

Capacity building as a route to export market expansion

A six-country experiment in the Western Balkans

Ana Paula Cusolito Ornella Darova David McKenzie

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Motivation

- Context
 - SMEs are the backbone of the Western Balkans (WBs) economy.
 - Firms in the Balkans have the capacity to grow in innovative entrepreneurship.
 - HK is high, labor costs are low, and firms have geographical proximity to Europe.
- Problem
 - Domestic demand is limited, making business propositions unattractive to VC investors (Cusolito et al., 2021). Covid-19 exacerbated this concern.
 - Expanding market size by exporting to larger and richer countries offers a potential solution (Frankel and Romer, 1999; Goldberg and Reed, 2021).
 - Exporting involves overcoming substantial search frictions (Arkolakis, 2008; Anderson and van Wincoop, 2004; Allen, 2014).
 - Firms lack the knowledge, skills, and confidence to try to do so.

What do we do?

- Design a capacity-building program (six-country RCT) to help innovative firms improve:
 - digital presence, enlarge their customer base, and export more
- Online training
 - 225 firms randomly assigned to treatment and control group
 - Treatment: 30 hours of group training and 5 hours of one-on-one coaching (\$3,350 per firm)
 - Control: 4 hours of light-touch training (\$690 per firm)
- Competition
 - Submission of a pitch deck and traction sheet scored by 3 judges
 - Top 20 proposals submitted a video pitch
 - Top 11 were selected for pitching live to a jury of VC investors
 - Top 3 won an Entrepreneurial Excellence Award and additional coaching

▶ Event

- Export promotion agencies
 - Experimental: no impact of intensive or light-touch consulting services on the extensive margin (Iacovone et al., 2022; Breinlich et al., 2017; Kim et al., 2018). Exception Atkin et al., 2017.
 - Non-experimental: positive effects on the extensive margin but mixed effects on the intensive one (Srhoj et al., 2020).
- Digitization, search frictions and domestic market integration
 - Experimental: positive effect of mobile telephony and e-commerce platforms on internal market integration (Bergquist et al., 2022; Couture et al., 2021; and Jin and Sun, 2021).
 - Non-experimental: positive effect of joining an e-commerce platform on exports (Carballo et al., 2022).
- Training and consulting services for firm upgrading
 - (Non) Experimental: has little focus on exports (Verhoogen 2022 and McKenzie et al., 2021).

Firms in the sample

- 36% of firms in the ICT sector.
- 72% of firms were involved in B2B transactions.
- 71% of the firms were exporting at the time of application.
- 75% had a Facebook page but only 25% used SEO tools.

- Examples of firms

- Mobile and web applications
- E-commerce support
- Cloud services
- Digital marketing tools and support
- Virtual and augmented reality, 3D printing
- Organic processed food products
- Legal consulting



Program's features

- Customers and market expansion
 - Identify potential sales channels
 - Find partners in new markets
 - Segment foreign customer base
 - Focus on high-margin customers
- Online selling capabilities
 - Use SEO tools to drive traffic
 - Improve the business website
 - Leverage on digital touchpoints
 - Use data to track customer experiences and satisfaction
- Homework
 - Experiment with at least one new digital touchpoint
 - Request customer feedback and analyze it
 - Put in practice at least one SEO tip

- Judges scores from the pitch deck and traction sheet.
 - market traction (30%)
 - unique value proposition (20%)
 - market expansion (10%)
 - business model (10%)
 - team (10%)
 - technology (10%)
 - pitch deck effectiveness (10%)
- Endline survey 1 year after the program started.
- Google, Website and Facebook scores based on 40 features [▶ Click here to see the features](#)

- Is the SMEs-oriented program effective? Yes
 - Improved performance on Google and Facebook scores [▶ Table I](#) [▶ Table II](#)
 - Number of customers increased relative to the control mean [▶ Graph I](#)
 - Exports increased through the intensive margin [▶ Graph II](#) [▶ Graph III](#)

Conclusions

- Program's additionality
 - improve digital presence.
 - reduce search costs.
 - export more.
- Mechanisms
 - online marketing methods and social media.
 - tailored demand-oriented advice.
 - encouragement and external validation.
- Lessons
 - concentrate on a few specific actions (pivots).
 - target eligible firms to have a more homogeneous group of beneficiaries.
 - implement a mixed modality (online and offline) to minimize attrition.

Thank You

Table 1: Treatment Effects on Digital Presence, Business Practices and Judges' Scores

	(1) Google Score	(2) Web Score	(3) Facebook Score	(4) Business Practices	(5) Customer Personas	(6) Judges Scores
Treatment	0.071** (0.035)	-0.020 (0.023)	0.050** (0.022)	0.011 (0.026)	0.165** (0.077)	-0.007 (0.104)
Control Mean	0.563	0.531	0.431	0.440	0.541	2.891
Observations	225	225	224	157	153	136

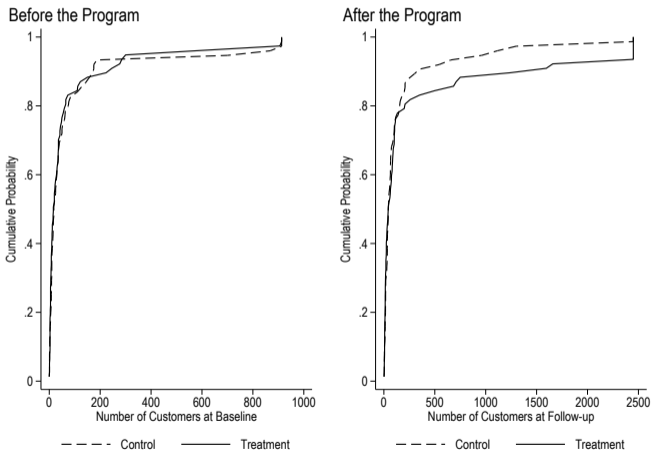
Table 2: Treatment effects on Firm Performance and Market Expansion Outcomes

	(1) Total Customers	(2) IHS Revenues	(3) IHS Exports	(4) Export at all (Extensive)	(5) Log Exports (Intensive)
Treatment	159** (77)	0.123 (0.379)	0.198 (0.643)	0.049 (0.071)	0.661** (0.296)
Control Mean	186.3	12.19	7.162	0.676	10.59
Observations	152	143	139	139	97

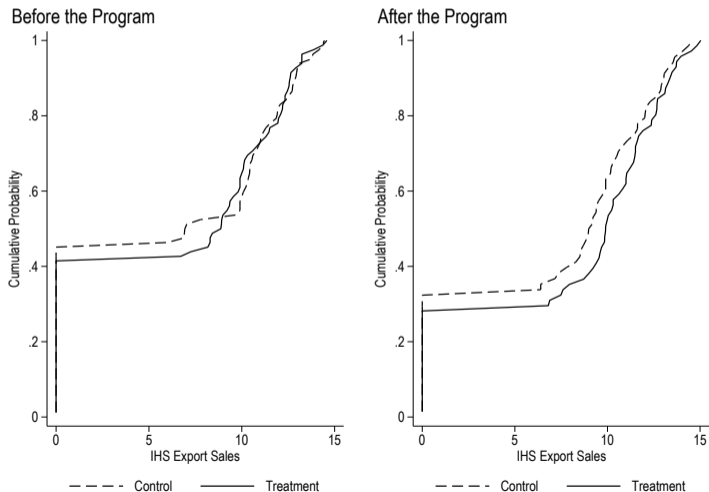
Table 3: Detailed Treatment Effects on Google and Facebook Scores

	Control Mean	Coefficient	Std. Error	P-value
Firm shows up in Google in the first page of search results	0.58	0.10**	0.05	0.04
(Inverse of) Rank at which firm shows up in the results	0.55	0.09**	0.04	0.04
Firm's website first on the page of results	0.58	0.10**	0.05	0.03
Google description in English	0.61	0.06	0.04	0.16
Google right menu shows a map/contact information	0.48	0.04	0.04	0.35
Clear google description	0.62	0.04	0.04	0.32
No modifier (doo/shpk) needed to find the firm on google	0.51	0.06	0.05	0.21
Google Score	0.56	0.07**	0.04	0.05
PCA Google Score	-0.25	0.48**	0.24	0.05
Facebook page found	0.87	0.06*	0.04	0.07
Facebook page specific to the business	0.87	0.06*	0.03	0.09
Posted in the past week	0.38	0.04	0.06	0.51
Clear description	0.72	0.10**	0.04	0.02
Clear value proposition	0.48	0.02	0.05	0.69
Easy to find contact	0.81	0.07*	0.04	0.06
Appealing photos	0.79	0.06	0.04	0.14
Customer reviews left in the past 3 months	0.04	0.02	0.03	0.51
Customer stories	0.26	0.06**	0.06	0.04
Stories highlighting progress in the last 3 month	0.29	-0.05	0.05	0.28
Special offers in the last 3 months	0.09	0.10***	0.04	0.01
English language version/English posts	0.34	0.15***	0.06	0.01
Serbo-Croatian language version/Serbo-Croatian posts	0.39	0.01	0.05	0.71
Albanian language version/Albanian posts	0.18	0.05	0.05	0.29
Online orders possible from Facebook shop	0.09	-0.01	0.04	0.82
Number of Facebook followers	3834	2195	1674	0.19
Facebook Score	0.43	0.05**	0.02	0.01
PCA Facebook Score	-0.18	0.58**	0.24	0.01
Observations	112	225	225	225

Impact on number of customers distribution



Impact on IHS transformation of export sales distribution



Impact on the intensive margin of exports over time

Impact of treatment on log export sales - Intensive Margin

95% and 90% confidence intervals

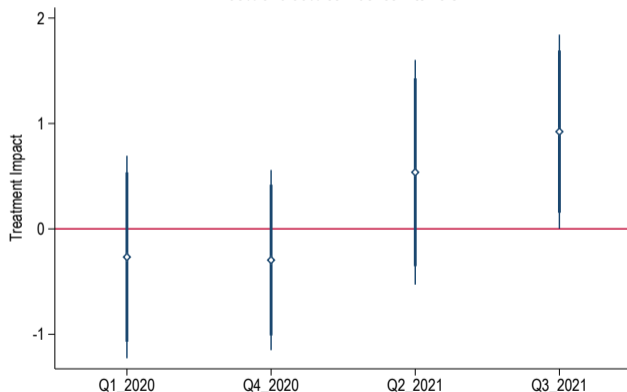


Table 4: Summary Statistics on Experimental Sample

	(1)			(2)		(3)	(4)	
	Mean	St. Dev.	Full sample 10th perc.	Median	90th perc.	Control Mean	Treatment Mean	P-value
Firm registered in Serbia	0.23	(0.42)	0.00	0.00	1.00	0.23	0.23	.
Firm registered in Bosnia and Herzegovina	0.31	(0.46)	0.00	0.00	1.00	0.32	0.30	0.13
Sector is ICT	0.36	(0.48)	0.00	0.00	1.00	0.36	0.35	0.97
Diagnostic score for business practices	2.01	(0.82)	1.00	2.00	3.00	2.02	2.01	1.00
Diagnostic score for investment readiness	0.61	(0.15)	0.40	0.62	0.80	0.61	0.61	0.50
English proficiency of 4 or 5 out of 5	0.86	(0.35)	0.00	1.00	1.00	0.86	0.87	0.80
Female (co-)founder(s)	0.28	(0.45)	0.00	0.00	1.00	0.30	0.26	0.70
Average age of (co-)founder(s)	43.13	(11.19)	31.50	41.00	59.50	42.78	43.46	0.81
At least one co-founder with master degree	0.47	(0.50)	0.00	0.00	1.00	0.40	0.55	0.06*
Has a digital product	0.19	(0.39)	0.00	0.00	1.00	0.21	0.18	0.62
Age of firm in 2020	9.54	(9.34)	1.49	6.04	24.80	8.81	10.26	0.32
Sector is Manufacturing	0.24	(0.43)	0.00	0.00	1.00	0.24	0.23	0.81
Sector is Professional Services	0.14	(0.35)	0.00	0.00	1.00	0.13	0.14	0.74
Firm is B2B	0.72	(0.45)	0.00	1.00	1.00	0.70	0.73	0.53
Total number of employees	17.58	(21.39)	3.00	8.00	48.00	17.05	18.10	0.71
2 to 5 Full-time employees	0.40	(0.49)	0.00	0.00	1.00	0.42	0.39	0.73
6 to 10 Full-time employees	0.16	(0.37)	0.00	0.00	1.00	0.13	0.19	0.28
Outside investor (non-family & friends)	0.08	(0.28)	0.00	0.00	0.00	0.10	0.07	0.43
Interested in outside investment	0.84	(0.36)	0.00	1.00	1.00	0.86	0.83	0.52
Have used consulting before	0.47	(0.50)	0.00	0.00	1.00	0.46	0.48	0.85
Company has a Facebook page	0.75	(0.43)	0.00	1.00	1.00	0.78	0.72	0.35
Uses Search Engine Optimization (SEO)	0.25	(0.44)	0.00	0.00	1.00	0.29	0.22	0.27
Has updated comprehensive business plan	0.55	(0.50)	0.00	1.00	1.00	0.51	0.59	0.23
Uses KPIs to track marketing	0.27	(0.44)	0.00	0.00	1.00	0.29	0.25	0.59
Adapts products to export markets	0.62	(0.49)	0.00	1.00	1.00	0.59	0.65	0.39
Firm derives revenue from exports	0.71	(0.45)	0.00	1.00	1.00	0.73	0.69	0.57
Has sales in Europe	0.46	(0.50)	0.00	0.00	1.00	0.46	0.47	0.79
Profit in 2019	83964	(251321)	-873.20	15000	298261	84997	82941	0.95
Profit in first 9 months of 2020	101334	(370978)	-15031	14100	338827	126284	76615	0.32
Customers in Jan 2020	878	(8637)	1.00	12.00	166	1205	553	0.59
Revenue in 2019 below 25,000 Euros	0.16	(0.37)	0.00	0.00	1.00	0.16	0.16	0.98
Revenue in 2019 25,000 - 100,000 Euros	0.28	(0.45)	0.00	0.00	1.00	0.33	0.24	0.16
Revenue in 2019 100,000 - 250,000 Euros	0.13	(0.34)	0.00	0.00	1.00	0.12	0.15	0.45
Observations	225					112	113	< 225

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Features I

● Google:

- Does the firm show up in Google in the first page of search results?
- (Inverse of) Rank at which firm shows up in the results
- Is the firm's website first on the page of results?
- Is the Google description in English?
- Does the Google right menu shows a map/contact information for the firm?
- Is what the company does clear from the text under the Google result?
- Is a modifier (doo/shpk) needed to find the firm on Google?

● Website:

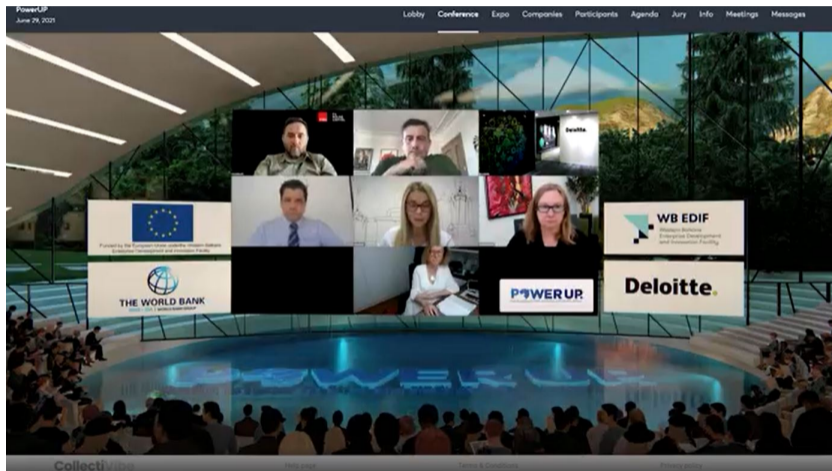
- Was the firm's website found and functioning?
- (Inverse of) Number of seconds taken to load website
- Does the website load quickly?
- Is the main page free of any noticeable typographical errors?
- Does the website include any customer stories?
- Does the website include a blog updated or added in the last 3 months?
- Does the website include any videos demonstrating the product or service?
- Are any photos and images provided high quality and professional looking?
- Does the website include any testimonials/recommendations from customers?
- Is it clear from the main landing page what the company does?
- Does the main landing page include a clear call for action?
- Does the website highlight key differentiating features with respect to competitors?
- How visually appealing is the website of the company? (1 to 5 over max)
- Is it easy to quickly find how to contact the company?
- Does the website enable customers to purchase the products directly online?
- Is an English language version of the website available?
- Is a Serbo-Croatian language version of the website available?
- Is an Albanian language version of the website available?
- Is the website optimized for the mobile format?

Features II

Facebook:

- Facebook page found
- Is the Facebook page specific to the business?
- Has the business posted in the past week?
- Is it clear from the main landing page what the company does?
- Does the page provide a clear value proposition?
- Is it easy to quickly find how to contact the company?
- Are attractive and appealing photos used?
- Have customer reviews been left in the past 3 months?
- Does the Facebook page include any customer stories?
- Do stories in the last 3 months highlight progress made?
- Do any of the posts in the past 3 months advertise special offers?
- Number of Facebook followers
- Is an English language version/English posts available?
- Is a Serbo-Croatian language version/Serbo-Croatian posts available?
- Is an Albanian language version/Albanian posts available?
- Are online orders possible from the Facebook shop?
- How much time does it take to get an answer (in hours)?

Finals event



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