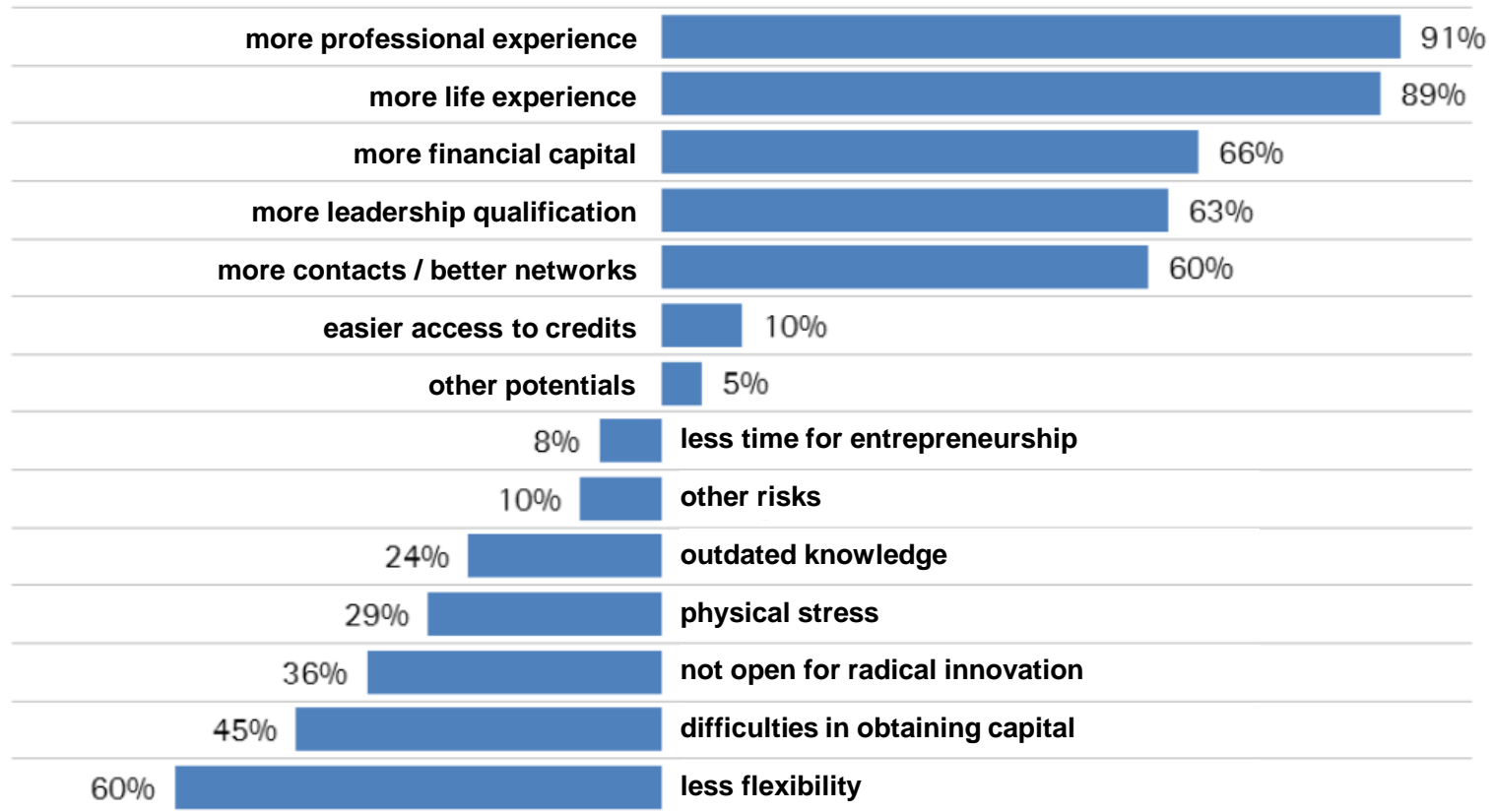
Number of senior entrepreneurs over the age of 50 increases

Source: DIHK Gründerreport



1. Start-up activities and trends in Germany

Advantages of senior entrepreneurs.... in comparison to young entrepreneurs....

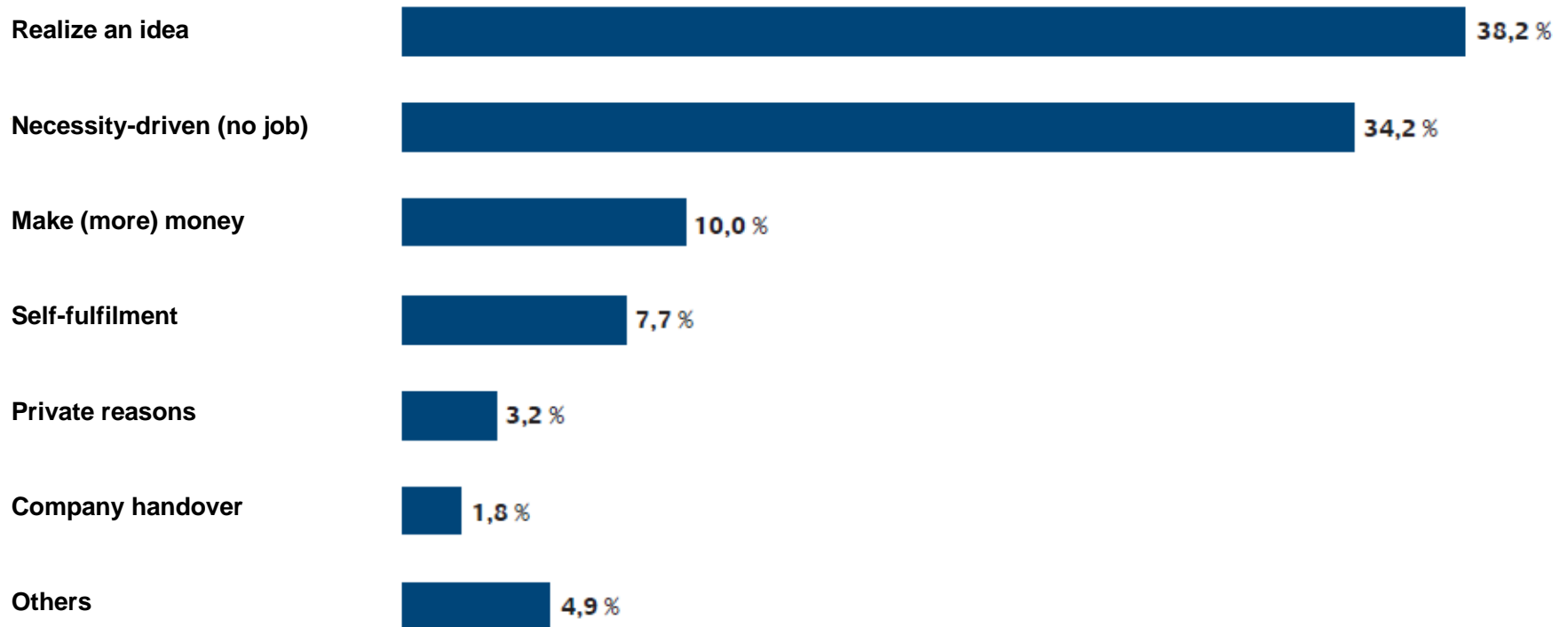


Source: DIHK Gründerreport

1. Start-up activities and trends in Germany

What motivates entrepreneurs to start / take over a venture?

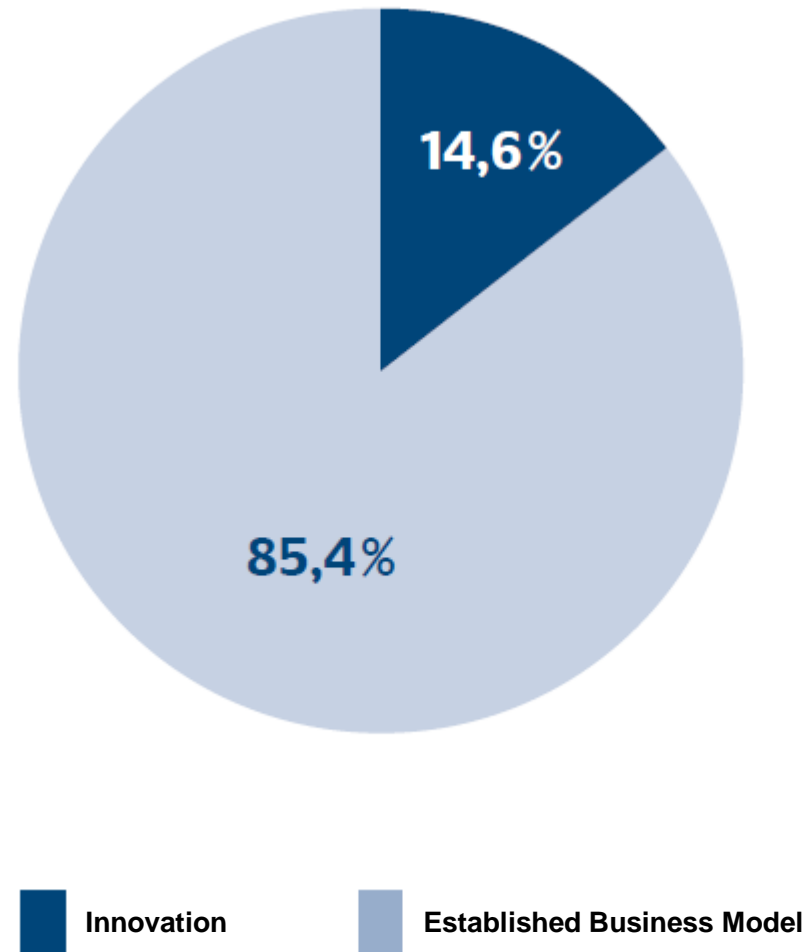
Source: KfW Gründungsmonitor



1. Start-up activities and trends in Germany

How many start-ups are innovative?

Source: KfW Gründungsmonitor

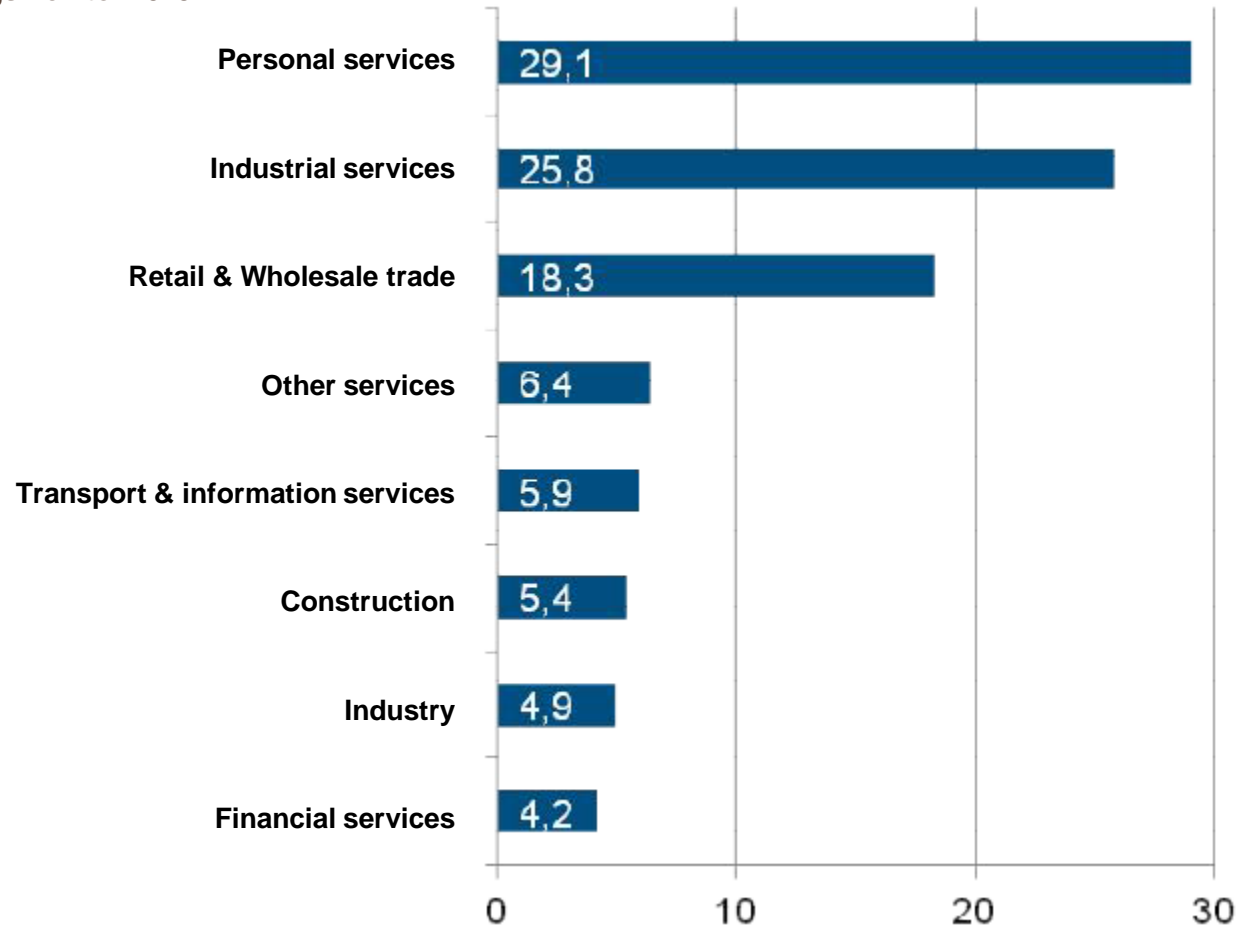


2. „Hot“ and innovative Topics in the German Start-up Scene

2. „Hot“ and innovative Topics in the German Start-up Scene

The current start-up scene by industries: Services dominate!

Source: KfW Gründungsmonitor 2013



2. „Hot“ and innovative Topics in the German Start-up Scene

Industry and Technology Trends + Opportunities:

A. Demographic change (ageing of society) creates opportunities:

- Good perspectives for start-ups in the health care sector:
 - Care services for old agers;
 - Sport, fitness, wellness services;
 - Innovative services for medical products (e.g. orthopedics)
- Household services for seniors;
- Specialized leisure and travel services for seniors
- etc.

2. „Hot“ and innovative Topics in the German Start-up Scene

Industry and Technology Trends + Opportunities:

B. Not new, but.....still rich opportunities for innovative IT- and Internet-services

- Examples:
 - Customized e-commerce services (e.g. mymuesli.de);
 - Social media services;
 - Industrial internet and communication services;
 - etc.
- IT-Outsourcing of larger corporations creates chances for innovative IT-service offerings.
- Good news: IT-start-ups usually require limited budgets in the immediate start-up phase.

2. „Hot“ and innovative Topics in the German Start-up Scene

Industry and Technology Trends + Opportunities:

C. Great Opportunities for **Green Start-ups** in the Green Economy

- 13.6 percent of all University start-ups (based on a survey of 30 entrepreneurship incubators) in GER are green start-ups
(Source: Borderstep Institute 2013)
- German „Energy Transition“ as an opportunity for start-ups
- Green start-ups across all industries in the German Economy
- Examples:
 - Products and services in renewable energies (e.g. solar technology)
 - Products & technologies to increase energy efficiency
 - Products & technologies to lower emissions and pollution
 - Products and services for sustaining biodiversity and ecosystems

2. „Hot“ and innovative Topics in the *North African* Start-up Scene

D. Your opinion and suggestions?

- ...
- ...
- ...
- ...
- ...

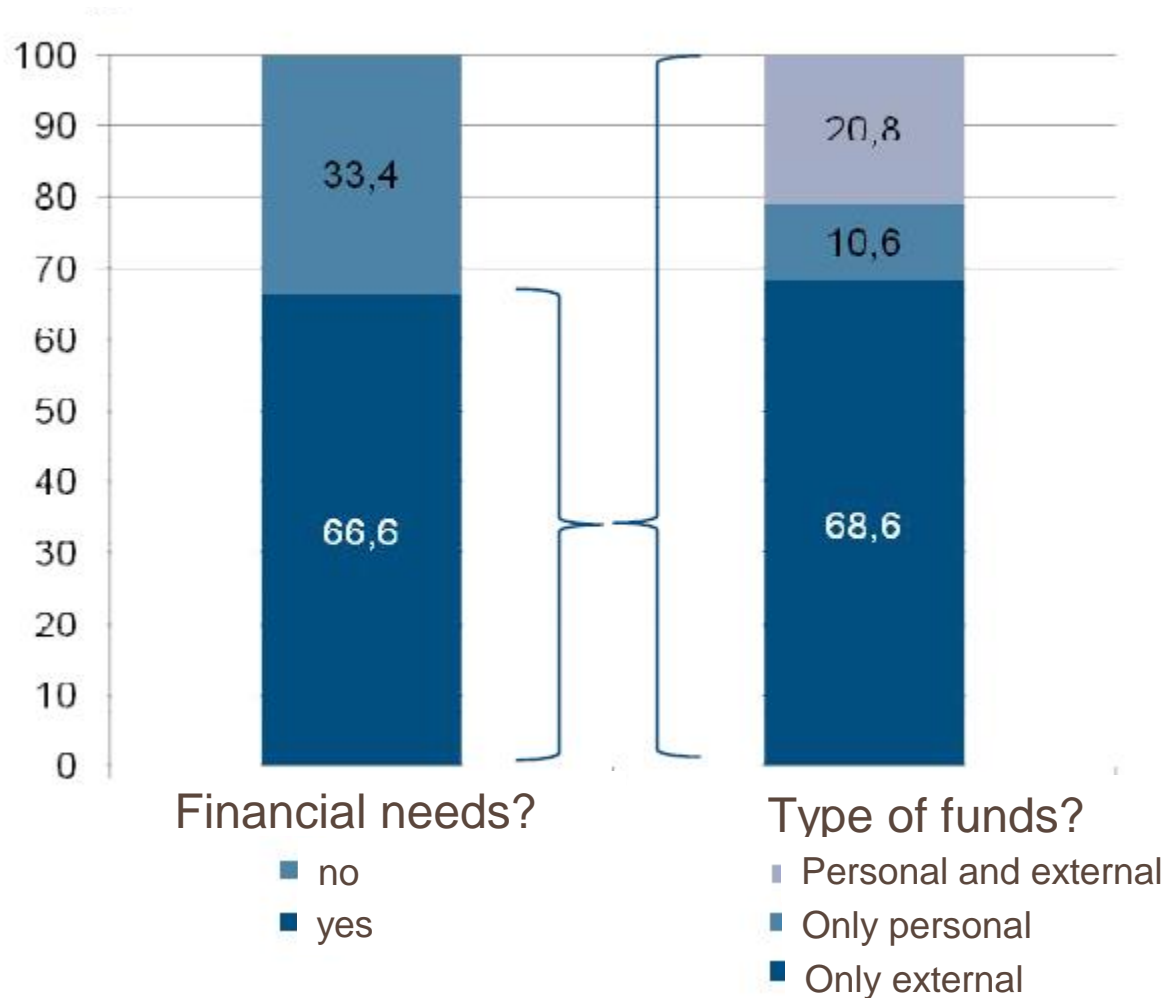
2. „Hot“ and innovative Topics in the *North African* Start-up Scene

Always a hot Topic: The money!

3. Trends in Entrepreneurship Support and Start-up Financing

3. Trends in Start-up Support and Financing

Financial needs of start-ups

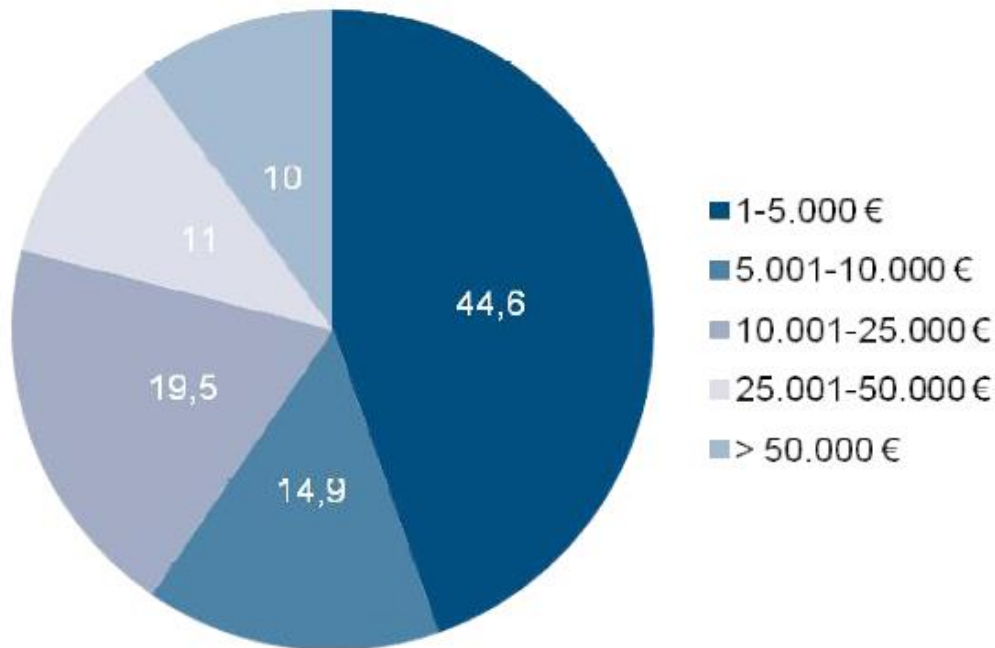


3. Trends in Start-up Support and Financing

Financial needs of start-ups: Small amounts dominate!

Source: KfW Gründungsmonitor 2013

Budgets needs of start-ups (in percent)



- Nearly 50% of all new ventures start with 5,000 Euros and less....
- Only 10% of the entrepreneurs need more than 50,000 Euro
- 6.3 % > 100,000 Euro

3. Trends in Start-up Support and Financing

Increase in Public Support for Start-ups

Source: KfW Gründungsmonitor 2013

- There is plethora of public / semi-public support programs in GER
- Support programs in Germany can be grouped into the main categories 'Coaching', 'Financing' and 'Innovation Support'



- Support is granted by federal, regional, local and supranational (European) institutions
- Support primarily focuses on innovative start-ups
- Support is also granted to foreign start-ups projects (e.g. via various DAAD programs)
- A rising number of private institutions offers start-up support: Business Angels, Venture Capitalist, specialized Banks etc.

3. Trends in Start-up Support and Financing

A New Trend in Financing: Crowdfunding

Source: KfW Gründungsmonitor 2013

- **Crowdfunding (and Crowdlending)**
- External financing in small amounts
- Crowdfunding is popular in the IT-industry, but also in culture and media industries
- Crowdfunding is based on project descriptions and marketing via social media or via specialized internet platforms
- Specialized crowdfunding platforms in Germany include “inkubato”, “pling”, “Startnext”
- Variations of Crowdfunding (CF):
 - Donation-based CF
 - Reward-based CF
 - Lending-based CF
 - Equity-based CF

3. Trends in Start-up Support and Financing

A New Trend in Financing: Crowdfunding



© OBS

3. Trends in Start-up Support and Financing

A New Trend in Financing: Crowdfunding

Volume of Crowdfunding in Germany is still small

Volume of funds raised quarterly, in thousand EUR



Market shares of major crowdfunding platforms





189.186,03 € (158%) finanziert

Am Borsigplatz geboren - Franz Jacobi und die Wiege des BVB

Kategorie: **Film / Video**

Unser Ziel ist es, eine filmische Dokumentation über Franz Jacobi, den Gründer des BVB, und seine Mitstreiter zu erschaffen - mit der Leidenschaft echter BVB-Fans!

1379 Fans 2573 Supporter Noch 15 Tage



11.049,64 € (55%) finanziert

Festsaal Kreuzberg - Wiederaufbau

Kategorie: **Kulturelle Bildung**

Nach 9 Jahren Musikgeschichte am Kottbusser Tor, dem einzig wahren Herzen von Berlin, wurde der Festsaal Kreuzberg Opfer der Flammen, ihn wiederaufzubauen ist das Ziel dieses Projekts.

482 Fans 379 Supporter Noch 70 Tage



90.801,80 € (182%) finanziert

C3S: Die faire GEMA-Alternative.

Kategorie: **Musik**

Die Initiative der Cultural Commons Collecting Society (C3S) möchte eine faire und flexible Alternative zur GEMA gründen. Die C3S will mit Kreativen und Musikliebenden gemeinsam Musikern zu einem besseren Auskommen

1521 Fans 1431 Supporter Noch 11 Tage



4.461,00 € (45%) finanziert

Yunikue Fitted Bag

Kategorie: **Design**

Wir möchten mit euch eine besondere Laptoptasche produzieren, die die von einer Tasche erwarteten Möglichkeiten, in Bezug auf Design und Funktionalität neu definiert. Eine perfekte Tasche, in der du nicht nur deinen

178 Fans 37 Supporter Noch 11 Tage



4.185,00 € (42%) finanziert

FLASH - Die nächste Generation (Web, TV, App & Community)

Kategorie: **Journalismus**

FLASH ist das schwul-lesbische Stadtmagazin für Köln und wir wollen es jetzt mit Eurer Hilfe in ein richtiges "Community- und Mitmach-Projekt" verwandeln. Mit unserem Crowdfunding bei Startnext.de sammeln wir Geld für d...

272 Fans 53 Supporter Noch 6 Tage



13.609,70 € (91%) finanziert

KANCHA - Design Accessoires für Urbane Nomaden

Kategorie: **Design**

KANCHA stellt Hüllen für Laptops, Tablets und Smartphones aus Filz und Leder in Kirgistan her. Im Mittelpunkt steht dabei der Mensch - so achten wir auf Fairness und soziale Verantwortung entlang der Wertkette und auf

247 Fans 145 Supporter Noch 3 Tage

3. Trends in Start-up Support and Financing

Start-up incubators: The number and their services increase

Source: KfW Gründungsmonitor 2013

- In total, German incubators have supported more than 40,000 start-up projects und have generated more than 248,000 jobs.
- The major German association of incubators (Innovation-, Technology- and Start-up Centers) today has more than 150 members .
- Incubators support entrepreneurs by the setting-up a good infrastructure for the concept-, start-up and early development phase.
-  **MAFEX** = Marburger Institut für Innovationsforschung und Existenzgründungsförderung aus der Universität

4. Structures of start-up support at German universities: Mafex

4. Structures of start-up support at German universities: Mafex



Marburger Institute for Innovation Research and
Entrepreneurship Support (Mafex)

MAFEX – Overview of the Institute

- MAFEX (MAFEX - Marburger Förderzentrum für Existenzgründer) was established as a charitable trust in 1998 to support university start-ups by undergraduate and graduate students in Marburg.
- Today, Mafex is an official Institute of the University that addresses all faculties but is affiliated with the Department of Economics and Management
- 2 Pillars of MAFEX
 1. Sensitizing, training and coaching of university start-ups;
 2. Innovation & strategic management consulting and training for SMEs.
- MAFEX integrates the current activities and services of the „Entrepreneurship Cluster Mittelhessen“ (ECM) in Marburg.
- The MAFEX Förderverein (Club of Sponsors) supports the MAFEX Institute both financially and with its network



Club of Sponsors

- Trustor of Mafex
- ca. 60 members
- City mayor and district director are members
- HQ: City Hall

Board of Directors

- Paul Alpar (Management)
- Michael Stephan (Management)
- Bernhard Seeger (Informatics)
- Thomas Brenner (Geography)
- Simone Strambach (Geography)

Advisory Board

- District Director, Landkreis Marburg
- City Mayor of Marburg
- President of Philipps-Universität
- Representatives of local Banks
- Representatives of local firms and business partners
- Chamber of Commerce (Oskar Edelmann)
- Other colleagues from various faculties

Managing Directors

- Paul Alpar, Michael Stephan

Coaches / Lecturers

(usually engaged in a PhD)

- Kristina Bette
- Oliver Dietz

Pillar 1: Entrepreneurship Support

a.) Sensitizing & Pre-Seed-Activities

Entrepreneurship Seminar

- Regular offerings since Wintersemester 2009/10
- per semester about 15 participants (interested in launching a start-up)
- From all faculties (still biased by management students)
- Seminars are part of the official curriculum and are acknowledged as official Seminar / Lecture Module with 6 ECTS point

Talks by Practitioners

- Each Semester about 10 lectures in Marburg and in Gießen
- Cooperation with the ECM – Project
- 30-40 participants on average

Other Events

- “Gründer-Flirt” (Speed dating for potential entrepreneurs)
- Elevator pitch events

Pillar 1: Entrepreneurship Support

a.) Sensitizing & Pre-Seed-Activities

Typical Example for a Pre-Seed Event:



Entrepreneurship Day with Pitching

- 2x per year
- Elevator Pitch for Start-ups
- Idea Pitch for potential Entrepreneurs
- Networking Event

Pillar 1: Entrepreneurship Support

b.) Entrepreneurship Training (MAFEX and TIM)

Lectures

- Introduction to Technology and Innovation Management
- Strategic Management of Technology and Innovation
- Innovation Project and Operation Management
- Intellectual Property Management
- Service Innovation Management
- Business Intelligence, E-Marketing

Seminars

- Entrepreneurship Seminar
- Project Seminar in Technology and Innovation Management

Workshops

- Business Planning in Green Biotechnology
- Protecting Software and Service Innovation

Pillar 1: Entrepreneurship Support

c.) Start-up support and Coaching

Example for a current start-up-project



International Solar Informations Solutions

- Start-up team from the geographical department
- Software solutions for professional solar energy planning
- Solar potential data & maps
- MAFEX Support: a.) Business Plan Coaching, b.) Incubator, c.) Procurement and Mentoring of an EXIST-Business Start-up Grant (2010-2012)



EXIST Business Start-up Grant



How is the support provided?

- Maximum period of support: one year
- Subsistence grant depending on level of degree:
 - *Doctorate*: € 2,500/month
 - *Graduates*: € 2,000/month
 - *Undergraduates*: € 800/month
 - *Child supplement*: € 100/month/child
- Material expenses: up to € 10,000 for individual start-ups (up to € 17,000 for teams)
- Start-up-related coaching: € 5,000

What has to be done?

- Applications for support must be submitted by the university or research institution.
- Applicants work out an idea sketch to describe their business project.
- The university or research institution designates a mentor who commits him or herself to provide specialist advice. A start-up network ensures that the entrepreneurs receive support.

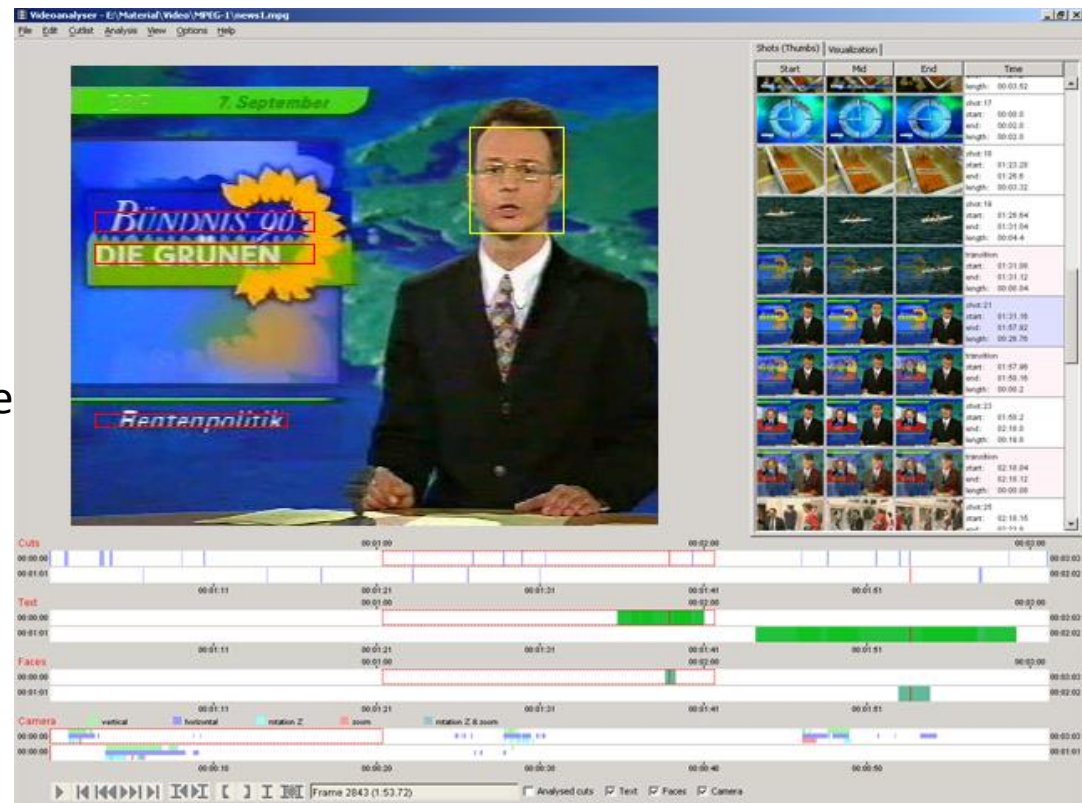
Pillar 1: Entrepreneurship Support

c.) Start-up support and coaching

Current start-up projects

VIDEANA - Software Toolkit for Semantic Searches in Picture and Video Data

- Methods and Tools for Computer-Assisted Media Analysis
- Project out of Computer Science and Mathematics
- EXIST Research Transfer Grant



Pillar 1: Entrepreneurship Support

b.) Start-up support and coaching

An overview of other current start-up-Projects

- Terahertz-Quasi-Zeitbereichsspektroskopie (Innovative Sensor Technology for Material Inspections)
- Emergency Signallung Technology
- Lunchbooker
- Co-Working Spaces (very popular!)
- Mindmapping Software
- JohannesTrading-station.net (retail service for PC-Systems in the finance industry)
- eE-Pass³ (innovative galvanisation process)
- Sproker (Webnovation GbR, Sport Simulation Game)
- 360° Display Solutions
- PanEuropean Magazine
- Green Chewinggums
- Tourism in Iran

Pillar 2: Knowledge Transfer in Technology & Innovation Management

Academic Expertise & Network

- Paul Alpar, Michael Stephan, Thomas Brenner, Simone Strambach
- Close collaboration with IHK Innovationsberatung

Innovation Management Consultancy

- Bachelor & Master Theses
- Consultancy Seminars (Project Seminars)
- Firm-specific Innovation Management Training & Consulting
 - TSE Systems (Modular Product and Service Architecture)
 - IXETIC (Integrating Idea Management into Innovation Management)

Innovation Research

- Empirical Studies and Conferences on Innovation Management

Pillar 2: Knowledge Transfer in Technology & Innovation Management

Current Study (2013):

Idea Management in Germany



**Management von Ideen:
Stand in der Praxis**

*Ergebnisse einer empirischen Untersuchung
im deutschsprachigen Raum*

Brigitte Jeberien
Dr. Martin J. Schneider
Prof. Dr. Michael Stephan
Michael Dietzsch



5. Main challenge: Business plan(ning)

Two Functions and Target Groups of the Business Plan

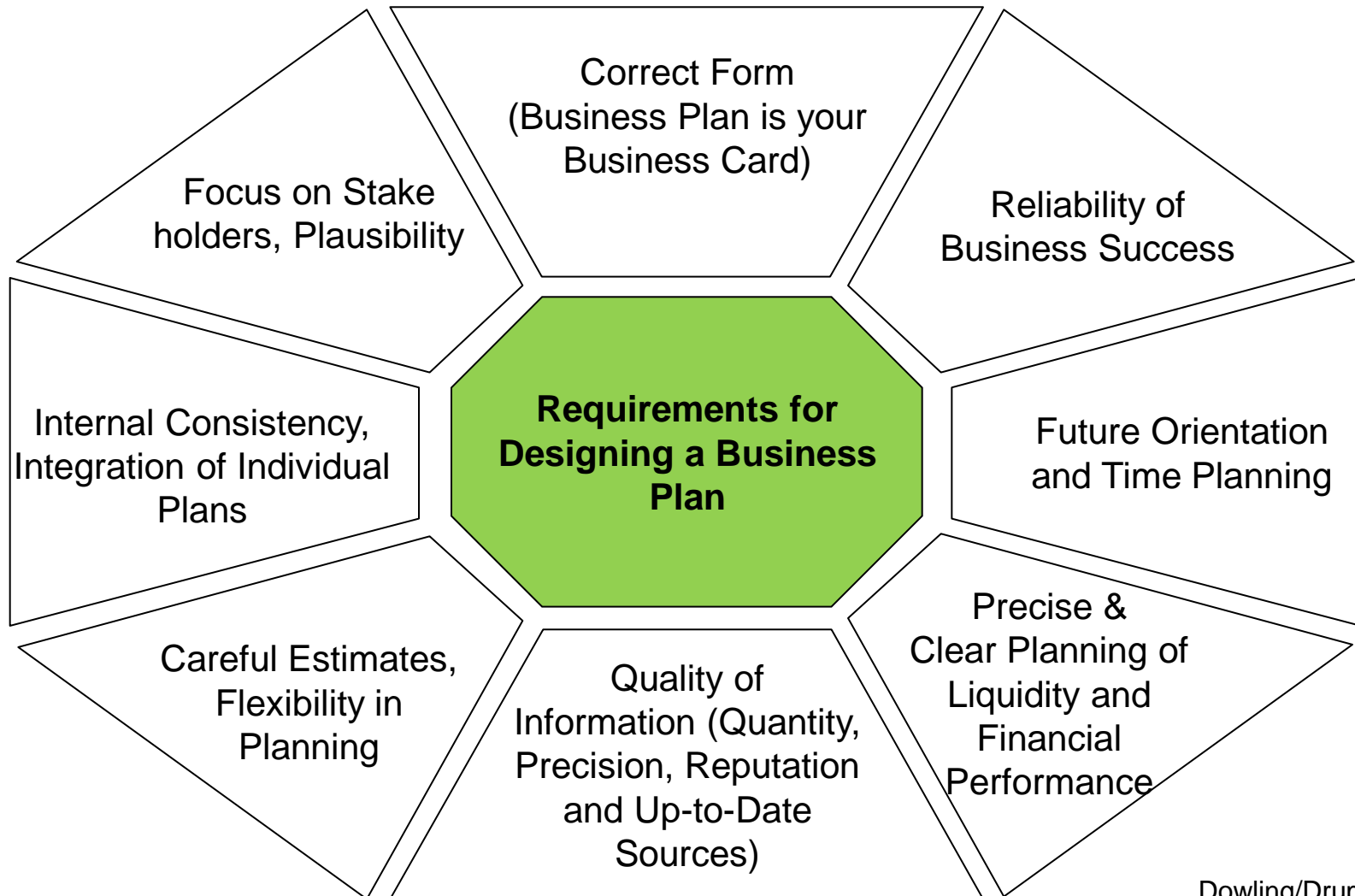


*"An admirable plan, Mr Gribbs,
but short on detail"*

1. For **External Stakeholders** the Business Plan is the Prime Document, the „Business Card“ and „Information Brochure“: Customers, Capital Lenders, Customers, Suppliers etc.

2. For the **Start-up Team** the Business Plan is the Prime Document, the prime instrument to build consensus, an instrument for setting targets, planning and control.

Requirements for the Design of Business Plans



Dowling/Drumm (2003)

Main Components of a Business-Plan

Executive Summary	<ul style="list-style-type: none"> ▶ Kernidee, Gründungsform, Herkunft der Idee, Beginn des Vorhabens, Investitionsvolumen, Finanzierungsbedarf, Chancen und Risiken
Concepts / Product	<ul style="list-style-type: none"> ▶ Kernidee, Leistungsangebot (Produkte, Dienstleistungen), Kundennutzen, Wettbewerbsvorteile, Marktsituation, Wachstumsmöglichkeiten, Rendite
Strategic Planning	<ul style="list-style-type: none"> ▶ Geschäftsmodell, Wettbewerbsstrategie, Technologiestrategie, Markteintrittsstrategie, Kooperationsstrategie, Exitstrategie
Market Analysis	<ul style="list-style-type: none"> ▶ Gesamtes Marktvolumen, Volumen einzelner Segmente, Absatz- und Umsatzprognose, Marktanteile, Gestaltung des Marketing Mix
Production Planning	<ul style="list-style-type: none"> ▶ Benötigte Anlagen, Bedarf an Eingangsgütern und Arbeitskräften, Zeitplanung (Meilensteine), Abschreibungsplan, Material- und Lagerplan
Finance & Performance Plan	<ul style="list-style-type: none"> ▶ Liquiditätsplan, Finanzierungsplan, Erfolgsrechnung, Discounted Cash-Flow, Investitionsrechnung, Planbilanz, Risikoanalyse, Stärken-Schwächen-Analyse, Break-Even-Analyse, Sensitivitätsanalyse
Organisation and Personnel	<ul style="list-style-type: none"> ▶ Gründerteam, Anteile der Gründer, Aufgabenteilung unter den Gründern, Berater, Kooperationspartner, Netzwerke, Rechtsform

Dowling/Drumm (2003)

6. Success factors and primary factors of failure of innovative start-ups: Personal experiences

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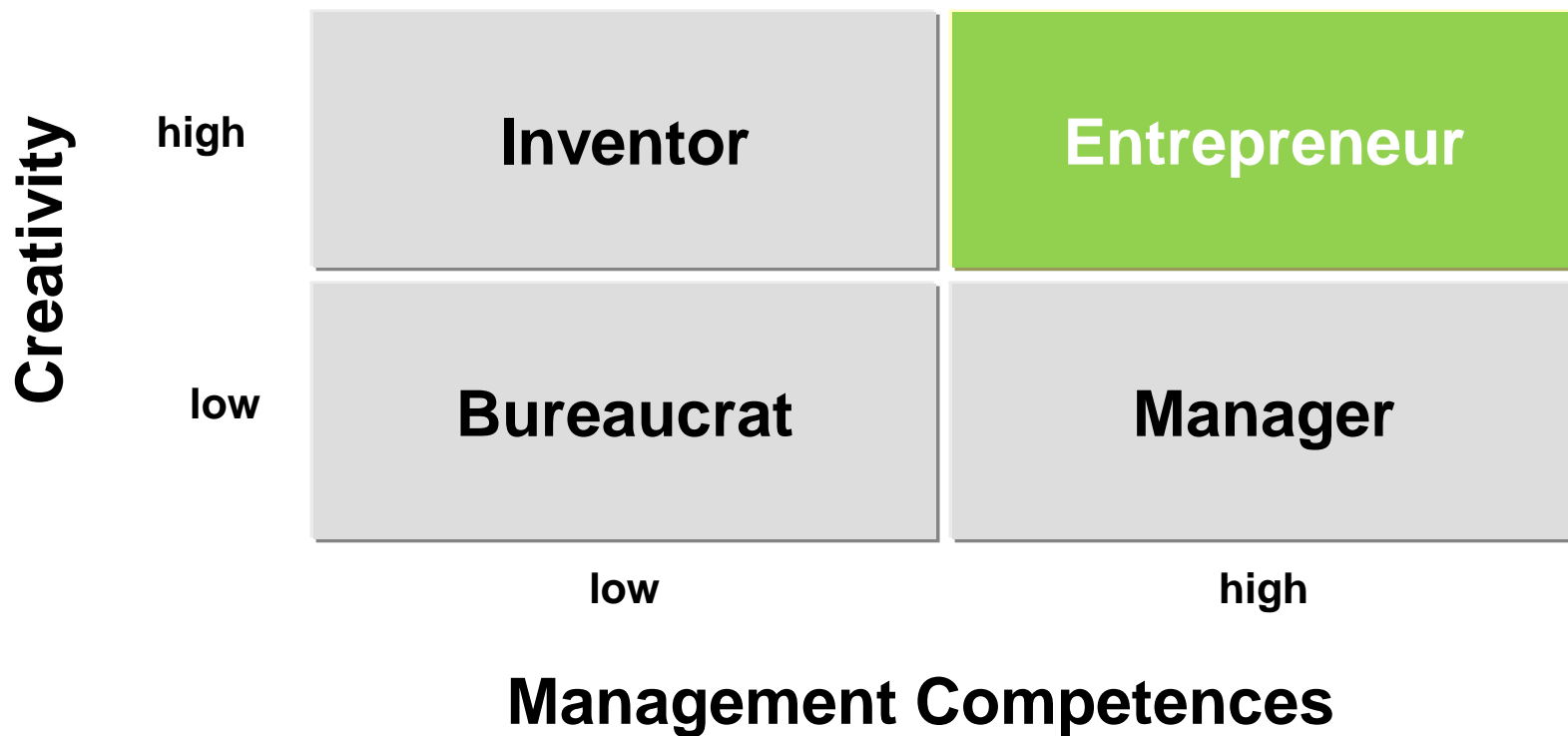
Success Factor: Intellectual Property Management – Protection of Products with Intellectual Property Rights

- ▶ Patents in GER, KOR, USA and Utility Patent in GER
- ▶ Filing of Intellectual Property Rights in GER and KOR even before the official foundation of the company
- ▶ „Fanorakel“ as a strong brand
- ▶ „Oliver Kahn“ as a strong brand
- ▶ Various „nano-“trademarks
- ▶ Broad mix of top- & 2nd-level Domains
- ▶ Close cooperation with a patent attorney
- ▶ Important: Trademarks and patents serve as “reputation builders”
- ▶ Problems: Inventing around and lack of patentability

6. Success factors and primary factors of failure of innovative start-ups: Personal experiences

Success Factors: The Start-up Team!

*The ideal Entrepreneur combines
(technical) Creativity and Management Competencies*



6. Success factors and primary factors of failure of innovative start-ups: Personal experiences

Primary Factors of Failure: The Team!

- ▶ „Management by Friends“ is supportive in the beginning
- ▶ Informal organizational structure creates flexibility...
- ▶ ...but prevents formal control and reporting systems....
- ▶ ...leads to abuse of company property and money...
- ▶ ...and leads to the dismissal of a team member



6. Success factors and primary factors of failure of innovative start-ups: Personal experiences

Success Factor: Participation in Pitching Events and Business Plan Competitions

Triple Winner of
Business Plan
Competition

Best Product of the
Year 2004
„Fraunhofer Institut“
IAO Impulse Magazin

LG CNS
Technology
Evaluation

Finalist (5. Platz)
im Business Plan
Wettbewerb BW-con
CyberOne 2005!



**Have Fun and Success in
Running Your Own Start-up!**

Revisited – The Innovation Challenge: Start-ups with Innovative Ideas

How many start-ups are innovators?

Source: KfW Gründungsmonitor

