The Impact of National Culture in Operations and Supply Chain Agility

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Abstract

1 Preliminary Observations

1.1 Correlation Coefficients

Table 1: Correlation Coefficients: GLOBE Value Dimensions

	guaiv	gfuov	gpdiv	ginscolv	ghumv	gperv	gigrcolv	ggndv	gassv
guaiv	1	0.506	0.402	0.273	-0.275	0.055	0.206	-0.653	0.412
gfuov	0.506	1	-0.142	0.355	-0.015	0.370	0.443	-0.155	0.224
gpdiv	0.402	-0.142	1	-0.093	-0.346	-0.313	-0.063	-0.500	0.437
ginscolv	0.273	0.355	-0.093	1	-0.264	0.292	-0.078	-0.064	-0.085
ghumv	-0.275	-0.015	-0.346	-0.264	1	0.024	0.336	0.084	-0.214
gperv	0.055	0.370	-0.313	0.292	0.024	1	0.431	0.294	0.013
gigrcolv	0.206	0.443	-0.063	-0.078	0.336	0.431	1	0.278	-0.025
ggndv	-0.653	-0.155	-0.500	-0.064	0.084	0.294	0.278	1	-0.386
gassv	0.412	0.224	0.437	-0.085	-0.214	0.013	-0.025	-0.386	1

Table 2: Correlation Coefficients: GLOBE Practice Dimensions

	guaip	gfuop	gpdip	ginscolp	ghump	gpefp	gigrcolp	ggndp	gassp
guaip	1	0.811	-0.651	0.430	0.220	0.576	-0.644	-0.298	-0.141
gfuop	0.811	1	-0.682	0.487	0.456	0.682	-0.588	-0.284	-0.083
gpdip	-0.651	-0.682	1	-0.513	-0.343	-0.393	0.756	-0.148	0.112
ginscolp	0.430	0.487	-0.513	1	0.701	0.192	-0.248	0.065	-0.748
ghump	0.220	0.456	-0.343	0.701	1	0.302	0.107	0.018	-0.610
gpefp	0.576	0.682	-0.393	0.192	0.302	1	-0.212	-0.603	0.225
gigrcolp	-0.644	-0.588	0.756	-0.248	0.107	-0.212	1	-0.154	-0.099
ggndp	-0.298	-0.284	-0.148	0.065	0.018	-0.603	-0.154	1	-0.168
gassp	-0.141	-0.083	0.112	-0.748	-0.610	0.225	-0.099	-0.168	1

Table 3: Correlation Coefficients: Key Variables

	agility	agility2	agilitycj	agility2cj	outcome	outcome2	outcomecj	outcome2cj
agility	1	0.763	0.933	0.692	0.450	0.365	0.428	0.300
agility2	0.763	1	0.649	0.867	0.384	0.442	0.315	0.325
agilitycj	0.933	0.649	1	0.743	0.431	0.309	0.463	0.327
agility2cj	0.692	0.867	0.743	1	0.346	0.348	0.371	0.377
outcome	0.450	0.384	0.431	0.346	1	0.448	0.923	0.414
outcome2	0.365	0.442	0.309	0.348	0.448	1	0.414	0.931
outcomecj	0.428	0.315	0.463	0.371	0.923	0.414	1	0.444
outcome2cj	0.300	0.325	0.327	0.377	0.414	0.931	0.444	1

Table 4: Correlation Coefficients: Key Variables (Set1)

	agility	outcome	sensing	proactive	flexOutcome	speedOutcome
agility	1	0.450	0.914	0.892	0.426	0.376
outcome	0.450	1	0.394	0.430	0.892	0.890
sensing	0.914	0.394	1	0.636	0.379	0.323
proactive	0.892	0.430	0.636	1	0.397	0.368
flexOutcome	0.426	0.892	0.379	0.397	1	0.588
speedOutcome	0.376	0.890	0.323	0.368	0.588	1

Table 5: Correlation Coefficients: Key Variables (Set2)

	agility2	outcome2	sensing2	proactive2	flexOutcome2	speedOutcome2
agility2	1	0.450	0.921	0.918	0.376	0.401
outcome2	0.450	1	0.388	0.439	0.865	0.862
sensing2	0.921	0.388	1	0.690	0.333	0.337
proactive2	0.918	0.439	0.690	1	0.358	0.400
flexOutcome2	0.376	0.865	0.333	0.358	1	0.490
speedOutcome2	0.401	0.862	0.337	0.400	0.490	1

2 Models

2.1 Models: Agility and National Culture

$$agility_{ij} = \beta_0 + \beta_1 \cdot network + \beta_2 \cdot firmsize + \beta_3 \cdot Culture + \varepsilon_{ij}$$

$$\beta_0 = \gamma_{00} + \gamma_{00} \cdot mfr2013 + u_{00}$$

$$\beta_1 = \gamma_{01} + \gamma_{01} \cdot Culture + u_{01}$$

brm.agility.model ¡- proactive2 mfr2013lnstd + network2xcj*firmsize.adj.cj*cul + (1 + network2xcj — countryx)

2.2 Models: Agility Effectiveness and National Culture

3 Results

3.1 Multilevel Models

3.1.1 Null Models

	Agility Practices	Sensing Practices	Proactive Practices	Agility Outcome	Flexible Outcome	Speed Outcome
b_Intercept	-0.03	-0.05	-0.01	0.02	0.01	-0.00
	$[-0.19; 0.13]$	$[-0.23; 0.13]$	$[-0.14; 0.11]$	$[-0.16; 0.20]$	$[-0.15; 0.17]$	$[-0.15; 0.15]$
sd_countryx__Intercept	0.33^*	0.37^*	0.23^*	0.36^*	0.33^*	0.31^*
	$[0.22; 0.49]$	$[0.24; 0.54]$	$[0.14; 0.36]$	$[0.24; 0.52]$	$[0.22; 0.48]$	$[0.20; 0.46]$
sigma	0.95^*	0.94^*	0.97^*	0.94^*	0.95^*	0.96^*
	$[0.90; 1.00]$	$[0.90; 0.98]$	$[0.93; 1.02]$	$[0.89; 0.98]$	$[0.91; 0.99]$	$[0.92; 1.01]$

* Null hypothesis value outside 95% credible interval.

Table 6: Null Models (Set 1)

	Agility Practices2	Sensing Practices2	Proactive Practices2	Agility Outcome2	Flexible Outcome2	Speed Outcome2
b_Intercept	-0.11	-0.10	-0.09	-0.08	-0.03	-0.11
	$[-0.31; 0.09]$	$[-0.32; 0.12]$	$[-0.27; 0.10]$	$[-0.24; 0.07]$	$[-0.14; 0.08]$	$[-0.28; 0.05]$
sd_countryx__Intercept	0.45^*	0.47^*	0.38^*	0.29^*	0.20^*	0.32^*
	$[0.31; 0.65]$	$[0.33; 0.68]$	$[0.26; 0.55]$	$[0.19; 0.43]$	$[0.12; 0.31]$	$[0.21; 0.48]$
sigma	0.88^*	0.89^*	0.91^*	0.95^*	0.98^*	0.94^*
	$[0.84; 0.93]$	$[0.85; 0.94]$	$[0.87; 0.95]$	$[0.90; 0.99]$	$[0.94; 1.03]$	$[0.90; 0.99]$

* Null hypothesis value outside 95% credible interval.

Table 7: Null Models (Set 2)

3.1.2 Agility Models

	UAI	FUO	PDI	InsCol	HUM	PER	IgrCol	GND	ASS
b_Intercept	−0.16*	−0.13	−0.14	−0.13	−0.09	−0.14	−0.14	−0.14	−0.13
	[−0.30; −0.01]	[−0.32; 0.07]	[−0.33; 0.06]	[−0.33; 0.07]	[−0.26; 0.08]	[−0.35; 0.07]	[−0.35; 0.08]	[−0.33; 0.04]	[−0.35; 0.07]
b_mfr2013.z	−0.09	−0.00	−0.10	−0.01	−0.08	−0.01	−0.01	−0.07	−0.03
	[−0.20; 0.04]	[−0.19; 0.18]	[−0.30; 0.10]	[−0.19; 0.17]	[−0.23; 0.06]	[−0.21; 0.19]	[−0.22; 0.19]	[−0.24; 0.10]	[−0.28; 0.22]
b_firmsize.adj.cj	0.19*	0.19*	0.19*	0.19*	0.19*	0.20*	0.19*	0.19*	0.20*
	[0.09; 0.28]	[0.09; 0.28]	[0.09; 0.28]	[0.10; 0.29]	[0.10; 0.29]	[0.10; 0.29]	[0.09; 0.29]	[0.09; 0.28]	[0.10; 0.29]
b_strategycj	0.17*	0.17*	0.16*	0.16*	0.17*	0.16*	0.17*	0.16*	0.16*
	[0.11; 0.23]	[0.11; 0.23]	[0.10; 0.23]	[0.10; 0.22]	[0.10; 0.23]	[0.10; 0.23]	[0.10; 0.23]	[0.10; 0.23]	[0.10; 0.23]
b_competitive1cj	0.25*	0.25*	0.24*	0.23*	0.24*	0.24*	0.25*	0.24*	0.25*
	[0.15; 0.34]	[0.16; 0.34]	[0.15; 0.34]	[0.15; 0.31]	[0.14; 0.33]	[0.14; 0.33]	[0.16; 0.34]	[0.15; 0.33]	[0.15; 0.35]
b_network4xcj	0.10*	0.09	0.08	0.08	0.09*	0.09	0.09	0.08	0.08
	[0.01; 0.20]	[−0.00; 0.18]	[−0.00; 0.18]	[−0.01; 0.17]	[0.00; 0.18]	[−0.01; 0.18]	[−0.01; 0.18]	[−0.01; 0.18]	[−0.00; 0.17]
b_cul	0.29*	0.07	0.19	0.07	−0.28*	0.03	0.04	−0.19	0.03
	[0.13; 0.46]	[−0.15; 0.28]	[−0.02; 0.41]	[−0.13; 0.26]	[−0.47; −0.08]	[−0.18; 0.26]	[−0.19; 0.26]	[−0.39; 0.01]	[−0.24; 0.30]
b_competitive1cj:cul	−0.00	0.01	0.02	−0.10*	0.05	−0.04	0.04	−0.02	−0.03
	[−0.10; 0.10]	[−0.09; 0.10]	[−0.06; 0.11]	[−0.18; −0.03]	[−0.06; 0.16]	[−0.13; 0.05]	[−0.05; 0.13]	[−0.10; 0.06]	[−0.12; 0.06]
b_network4xcj:cul	−0.02	−0.04	0.04	−0.04	−0.04	0.03	−0.01	−0.02	0.03
	[−0.13; 0.07]	[−0.13; 0.05]	[−0.04; 0.12]	[−0.12; 0.05]	[−0.13; 0.06]	[−0.06; 0.11]	[−0.11; 0.09]	[−0.10; 0.07]	[−0.05; 0.11]
b_competitive1cj:network4xcj:cul	0.04	−0.06*	0.08*	−0.09*	−0.02	−0.12*	−0.09*	−0.08*	0.07*
	[−0.02; 0.11]	[−0.12; −0.00]	[0.02; 0.14]	[−0.15; −0.03]	[−0.09; 0.05]	[−0.17; −0.07]	[−0.15; −0.03]	[−0.14; −0.03]	[0.02; 0.12]
sd_countryx__Intercept	0.28*	0.42*	0.38*	0.41*	0.32*	0.43*	0.42*	0.37*	0.43*
	[0.16; 0.45]	[0.27; 0.64]	[0.24; 0.58]	[0.26; 0.61]	[0.20; 0.51]	[0.28; 0.66]	[0.28; 0.65]	[0.24; 0.57]	[0.28; 0.65]
sd_countryx__network4xcj	0.15*	0.14*	0.13*	0.13*	0.13*	0.14*	0.14*	0.13*	0.12*
	[0.06; 0.25]	[0.05; 0.25]	[0.03; 0.25]	[0.05; 0.24]	[0.03; 0.24]	[0.05; 0.26]	[0.05; 0.26]	[0.04; 0.25]	[0.03; 0.23]
sd_countryx__competitive1cj	0.10*	0.10*	0.11*	0.06*	0.11*	0.10*	0.09*	0.09*	0.11*
	[0.01; 0.24]	[0.01; 0.24]	[0.01; 0.25]	[0.00; 0.17]	[0.01; 0.24]	[0.01; 0.23]	[0.00; 0.22]	[0.00; 0.23]	[0.01; 0.25]
sigma	0.74*	0.74*	0.74*	0.74*	0.75*	0.73*	0.74*	0.74*	0.74*
	[0.68; 0.80]	[0.67; 0.80]	[0.68; 0.80]	[0.68; 0.80]	[0.69; 0.80]	[0.67; 0.79]	[0.67; 0.80]	[0.68; 0.80]	[0.67; 0.80]

* Null hypothesis value outside 95% credible interval.

Table 8: Agility2 Models (T) - 4 Level Network

	UAI	FUO	PDI	InsCol	HUM	PER	IgrCol	GND	ASS
b_Intercept	−0.15*	−0.12	−0.13	−0.13	−0.09	−0.14	−0.13	−0.13	−0.13
	[−0.28; −0.02]	[−0.29; 0.05]	[−0.29; 0.03]	[−0.30; 0.04]	[−0.23; 0.06]	[−0.31; 0.04]	[−0.30; 0.05]	[−0.29; 0.02]	[−0.31; 0.05]
b_mfr2013.z	−0.08	−0.00	−0.09	−0.01	−0.08	−0.02	−0.01	−0.07	−0.02
	[−0.18; 0.02]	[−0.15; 0.15]	[−0.25; 0.06]	[−0.16; 0.13]	[−0.21; 0.05]	[−0.18; 0.15]	[−0.18; 0.16]	[−0.22; 0.07]	[−0.22; 0.18]
b_firmsize.adj.cj	0.20*	0.20*	0.20*	0.21*	0.21*	0.21*	0.21*	0.20*	0.21*
	[0.12; 0.28]	[0.12; 0.28]	[0.13; 0.28]	[0.13; 0.29]	[0.13; 0.28]	[0.13; 0.29]	[0.13; 0.28]	[0.12; 0.28]	[0.13; 0.29]
b_strategycj	0.17*	0.17*	0.16*	0.16*	0.17*	0.16*	0.17*	0.16*	0.16*
	[0.11; 0.22]	[0.11; 0.22]	[0.11; 0.22]	[0.11; 0.21]	[0.11; 0.22]	[0.11; 0.22]	[0.11; 0.22]	[0.11; 0.22]	[0.11; 0.22]
b_competitive1cj	0.25*	0.25*	0.24*	0.23*	0.24*	0.24*	0.25*	0.24*	0.25*
	[0.17; 0.33]	[0.18; 0.33]	[0.16; 0.32]	[0.16; 0.30]	[0.16; 0.32]	[0.16; 0.31]	[0.18; 0.32]	[0.17; 0.32]	[0.17; 0.33]
b_network2xcj	0.23*	0.19	0.18	0.16	0.19*	0.19	0.17	0.18	0.17
	[0.03; 0.44]	[−0.00; 0.39]	[−0.01; 0.37]	[−0.03; 0.36]	[0.01; 0.38]	[−0.01; 0.38]	[−0.03; 0.37]	[−0.02; 0.37]	[−0.01; 0.36]
b_cul	0.28*	0.07	0.19*	0.06	−0.28*	0.03	0.03	−0.18*	0.02
	[0.15; 0.42]	[−0.11; 0.24]	[0.02; 0.37]	[−0.10; 0.23]	[−0.44; −0.12]	[−0.15; 0.22]	[−0.17; 0.22]	[−0.34; −0.02]	[−0.20; 0.25]
b_competitive1cj:cul	−0.00	0.01	0.02	−0.10*	0.04	−0.04	0.03	−0.03	−0.02
	[−0.08; 0.08]	[−0.07; 0.08]	[−0.05; 0.10]	[−0.16; −0.03]	[−0.04; 0.13]	[−0.11; 0.03]	[−0.04; 0.11]	[−0.09; 0.04]	[−0.10; 0.05]
b_network2xcj:cul	−0.05	−0.08	0.11	−0.13	−0.10	0.06	0.00	−0.04	0.09
	[−0.27; 0.16]	[−0.27; 0.10]	[−0.05; 0.28]	[−0.31; 0.04]	[−0.29; 0.10]	[−0.11; 0.24]	[−0.20; 0.22]	[−0.21; 0.15]	[−0.08; 0.26]
b_competitive1cj:cul:network4xcj	0.05	−0.07*	0.08*	−0.09*	−0.02	−0.12*	−0.09*	−0.08*	0.07*
	[−0.01; 0.10]	[−0.12; −0.02]	[0.03; 0.13]	[−0.14; −0.05]	[−0.08; 0.04]	[−0.16; −0.08]	[−0.15; −0.04]	[−0.13; −0.04]	[0.03; 0.11]
sd_countryx__Intercept	0.29*	0.42*	0.38*	0.41*	0.33*	0.44*	0.43*	0.38*	0.43*
	[0.18; 0.42]	[0.29; 0.59]	[0.26; 0.54]	[0.28; 0.58]	[0.22; 0.46]	[0.30; 0.61]	[0.30; 0.60]	[0.25; 0.53]	[0.30; 0.60]
sd_countryx__network2xcj	0.36*	0.34*	0.32*	0.33*	0.33*	0.34*	0.36*	0.33*	0.31*
	[0.17; 0.57]	[0.13; 0.57]	[0.11; 0.56]	[0.13; 0.56]	[0.11; 0.56]	[0.14; 0.57]	[0.15; 0.61]	[0.13; 0.57]	[0.11; 0.54]
sd_countryx__competitive1cj	0.10*	0.10*	0.11*	0.06*	0.11*	0.10*	0.09*	0.09*	0.12*
	[0.01; 0.21]	[0.01; 0.21]	[0.01; 0.21]	[0.00; 0.15]	[0.02; 0.22]	[0.01; 0.20]	[0.01; 0.20]	[0.01; 0.20]	[0.02; 0.23]
cor_countryx__Intercept__network2xcj	0.67*	0.38	0.31	0.45	0.36	0.34	0.33	0.40	0.40
	[0.16; 0.96]	[−0.15; 0.81]	[−0.28; 0.80]	[−0.12; 0.88]	[−0.21; 0.84]	[−0.22; 0.81]	[−0.22; 0.79]	[−0.17; 0.85]	[−0.16; 0.84]
cor_countryx__Intercept__competitive1cj	0.33	0.18	0.24	0.20	0.44	0.13	0.18	0.16	0.23
	[−0.42; 0.88]	[−0.54; 0.80]	[−0.49; 0.82]	[−0.65; 0.86]	[−0.25; 0.90]	[−0.60; 0.79]	[−0.58; 0.83]	[−0.59; 0.81]	[−0.49; 0.82]
cor_countryx__network2xcj__competitive1cj	0.29	0.28	0.27	0.11	0.37	0.28	0.29	0.23	0.39
	[−0.48; 0.88]	[−0.55; 0.89]	[−0.56; 0.88]	[−0.71; 0.83]	[−0.41; 0.91]	[−0.53; 0.88]	[−0.51; 0.89]	[−0.59; 0.86]	[−0.40; 0.91]
sigma	0.74*	0.74*	0.74*	0.74*	0.75*	0.73*	0.73*	0.74*	0.74*
	[0.69; 0.80]	[0.68; 0.79]	[0.69; 0.79]	[0.69; 0.79]	[0.69; 0.80]	[0.68; 0.78]	[0.68; 0.79]	[0.69; 0.79]	[0.68; 0.79]

* Null hypothesis value outside 90% credible interval.

Table 9: Agility2 Models (T) alpha = .10 - Cross Interaction

3.1.3 Outcome Models

	UAI	FUO	PDI	InsCol	HUM	PER	IgrCol	GND	ASS
b_Intercept	−0.10	−0.09	−0.09	−0.09	−0.08	−0.09	−0.08	−0.09	−0.09
	[−0.22; 0.03]	[−0.22; 0.03]	[−0.22; 0.04]	[−0.23; 0.05]	[−0.21; 0.04]	[−0.22; 0.05]	[−0.21; 0.04]	[−0.22; 0.04]	[−0.19; 0.03]
b_mfr2013.z	−0.04	−0.05	−0.05	−0.03	−0.06	−0.03	−0.07	−0.04	0.08
	[−0.15; 0.07]	[−0.16; 0.05]	[−0.18; 0.09]	[−0.14; 0.09]	[−0.17; 0.06]	[−0.15; 0.08]	[−0.19; 0.06]	[−0.16; 0.07]	[−0.04; 0.19]
b_firmsize.adj.cj	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.01	0.01
	[−0.10; 0.12]	[−0.10; 0.13]	[−0.10; 0.12]	[−0.09; 0.13]	[−0.09; 0.13]	[−0.11; 0.12]	[−0.10; 0.13]	[−0.11; 0.12]	[−0.10; 0.12]
b_strategycj	0.18*	0.17*	0.17*	0.17*	0.17*	0.17*	0.17*	0.18*	0.17*
	[0.10; 0.25]	[0.09; 0.25]	[0.10; 0.24]	[0.10; 0.25]	[0.10; 0.25]	[0.09; 0.25]	[0.10; 0.25]	[0.10; 0.25]	[0.09; 0.24]
b_network4xcj	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.02
	[−0.06; 0.09]	[−0.06; 0.09]	[−0.05; 0.10]	[−0.06; 0.08]	[−0.06; 0.08]	[−0.06; 0.09]	[−0.06; 0.09]	[−0.06; 0.08]	[−0.06; 0.09]
b_agility2cj	0.28*	0.29*	0.28*	0.25*	0.30*	0.28*	0.29*	0.28*	0.27*
	[0.13; 0.42]	[0.14; 0.43]	[0.13; 0.42]	[0.13; 0.36]	[0.15; 0.45]	[0.15; 0.42]	[0.13; 0.44]	[0.13; 0.42]	[0.11; 0.43]
b_cul	0.03	−0.10	0.02	0.05	−0.09	−0.01	−0.09	−0.01	−0.19*
	[−0.12; 0.16]	[−0.22; 0.03]	[−0.14; 0.17]	[−0.09; 0.17]	[−0.23; 0.07]	[−0.15; 0.13]	[−0.23; 0.05]	[−0.14; 0.13]	[−0.33; −0.06]
b_network4xcj:agility2cj	0.02	0.03	0.02	−0.00	0.04	0.01	0.02	0.01	0.01
	[−0.06; 0.09]	[−0.04; 0.10]	[−0.05; 0.09]	[−0.08; 0.07]	[−0.03; 0.11]	[−0.07; 0.08]	[−0.05; 0.10]	[−0.07; 0.08]	[−0.06; 0.09]
b_agility2cj:cul	0.09	0.02	0.04	−0.18*	−0.03	−0.09	0.03	−0.06	0.03
	[−0.07; 0.24]	[−0.12; 0.15]	[−0.10; 0.19]	[−0.29; −0.07]	[−0.20; 0.15]	[−0.22; 0.04]	[−0.13; 0.19]	[−0.19; 0.08]	[−0.11; 0.18]
b_network4xcj:cul	−0.06	0.01	−0.05	−0.03	0.09*	−0.01	0.00	0.02	−0.03
	[−0.13; 0.02]	[−0.06; 0.08]	[−0.12; 0.01]	[−0.09; 0.04]	[0.01; 0.17]	[−0.07; 0.06]	[−0.07; 0.08]	[−0.06; 0.09]	[−0.10; 0.03]
b_network4xcj:agility2cj:cul	0.09*	−0.01	0.05	−0.10*	−0.05	−0.07*	−0.03	−0.09*	0.06*
	[0.01; 0.17]	[−0.09; 0.06]	[−0.02; 0.12]	[−0.18; −0.03]	[−0.14; 0.03]	[−0.13; −0.01]	[−0.11; 0.05]	[−0.15; −0.02]	[0.00; 0.12]
sd_countryx__Intercept	0.20*	0.19*	0.22*	0.22*	0.21*	0.23*	0.21*	0.21*	0.15*
	[0.08; 0.35]	[0.08; 0.33]	[0.11; 0.37]	[0.11; 0.37]	[0.10; 0.35]	[0.11; 0.37]	[0.10; 0.35]	[0.09; 0.36]	[0.02; 0.29]
sd_countryx__network4xcj	0.05*	0.05*	0.05*	0.04*	0.04*	0.05*	0.05*	0.05*	0.05*
	[0.00; 0.14]	[0.00; 0.14]	[0.00; 0.14]	[0.00; 0.13]	[0.00; 0.12]	[0.00; 0.14]	[0.00; 0.15]	[0.00; 0.14]	[0.00; 0.15]
sd_countryx__agility2cj	0.18*	0.20*	0.21*	0.11*	0.21*	0.17*	0.22*	0.20*	0.23*
	[0.03; 0.36]	[0.05; 0.38]	[0.06; 0.40]	[0.01; 0.27]	[0.06; 0.39]	[0.02; 0.35]	[0.06; 0.40]	[0.03; 0.39]	[0.10; 0.41]
cor_countryx__Intercept__network4xcj	−0.01	−0.01	−0.02	0.08	0.08	−0.04	−0.07	−0.07	−0.03
	[−0.86; 0.85]	[−0.86; 0.84]	[−0.86; 0.85]	[−0.83; 0.89]	[−0.82; 0.89]	[−0.86; 0.84]	[−0.87; 0.81]	[−0.88; 0.82]	[−0.86; 0.83]
cor_countryx__Intercept__agility2cj	0.09	0.24	0.15	0.22	0.16	0.14	0.18	0.10	0.19
	[−0.68; 0.78]	[−0.55; 0.85]	[−0.57; 0.80]	[−0.70; 0.90]	[−0.55; 0.79]	[−0.64; 0.82]	[−0.55; 0.79]	[−0.67; 0.79]	[−0.59; 0.86]
cor_countryx__network4xcj__agility2cj	0.14	0.14	0.17	0.05	0.15	0.08	0.15	0.11	0.20
	[−0.82; 0.92]	[−0.82; 0.91]	[−0.80; 0.92]	[−0.87; 0.90]	[−0.80; 0.92]	[−0.85; 0.90]	[−0.80; 0.91]	[−0.83; 0.91]	[−0.78; 0.93]
sigma	0.76*	0.76*	0.76*	0.77*	0.75*	0.77*	0.76*	0.76*	0.75*
	[0.68; 0.84]	[0.69; 0.84]	[0.68; 0.84]	[0.69; 0.85]	[0.67; 0.84]	[0.69; 0.85]	[0.68; 0.84]	[0.68; 0.84]	[0.67; 0.83]

* Null hypothesis value outside 95% credible interval.

Table 10: Outcome2 Models (T) - 4 Level Network

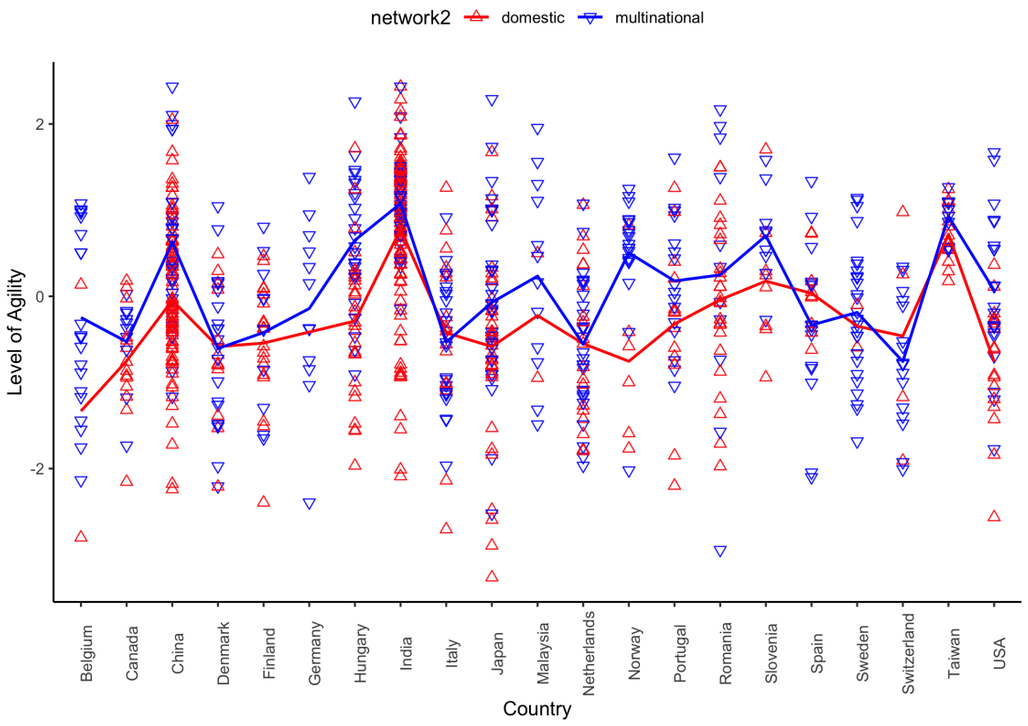
	UAI	FUO	PDI	InsCol	HUM	PER	IgrCol	GND	ASS
b_Intercept	−0.10	−0.09	−0.09	−0.09	−0.08	−0.09	−0.08	−0.09	−0.09
	[−0.20; 0.01]	[−0.20; 0.01]	[−0.20; 0.02]	[−0.20; 0.02]	[−0.19; 0.02]	[−0.20; 0.02]	[−0.19; 0.02]	[−0.19; 0.02]	[−0.18; 0.00]
b_mfr2013.z	−0.04	−0.05	−0.05	−0.03	−0.06	−0.03	−0.07	−0.04	0.08
	[−0.13; 0.05]	[−0.14; 0.03]	[−0.16; 0.06]	[−0.12; 0.07]	[−0.15; 0.03]	[−0.13; 0.06]	[−0.17; 0.03]	[−0.14; 0.05]	[−0.02; 0.17]
b_firmsize.adj.cj	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.01	0.01
	[−0.08; 0.11]	[−0.08; 0.11]	[−0.08; 0.10]	[−0.07; 0.11]	[−0.08; 0.11]	[−0.09; 0.11]	[−0.08; 0.11]	[−0.09; 0.10]	[−0.08; 0.11]
b_strategycj	0.18*	0.17*	0.17*	0.17*	0.17*	0.17*	0.17*	0.18*	0.17*
	[0.11; 0.24]	[0.11; 0.24]	[0.11; 0.23]	[0.11; 0.24]	[0.11; 0.24]	[0.11; 0.23]	[0.11; 0.24]	[0.12; 0.24]	[0.11; 0.23]
b_network4xcj	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.02
	[−0.04; 0.08]	[−0.05; 0.08]	[−0.04; 0.08]	[−0.05; 0.07]	[−0.05; 0.07]	[−0.05; 0.08]	[−0.05; 0.07]	[−0.05; 0.07]	[−0.04; 0.08]
b_agility2cj	0.28*	0.29*	0.28*	0.25*	0.30*	0.28*	0.29*	0.28*	0.27*
	[0.16; 0.40]	[0.16; 0.41]	[0.16; 0.40]	[0.15; 0.34]	[0.18; 0.42]	[0.17; 0.40]	[0.16; 0.41]	[0.16; 0.39]	[0.14; 0.40]
b_cul	0.03	−0.10	0.02	0.05	−0.09	−0.01	−0.09	−0.01	−0.19*
	[−0.09; 0.14]	[−0.20; 0.00]	[−0.11; 0.14]	[−0.07; 0.15]	[−0.21; 0.04]	[−0.12; 0.10]	[−0.21; 0.03]	[−0.12; 0.11]	[−0.31; −0.08]
b_network4xcj:agility2cj	0.02	0.03	0.02	−0.00	0.04	0.01	0.02	0.01	0.01
	[−0.04; 0.08]	[−0.03; 0.09]	[−0.04; 0.08]	[−0.06; 0.06]	[−0.02; 0.10]	[−0.05; 0.07]	[−0.04; 0.09]	[−0.06; 0.07]	[−0.05; 0.07]
b_agility2cj:cul	0.09	0.02	0.04	−0.18*	−0.03	−0.09	0.03	−0.06	0.03
	[−0.04; 0.21]	[−0.09; 0.13]	[−0.08; 0.17]	[−0.28; −0.09]	[−0.17; 0.12]	[−0.20; 0.02]	[−0.10; 0.16]	[−0.17; 0.05]	[−0.09; 0.15]
b_network4xcj:cul	−0.06	0.01	−0.05	−0.03	0.09*	−0.01	0.00	0.02	−0.03
	[−0.12; 0.01]	[−0.04; 0.07]	[−0.10; 0.00]	[−0.08; 0.03]	[0.02; 0.15]	[−0.06; 0.05]	[−0.06; 0.06]	[−0.04; 0.07]	[−0.09; 0.02]
b_network4xcj:agility2cj:cul	0.09*	−0.01	0.05	−0.10*	−0.05	−0.07*	−0.03	−0.09*	0.06*
	[0.02; 0.16]	[−0.08; 0.05]	[−0.00; 0.11]	[−0.16; −0.04]	[−0.12; 0.02]	[−0.12; −0.02]	[−0.09; 0.03]	[−0.14; −0.03]	[0.01; 0.11]
sd_countryx__Intercept	0.20*	0.19*	0.22*	0.22*	0.21*	0.23*	0.21*	0.21*	0.15*
	[0.10; 0.32]	[0.10; 0.30]	[0.13; 0.34]	[0.13; 0.34]	[0.11; 0.32]	[0.13; 0.35]	[0.11; 0.32]	[0.11; 0.33]	[0.04; 0.26]
sd_countryx__network4xcj	0.05*	0.05*	0.05*	0.04*	0.04*	0.05*	0.05*	0.05*	0.05*
	[0.00; 0.12]	[0.00; 0.12]	[0.00; 0.12]	[0.00; 0.11]	[0.00; 0.11]	[0.00; 0.12]	[0.00; 0.13]	[0.00; 0.13]	[0.00; 0.13]
sd_countryx__agility2cj	0.18*	0.20*	0.21*	0.11*	0.21*	0.17*	0.22*	0.20*	0.23*
	[0.05; 0.33]	[0.08; 0.35]	[0.09; 0.35]	[0.01; 0.24]	[0.09; 0.35]	[0.03; 0.32]	[0.09; 0.36]	[0.06; 0.35]	[0.12; 0.38]
cor_countryx__Intercept__network4xcj	−0.01	−0.01	−0.02	0.08	0.08	−0.04	−0.07	−0.07	−0.03
	[−0.78; 0.77]	[−0.77; 0.75]	[−0.78; 0.75]	[−0.74; 0.82]	[−0.73; 0.82]	[−0.79; 0.75]	[−0.80; 0.72]	[−0.81; 0.73]	[−0.79; 0.75]
cor_countryx__Intercept__agility2cj	0.09	0.24	0.15	0.22	0.16	0.14	0.18	0.10	0.19
	[−0.59; 0.70]	[−0.41; 0.78]	[−0.48; 0.72]	[−0.55; 0.85]	[−0.45; 0.72]	[−0.53; 0.75]	[−0.43; 0.72]	[−0.56; 0.71]	[−0.48; 0.80]
cor_countryx__network4xcj__agility2cj	0.14	0.14	0.17	0.05	0.15	0.08	0.15	0.11	0.20
	[−0.72; 0.86]	[−0.72; 0.86]	[−0.69; 0.88]	[−0.79; 0.84]	[−0.70; 0.88]	[−0.75; 0.84]	[−0.71; 0.86]	[−0.73; 0.85]	[−0.67; 0.88]
sigma	0.76*	0.76*	0.76*	0.77*	0.75*	0.77*	0.76*	0.76*	0.75*
	[0.70; 0.83]	[0.70; 0.83]	[0.70; 0.83]	[0.70; 0.84]	[0.69; 0.82]	[0.70; 0.83]	[0.70; 0.83]	[0.69; 0.83]	[0.69; 0.82]

* Null hypothesis value outside 90% credible interval.

Table 11: Outcome2 Models (T) alpha = .10 - 4 Level Network

4 Plots

Level of Agility by Country and Network



Level of Agility and Operational Outcome