

Top-down vs bottom-up approaches to remote
business training:
Populated Pre-analysis Plan

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August 4, 2023

Appendix

A Analyses using PAP specification and PAP outcomes

Table A.1: PAP Primary outcomes using PAP specification at 2 months

Dependent Variable	N (1)	Control Mean (2)	ITT			P-value TD = BU (6)
			Combined Treatment (3)	Top Down (4)	Bottom Up (5)	
Panel A: Primary outcomes						
Index of marketing practices	1,592	0.487	0.016 [0.015]	0.004 [0.017]	0.030 [0.016]*	0.088
Index of accounting practices	1,592	0.541	0.069 [0.016]***	0.067 [0.018]***	0.072 [0.018]***	0.755
Index of planning practices	1,592	0.417	0.118 [0.020]***	0.114 [0.023]***	0.122 [0.023]***	0.694
Index of business practices	1,592	0.502	0.055 [0.014]***	0.049 [0.016]***	0.061 [0.015]***	0.389
Index of personal initiative	1,592	4.355	0.037 [0.035]	0.068 [0.038]*	0.004 [0.042]	0.087
Index of new activities						
Index of digitization						
Standardized index of firm performance	1,591	-0.019	0.028 [0.053]	-0.011 [0.061]	0.071 [0.061]	0.170
Panel B: Secondary outcomes						
Business is open	1,592	0.900	0.019 [0.016]	0.001 [0.019]	0.040 [0.018]**	0.020
Any sales online	1,592	0.640	0.020 [0.024]	0.019 [0.027]	0.020 [0.028]	0.988
Percent sales online	1,592	39.414	2.069 [1.926]	2.013 [2.191]	2.131 [2.230]	0.957
In contact with other participants	1,592	0.059	0.147 [0.017]***	0.140 [0.021]***	0.154 [0.021]***	0.560
Panel C: Alternative measures of firm performance						
Sales in past month	1,591	17,023.173	4,144.252 [1,538.818]***	3,346.337 [1,759.252]*	5,007.845 [1,894.397]***	0.398
Profits in past month	1,591	6,309.141	726.485 [552.404]	287.623 [620.517]	1,204.380 [662.297]*	0.160
Perc. change in sales	1,591	3.847	0.675 [0.277]**	0.507 [0.316]	0.858 [0.330]***	0.290
Perc. change in profits	1,591	5.812	0.591 [0.524]	0.087 [0.582]	1.137 [0.621]*	0.076

Notes: Regressions control for randomization strata, baseline value of outcome where available, and additional controls selected by pdslaso. Robust standard errors in parentheses. *, **, and *** denote significance at the 10, 5, and 1 percent levels respectively.

Table A.2: PAP Primary outcomes using PAP specification at 6 months

Dependent Variable	N (1)	Control Mean (2)	ITT			P-value TD = BU (6)
			Combined Treatment (3)	Top Down (4)	Bottom Up (5)	
Panel A: Primary outcomes						
Index of marketing practices	1,613	0.503	-0.006 [0.015]	-0.006 [0.017]	-0.005 [0.017]	0.944
Index of accounting practices	1,613	0.590	0.020 [0.017]	0.020 [0.019]	0.019 [0.020]	0.965
Index of planning practices	1,613	0.518	0.007 [0.021]	0.009 [0.024]	0.004 [0.024]	0.846
Index of business practices	1,613	0.545	0.007 [0.015]	0.007 [0.017]	0.007 [0.017]	0.988
Index of new activities	1,587	0.598	0.004 [0.017]	0.009 [0.020]	-0.003 [0.020]	0.540
Index of digitization	1,613	0.548	0.000 [0.013]	0.008 [0.015]	-0.008 [0.016]	0.305
IHS sales in past month	1,607	8.379	-0.368 [0.183]**	-0.287 [0.206]	-0.456 [0.217]**	0.428
IHS profits in past month	1,607	6.990	-0.152 [0.211]	-0.091 [0.236]	-0.220 [0.247]	0.585
IHS total earnings in past month	1,427	8.154	0.014 [0.178]	0.037 [0.196]	-0.012 [0.208]	0.795
Standardized index of firm performance	1,607	0.046	-0.060 [0.053]	-0.039 [0.059]	-0.082 [0.063]	0.474
Panel B: Secondary outcomes						
Business is open	1,613	0.904	-0.019 [0.017]	-0.018 [0.019]	-0.021 [0.020]	0.871
Any sales online	1,613	0.664	-0.009 [0.024]	0.008 [0.028]	-0.028 [0.029]	0.194
Percent sales online	1,066	54.744	4.015 [2.274]*	3.059 [2.576]	5.169 [2.609]**	0.398
In contact with other participants	1,613	0.051	0.046 [0.014]***	0.029 [0.016]*	0.065 [0.018]***	0.063
Index of business practices (6m included)	1,613	0.522	0.016 [0.014]	0.018 [0.016]	0.013 [0.017]	0.717
Panel C: Alternative measures of firm performance						
Sales in past month	1,607	15,365.338	-1,203.327 [1,329.567]	-538.952 [1,516.857]	-1,935.675 [1,522.433]	0.344
Profits in past month	1,607	4,896.131	-440.843 [365.546]	-553.998 [406.284]	-316.005 [439.774]	0.575
Perc. change in sales	1,607	2.701	-0.121 [0.186]	-0.031 [0.212]	-0.222 [0.209]	0.339
Perc. change in profits	1,607	4.074	-0.251 [0.321]	-0.464 [0.363]	-0.017 [0.372]	0.209

Notes: Regressions control for randomization strata, baseline value of outcome where available, and additional controls selected by pdslasso. Robust standard errors in parentheses. *, **, and *** denote significance at the 10, 5, and 1 percent levels respectively.

Table A.3: PAP Primary outcomes using PAP specification pooling 2 and 6 months

Dependent Variable	N (1)	Control Mean (2)	ITT			P-value TD = BU (6)
			Combined Treatment (3)	Top Down (4)	Bottom Up (5)	
Panel A: Primary outcomes						
Index of marketing practices	3,205	0.495	0.005 [0.011]	-0.001 [0.013]	0.012 [0.013]	0.264
Index of accounting practices	3,205	0.566	0.044 [0.013]***	0.042 [0.015]***	0.045 [0.015]***	0.871
Index of planning practices	3,205	0.469	0.062 [0.016]***	0.060 [0.018]***	0.063 [0.018]***	0.874
Index of business practices	3,205	0.524	0.030 [0.011]***	0.027 [0.013]**	0.033 [0.013]***	0.603
Index of personal initiative	1,592	4.355	0.037 [0.033]	0.068 [0.036]*	0.004 [0.040]	0.072
Index of new activities	1,587	0.598	0.004 [0.016]	0.009 [0.019]	-0.003 [0.019]	0.520
Index of digitization	1,613	0.548	0.000 [0.013]	0.008 [0.014]	-0.008 [0.015]	0.280
Standardized index of firm performance	3,198	0.014	-0.017 [0.041]	-0.027 [0.046]	-0.007 [0.047]	0.662
Panel B: Secondary outcomes						
Business is open	3,205	0.902	-0.001 [0.013]	-0.009 [0.015]	0.009 [0.015]	0.182
Any sales online	3,205	0.652	0.005 [0.018]	0.013 [0.021]	-0.004 [0.021]	0.380
Percent sales online	2,658	45.741	2.812 [1.492]*	2.592 [1.699]	3.062 [1.748]*	0.785
In contact with other participants	3,205	0.055	0.095 [0.011]***	0.084 [0.013]***	0.108 [0.015]***	0.131
Panel C: Alternative measures of firm performance						
Sales in past month	3,198	16,171.521	1,441.871 [1,159.537]	1,395.699 [1,348.576]	1,492.278 [1,355.450]	0.945
Profits in past month	3,198	5,583.259	59.736 [353.773]	-170.118 [399.267]	313.297 [418.656]	0.238
Perc. change in sales	3,198	3.258	0.287 [0.185]	0.255 [0.213]	0.322 [0.215]	0.756
Perc. change in profits	3,198	4.919	0.161 [0.343]	-0.198 [0.385]	0.554 [0.403]	0.053

Notes: Regressions control for randomization strata, baseline value of outcome where available, and additional controls selected by pdslasso. Robust standard errors in parentheses. *, **, and *** denote significance at the 10, 5, and 1 percent levels respectively.

B Analyses similar to those in Main paper

Table B.1: PAP Primary outcomes using Main Paper specification

Dependent Variable	2-month Endline			6-month Endline			Diff.
	N (1)	Control Mean (2)	ITT (3)	N (4)	Control Mean (5)	ITT (6)	
Panel A: Primary outcomes							
Index of marketing practices	1,592	0.487	0.016 [0.014]	1,613	0.503	-0.006 [0.014]	-0.022 [0.016]
Index of accounting practices	1,592	0.541	0.069 [0.015]***	1,613	0.590	0.019 [0.016]	-0.050 [0.017]***
Index of planning practices	1,592	0.417	0.117 [0.019]***	1,613	0.518	0.009 [0.020]	-0.109 [0.023]***
Index of business practices	1,592	0.502	0.054 [0.013]***	1,613	0.545	0.007 [0.014]	-0.047 [0.015]***
Index of personal initiative	1,592	4.355	0.027 [0.035]				
Index of new activities	1,587				0.598	0.004 [0.017]	
Index of digitization	1,613				0.548	0.000 [0.013]	
Standardized index of firm performance	1,591	-0.019	0.027 [0.050]	1,607	0.046	-0.060 [0.050]	-0.086 [0.060]
Panel B: Secondary outcomes							
Business is open	1,592	0.900	0.019 [0.015]	1,613	0.904	-0.019 [0.016]	-0.039 [0.018]**
Any sales online	1,592	0.640	0.019 [0.023]	1,613	0.664	-0.010 [0.023]	-0.029 [0.028]
Percent sales online	1,592	39.414	1.786 [1.825]	1,066	54.744	4.141 [2.101]**	2.355 [2.533]
In contact with other participants	1,592	0.059	0.147 [0.016]***	1,613	0.051	0.046 [0.013]***	-0.101 [0.019]***
Panel C: Alternative measures of firm performance							
Sales in past month	1,591	17,023.173	4,112.501 [1,461.377]***	1,607	15,365.338	-1,135.713 [1,262.873]	-5,248.214 [1,439.234]***
Profits in past month	1,591	6,309.141	648.075 [506.341]	1,607	4,896.131	-511.611 [348.119]	-1,159.686 [501.810]**
Perc. change in sales	1,591	3.847	0.689 [0.263]***	1,607	2.701	-0.100 [0.176]	-0.789 [0.250]***
Perc. change in profits	1,591	5.812	0.591 [0.498]	1,607	4.074	-0.251 [0.306]	-0.842 [0.455]*

Notes: Regressions control for randomization strata, baseline value of outcome where available, and additional controls selected by pdslasso. Robust standard errors in parentheses. *, **, and *** denote significance at the 10, 5, and 1 percent levels respectively.