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STATISTICAL ANALYSIS OF NEED ANALYSIS REPORT INDUSTRY 4.0 SKILL KIT

LEGEND:

FOR W+VW

RED IS WEAK AND VERY WEAK, AS THE RED GETS DARKER (DARK RED), IT GETS WORSE, BLUE IS GOOD. RED MEANS WEAK+VERY WEAK GETS CLOSE %50, THE MORE RESPONDENTS RATED THEMSELVES INSUFFICIENT WITH THE SKILL. BLUE MEANS CLOSE TO ZERO (0), LESS RESPONDENTS FEEL THEMSELVES INSUFFICIENT WITH THE SKILL.

FOR S+VS

SAME AS BLUE IS GOOD, RED IS BAD. BUT, RED MEANS STRONG+VERY STRONG IS CLOSE TO ZERO (0), MEANS RESPONDENTS RATE THEMSELVES NOT STRONG+VERY STRONG. BLUE MEANS RESPONDENTS RATING IS MOVING AWAY FROM ZERO, WHICH MEANS RESPONDENTS RATE THEMSELVES STRONG AND VERY STRONG SKILL.

WHITE IS NEUTR.

IN SUMMARY, RED SIGNALS TRAINING NEED.

	SPAIN				HUNGARY				ROMANIA				POLAND				TURKEY			
	Employee		Student		Employee		Student		Employee		Student		Employee		Student		Employee		Student	
	W+VW	S+VS	W+VW	S+VS	W+VW	S+VS	W+VW	S+VS	W+VW	S+VS	W+VW	S+VS	W+VW	S+VS	W+VW	S+VS	W+VW	S+VS	W+VW	S+VS
Deciding and Initial Action																				
Decision making	5%	60%	11%	51%	20%	53%	8%	64%	3%	85%	16%	59%	3%	76%	1%	58%	7%	63%	6%	55%
Taking responsibility	5%	79%	5%	67%	8%	60%	7%	68%	3%	92%	10%	82%	3%	87%	1%	83%	7%	77%	6%	72%
Leading and Supervising																				
Leadership Skills	11%	44%	22%	47%	22%	40%	12%	50%	4%	68%	36%	38%	4%	61%	7%	56%	10%	53%	7%	62%
Working With People																				
Team work	5%	75%	6%	71%	15%	68%	4%	75%	1%	92%	4%	81%	3%	82%	1%	80%	5%	78%	12%	60%
Collaborating with others	3%	81%	6%	70%	13%	60%	5%	81%	1%	93%	3%	81%	1%	84%	1%	83%	3%	78%	6%	67%
Communicating with people	3%	81%	9%	65%	12%	65%	5%	76%	1%	96%	2%	83%	1%	89%	4%	78%	3%	72%	3%	72%
Adhering to Principles and Values																				
Respecting ethics	3%	94%	8%	81%	10%	77%	6%	73%	1%	96%	3%	87%	0%	95%	1%	89%	5%	73%	3%	77%
Environmental awareness	3%	82%	14%	66%	13%	65%	9%	65%	4%	88%	6%	76%	4%	77%	3%	67%	12%	73%	4%	74%
Awareness of ergonomics	8%	59%	22%	46%	28%	35%	22%	40%	4%	85%	7%	78%	9%	53%	8%	52%	11%	49%	12%	50%
Relating and Networking																				
Compromising	2%	93%	3%	82%	12%	60%	9%	71%	13%	68%	22%	45%	3%	72%	3%	70%	7%	80%	5%	71%
Creating business networks	34%	28%	30%	35%	13%	58%	5%	76%	32%	27%	51%	15%	35%	19%	33%	20%	5%	71%	10%	51%
Maintaining customer relationships	13%	56%	13%	61%	18%	67%	13%	69%	9%	80%	26%	40%	9%	65%	9%	62%	5%	66%	8%	54%
Persuading and Influencing																				
Negotiating	10%	54%	15%	49%	15%	60%	13%	60%	14%	70%	27%	39%	10%	47%	14%	48%	14%	47%	29%	50%
Emotional intelligence	7%	67%	8%	73%	15%	67%	1%	76%	8%	74%	35%	52%	2%	76%	1%	78%	17%	61%	8%	71%
Presenting and Communicating Information																				
Presenting and communication ability	10%	52%	21%	54%	20%	55%	5%	70%	5%	85%	13%	63%	2%	80%	7%	55%	10%	54%	11%	54%
Writing and reporting																				
Targeted/Technical Communication	6%	48%	22%	43%	20%	58%	7%	73%	7%	76%	33%	54%	6%	54%	8%	41%	8%	51%	10%	47%
Literacy (Reporting, writing plans, writing letters)	7%	67%	19%	46%	20%	54%	6%	76%	5%	86%	13%	64%	0%	98%	1%	92%	12%	55%	16%	55%
Applying Expertise and Technology																				

IT and technology affinity	10%	56%	16%	59%	27%	42%	15%	58%	11%	62%	30%	53%	6%	53%	12%	43%	17%	54%	8%	56%
Economics	20%	38%	31%	33%	31%	22%	27%	30%	12%	56%	33%	39%	19%	35%	15%	32%	16%	38%	17%	37%
Extract business value from social media	33%	25%	24%	39%	31%	20%	37%	14%	15%	51%	33%	38%	32%	35%	16%	38%	17%	47%	18%	43%
Service orientation/product service offerings	25%	32%	26%	31%	29%	34%	30%	39%	11%	58%	25%	51%	24%	33%	14%	37%	8%	47%	13%	48%
Business process management	31%	34%	28%	28%	31%	34%	34%	27%	23%	44%	41%	24%	43%	23%	29%	28%	14%	55%	12%	42%
Business change management	33%	30%	38%	22%	33%	40%	32%	27%	24%	35%	48%	24%	31%	33%	25%	32%	22%	36%	24%	25%
Understand and coordinate workflows	15%	47%	24%	40%	16%	57%	13%	63%	14%	60%	30%	49%	26%	36%	14%	43%	5%	69%	12%	56%
Network security	27%	32%	33%	33%	19%	43%	23%	43%	38%	34%	59%	22%	6%	59%	4%	59%	35%	25%	31%	29%
IT architectures	43%	26%	51%	19%	50%	14%	39%	29%	60%	17%	66%	18%	43%	17%	41%	18%	42%	20%	33%	19%
Machine learning	15%	46%	22%	43%	38%	24%	48%	31%	34%	38%	52%	31%	41%	11%	42%	17%	27%	41%	24%	34%
System development	49%	21%	49%	16%	48%	17%	46%	30%	56%	22%	63%	23%	49%	16%	33%	19%	28%	31%	28%	32%
Integrating heterogeneous technologies	48%	26%	44%	21%	53%	17%	57%	15%	54%	21%	61%	16%	44%	19%	31%	22%	32%	33%	28%	33%
Mobile technologies	26%	39%	18%	54%	46%	23%	29%	44%	40%	30%	62%	21%	24%	26%	15%	43%	24%	39%	19%	47%
Sensors/embedded systems	59%	18%	46%	26%	66%	12%	63%	16%	50%	21%	57%	17%	63%	10%	50%	12%	41%	16%	34%	31%
Network technology/M2M communication	53%	18%	52%	17%	67%	9%	68%	14%	63%	11%	71%	13%	70%	9%	57%	13%	42%	32%	35%	27%
Robotics/Artificial intelligence	69%	8%	63%	16%	72%	5%	66%	15%	60%	14%	68%	13%	83%	5%	68%	7%	59%	17%	39%	19%
Predictive maintenance	61%	15%	54%	12%	63%	7%	68%	16%	63%	19%	65%	11%	79%	9%	54%	14%	37%	27%	28%	32%
Modelling and programming	60%	21%	51%	19%	76%	7%	55%	22%	62%	15%	72%	11%	81%	6%	68%	9%	54%	19%	34%	27%
Big data/Data analysis and interpretation	55%	16%	58%	18%	55%	16%	31%	33%	62%	25%	72%	15%	55%	14%	45%	19%	52%	22%	39%	25%
Cloud computing/architectures	61%	18%	64%	17%	67%	14%	62%	20%	70%	11%	74%	9%	69%	9%	67%	9%	64%	3%	47%	20%
In-memory DBs	58%	19%	58%	13%	72%	7%	74%	12%	68%	16%	74%	8%	84%	6%	72%	9%	62%	12%	44%	22%
Statistics	48%	20%	49%	22%	54%	12%	36%	25%	51%	25%	69%	12%	53%	13%	44%	11%	46%	21%	28%	29%
Data security	44%	26%	44%	26%	53%	16%	48%	26%	59%	27%	66%	15%	31%	29%	31%	29%	47%	22%	36%	28%
Analyzing																				
Problem Solving	5%	69%	16%	49%	14%	56%	7%	77%	12%	71%	16%	57%	5%	60%	7%	57%	2%	72%	5%	59%
Optimization	22%	53%	27%	38%	25%	41%	20%	55%	22%	55%	46%	22%	26%	33%	20%	36%	19%	40%	12%	33%
Analytical Skills	20%	51%	27%	41%	27%	42%	20%	42%	19%	60%	35%	35%	11%	48%	22%	33%	19%	39%	11%	46%

Cognitive Ability	15%	50%	26%	42%	14%	59%	7%	71%	8%	67%	19%	46%	3%	77%	8%	57%	10%	49%	8%	56%
Learning and Researching																				
Life-long learning	5%	62%	14%	57%	20%	59%	15%	65%	3%	88%	9%	74%	0%	95%	2%	80%	10%	60%	6%	69%
Knowledge management	10%	54%	17%	53%	26%	45%	16%	52%	4%	85%	13%	58%	0%	77%	3%	59%	14%	53%	11%	60%
Creating and Innovation																				
Innovating	3%	57%	19%	49%	15%	47%	12%	65%	8%	63%	28%	42%	3%	57%	7%	46%	21%	30%	13%	45%
Creativity	3%	55%	16%	57%	12%	59%	5%	82%	10%	73%	34%	49%	1%	70%	4%	72%	15%	42%	9%	56%
Critical thinking	7%	70%	13%	62%	14%	58%	4%	71%	8%	70%	35%	47%	2%	76%	4%	66%	12%	58%	5%	64%
Change management	15%	57%	21%	47%	24%	56%	8%	66%	19%	56%	39%	28%	12%	38%	11%	39%	17%	40%	12%	45%
Formulating Strategies																				
Business strategy	35%	33%	30%	29%	22%	33%	30%	34%	32%	38%	52%	18%	40%	21%	32%	28%	14%	43%	18%	45%
Abstraction ability	15%	57%	25%	46%	26%	31%	22%	39%	18%	48%	40%	28%	3%	63%	12%	46%	16%	59%	9%	51%
Managing complexity	12%	42%	22%	44%	22%	38%	12%	50%	19%	56%	42%	30%	24%	29%	30%	22%	10%	61%	10%	49%
Planning and Organization																				
Project management	13%	48%	25%	45%	22%	42%	17%	51%	33%	33%	68%	18%	18%	46%	14%	38%	19%	43%	11%	47%
Planning and organizing work	5%	61%	15%	58%	17%	58%	9%	66%	8%	68%	28%	45%	1%	80%	7%	65%	10%	53%	12%	53%
Management ability	8%	54%	19%	45%	19%	54%	15%	62%	22%	45%	52%	26%	6%	56%	13%	56%	7%	53%	13%	55%
Delivering Results and Meeting Customer Expectation																				
Customer orientation	15%	49%	23%	41%	12%	64%	20%	60%	15%	58%	38%	35%	1%	74%	12%	52%	10%	53%	13%	56%
Customer relationship management	20%	43%	20%	47%	15%	63%	20%	60%	13%	61%	42%	35%	4%	66%	12%	57%	11%	53%	13%	52%
Following Instructions and Procedures																				
Legislation awareness	23%	41%	40%	25%	53%	17%	38%	27%	15%	63%	20%	48%	12%	48%	20%	30%	22%	40%	18%	40%
Safety awareness	17%	42%	22%	40%	34%	36%	19%	49%	4%	86%	12%	71%	5%	55%	8%	59%	12%	63%	13%	55%
Individual responsibility	0%	78%	8%	66%	15%	64%	11%	62%	1%	90%	9%	80%	1%	85%	4%	73%	7%	73%	6%	70%
Adopting and Responding to Change																				
Work in interdisciplinary environments	16%	51%	20%	47%	25%	47%	16%	44%	10%	68%	23%	45%	10%	55%	13%	38%	7%	70%	3%	60%
Intercultural competency	12%	47%	21%	48%	29%	49%	16%	46%	11%	66%	19%	38%	12%	49%	12%	49%	7%	48%	8%	50%
Flexibility	5%	70%	14%	70%	20%	58%	9%	71%	7%	76%	18%	49%	0%	79%	4%	67%	10%	53%	7%	50%
Adaptability and ability to change mind-set	3%	73%	12%	68%	19%	47%	9%	61%	10%	75%	15%	51%	1%	68%	5%	62%	12%	63%	9%	63%

Persuading and Influencing																				
Work-life Balance	11%	57%	15%	58%	32%	34%	16%	57%	5%	77%	33%	40%	12%	53%	4%	62%	14%	56%	9%	50%
Achieving Personal Work Goals and Objectives																				
Self-management and organization	8%	69%	13%	56%	20%	54%	8%	61%	11%	71%	36%	35%	5%	74%	4%	70%	12%	69%	5%	72%
Entrepreneurial and Commercial Thinking																				
Business model understanding	13%	51%	17%	48%	24%	38%	20%	38%	29%	48%	51%	26%	33%	31%	23%	30%	8%	47%	13%	53%
Entrepreneurship	28%	33%	12%	51%	20%	45%	13%	64%	35%	42%	60%	17%	18%	40%	9%	45%	15%	53%	11%	55%

	Spain					Hungary					Romania					Poland					Turkey				
	Employee		Graduate			Employee		Graduate			Employee		Graduate			Employee		Graduate			Employee		Graduate		
	Weak	Very Weak	Strong	Very Strong	Weak	Very Weak	Strong	Very Strong	Weak	Very Weak	Strong	Very Strong	Weak	Very Weak	Strong	Very Strong	Weak	Very Weak	Strong	Very Strong	Weak	Very Weak	Strong	Very Strong	
Decision making	4.84%	20.00%	59.68%	10.73%	50.54%	53.33%	8.00%	64.00%	64.00%	2.74%	84.93%	15.56%	58.89%	3.19%	75.53%	1.45%	57.97%	6.67%	63.33%	6.42%	59.57%	6.67%	63.33%	6.42%	59.57%
Taking responsibility	4.84%	79.03%	5.38%	66.67%	66.67%	8.33%	60.00%	7.00%	68.00%	2.70%	91.89%	10.11%	82.02%	3.19%	87.23%	0.72%	82.81%	6.67%	76.67%	6.42%	71.56%	6.67%	76.67%	6.42%	71.56%
Leadership Skills	11.22%	43.55%	47.31%	21.67%	40.00%	12.00%	50.00%	12.00%	50.00%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	10.00%	53.33%	7.41%	62.04%
Team work	4.92%	75.41%	6.43%	70.97%	70.97%	15.25%	67.80%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	9.93%	78.33%	11.93%	59.00%	11.93%	59.00%	11.93%	59.00%
Collaborating with others	3.23%	80.65%	6.45%	69.89%	69.89%	13.33%	60.00%	5.00%	81.00%	1.35%	93.24%	3.33%	81.11%	1.06%	84.04%	1.45%	82.61%	3.39%	77.97%	6.42%	66.97%	3.39%	77.97%	6.42%	66.97%
Communicating with people	3.23%	80.65%	6.45%	69.89%	69.89%	11.67%	65.00%	5.00%	76.00%	1.35%	95.95%	2.22%	83.33%	1.06%	89.36%	3.26%	78.26%	3.33%	71.67%	2.75%	71.56%	3.33%	71.67%	2.75%	71.56%
Respecting ethics	3.23%	93.55%	7.53%	80.65%	80.65%	10.00%	76.67%	6.00%	73.00%	1.35%	95.95%	3.33%	86.67%	0.00%	94.68%	1.45%	89.19%	5.08%	72.88%	2.78%	76.85%	5.08%	72.88%	2.78%	76.85%
Environmental awareness	3.23%	81.97%	14.13%	66.30%	66.30%	13.33%	65.00%	9.00%	65.00%	4.05%	87.64%	5.56%	75.56%	4.26%	76.60%	2.90%	66.67%	11.86%	73.88%	3.24%	73.83%	11.86%	73.88%	3.24%	73.83%
Awareness of ergonomics	8.20%	59.02%	21.51%	46.24%	46.24%	28.33%	35.00%	22.00%	40.00%	4.11%	84.33%	6.67%	77.78%	8.51%	53.77%	7.97%	52.17%	11.65%	49.09%	11.65%	49.09%	11.65%	49.09%	11.65%	49.09%
Compromising	1.67%	93.33%	3.26%	81.52%	81.52%	11.67%	60.00%	9.00%	71.00%	12.50%	68.06%	22.47%	44.94%	3.19%	72.34%	2.90%	69.57%	6.67%	80.00%	4.63%	71.30%	6.67%	80.00%	4.63%	71.30%
Creating business networks	34.43%	27.87%	30.34%	34.63%	34.63%	13.33%	58.33%	5.00%	76.00%	31.51%	27.40%	50.56%	18.61%	35.11%	19.15%	32.61%	19.97%	5.17%	70.69%	10.09%	51.38%	5.17%	70.69%	10.09%	51.38%
Maintaining customer relationships	13.11%	55.74%	13.33%	61.11%	61.11%	18.33%	66.67%	13.13%	68.89%	9.46%	79.29%	26.14%	39.77%	6.48%	64.89%	9.42%	62.32%	5.08%	66.10%	8.26%	54.13%	5.08%	66.10%	8.26%	54.13%
Negotiating	9.84%	54.10%	15.38%	49.45%	49.45%	15.00%	60.00%	13.00%	60.00%	13.70%	69.80%	27.27%	38.64%	9.57%	46.81%	13.77%	47.83%	13.79%	46.55%	29.36%	49.54%	13.79%	46.55%	29.36%	49.54%
Emotional Intelligence	6.56%	67.21%	7.69%	62.53%	62.53%	5.00%	66.67%	1.01%	75.76%	8.22%	73.97%	34.83%	51.69%	2.13%	75.53%	0.72%	78.26%	16.95%	61.02%	8.33%	71.30%	16.95%	61.02%	8.33%	71.30%
Presenting and communication ability	9.84%	52.46%	20.88%	53.85%	53.85%	20.00%	55.00%	5.00%	70.00%	5.48%	84.93%	12.50%	62.50%	2.13%	79.79%	7.25%	55.07%	10.17%	54.24%	11.11%	53.70%	10.17%	54.24%	11.11%	53.70%
Targeted/Technical Communication	6.45%	48.39%	22.22%	43.33%	43.33%	20.00%	58.33%	7.00%	73.00%	6.94%	76.39%	32.58%	53.93%	6.38%	54.26%	7.97%	40.58%	8.47%	50.85%	10.09%	46.79%	8.47%	50.85%	10.09%	46.79%
Literacy (Reporting, writing plans, writing letters)	6.56%	67.21%	18.89%	45.56%	45.56%	20.34%	54.24%	6.00%	76.00%	5.48%	86.30%	13.48%	64.04%	0.00%	97.87%	1.45%	92.88%	12.07%	55.17%	15.60%	55.05%	12.07%	55.17%	15.60%	55.05%
IT and technology affinity	9.84%	55.74%	15.56%	58.89%	58.89%	27.12%	42.37%	15.00%	58.00%	10.81%	62.16%	30.34%	52.81%	6.38%	53.19%	11.59%	43.48%	16.95%	54.24%	8.33%	56.48%	16.95%	54.24%	8.33%	56.48%
Economics	20.00%	38.33%	30.77%	32.97%	32.97%	30.51%	22.03%	27.27%	30.30%	12.33%	56.16%	32.58%	39.33%	19.15%	35.11%	15.22%	31.88%	16.51%	37.93%	16.51%	36.70%	16.51%	37.93%	16.51%	36.70%
Extract business value from social media	32.79%	24.59%	23.60%	39.33%	39.33%	30.51%	20.34%	37.00%	14.00%	15.07%	50.68%	32.58%	38.20%	31.91%	35.11%	15.94%	38.41%	16.67%	46.67%	17.59%	42.59%	16.67%	46.67%	17.59%	42.59%
Service orientation/product service offerings	25.00%	31.67%	25.84%	31.46%	31.46%	29.31%	34.48%	30.00%	39.00%	10.96%	57.53%	25.00%	51.14%	24.47%	32.98%	13.77%	36.96%	8.47%	47.46%	47.71%	47.71%	8.47%	47.46%	47.71%	47.71%
Business process management	30.65%	33.87%	28.41%	28.41%	28.41%	31.03%	34.48%	34.00%	27.00%	23.29%	43.84%	40.91%	23.86%	23.40%	42.52%	23.40%	28.99%	28.26%	33.79%	11.93%	42.20%	28.26%	33.79%	11.93%	42.20%
Business change management	33.33%	30.00%	37.93%	21.84%	21.84%	32.76%	39.56%	32.00%	27.00%	23.61%	34.72%	48.31%	23.60%	30.85%	32.98%	25.36%	31.88%	22.41%	36.21%	23.85%	24.77%	22.41%	36.21%	23.85%	24.77%
Understand and coordinate workflows	15.00%	46.67%	23.86%	39.77%	39.77%	15.52%	56.90%	13.00%	63.00%	13.70%	56.90%	30.34%	49.44%	25.53%	36.17%	13.77%	42.75%	5.17%	68.97%	12.04%	56.48%	5.17%	68.97%	12.04%	56.48%
Network security	27.42%	32.26%	33.33%	33.33%	33.33%	18.97%	43.10%	23.00%	43.00%	38.36%	34.2%	59.09%	21.59%	38.51%	3.62%	58.70%	35.00%	25.00%	30.56%	28.70%	31.48%	35.00%	25.00%	30.56%	28.70%
IT architectures	42.62%	26.23%	59.18%	19.32%	19.32%	50.00%	59.72%	36.67%	39.00%	59.72%	36.67%	65.91%	29.08%	42.55%	33.20%	40.58%	18.12%	42.37%	20.36%	33.03%	33.03%	42.37%	20.36%	33.03%	33.03%
Machine learning	14.74%	45.90%	22.22%	43.33%	43.33%	17.93%	24.14%	43.33%	31.00%	39.25%	38.36%	40.84%	52.77%	30.68%	41.69%	42.03%	37.80%	26.79%	41.07%	23.85%	33.94%	26.79%	41.07%	23.85%	33.94%
System development	49.18%	21.31%	48.86%	15.91%	15.91%	48.28%	17.24%	45.92%	29.59%	56.16%	21.92%	62.50%	22.73%	48.94%	15.96%	32.61%	18.84%	27.59%	31.03%	28.44%	32.11%	27.59%	31.03%	28.44%	32.11%
Integrating heterogeneous technologies	47.54%	26.23%	43.82%	21.25%	21.25%	53.45%	17.24%	57.00%	15.00%	53.45%	20.83%	60.67%	15.73%	43.62%	19.15%	31.16%	22.46%	31.67%	33.33%	28.44%	33.03%	31.67%	33.33%	28.44%	33.03%
Mobile technologies	26.23%	39.34%	17.78%	54.64%	54.64%	45.61%	22.81%	29.00%	44.00%	39.73%	30.14%	61.80%	21.35%	24.47%	25.53%	15.22%	43.48%	23.73%	38.98%	19.44%	47.22%	23.73%	38.98%	19.44%	47.22%
Sensors/embedded systems	59.02%	18.03%	46.07%	25.84%	25.84%	65.52%	12.07%	63.00%	16.00%	50.00%	21.43%	57.47%	17.24%	62.77%	9.57%	50.00%	31.59%	41.38%	35.26%	34.26%	31.48%	35.26%	34.26%	31.48%	35.26%
Network technology/M2M communication	53.33%	18.33%	52.27%	17.05%	17.05%	67.24%	8.62%	68.00%	14.00%	63.01%	10.96%	70.79%	11.48%	70.21%	8.51%	56.52%	13.04%	42.37%	32.20%	35.19%	26.85%	42.37%	32.20%	35.19%	26.85%
Robotics/Artificial intelligence	68.85%	8.20%	62.64%	16.48%	16.48%	72.41%	5.17%	66.00%	15.00%	59.72%	13.89%	68.18%	12.50%	82.88%	5.32%	68.12%	6.52%	59.32%	16.95%	38.89%	19.44%	16.95%	38.89%	19.44%	19.44%
Predictive maintenance	61.02%	15.25%	54.12%	11.76%	11.76%	63.16%	7.02%	67.68%	16.16%	62.50%	19.44%	65.11%	11.24%	78.72%	8.51%	53.62%	14.49%	37.29%	27.12%	28.44%	32.11%	27.12%	28.44%	32.11%	32.11%
Modelling and programming	59.68%	20.97%	51.11%	18.89%	18.89%	79.88%	6.90%	55.00%	22.00%	61.64%	15.07%	71.59%	11.36%	80.89%	6.38%	68.12%	9.42%	54.24%	18.64%	33.94%	26.61%	18.64%	33.94%	26.61%	26.61%
Big data/Data analysis and interpretation	54.84%	16.13%	57.95%	18.18%	18.18%	55.17%	15.52%	31.00%	33.00%	61.64%	24.66%	71.59%	14.77%	55.32%	13.83%	44.93%	18.84%	51.72%	22.41%	39.54%	24.77%	22.41%	39.54%	24.77%	24.77%
Cloud computing/Architectures	60.66%	18.03%	63.64%	17.05%	17.05%	67.24%	13.79%	61.62%	20.20%	70.42%	11.27%	74.16%	8.99%	69.15%	8.51%	67.39%	9.42%	63.79%	3.45%	46.79%	20.18%	63.79%	3.45%	46.79%	20.18%
In-memory DBs	57.63%	18.64%	57.95%	12.50%	12.50%	72.41%	6.90%	74.00%	12.00%	68.49%	16.44%	74.16%	7.87%	84.04%	6.38%	71.24%	9.42%	61.67%	11.67%	44.04%	22.02%	61.67%	11.67%	44.04%	22.02%
Statistics	47.54%	19.67%	49.44%	22.47%	22.47%	54.24%	11.88%	36.00%	25.00%	50.68%	24.66%	68.54%	12.36%	53.19%	12.77%	44.20%	10.87%	45.61%	21.05%	29.36%	26.61%	21.05%	29.36%	26.61%	26.61%
Data security	44.26%	26.23%	43.82%	25.86%	25.86%	52.69%	15.79%	48.00%	26.00%	58.90%	27.40%	69.93%	14.77%	30.85%	28.72%	31.16%	28.99%	46.67%	21.67%	58.88%	28.44%	46.67%	21.67%	58.88%	28.44%
Problem Solving	4.92%	68.85%	15.56%	48.89%	48.89%	13.56%	55.93%	7.00%	77.00%	12.33%	71.2%	15.73%	57.30%	5.38%	59.57%	6.52%	56.52%	4.78%	71.93%	4.87%	58.88%	4.78%	71.93%	4.87%	58.88%
Optimization	21.67%	53.33%	26.67%	37.78%	37.78%	25.42%	40.68%	20.20%	54.55%	21.92%	54.79%	46.07%	22.47%	25.53%	32.98%	20.29%	35.51%	19.30%	40.55%	12.04%	33.33%	19.30%	40.55%	12.04%	33.33%
Analytical Skills	19.67%	50.82%	26.67%	41.11%	41.11%	27.12%	42.37%	20.00%	42.00%	19.18%	60.27%	34.83%	34.83%	10.64%	47.87%	22.46%	33.33%	18.64%	38.98%	11.01%	45.87%	18.64%	38.98%	11.01%	45.87%
Cognitive Ability	15.00%	50.00%	25.56%	42.22%	42.22%	13.56%	59.33%	7.00%	71.00%	8.22%	67.12%	19.10%	46.07%	3.19%	76.60%	7.97%	56.52%	10.17%	49.15%	8.33%	56.48%	10.17%	49.15%	8.33%	56.48%
Life-long learning	4.92%	62.30%	34.29%	57.14%	57.14%	20.34%	59.33%	15.00%	65.00%	2.74%	87.67%	13.89%	73.86%	0.00%	94.68%	2.17%	80.28%	10.00%	66.88%	69.44%	69.44%	10.00%	66.88%	69.44%	69.44%
Knowledge management	9.84%	54.10%	17.24%	52.78%	52.78%	25.86%	44.83%	16.00%	52.00%	4.11%	84.93%	13.48%	58.43%	0.00%	76.60%	2.90%	59.42%	11.86%	52.54%	11.11%	60.19%	11.86%	52.54%	11.11%	60.19%
Innovating	3.33%	56.67%	1																						

	Spain				Hungary				Romania				Poland				Turkey																							
	Employee	Weak	Very Weak	Strong	Very Strong	Graduate	Weak	Very Weak	Strong	Very Strong	Employee	Weak	Very Weak	Strong	Very Strong	Graduate	Weak	Very Weak	Strong	Very Strong	Employee	Weak	Very Weak	Strong	Very Strong	Graduate	Weak	Very Weak	Strong	Very Strong										
Decision making	4.84%	59.68%	10.75%	50.54%	20.00%	53.33%	8.00%	64.00%	2.74%	84.93%	15.56%	58.89%	3.19%	57.97%	6.57%	57.97%	6.57%	63.33%	6.42%	55.05%	4.84%	79.03%	5.38%	66.67%	8.33%	60.00%	7.00%	68.00%	2.70%	91.89%	10.11%	82.02%	3.19%	87.23%	0.72%	82.61%	6.67%	76.67%	6.42%	71.56%
Taking responsibility	4.84%	79.03%	5.38%	66.67%	8.33%	60.00%	7.00%	68.00%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Leadership Skills	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Team work	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Collaborating with others	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Communicating with people	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Respecting ethics	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Environmental awareness	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Awareness of ergonomics	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Compromising	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Creating business networks	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Maintaining customer relationships	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Negotiating	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Emotional intelligence	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Presenting and communication ability	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Targeted/Technical Communication	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Literacy (Reporting, writing plans, writing letters)	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
IT and technology affinity	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Economics	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Extract business value from social media	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Service orientation/product service offerings	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Business process management	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Business change management	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Understand and coordinate workflows	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Network security	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
IT architectures	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
Machine learning	4.84%	80.65%	6.45%	69.89%	13.33%	60.00%	5.00%	81.11%	4.11%	68.49%	35.96%	38.20%	4.26%	60.64%	7.25%	55.80%	10.00%	53.33%	7.41%	62.04%	11.29%	43.55%	21.51%	47.31%	15.25%	67.89%	4.00%	75.00%	1.35%	91.89%	4.44%	81.11%	3.19%	81.91%	0.72%	80.43%	5.00%	78.33%	11.93%	59.63%
System development	4.84%	80.65%	6.45%	69.89%	13.33%	6																																		

	Very Weak	Weak	Moderate	Strong	Very Strong	Weak+ Ver	Strong+
	Row Valid N %	Row Valid N %	Row Valid N %	Row Valid N %	Row Valid N %		Very Strong
Spanish graduates							
Decision making	1,1%	9,7%	38,7%	45,2%	5,4%	10,8%	50,5%
Taking responsibility	1,1%	4,3%	28,0%	43,0%	23,7%	5,4%	66,7%
Leadership Skills	6,5%	15,1%	31,2%	39,8%	7,5%	21,5%	47,3%
Team work	2,2%	4,3%	22,6%	37,6%	33,3%	6,5%	71,0%
Collaborating with others	3,2%	3,2%	23,7%	35,5%	34,4%	6,5%	69,9%
Communicating with people	2,2%	6,5%	26,9%	34,4%	30,1%	8,6%	64,5%
Respecting ethics	3,2%	4,3%	11,8%	31,2%	49,5%	7,5%	80,6%
Environmental awareness	4,3%	9,8%	19,6%	28,3%	38,0%	14,1%	66,3%
Awareness of ergonomics	4,3%	17,2%	32,3%	21,5%	24,7%	21,5%	46,2%
Compromising	1,1%	2,2%	15,2%	30,4%	51,1%	3,3%	81,5%
Creating business networks	5,6%	24,7%	34,8%	23,6%	11,2%	30,3%	34,8%
Maintaining customer relationships	2,2%	11,1%	25,6%	38,9%	22,2%	13,3%	61,1%
Negotiating	5,5%	9,9%	35,2%	36,3%	13,2%	15,4%	49,5%
Emotional intelligence	1,1%	6,6%	19,8%	39,6%	33,0%	7,7%	72,5%
Presenting and communication ability	1,1%	19,8%	25,3%	35,2%	18,7%	20,9%	53,8%
Targeted/Technical Communication	2,2%	20,0%	34,4%	24,4%	18,9%	22,2%	43,3%
Literacy (Reporting, writing plans, writing letters)	2,2%	16,7%	35,6%	26,7%	18,9%	18,9%	45,6%
IT and technology affinity	1,1%	14,4%	25,6%	35,6%	23,3%	15,6%	58,9%
Economics	6,6%	24,2%	36,3%	23,1%	9,9%	30,8%	33,0%
Extract business value from social media	3,4%	20,2%	37,1%	30,3%	9,0%	23,6%	39,3%
Service orientation/product service offerings	2,2%	23,6%	42,7%	24,7%	6,7%	25,8%	31,5%
Business process management	5,7%	22,7%	43,2%	20,5%	8,0%	28,4%	28,4%
Business change management	5,7%	32,2%	40,2%	14,9%	6,9%	37,9%	21,8%
Understand and coordinate workflows	1,1%	22,7%	36,4%	28,4%	11,4%	23,9%	39,8%
Network security	8,9%	24,4%	33,3%	26,7%	6,7%	33,3%	33,3%
IT architectures	14,8%	36,4%	29,5%	14,8%	4,5%	51,1%	19,3%
Machine learning	5,6%	16,7%	34,4%	28,9%	14,4%	22,2%	43,3%
System development	10,2%	38,6%	35,2%	11,4%	4,5%	48,9%	15,9%
Integrating heterogeneous technologies	11,2%	32,6%	34,8%	14,6%	6,7%	43,8%	21,3%
Mobile technologies	3,3%	14,4%	27,8%	32,2%	22,2%	17,8%	54,4%
Sensors/embedded systems	18,0%	28,1%	28,1%	20,2%	5,6%	46,1%	25,8%
Network technology/M2M communication	25,0%	27,3%	30,7%	11,4%	5,7%	52,3%	17,0%
Robotics/Artificial intelligence	34,1%	28,6%	20,9%	13,2%	3,3%	62,6%	16,5%
Predictive maintenance	25,9%	28,2%	34,1%	8,2%	3,5%	54,1%	11,8%
Modelling and programming	17,8%	33,3%	30,0%	12,2%	6,7%	51,1%	18,9%
Big data/Data analysis and interpretation	29,5%	28,4%	23,9%	11,4%	6,8%	58,0%	18,2%
Cloud computing/architectures	30,7%	33,0%	19,3%	8,0%	9,1%	63,6%	17,0%
In-memory DBs	33,0%	25,0%	29,5%	10,2%	2,3%	58,0%	12,5%
Statistics	16,9%	32,6%	28,1%	14,6%	7,9%	49,4%	22,5%
Data security	16,9%	27,0%	30,3%	16,9%	9,0%	43,8%	25,8%
Problem Solving	1,1%	14,4%	35,6%	31,1%	17,8%	15,6%	48,9%
Optimization	2,2%	24,4%	35,6%	25,6%	12,2%	26,7%	37,8%
Analytical Skills	7,8%	18,9%	32,2%	30,0%	11,1%	26,7%	41,1%
Cognitive Ability	6,7%	18,9%	32,2%	30,0%	12,2%	25,6%	42,2%
Life-long learning	0,0%	14,3%	28,6%	34,1%	23,1%	14,3%	57,1%
Knowledge management	2,3%	14,9%	29,9%	46,0%	6,9%	17,2%	52,9%
Innovating	4,5%	14,8%	31,8%	30,7%	18,2%	19,3%	48,9%
Creativity	5,6%	10,0%	27,8%	33,3%	23,3%	15,6%	56,7%
Critical thinking	2,2%	11,1%	24,4%	27,8%	34,4%	13,3%	62,2%
Change management	2,2%	18,9%	32,2%	28,9%	17,8%	21,1%	46,7%
Business strategy	2,2%	28,1%	40,4%	20,2%	9,0%	30,3%	29,2%
Abstraction ability	3,4%	21,8%	28,7%	29,9%	16,1%	25,3%	46,0%
Managing complexity	2,2%	20,2%	33,7%	38,2%	5,6%	22,5%	43,8%
Project management	0,0%	24,7%	30,3%	34,8%	10,1%	24,7%	44,9%
Planning and organizing work	1,1%	13,5%	27,0%	36,0%	22,5%	14,6%	58,4%
Management ability	1,1%	18,2%	35,2%	30,7%	14,8%	19,3%	45,5%
Customer orientation	1,1%	22,2%	35,6%	22,2%	18,9%	23,3%	41,1%
Customer relationship management	0,0%	20,2%	32,6%	25,8%	21,3%	20,2%	47,2%

Legislation awareness	8,0%	32,2%	34,5%	16,1%	9,2%	40,2%	25,3%
Safety awareness	3,4%	19,1%	37,1%	25,8%	14,6%	22,5%	40,4%
Individual responsibility	1,1%	6,7%	26,7%	31,1%	34,4%	7,8%	65,6%
Work in interdisciplinary environments	0,0%	20,2%	32,6%	23,6%	23,6%	20,2%	47,2%
Intercultural competency	3,4%	18,0%	30,3%	23,6%	24,7%	21,3%	48,3%
Flexibility	1,1%	12,5%	15,9%	42,0%	28,4%	13,6%	70,5%
Adaptability and ability to change mind-set	2,2%	10,0%	20,0%	37,8%	30,0%	12,2%	67,8%
Work-life Balance	3,4%	11,2%	27,0%	33,7%	24,7%	14,6%	58,4%
Self-management and organization	1,1%	12,1%	30,8%	33,0%	23,1%	13,2%	56,0%
Business model understanding	3,3%	13,3%	35,6%	30,0%	17,8%	16,7%	47,8%
Entrepreneurship	4,5%	7,9%	37,1%	29,2%	21,3%	12,4%	50,6%

	Very Weak	Weak	Moderate	Strong	Very Strong	Weak+ Ver	Strong+
	Row Valid N %	Row Valid N %	Row Valid N %	Row Valid N %	Row Valid N %		Very Strong
Spanish employees							
Decision making	4,8%	0,0%	35,5%	54,8%	4,8%	4,8%	59,7%
Taking responsibility	1,6%	3,2%	16,1%	56,5%	22,6%	4,8%	79,0%
Leadership Skills	1,6%	9,7%	45,2%	40,3%	3,2%	11,3%	43,5%
Team work	1,6%	3,3%	19,7%	47,5%	27,9%	4,9%	75,4%
Collaborating with others	0,0%	3,2%	16,1%	41,9%	38,7%	3,2%	80,6%
Communicating with people	1,6%	1,6%	16,1%	48,4%	32,3%	3,2%	80,6%
Respecting ethics	1,6%	1,6%	3,2%	37,1%	56,5%	3,2%	93,5%
Environmental awareness	1,6%	1,6%	14,8%	45,9%	36,1%	3,3%	82,0%
Awareness of ergonomics	3,3%	4,9%	32,8%	44,3%	14,8%	8,2%	59,0%
Compromising	0,0%	1,7%	5,0%	43,3%	50,0%	1,7%	93,3%
Creating business networks	11,5%	23,0%	37,7%	14,8%	13,1%	34,4%	27,9%
Maintaining customer relationships	4,9%	8,2%	31,1%	37,7%	18,0%	13,1%	55,7%
Negotiating	0,0%	9,8%	36,1%	41,0%	13,1%	9,8%	54,1%
Emotional intelligence	3,3%	3,3%	26,2%	50,8%	16,4%	6,6%	67,2%
Presenting and communication ability	1,6%	8,2%	37,7%	29,5%	23,0%	9,8%	52,5%
Targeted/Technical Communication	0,0%	6,5%	45,2%	40,3%	8,1%	6,5%	48,4%
Literacy (Reporting, writing plans, writing letters)	3,3%	3,3%	26,2%	47,5%	19,7%	6,6%	67,2%
IT and technology affinity	4,9%	4,9%	34,4%	39,3%	16,4%	9,8%	55,7%
Economics	3,3%	16,7%	41,7%	26,7%	11,7%	20,0%	38,3%
Extract business value from social media	16,4%	16,4%	42,6%	18,0%	6,6%	32,8%	24,6%
Service orientation/product service offerings	6,7%	18,3%	43,3%	23,3%	8,3%	25,0%	31,7%
Business process management	9,7%	21,0%	35,5%	27,4%	6,5%	30,6%	33,9%
Business change management	11,7%	21,7%	36,7%	23,3%	6,7%	33,3%	30,0%
Understand and coordinate workflows	5,0%	10,0%	38,3%	38,3%	8,3%	15,0%	46,7%
Network security	6,5%	21,0%	40,3%	24,2%	8,1%	27,4%	32,3%
IT architectures	26,2%	16,4%	31,1%	13,1%	13,1%	42,6%	26,2%
Machine learning	9,8%	4,9%	39,3%	34,4%	11,5%	14,8%	45,9%
System development	32,8%	16,4%	29,5%	19,7%	1,6%	49,2%	21,3%
Integrating heterogeneous technologies	21,3%	26,2%	26,2%	18,0%	8,2%	47,5%	26,2%
Mobile technologies	13,1%	13,1%	34,4%	29,5%	9,8%	26,2%	39,3%
Sensors/embedded systems	26,2%	32,8%	23,0%	13,1%	4,9%	59,0%	18,0%
Network technology/M2M communication	30,0%	23,3%	28,3%	15,0%	3,3%	53,3%	18,3%
Robotics/Artificial intelligence	36,1%	32,8%	23,0%	3,3%	4,9%	68,9%	8,2%
Predictive maintenance	35,6%	25,4%	23,7%	15,3%	0,0%	61,0%	15,3%
Modelling and programming	37,1%	22,6%	19,4%	12,9%	8,1%	59,7%	21,0%
Big data/Data analysis and interpretation	33,9%	21,0%	29,0%	11,3%	4,8%	54,8%	16,1%
Cloud computing/architectures	36,1%	24,6%	21,3%	13,1%	4,9%	60,7%	18,0%
In-memory DBs	32,2%	25,4%	23,7%	15,3%	3,4%	57,6%	18,6%
Statistics	16,4%	31,1%	32,8%	13,1%	6,6%	47,5%	19,7%
Data security	14,8%	29,5%	29,5%	21,3%	4,9%	44,3%	26,2%
Problem Solving	1,6%	3,3%	26,2%	49,2%	19,7%	4,9%	68,9%
Optimization	6,7%	15,0%	25,0%	45,0%	8,3%	21,7%	53,3%
Analytical Skills	1,6%	18,0%	29,5%	41,0%	9,8%	19,7%	50,8%
Cognitive Ability	1,7%	13,3%	35,0%	40,0%	10,0%	15,0%	50,0%
Life-long learning	0,0%	4,9%	32,8%	42,6%	19,7%	4,9%	62,3%
Knowledge management	1,6%	8,2%	36,1%	45,9%	8,2%	9,8%	54,1%
Innovating	0,0%	3,3%	40,0%	43,3%	13,3%	3,3%	56,7%
Creativity	1,7%	1,7%	41,7%	41,7%	13,3%	3,3%	55,0%
Critical thinking	0,0%	6,6%	23,0%	45,9%	24,6%	6,6%	70,5%
Change management	1,6%	13,1%	27,9%	44,3%	13,1%	14,8%	57,4%
Business strategy	6,7%	28,3%	31,7%	25,0%	8,3%	35,0%	33,3%
Abstraction ability	0,0%	14,8%	27,9%	44,3%	13,1%	14,8%	57,4%
Managing complexity	1,7%	10,2%	45,8%	32,2%	10,2%	11,9%	42,4%
Project management	5,0%	8,3%	38,3%	33,3%	15,0%	13,3%	48,3%
Planning and organizing work	1,6%	3,3%	34,4%	42,6%	18,0%	4,9%	60,7%
Management ability	1,6%	6,6%	37,7%	41,0%	13,1%	8,2%	54,1%

Customer orientation	3,3%	11,5%	36,1%	37,7%	11,5%	14,8%	49,2%
Customer relationship management	3,3%	16,4%	37,7%	31,1%	11,5%	19,7%	42,6%
Legislation awareness	3,3%	19,7%	36,1%	32,8%	8,2%	23,0%	41,0%
Safety awareness	1,7%	15,0%	41,7%	36,7%	5,0%	16,7%	41,7%
Individual responsibility	0,0%	0,0%	21,7%	46,7%	31,7%	0,0%	78,3%
Work in interdisciplinary environments	3,3%	13,1%	32,8%	39,3%	11,5%	16,4%	50,8%
Intercultural competency	5,0%	6,7%	41,7%	33,3%	13,3%	11,7%	46,7%
Flexibility	1,6%	3,3%	24,6%	52,5%	18,0%	4,9%	70,5%
Adaptability and ability to change mind-set	0,0%	3,3%	23,3%	56,7%	16,7%	3,3%	73,3%
Work-life Balance	1,6%	9,8%	31,1%	41,0%	16,4%	11,5%	57,4%
Self-management and organization	0,0%	8,2%	23,0%	49,2%	19,7%	8,2%	68,9%
Business model understanding	4,9%	8,2%	36,1%	41,0%	9,8%	13,1%	50,8%
Entrepreneurship	4,9%	23,0%	39,3%	19,7%	13,1%	27,9%	32,8%

	Very Weak	Weak	Moderate	Strong	Very Strong	Weak+ Ver	Strong+
	Row Valid N %	Row Valid N %	Row Valid N %	Row Valid N %	Row Valid N %	%	Very Strong
Romanian employee							
Decision making	1,4%	1,4%	12,3%	41,1%	43,8%	2,7%	84,9%
Taking responsibility	1,4%	1,4%	5,4%	21,6%	70,3%	2,7%	91,9%
Leadership Skills	1,4%	2,7%	27,4%	47,9%	20,5%	4,1%	68,5%
Team work	1,4%	0,0%	6,8%	16,2%	75,7%	1,4%	91,9%
Collaborating with others	1,4%	0,0%	5,4%	17,6%	75,7%	1,4%	93,2%
Communicating with people	1,4%	0,0%	2,7%	18,9%	77,0%	1,4%	95,9%
Respecting ethics	1,4%	0,0%	2,7%	16,2%	79,7%	1,4%	95,9%
Environmental awareness	1,4%	2,7%	8,1%	25,7%	62,2%	4,1%	87,8%
Awareness of ergonomics	2,7%	1,4%	11,0%	27,4%	57,5%	4,1%	84,9%
Compromising	2,8%	9,7%	19,4%	48,6%	19,4%	12,5%	68,1%
Creating business networks	11,0%	20,5%	41,1%	19,2%	8,2%	31,5%	27,4%
Maintaining customer relationships	5,4%	4,1%	10,8%	37,8%	41,9%	9,5%	79,7%
Negotiating	5,5%	8,2%	16,4%	45,2%	24,7%	13,7%	69,9%
Emotional intelligence	2,7%	5,5%	17,8%	41,1%	32,9%	8,2%	74,0%
Presenting and communication ability	2,7%	2,7%	9,6%	34,2%	50,7%	5,5%	84,9%
Targeted/Technical Communication	2,8%	4,2%	16,7%	38,9%	37,5%	6,9%	76,4%
Literacy (Reporting, writing plans, writing letters)	0,0%	5,5%	8,2%	27,4%	58,9%	5,5%	86,3%
IT and technology affinity	2,7%	8,1%	27,0%	28,4%	33,8%	10,8%	62,2%
Economics	2,7%	9,6%	31,5%	39,7%	16,4%	12,3%	56,2%
Extract business value from social media	4,1%	11,0%	34,2%	24,7%	26,0%	15,1%	50,7%
Service orientation/product service offerings	2,7%	8,2%	31,5%	26,0%	31,5%	11,0%	57,5%
Business process management	5,5%	17,8%	32,9%	34,2%	9,6%	23,3%	43,8%
Business change management	8,3%	15,3%	41,7%	25,0%	9,7%	23,6%	34,7%
Understand and coordinate workflows	5,5%	8,2%	26,0%	34,2%	26,0%	13,7%	60,3%
Network security	23,3%	15,1%	27,4%	23,3%	11,0%	38,4%	34,2%
IT architectures	36,1%	23,6%	23,6%	11,1%	5,6%	59,7%	16,7%
Machine learning	15,1%	19,2%	27,4%	20,5%	17,8%	34,2%	38,4%
System development	32,9%	23,3%	21,9%	13,7%	8,2%	56,2%	21,9%
Integrating heterogeneous technologies	27,8%	26,4%	25,0%	15,3%	5,6%	54,2%	20,8%
Mobile technologies	27,4%	12,3%	30,1%	15,1%	15,1%	39,7%	30,1%
Sensors/embedded systems	30,0%	20,0%	28,6%	11,4%	10,0%	50,0%	21,4%
Network technology/M2M communication	43,8%	19,2%	26,0%	5,5%	5,5%	63,0%	11,0%
Robotics/Artificial intelligence	43,1%	16,7%	26,4%	9,7%	4,2%	59,7%	13,9%
Predictive maintenance	33,3%	29,2%	18,1%	13,9%	5,6%	62,5%	19,4%
Modelling and programming	45,2%	16,4%	23,3%	9,6%	5,5%	61,6%	15,1%
Big data/Data analysis and interpretation	43,8%	17,8%	13,7%	17,8%	6,8%	61,6%	24,7%
Cloud computing/architectures	56,3%	14,1%	18,3%	7,0%	4,2%	70,4%	11,3%
In-memory DBs	52,1%	16,4%	15,1%	12,3%	4,1%	68,5%	16,4%
Statistics	24,7%	26,0%	24,7%	17,8%	6,8%	50,7%	24,7%
Data security	34,2%	24,7%	13,7%	17,8%	9,6%	58,9%	27,4%
Problem Solving	6,8%	5,5%	16,4%	38,4%	32,9%	12,3%	71,2%
Optimization	11,0%	11,0%	23,3%	37,0%	17,8%	21,9%	54,8%
Analytical Skills	2,7%	16,4%	20,5%	38,4%	21,9%	19,2%	60,3%
Cognitive Ability	0,0%	8,2%	24,7%	39,7%	27,4%	8,2%	67,1%
Life-long learning	0,0%	2,7%	9,6%	35,6%	52,1%	2,7%	87,7%
Knowledge management	0,0%	4,1%	11,0%	41,1%	43,8%	4,1%	84,9%
Innovating	4,2%	4,2%	28,2%	42,3%	21,1%	8,5%	63,4%
Creativity	6,8%	2,7%	17,8%	45,2%	27,4%	9,6%	72,6%
Critical thinking	6,8%	1,4%	21,9%	34,2%	35,6%	8,2%	69,9%
Change management	6,9%	12,5%	25,0%	36,1%	19,4%	19,4%	55,6%
Business strategy	8,2%	23,3%	30,1%	28,8%	9,6%	31,5%	38,4%
Abstraction ability	2,7%	15,1%	34,2%	35,6%	12,3%	17,8%	47,9%
Managing complexity	4,2%	15,3%	25,0%	36,1%	19,4%	19,4%	55,6%
Project management	11,1%	22,2%	33,3%	16,7%	16,7%	33,3%	33,3%
Planning and organizing work	2,8%	5,6%	23,9%	31,0%	36,6%	8,5%	67,6%
Management ability	8,2%	13,7%	32,9%	26,0%	19,2%	21,9%	45,2%
Customer orientation	4,2%	11,1%	26,4%	22,2%	36,1%	15,3%	58,3%
Customer relationship management	4,2%	8,3%	26,4%	26,4%	34,7%	12,5%	61,1%
Legislation awareness	5,5%	9,6%	21,9%	39,7%	23,3%	15,1%	63,0%
Safety awareness	2,7%	1,4%	9,6%	39,7%	46,6%	4,1%	86,3%
Individual responsibility	1,4%	0,0%	8,3%	25,0%	65,3%	1,4%	90,3%

Work in interdisciplinary environments	4,1%	5,5%	21,9%	35,6%	32,9%	9,6%	68,5%
Intercultural competency	4,1%	6,8%	23,3%	38,4%	27,4%	11,0%	65,8%
Flexibility	0,0%	6,9%	16,7%	41,7%	34,7%	6,9%	76,4%
Adaptability and ability to change mind-set	1,4%	8,2%	15,1%	39,7%	35,6%	9,6%	75,3%
Work-life Balance	1,4%	4,1%	17,8%	45,2%	31,5%	5,5%	76,7%
Self-management and organization	1,4%	9,7%	18,1%	40,3%	30,6%	11,1%	70,8%
Business model understanding	5,5%	23,3%	23,3%	35,6%	12,3%	28,8%	47,9%
Entrepreneurship	19,4%	15,3%	23,6%	29,2%	12,5%	34,7%	41,7%

	Very Weak	Weak	Moderate	Strong	Very Strong	Weak+ Ver	Strong+
	Row Valid N %	Row Valid N %	Row Valid N %	Row Valid N %	Row Valid N %		Very Strong
Romanian Graduate							
Decision making	3,3%	12,2%	25,6%	37,8%	21,1%	15,6%	58,9%
Taking responsibility	0,0%	10,1%	7,9%	39,3%	42,7%	10,1%	82,0%
Leadership Skills	22,5%	13,5%	25,8%	28,1%	10,1%	36,0%	38,2%
Team work	0,0%	4,4%	14,4%	26,7%	54,4%	4,4%	81,1%
Collaborating with others	0,0%	3,3%	15,6%	27,8%	53,3%	3,3%	81,1%
Communicating with people	0,0%	2,2%	14,4%	27,8%	55,6%	2,2%	83,3%
Respecting ethics	0,0%	3,3%	10,0%	24,4%	62,2%	3,3%	86,7%
Environmental awareness	0,0%	5,6%	18,9%	41,1%	34,4%	5,6%	75,6%
Awareness of ergonomics	0,0%	6,7%	15,6%	38,9%	38,9%	6,7%	77,8%
Compromising	7,9%	14,6%	32,6%	29,2%	15,7%	22,5%	44,9%
Creating business networks	30,3%	20,2%	34,8%	6,7%	7,9%	50,6%	14,6%
Maintaining customer relationships	9,1%	17,0%	34,1%	18,2%	21,6%	26,1%	39,8%
Negotiating	10,2%	17,0%	34,1%	21,6%	17,0%	27,3%	38,6%
Emotional intelligence	19,1%	15,7%	13,5%	29,2%	22,5%	34,8%	51,7%
Presenting and communication ability	1,1%	11,4%	25,0%	35,2%	27,3%	12,5%	62,5%
Targeted/Technical Communication	12,4%	20,2%	13,5%	36,0%	18,0%	32,6%	53,9%
Literacy (Reporting, writing plans, writing letters)	1,1%	12,4%	22,5%	43,8%	20,2%	13,5%	64,0%
IT and technology affinity	10,1%	20,2%	16,9%	31,5%	21,3%	30,3%	52,8%
Economics	6,7%	25,8%	28,1%	30,3%	9,0%	32,6%	39,3%
Extract business value from social media	16,9%	15,7%	29,2%	23,6%	14,6%	32,6%	38,2%
Service orientation/product service offerings	5,7%	19,3%	23,9%	30,7%	20,5%	25,0%	51,1%
Business process management	27,3%	13,6%	35,2%	12,5%	11,4%	40,9%	23,9%
Business change management	27,0%	21,3%	28,1%	11,2%	12,4%	48,3%	23,6%
Understand and coordinate workflows	13,5%	16,9%	20,2%	37,1%	12,4%	30,3%	49,4%
Network security	39,8%	19,3%	19,3%	9,1%	12,5%	59,1%	21,6%
IT architectures	51,1%	14,8%	15,9%	9,1%	9,1%	65,9%	18,2%
Machine learning	33,0%	19,3%	17,0%	17,0%	13,6%	52,3%	30,7%
System development	52,3%	10,2%	14,8%	12,5%	10,2%	62,5%	22,7%
Integrating heterogeneous technologies	49,4%	11,2%	23,6%	11,2%	4,5%	60,7%	15,7%
Mobile technologies	49,4%	12,4%	16,9%	9,0%	12,4%	61,8%	21,3%
Sensors/embedded systems	33,3%	24,1%	25,3%	10,3%	6,9%	57,5%	17,2%
Network technology/M2M communication	61,8%	9,0%	15,7%	10,1%	3,4%	70,8%	13,5%
Robotics/Artificial intelligence	40,9%	27,3%	19,3%	8,0%	4,5%	68,2%	12,5%
Predictive maintenance	42,7%	22,5%	23,6%	7,9%	3,4%	65,2%	11,2%
Modelling and programming	63,6%	8,0%	17,0%	4,5%	6,8%	71,6%	11,4%
Big data/Data analysis and interpretation	65,9%	5,7%	13,6%	8,0%	6,8%	71,6%	14,8%
Cloud computing/architectures	68,5%	5,6%	16,9%	6,7%	2,2%	74,2%	9,0%
In-memory DBs	67,4%	6,7%	18,0%	5,6%	2,2%	74,2%	7,9%
Statistics	25,8%	42,7%	19,1%	9,0%	3,4%	68,5%	12,4%
Data security	43,2%	22,7%	19,3%	6,8%	8,0%	65,9%	14,8%
Problem Solving	7,9%	7,9%	27,0%	42,7%	14,6%	15,7%	57,3%
Optimization	23,6%	22,5%	31,5%	12,4%	10,1%	46,1%	22,5%
Analytical Skills	12,4%	22,5%	30,3%	22,5%	12,4%	34,8%	34,8%
Cognitive Ability	4,5%	14,6%	34,8%	31,5%	14,6%	19,1%	46,1%
Life-long learning	3,4%	5,7%	17,0%	38,6%	35,2%	9,1%	73,9%
Knowledge management	3,4%	10,1%	28,1%	33,7%	24,7%	13,5%	58,4%
Innovating	13,5%	14,6%	30,3%	30,3%	11,2%	28,1%	41,6%
Creativity	14,8%	19,3%	17,0%	27,3%	21,6%	34,1%	48,9%
Critical thinking	15,7%	19,1%	18,0%	25,8%	21,3%	34,8%	47,2%
Change management	21,6%	17,0%	33,0%	19,3%	9,1%	38,6%	28,4%
Business strategy	32,6%	19,1%	30,3%	11,2%	6,7%	51,7%	18,0%
Abstraction ability	16,1%	24,1%	32,2%	19,5%	8,0%	40,2%	27,6%
Managing complexity	22,7%	19,3%	28,4%	20,5%	9,1%	42,0%	29,5%
Project management	44,3%	23,9%	13,6%	11,4%	6,8%	68,2%	18,2%
Planning and organizing work	6,8%	21,6%	26,1%	31,8%	13,6%	28,4%	45,5%
Management ability	28,1%	23,6%	22,5%	19,1%	6,7%	51,7%	25,8%
Customer orientation	16,9%	21,3%	27,0%	19,1%	15,7%	38,2%	34,8%
Customer relationship management	18,0%	23,6%	23,6%	19,1%	15,7%	41,6%	34,8%
Legislation awareness	2,2%	18,0%	31,5%	38,2%	10,1%	20,2%	48,3%
Safety awareness	1,1%	11,2%	16,9%	33,7%	37,1%	12,4%	70,8%

Individual responsibility	1,1%	8,0%	10,3%	25,3%	55,2%	9,2%	80,5%
Work in interdisciplinary environments	9,1%	13,6%	31,8%	30,7%	14,8%	22,7%	45,5%
Intercultural competency	2,2%	16,9%	42,7%	22,5%	15,7%	19,1%	38,2%
Flexibility	2,3%	16,1%	32,2%	32,2%	17,2%	18,4%	49,4%
Adaptability and ability to change mind-set	3,4%	11,4%	34,1%	28,4%	22,7%	14,8%	51,1%
Work-life Balance	11,2%	21,3%	27,0%	21,3%	19,1%	32,6%	40,4%
Self-management and organization	11,2%	24,7%	29,2%	16,9%	18,0%	36,0%	34,8%
Business model understanding	24,7%	25,8%	23,6%	11,2%	14,6%	50,6%	25,8%
Entrepreneurship	39,3%	20,2%	23,6%	9,0%	7,9%	59,6%	16,9%

	Very Weak	Weak	Moderate	Strong	Very Strong	Weak+ Ver	Strong+
	Row Valid N %	Row Valid N %	Row Valid N %	Row Valid N %	Row Valid N %		Very Strong
Polish graduate							
Decision making	0,0%	1,4%	40,6%	46,4%	11,6%	1,4%	58,0%
Taking responsibility	0,0%	0,7%	16,7%	50,7%	31,9%	0,7%	82,6%
Leadership Skills	2,2%	5,1%	37,0%	43,5%	12,3%	7,2%	55,8%
Team work	0,7%	0,0%	18,8%	58,7%	21,7%	0,7%	80,4%
Collaborating with others	1,4%	0,0%	15,9%	60,1%	22,5%	1,4%	82,6%
Communicating with people	0,7%	2,9%	18,1%	63,0%	15,2%	3,6%	78,3%
Respecting ethics	1,4%	0,0%	9,4%	50,7%	38,4%	1,4%	89,1%
Environmental awareness	0,7%	2,2%	30,4%	44,2%	22,5%	2,9%	66,7%
Awareness of ergonomics	0,0%	8,0%	39,9%	43,5%	8,7%	8,0%	52,2%
Compromising	0,0%	2,9%	27,5%	53,6%	15,9%	2,9%	69,6%
Creating business networks	9,4%	23,2%	47,8%	15,9%	3,6%	32,6%	19,6%
Maintaining customer relationships	1,4%	8,0%	28,3%	44,9%	17,4%	9,4%	62,3%
Negotiating	0,0%	13,8%	38,4%	39,9%	8,0%	13,8%	47,8%
Emotional intelligence	0,0%	0,7%	21,0%	58,0%	20,3%	0,7%	78,3%
Presenting and communication ability	1,4%	5,8%	37,7%	44,2%	10,9%	7,2%	55,1%
Targeted/Technical Communication	0,7%	7,2%	51,4%	34,8%	5,8%	8,0%	40,6%
Literacy (Reporting, writing plans, writing letters)	0,7%	0,7%	6,5%	42,0%	50,0%	1,4%	92,0%
IT and technology affinity	1,4%	10,1%	44,9%	34,8%	8,7%	11,6%	43,5%
Economics	0,7%	14,5%	52,9%	27,5%	4,3%	15,2%	31,9%
Extract business value from social media	2,2%	13,8%	45,7%	35,5%	2,9%	15,9%	38,4%
Service orientation/product service offerings	1,4%	12,3%	49,3%	33,3%	3,6%	13,8%	37,0%
Business process management	2,9%	26,1%	42,8%	23,2%	5,1%	29,0%	28,3%
Business change management	3,6%	21,7%	42,8%	29,0%	2,9%	25,4%	31,9%
Understand and coordinate workflows	2,2%	11,6%	43,5%	37,7%	5,1%	13,8%	42,8%
Network security	1,4%	2,2%	37,7%	39,9%	18,8%	3,6%	58,7%
IT architectures	6,5%	34,1%	41,3%	13,0%	5,1%	40,6%	18,1%
Machine learning	11,6%	30,4%	40,6%	14,5%	2,9%	42,0%	17,4%
System development	6,5%	26,1%	48,6%	17,4%	1,4%	32,6%	18,8%
Integrating heterogeneous technologies	5,1%	26,1%	46,4%	18,1%	4,3%	31,2%	22,5%
Mobile technologies	2,2%	13,0%	41,3%	39,9%	3,6%	15,2%	43,5%
Sensors/embedded systems	18,1%	31,9%	38,4%	10,1%	1,4%	50,0%	11,6%
Network technology/M2M communication	21,7%	34,8%	30,4%	12,3%	0,7%	56,5%	13,0%
Robotics/Artificial intelligence	32,6%	35,5%	25,4%	6,5%	0,0%	68,1%	6,5%
Predictive maintenance	25,4%	28,3%	31,9%	12,3%	2,2%	53,6%	14,5%
Modelling and programming	29,7%	38,4%	22,5%	8,0%	1,4%	68,1%	9,4%
Big data/Data analysis and interpretation	21,7%	23,2%	36,2%	16,7%	2,2%	44,9%	18,8%
Cloud computing/architectures	29,7%	37,7%	23,2%	8,0%	1,4%	67,4%	9,4%
In-memory DBs	39,9%	31,9%	18,8%	8,7%	0,7%	71,7%	9,4%
Statistics	13,0%	31,2%	44,9%	9,4%	1,4%	44,2%	10,9%
Data security	10,1%	21,0%	39,9%	23,2%	5,8%	31,2%	29,0%
Problem Solving	1,4%	5,1%	37,0%	49,3%	7,2%	6,5%	56,5%
Optimization	4,3%	15,9%	44,2%	33,3%	2,2%	20,3%	35,5%
Analytical Skills	3,6%	18,8%	44,2%	26,1%	7,2%	22,5%	33,3%
Cognitive Ability	2,9%	5,1%	35,5%	45,7%	10,9%	8,0%	56,5%
Life-long learning	0,7%	1,4%	17,4%	55,1%	25,4%	2,2%	80,4%
Knowledge management	2,2%	0,7%	37,7%	50,0%	9,4%	2,9%	59,4%
Innovating	1,4%	5,1%	47,1%	37,7%	8,7%	6,5%	46,4%
Creativity	2,2%	2,2%	23,2%	50,0%	22,5%	4,3%	72,5%
Critical thinking	0,0%	3,6%	30,4%	48,6%	17,4%	3,6%	65,9%
Change management	1,4%	9,4%	50,0%	32,6%	6,5%	10,9%	39,1%
Business strategy	7,2%	24,6%	40,6%	23,2%	4,3%	31,9%	27,5%
Abstraction ability	1,4%	10,1%	42,0%	33,3%	13,0%	11,6%	46,4%
Managing complexity	5,8%	23,9%	48,6%	18,1%	3,6%	29,7%	21,7%
Project management	2,2%	11,6%	48,6%	31,2%	6,5%	13,8%	37,7%
Planning and organizing work	2,2%	5,1%	27,5%	43,5%	21,7%	7,2%	65,2%
Management ability	3,6%	9,4%	31,2%	38,4%	17,4%	13,0%	55,8%
Customer orientation	2,2%	9,4%	36,2%	38,4%	13,8%	11,6%	52,2%
Customer relationship management	1,4%	10,1%	31,2%	43,5%	13,8%	11,6%	57,2%
Legislation awareness	3,6%	16,7%	49,3%	23,9%	6,5%	20,3%	30,4%
Safety awareness	0,7%	7,2%	32,6%	48,6%	10,9%	8,0%	59,4%
Individual responsibility	2,2%	2,2%	22,5%	46,4%	26,8%	4,3%	73,2%

Work in interdisciplinary environments	1,4%	11,6%	49,3%	30,4%	7,2%	13,0%	37,7%
Intercultural competency	0,7%	11,6%	38,4%	31,9%	17,4%	12,3%	49,3%
Flexibility	0,7%	3,6%	28,3%	46,4%	21,0%	4,3%	67,4%
Adaptability and ability to change mind-set	0,7%	4,3%	33,3%	50,0%	11,6%	5,1%	61,6%
Work-life Balance	0,7%	3,6%	34,1%	50,0%	11,6%	4,3%	61,6%
Self-management and organization	2,2%	1,4%	26,1%	50,0%	20,3%	3,6%	70,3%
Business model understanding	7,2%	15,9%	46,4%	26,1%	4,3%	23,2%	30,4%
Entrepreneurship	0,7%	8,7%	45,7%	34,1%	10,9%	9,4%	44,9%

	Very Weak	Weak	Moderate	Strong	Very Strong	Weak+ Ver	Strong+
	Row Valid N %	Row Valid N %	Row Valid N %	Row Valid N %	Row Valid N %		Very Strong
Polish employee							
Decision making	1,1%	2,1%	21,3%	51,1%	24,5%	3,2%	75,5%
Taking responsibility	0,0%	3,2%	9,6%	55,3%	31,9%	3,2%	87,2%
Leadership Skills	0,0%	4,3%	35,1%	44,7%	16,0%	4,3%	60,6%
Team work	1,1%	2,1%	14,9%	52,1%	29,8%	3,2%	81,9%
Collaborating with others	0,0%	1,1%	14,9%	54,3%	29,8%	1,1%	84,0%
Communicating with people	0,0%	1,1%	9,6%	54,3%	35,1%	1,1%	89,4%
Respecting ethics	0,0%	0,0%	5,3%	39,4%	55,3%	0,0%	94,7%
Environmental awareness	0,0%	4,3%	19,1%	52,1%	24,5%	4,3%	76,6%
Awareness of ergonomics	2,1%	6,4%	38,3%	41,5%	11,7%	8,5%	53,2%
Compromising	0,0%	3,2%	24,5%	48,9%	23,4%	3,2%	72,3%
Creating business networks	6,4%	28,7%	45,7%	14,9%	4,3%	35,1%	19,1%
Maintaining customer relationships	0,0%	8,5%	26,6%	39,4%	25,5%	8,5%	64,9%
Negotiating	1,1%	8,5%	43,6%	39,4%	7,4%	9,6%	46,8%
Emotional intelligence	0,0%	2,1%	22,3%	47,9%	27,7%	2,1%	75,5%
Presenting and communication ability	0,0%	2,1%	18,1%	51,1%	28,7%	2,1%	79,8%
Targeted/Technical Communication	1,1%	5,3%	39,4%	41,5%	12,8%	6,4%	54,3%
Literacy (Reporting, writing plans, writing letters)	0,0%	0,0%	2,1%	30,9%	67,0%	0,0%	97,9%
IT and technology affinity	0,0%	6,4%	40,4%	36,2%	17,0%	6,4%	53,2%
Economics	1,1%	18,1%	45,7%	26,6%	8,5%	19,1%	35,1%
Extract business value from social media	7,4%	24,5%	33,0%	28,7%	6,4%	31,9%	35,1%
Service orientation/product service offerings	3,2%	21,3%	42,6%	29,8%	3,2%	24,5%	33,0%
Business process management	13,8%	28,7%	34,0%	20,2%	3,2%	42,6%	23,4%
Business change management	6,4%	24,5%	36,2%	27,7%	5,3%	30,9%	33,0%
Understand and coordinate workflows	4,3%	21,3%	38,3%	30,9%	5,3%	25,5%	36,2%
Network security	1,1%	5,3%	35,1%	46,8%	11,7%	6,4%	58,5%
IT architectures	11,7%	30,9%	40,4%	12,8%	4,3%	42,6%	17,0%
Machine learning	19,1%	22,3%	47,9%	7,4%	3,2%	41,5%	10,6%
System development	18,1%	30,9%	35,1%	12,8%	3,2%	48,9%	16,0%
Integrating heterogeneous technologies	14,9%	28,7%	37,2%	14,9%	4,3%	43,6%	19,1%
Mobile technologies	7,4%	17,0%	50,0%	19,1%	6,4%	24,5%	25,5%
Sensors/embedded systems	33,0%	29,8%	27,7%	7,4%	2,1%	62,8%	9,6%
Network technology/M2M communication	45,7%	24,5%	21,3%	5,3%	3,2%	70,2%	8,5%
Robotics/Artificial intelligence	51,1%	31,9%	11,7%	2,1%	3,2%	83,0%	5,3%
Predictive maintenance	54,3%	24,5%	12,8%	6,4%	2,1%	78,7%	8,5%
Modelling and programming	57,4%	23,4%	12,8%	5,3%	1,1%	80,9%	6,4%
Big data/Data analysis and interpretation	26,6%	28,7%	30,9%	11,7%	2,1%	55,3%	13,8%
Cloud computing/architectures	39,4%	29,8%	22,3%	7,4%	1,1%	69,1%	8,5%
In-memory DBs	59,6%	24,5%	9,6%	5,3%	1,1%	84,0%	6,4%
Statistics	23,4%	29,8%	34,0%	10,6%	2,1%	53,2%	12,8%
Data security	10,6%	20,2%	40,4%	23,4%	5,3%	30,9%	28,7%
Problem Solving	3,2%	2,1%	35,1%	43,6%	16,0%	5,3%	59,6%
Optimization	7,4%	18,1%	41,5%	26,6%	6,4%	25,5%	33,0%
Analytical Skills	5,3%	5,3%	41,5%	34,0%	13,8%	10,6%	47,9%
Cognitive Ability	2,1%	1,1%	20,2%	55,3%	21,3%	3,2%	76,6%
Life-long learning	0,0%	0,0%	5,3%	39,4%	55,3%	0,0%	94,7%
Knowledge management	0,0%	0,0%	23,4%	43,6%	33,0%	0,0%	76,6%
Innovating	0,0%	3,2%	39,4%	40,4%	17,0%	3,2%	57,4%
Creativity	0,0%	1,1%	28,7%	35,1%	35,1%	1,1%	70,2%
Critical thinking	0,0%	2,1%	22,3%	52,1%	23,4%	2,1%	75,5%
Change management	0,0%	11,7%	50,0%	27,7%	10,6%	11,7%	38,3%
Business strategy	13,8%	26,6%	38,3%	13,8%	7,4%	40,4%	21,3%
Abstraction ability	2,1%	1,1%	34,0%	42,6%	20,2%	3,2%	62,8%
Managing complexity	5,3%	19,1%	46,8%	24,5%	4,3%	24,5%	28,7%
Project management	2,1%	16,0%	36,2%	35,1%	10,6%	18,1%	45,7%
Planning and organizing work	0,0%	1,1%	19,1%	53,2%	26,6%	1,1%	79,8%
Management ability	1,1%	5,3%	37,2%	44,7%	11,7%	6,4%	56,4%
Customer orientation	0,0%	1,1%	24,5%	56,4%	18,1%	1,1%	74,5%
Customer relationship management	0,0%	4,3%	29,8%	47,9%	18,1%	4,3%	66,0%
Legislation awareness	2,1%	9,6%	40,4%	37,2%	10,6%	11,7%	47,9%
Safety awareness	2,1%	3,2%	39,4%	42,6%	12,8%	5,3%	55,3%

Individual responsibility	1,1%	0,0%	13,8%	59,6%	25,5%	1,1%	85,1%
Work in interdisciplinary environments	2,1%	7,4%	35,1%	40,4%	14,9%	9,6%	55,3%
Intercultural competency	1,1%	10,6%	39,4%	35,1%	13,8%	11,7%	48,9%
Flexibility	0,0%	0,0%	21,3%	55,3%	23,4%	0,0%	78,7%
Adaptability and ability to change mind-set	0,0%	1,1%	30,9%	53,2%	14,9%	1,1%	68,1%
Work-life Balance	3,2%	8,5%	35,1%	42,6%	10,6%	11,7%	53,2%
Self-management and organization	1,1%	4,3%	20,2%	53,2%	21,3%	5,3%	74,5%
Business model understanding	6,4%	26,6%	36,2%	27,7%	3,2%	33,0%	30,9%
Entrepreneurship	2,1%	16,0%	41,5%	26,6%	13,8%	18,1%	40,4%

	Very Weak Row Valid N %	Weak Row Valid N %	Moderate Row Valid N %	Strong Row Valid N %	Very Strong Row Valid N %	Weak+ Ver	Strong+ Ver Very Strong
Hungarian employees							
Decision making	0,0%	20,0%	26,7%	40,0%	13,3%	20,0%	53,3%
Taking responsibility	0,0%	8,3%	31,7%	31,7%	28,3%	8,3%	60,0%
Leadership Skills	1,7%	20,0%	38,3%	31,7%	8,3%	21,7%	40,0%
Team work	0,0%	15,3%	16,9%	42,4%	25,4%	15,3%	67,8%
Collaborating with others	1,7%	11,7%	26,7%	35,0%	25,0%	13,3%	60,0%
Communicating with people	0,0%	11,7%	23,3%	36,7%	28,3%	11,7%	65,0%
Respecting ethics	1,7%	8,3%	13,3%	45,0%	31,7%	10,0%	76,7%
Environmental awareness	0,0%	13,3%	21,7%	43,3%	21,7%	13,3%	65,0%
Awareness of ergonomics	10,0%	18,3%	36,7%	26,7%	8,3%	28,3%	35,0%
Compromising	5,0%	6,7%	28,3%	55,0%	5,0%	11,7%	60,0%
Creating business networks	0,0%	13,3%	28,3%	36,7%	21,7%	13,3%	58,3%
Maintaining customer relationships	1,7%	16,7%	15,0%	38,3%	28,3%	18,3%	66,7%
Negotiating	3,3%	11,7%	25,0%	41,7%	18,3%	15,0%	60,0%
Emotional intelligence	1,7%	13,3%	18,3%	35,0%	31,7%	15,0%	66,7%
Presenting and communication ability	3,3%	16,7%	25,0%	40,0%	15,0%	20,0%	55,0%
Targeted/Technical Communication	6,7%	13,3%	21,7%	43,3%	15,0%	20,0%	58,3%
Literacy (Reporting, writing plans, writing letters)	11,9%	8,5%	25,4%	37,3%	16,9%	20,3%	54,2%
IT and technology affinity	11,9%	15,3%	30,5%	33,9%	8,5%	27,1%	42,4%
Economics	5,1%	25,4%	47,5%	16,9%	5,1%	30,5%	22,0%
Extract business value from social media	6,8%	23,7%	49,2%	16,9%	3,4%	30,5%	20,3%
Service orientation/product service offerings	8,6%	20,7%	36,2%	24,1%	10,3%	29,3%	34,5%
Business process management	5,2%	25,9%	34,5%	31,0%	3,4%	31,0%	34,5%
Business change management	1,7%	31,0%	27,6%	31,0%	8,6%	32,8%	39,7%
Understand and coordinate workflows	3,4%	12,1%	27,6%	37,9%	19,0%	15,5%	56,9%
Network security	5,2%	13,8%	37,9%	32,8%	10,3%	19,0%	43,1%
IT architectures	17,2%	32,8%	36,2%	12,1%	1,7%	50,0%	13,8%
Machine learning	17,2%	20,7%	37,9%	20,7%	3,4%	37,9%	24,1%
System development	27,6%	20,7%	34,5%	12,1%	5,2%	48,3%	17,2%
Integrating heterogeneous technologies	29,3%	24,1%	29,3%	15,5%	1,7%	53,4%	17,2%
Mobile technologies	21,1%	24,6%	31,6%	17,5%	5,3%	45,6%	22,8%
Sensors/embedded systems	41,4%	24,1%	22,4%	8,6%	3,4%	65,5%	12,1%
Network technology/M2M communication	29,3%	37,9%	24,1%	8,6%	0,0%	67,2%	8,6%
Robotics/Artificial intelligence	39,7%	32,8%	22,4%	3,4%	1,7%	72,4%	5,2%
Predictive maintenance	40,4%	22,8%	29,8%	5,3%	1,8%	63,2%	7,0%
Modelling and programming	34,5%	41,4%	17,2%	5,2%	1,7%	75,9%	6,9%
Big data/Data analysis and interpretation	24,1%	31,0%	29,3%	10,3%	5,2%	55,2%	15,5%
Cloud computing/architectures	39,7%	27,6%	19,0%	10,3%	3,4%	67,2%	13,8%
In-memory DBs	39,7%	32,8%	20,7%	6,9%	0,0%	72,4%	6,9%
Statistics	16,9%	37,3%	33,9%	5,1%	6,8%	54,2%	11,9%
Data security	17,5%	35,1%	31,6%	14,0%	1,8%	52,6%	15,8%
Problem Solving	5,1%	8,5%	30,5%	39,0%	16,9%	13,6%	55,9%
Optimization	0,0%	25,4%	33,9%	32,2%	8,5%	25,4%	40,7%
Analytical Skills	8,5%	18,6%	30,5%	37,3%	5,1%	27,1%	42,4%
Cognitive Ability	3,4%	10,2%	27,1%	37,3%	22,0%	13,6%	59,3%
Life-long learning	5,1%	15,3%	20,3%	28,8%	30,5%	20,3%	59,3%
Knowledge management	1,7%	24,1%	29,3%	25,9%	19,0%	25,9%	44,8%
Innovating	5,1%	10,2%	37,3%	27,1%	20,3%	15,3%	47,5%
Creativity	0,0%	12,1%	29,3%	24,1%	34,5%	12,1%	58,6%
Critical thinking	1,7%	11,9%	28,8%	30,5%	27,1%	13,6%	57,6%
Change management	6,8%	16,9%	20,3%	44,1%	11,9%	23,7%	55,9%
Business strategy	6,9%	15,5%	44,8%	24,1%	8,6%	22,4%	32,8%
Abstraction ability	0,0%	25,9%	43,1%	22,4%	8,6%	25,9%	31,0%
Managing complexity	5,2%	17,2%	39,7%	24,1%	13,8%	22,4%	37,9%
Project management	3,4%	18,6%	35,6%	35,6%	6,8%	22,0%	42,4%

Planning and organizing work	0,0%	16,9%	25,4%	40,7%	16,9%	16,9%	57,6%
Management ability	8,5%	10,2%	27,1%	33,9%	20,3%	18,6%	54,2%
Customer orientation	1,7%	10,2%	23,7%	40,7%	23,7%	11,9%	64,4%
Customer relationship management	1,7%	13,6%	22,0%	37,3%	25,4%	15,3%	62,7%
Legislation awareness	22,0%	30,5%	30,5%	15,3%	1,7%	52,5%	16,9%
Safety awareness	8,6%	25,9%	29,3%	25,9%	10,3%	34,5%	36,2%
Individual responsibility	5,1%	10,2%	20,3%	37,3%	27,1%	15,3%	64,4%
Work in interdisciplinary environments	5,3%	19,3%	28,1%	35,1%	12,3%	24,6%	47,4%
Intercultural competency	13,6%	15,3%	22,0%	32,2%	16,9%	28,8%	49,2%
Flexibility	3,4%	16,9%	22,0%	33,9%	23,7%	20,3%	57,6%
Adaptability and ability to change mind-set	3,4%	15,3%	33,9%	35,6%	11,9%	18,6%	47,5%
Work-life Balance	3,4%	28,8%	33,9%	20,3%	13,6%	32,2%	33,9%
Self-management and organization	3,4%	16,9%	25,4%	30,5%	23,7%	20,3%	54,2%
Business model understanding	1,7%	22,4%	37,9%	27,6%	10,3%	24,1%	37,9%
Entrepreneurship	1,8%	17,9%	35,7%	23,2%	21,4%	19,6%	44,6%

	Very Weak Row Valid N %	Weak Row Valid N %	Moderate Row Valid N %	Strong Row Valid N %	Very Strong Row Valid N %	Weak + Ve	Strong+ Very Strong
Hungarian graduates							
Decision making	1,0%	7,0%	28,0%	42,0%	22,0%	8,0%	64,0%
Taking responsibility	0,0%	7,0%	25,0%	42,0%	26,0%	7,0%	68,0%
Leadership Skills	2,0%	10,0%	38,0%	33,0%	17,0%	12,0%	50,0%
Team work	0,0%	4,0%	21,0%	32,0%	43,0%	4,0%	75,0%
Collaborating with others	1,0%	4,0%	14,0%	38,0%	43,0%	5,0%	81,0%
Communicating with people	0,0%	5,0%	19,0%	36,0%	40,0%	5,0%	76,0%
Respecting ethics	2,0%	4,0%	21,0%	42,0%	31,0%	6,0%	73,0%
Environmental awareness	0,0%	9,0%	26,0%	40,0%	25,0%	9,0%	65,0%
Awareness of ergonomics	4,0%	18,0%	38,0%	28,0%	12,0%	22,0%	40,0%
Compromising	2,0%	7,0%	20,0%	50,0%	21,0%	9,0%	71,0%
Creating business networks	1,0%	4,0%	19,0%	41,0%	35,0%	5,0%	76,0%
Maintaining customer relationships	1,0%	12,1%	18,2%	36,4%	32,3%	13,1%	68,7%
Negotiating	0,0%	13,0%	27,0%	36,0%	24,0%	13,0%	60,0%
Emotional intelligence	0,0%	1,0%	23,2%	35,4%	40,4%	1,0%	75,8%
Presenting and communication ability	0,0%	5,0%	25,0%	41,0%	29,0%	5,0%	70,0%
Targeted/Technical Communication	0,0%	7,0%	20,0%	46,0%	27,0%	7,0%	73,0%
Literacy (Reporting, writing plans, writing letters)	2,0%	4,0%	18,0%	43,0%	33,0%	6,0%	76,0%
IT and technology affinity	4,0%	11,0%	27,0%	33,0%	25,0%	15,0%	58,0%
Economics	7,1%	20,2%	42,4%	22,2%	8,1%	27,3%	30,3%
Extract business value from social media	13,0%	24,0%	49,0%	11,0%	3,0%	37,0%	14,0%
Service orientation/product service offerings	8,0%	22,0%	31,0%	24,0%	15,0%	30,0%	39,0%
Business process management	7,0%	27,0%	39,0%	20,0%	7,0%	34,0%	27,0%
Business change management	7,0%	25,0%	41,0%	19,0%	8,0%	32,0%	27,0%
Understand and coordinate workflows	3,0%	10,0%	24,0%	44,0%	19,0%	13,0%	63,0%
Network security	7,0%	16,0%	34,0%	34,0%	9,0%	23,0%	43,0%
IT architectures	16,0%	23,0%	32,0%	17,0%	12,0%	39,0%	29,0%
Machine learning	27,0%	21,0%	21,0%	15,0%	16,0%	48,0%	31,0%
System development	19,4%	26,5%	24,5%	20,4%	9,2%	45,9%	29,6%
Integrating heterogeneous technologies	39,0%	18,0%	28,0%	8,0%	7,0%	57,0%	15,0%
Mobile technologies	16,0%	13,0%	27,0%	29,0%	15,0%	29,0%	44,0%
Sensors/embedded systems	44,0%	19,0%	21,0%	8,0%	8,0%	63,0%	16,0%
Network technology/M2M communication	48,0%	20,0%	18,0%	11,0%	3,0%	68,0%	14,0%
Robotics/Artificial intelligence	43,0%	23,0%	19,0%	8,0%	7,0%	66,0%	15,0%
Predictive maintenance	42,4%	25,3%	16,2%	12,1%	4,0%	67,7%	16,2%
Modelling and programming	34,0%	21,0%	23,0%	12,0%	10,0%	55,0%	22,0%
Big data/Data analysis and interpretation	14,0%	17,0%	36,0%	24,0%	9,0%	31,0%	33,0%
Cloud computing/architectures	37,4%	24,2%	18,2%	13,1%	7,1%	61,6%	20,2%
In-memory DBs	54,0%	20,0%	14,0%	10,0%	2,0%	74,0%	12,0%
Statistics	9,0%	27,0%	39,0%	21,0%	4,0%	36,0%	25,0%
Data security	18,0%	30,0%	26,0%	16,0%	10,0%	48,0%	26,0%
Problem Solving	2,0%	5,0%	16,0%	35,0%	42,0%	7,0%	77,0%
Optimization	6,1%	14,1%	25,3%	40,4%	14,1%	20,2%	54,5%
Analytical Skills	5,0%	15,0%	38,0%	31,0%	11,0%	20,0%	42,0%
Cognitive Ability	1,0%	6,0%	22,0%	48,0%	23,0%	7,0%	71,0%
Life-long learning	3,0%	12,0%	20,0%	28,0%	37,0%	15,0%	65,0%
Knowledge management	4,0%	12,0%	32,0%	36,0%	16,0%	16,0%	52,0%
Innovating	4,0%	8,0%	23,0%	38,0%	27,0%	12,0%	65,0%
Creativity	2,0%	3,0%	13,0%	32,0%	50,0%	5,0%	82,0%
Critical thinking	0,0%	4,0%	25,3%	43,4%	27,3%	4,0%	70,7%
Change management	0,0%	8,0%	26,0%	44,0%	22,0%	8,0%	66,0%
Business strategy	10,0%	20,0%	36,0%	26,0%	8,0%	30,0%	34,0%
Abstraction ability	3,0%	19,0%	39,0%	28,0%	11,0%	22,0%	39,0%
Managing complexity	1,0%	11,0%	38,0%	38,0%	12,0%	12,0%	50,0%
Project management	2,0%	15,2%	32,3%	30,3%	20,2%	17,2%	50,5%

Planning and organizing work	1,0%	8,0%	25,0%	41,0%	25,0%	9,0%	66,0%
Management ability	3,0%	12,0%	23,0%	33,0%	29,0%	15,0%	62,0%
Customer orientation	3,0%	17,0%	20,0%	37,0%	23,0%	20,0%	60,0%
Customer relationship management	2,0%	18,0%	20,0%	38,0%	22,0%	20,0%	60,0%
Legislation awareness	22,0%	16,0%	35,0%	20,0%	7,0%	38,0%	27,0%
Safety awareness	6,0%	13,0%	32,0%	35,0%	14,0%	19,0%	49,0%
Individual responsibility	2,0%	9,0%	27,0%	44,0%	18,0%	11,0%	62,0%
Work in interdisciplinary environments	8,0%	8,0%	40,0%	28,0%	16,0%	16,0%	44,0%
Intercultural competency	5,0%	11,0%	38,0%	27,0%	19,0%	16,0%	46,0%
Flexibility	2,0%	7,0%	20,0%	43,0%	28,0%	9,0%	71,0%
Adaptability and ability to change mind-set	0,0%	9,0%	30,0%	38,0%	23,0%	9,0%	61,0%
Work-life Balance	0,0%	16,0%	27,0%	43,0%	14,0%	16,0%	57,0%
Self-management and organization	0,0%	8,1%	31,3%	37,4%	23,2%	8,1%	60,6%
Business model understanding	6,1%	14,1%	41,4%	24,2%	14,1%	20,2%	38,4%
Entrepreneurship	3,0%	10,1%	23,2%	37,4%	26,3%	13,1%	63,6%

	Very Weak	Weak	Moderate	Strong	Very Strong	Weak+ Ver	Strong+
	Row Valid N %	Row Valid N %	Row Valid N %	Row Valid N %	Row Valid N %		Very Strong
Turkish graduate							
Decision making	0,9%	5,5%	38,5%	41,3%	13,8%	6,4%	55,0%
Taking responsibility	0,9%	5,5%	22,0%	47,7%	23,9%	6,4%	71,6%
Leadership Skills	0,0%	7,4%	30,6%	40,7%	21,3%	7,4%	62,0%
Team work	0,9%	11,0%	28,4%	44,0%	15,6%	11,9%	59,6%
Collaborating with others	0,0%	6,4%	26,6%	49,5%	17,4%	6,4%	67,0%
Communicating with people	0,9%	1,8%	25,7%	46,8%	24,8%	2,8%	71,6%
Respecting ethics	0,9%	1,9%	20,4%	51,9%	25,0%	2,8%	76,9%
Environmental awareness	0,0%	3,7%	22,4%	46,7%	27,1%	3,7%	73,8%
Awareness of ergonomics	1,0%	10,7%	38,8%	38,8%	10,7%	11,7%	49,5%
Compromising	0,0%	4,6%	24,1%	54,6%	16,7%	4,6%	71,3%
Creating business networks	0,9%	9,2%	38,5%	38,5%	12,8%	10,1%	51,4%
Maintaining customer relationships	1,8%	6,4%	37,6%	41,3%	12,8%	8,3%	54,1%
Negotiating	6,4%	22,9%	21,1%	30,3%	19,3%	29,4%	49,5%
Emotional intelligence	0,9%	7,4%	20,4%	43,5%	27,8%	8,3%	71,3%
Presenting and communication ability	0,9%	10,2%	35,2%	38,0%	15,7%	11,1%	53,7%
Targeted/Technical Communication	0,9%	9,2%	43,1%	40,4%	6,4%	10,1%	46,8%
Literacy (Reporting, writing plans, writing letters)	2,8%	12,8%	29,4%	37,6%	17,4%	15,6%	55,0%
IT and technology affinity	0,0%	8,3%	35,2%	42,6%	13,9%	8,3%	56,5%
Economics	3,7%	12,8%	46,8%	28,4%	8,3%	16,5%	36,7%
Extract business value from social media	1,9%	15,7%	39,8%	28,7%	13,9%	17,6%	42,6%
Service orientation/product service offerings	3,7%	9,2%	39,4%	39,4%	8,3%	12,8%	47,7%
Business process management	2,8%	9,2%	45,9%	33,9%	8,3%	11,9%	42,2%
Business change management	5,5%	18,3%	51,4%	19,3%	5,5%	23,9%	24,8%
Understand and coordinate workflows	0,9%	11,1%	31,5%	44,4%	12,0%	12,0%	56,5%
Network security	5,6%	25,0%	40,7%	25,0%	3,7%	30,6%	28,7%
IT architectures	4,6%	28,4%	47,7%	17,4%	1,8%	33,0%	19,3%
Machine learning	3,7%	20,2%	42,2%	27,5%	6,4%	23,9%	33,9%
System development	3,7%	24,8%	39,4%	28,4%	3,7%	28,4%	32,1%
Integrating heterogeneous technologies	5,5%	22,9%	38,5%	27,5%	5,5%	28,4%	33,0%
Mobile technologies	2,8%	16,7%	33,3%	37,0%	10,2%	19,4%	47,2%
Sensors/embedded systems	9,3%	25,0%	34,3%	25,9%	5,6%	34,3%	31,5%
Network technology/M2M communication	12,0%	23,1%	38,0%	22,2%	4,6%	35,2%	26,9%
Robotics/Artificial intelligence	8,3%	30,6%	41,7%	16,7%	2,8%	38,9%	19,4%
Predictive maintenance	8,3%	20,2%	39,4%	29,4%	2,8%	28,4%	32,1%
Modelling and programming	8,3%	25,7%	39,4%	22,9%	3,7%	33,9%	26,6%
Big data/Data analysis and interpretation	11,9%	27,5%	35,8%	20,2%	4,6%	39,4%	24,8%
Cloud computing/architectures	15,6%	31,2%	33,0%	17,4%	2,8%	46,8%	20,2%
In-memory DBs	17,4%	26,6%	33,9%	19,3%	2,8%	44,0%	22,0%
Statistics	5,5%	22,0%	43,1%	20,2%	9,2%	27,5%	29,4%
Data security	8,3%	27,5%	35,8%	22,0%	6,4%	35,8%	28,4%
Problem Solving	0,9%	3,7%	36,4%	44,9%	14,0%	4,7%	58,9%
Optimization	3,7%	8,3%	54,6%	29,6%	3,7%	12,0%	33,3%
Analytical Skills	2,8%	8,3%	43,1%	39,4%	6,4%	11,0%	45,9%
Cognitive Ability	0,9%	7,4%	35,2%	41,7%	14,8%	8,3%	56,5%
Life-long learning	0,9%	5,6%	24,1%	44,4%	25,0%	6,5%	69,4%
Knowledge management	0,9%	10,2%	28,7%	50,0%	10,2%	11,1%	60,2%
Innovating	2,8%	10,1%	42,2%	33,9%	11,0%	12,8%	45,0%
Creativity	4,6%	4,6%	34,9%	35,8%	20,2%	9,2%	56,0%
Critical thinking	0,0%	4,6%	31,5%	38,9%	25,0%	4,6%	63,9%
Change management	0,9%	11,0%	43,1%	34,9%	10,1%	11,9%	45,0%
Business strategy	2,8%	15,6%	36,7%	33,9%	11,0%	18,3%	45,0%
Abstraction ability	0,9%	8,3%	39,4%	28,4%	22,9%	9,2%	51,4%
Managing complexity	1,9%	8,4%	41,1%	32,7%	15,9%	10,3%	48,6%
Project management	1,8%	9,2%	42,2%	34,9%	11,9%	11,0%	46,8%
Planning and organizing work	2,8%	9,2%	34,9%	41,3%	11,9%	11,9%	53,2%
Management ability	2,8%	10,1%	32,1%	39,4%	15,6%	12,8%	55,0%
Customer orientation	5,6%	7,4%	30,6%	41,7%	14,8%	13,0%	56,5%
Customer relationship management	4,7%	8,5%	34,9%	39,6%	12,3%	13,2%	51,9%
Legislation awareness	5,5%	12,8%	41,3%	33,9%	6,4%	18,3%	40,4%

Safety awareness	2,8%	10,1%	32,1%	45,0%	10,1%	12,8%	55,0%
Individual responsibility	0,9%	4,6%	24,1%	51,9%	18,5%	5,6%	70,4%
Work in interdisciplinary environments	0,9%	1,8%	37,6%	49,5%	10,1%	2,8%	59,6%
Intercultural competency	0,9%	7,4%	41,7%	35,2%	14,8%	8,3%	50,0%
Flexibility	0,9%	6,4%	42,2%	37,6%	12,8%	7,3%	50,5%
Adaptability and ability to change mind-set	0,9%	8,5%	27,4%	47,2%	16,0%	9,4%	63,2%
Work-life Balance	0,9%	8,3%	40,7%	39,8%	10,2%	9,3%	50,0%
Self-management and organization	0,0%	4,6%	23,9%	44,0%	27,5%	4,6%	71,6%
Business model understanding	2,8%	10,2%	34,3%	38,9%	13,9%	13,0%	52,8%
Entrepreneurship	1,8%	9,2%	33,9%	33,9%	21,1%	11,0%	55,0%

	Very Weak	Weak	Moderate	Strong	Very Strong	Weak+ Ver	Stron+ Very Strong
	Row Valid N %	Row Valid N %	Row Valid N %	Row Valid N %	Row Valid N %		
Turkish employees							
Decision making	1,7%	5,0%	30,0%	48,3%	15,0%	6,7%	63,3%
Taking responsibility	0,0%	6,7%	16,7%	46,7%	30,0%	6,7%	76,7%
Leadership Skills	1,7%	8,3%	36,7%	46,7%	6,7%	10,0%	53,3%
Team work	0,0%	5,0%	16,7%	55,0%	23,3%	5,0%	78,3%
Collaborating with others	0,0%	3,4%	18,6%	49,2%	28,8%	3,4%	78,0%
Communicating with people	0,0%	3,3%	25,0%	45,0%	26,7%	3,3%	71,7%
Respecting ethics	1,7%	3,4%	22,0%	44,1%	28,8%	5,1%	72,9%
Environmental awareness	1,7%	10,2%	15,3%	47,5%	25,4%	11,9%	72,9%
Awareness of ergonomics	3,6%	7,3%	40,0%	34,5%	14,5%	10,9%	49,1%
Compromising	0,0%	6,7%	13,3%	58,3%	21,7%	6,7%	80,0%
Creating business networks	0,0%	5,2%	24,1%	60,3%	10,3%	5,2%	70,7%
Maintaining customer relationships	0,0%	5,1%	28,8%	42,4%	23,7%	5,1%	66,1%
Negotiating	5,2%	8,6%	39,7%	29,3%	17,2%	13,8%	46,6%
Emotional intelligence	0,0%	16,9%	22,0%	40,7%	20,3%	16,9%	61,0%
Presenting and communication ability	1,7%	8,5%	35,6%	39,0%	15,3%	10,2%	54,2%
Targeted/Technical Communication	3,4%	5,1%	40,7%	40,7%	10,2%	8,5%	50,8%
Literacy (Reporting, writing plans, writing letters)	5,2%	6,9%	32,8%	43,1%	12,1%	12,1%	55,2%
IT and technology affinity	1,7%	15,3%	28,8%	30,5%	23,7%	16,9%	54,2%
Economics	5,2%	10,3%	46,6%	31,0%	6,9%	15,5%	37,9%
Extract business value from social media	3,3%	13,3%	36,7%	35,0%	11,7%	16,7%	46,7%
Service orientation/product service offerings	0,0%	8,5%	44,1%	42,4%	5,1%	8,5%	47,5%
Business process management	1,7%	12,1%	31,0%	46,6%	8,6%	13,8%	55,2%
Business change management	8,6%	13,8%	41,4%	32,8%	3,4%	22,4%	36,2%
Understand and coordinate workflows	5,2%	0,0%	25,9%	50,0%	19,0%	5,2%	69,0%
Network security	11,7%	23,3%	40,0%	18,3%	6,7%	35,0%	25,0%
IT architectures	18,6%	23,7%	37,3%	20,3%	0,0%	42,4%	20,3%
Machine learning	10,7%	16,1%	32,1%	28,6%	12,5%	26,8%	41,1%
System development	13,8%	13,8%	41,4%	22,4%	8,6%	27,6%	31,0%
Integrating heterogeneous technologies	15,0%	16,7%	35,0%	28,3%	5,0%	31,7%	33,3%
Mobile technologies	5,1%	18,6%	37,3%	28,8%	10,2%	23,7%	39,0%
Sensors/embedded systems	19,0%	22,4%	43,1%	12,1%	3,4%	41,4%	15,5%
Network technology/M2M communication	18,6%	23,7%	25,4%	27,1%	5,1%	42,4%	32,2%
Robotics/Artificial intelligence	33,9%	25,4%	23,7%	10,2%	6,8%	59,3%	16,9%
Predictive maintenance	16,9%	20,3%	35,6%	20,3%	6,8%	37,3%	27,1%
Modelling and programming	23,7%	30,5%	27,1%	10,2%	8,5%	54,2%	18,6%
Big data/Data analysis and interpretation	24,1%	27,6%	25,9%	19,0%	3,4%	51,7%	22,4%
Cloud computing/architectures	27,6%	36,2%	32,8%	1,7%	1,7%	63,8%	3,4%
In-memory DBs	30,0%	31,7%	26,7%	8,3%	3,3%	61,7%	11,7%
Statistics	28,1%	17,5%	33,3%	17,5%	3,5%	45,6%	21,1%
Data security	20,0%	26,7%	31,7%	13,3%	8,3%	46,7%	21,7%
Problem Solving	0,0%	1,8%	26,3%	54,4%	17,5%	1,8%	71,9%
Optimization	1,8%	17,5%	40,4%	36,8%	3,5%	19,3%	40,4%
Analytical Skills	3,4%	15,3%	42,4%	32,2%	6,8%	18,6%	39,0%
Cognitive Ability	5,1%	5,1%	40,7%	40,7%	8,5%	10,2%	49,2%
Life-long learning	0,0%	10,0%	30,0%	43,3%	16,7%	10,0%	60,0%
Knowledge management	0,0%	13,6%	33,9%	44,1%	8,5%	13,6%	52,5%
Innovating	5,4%	16,1%	48,2%	23,2%	7,1%	21,4%	30,4%
Creativity	3,4%	11,9%	42,4%	32,2%	10,2%	15,3%	42,4%
Critical thinking	3,4%	8,5%	30,5%	45,8%	11,9%	11,9%	57,6%
Change management	0,0%	16,7%	43,3%	30,0%	10,0%	16,7%	40,0%
Business strategy	1,7%	12,1%	43,1%	39,7%	3,4%	13,8%	43,1%
Abstraction ability	1,7%	13,8%	25,9%	50,0%	8,6%	15,5%	58,6%
Managing complexity	3,4%	6,8%	28,8%	49,2%	11,9%	10,2%	61,0%
Project management	1,7%	17,2%	37,9%	36,2%	6,9%	19,0%	43,1%
Planning and organizing work	0,0%	10,2%	37,3%	37,3%	15,3%	10,2%	52,5%
Management ability	1,8%	5,3%	40,4%	42,1%	10,5%	7,0%	52,6%
Customer orientation	1,7%	8,5%	37,3%	37,3%	15,3%	10,2%	52,5%
Customer relationship management	3,5%	7,0%	36,8%	36,8%	15,8%	10,5%	52,6%
Legislation awareness	3,4%	19,0%	37,9%	25,9%	13,8%	22,4%	39,7%

Safety awareness	1,7%	10,0%	25,0%	48,3%	15,0%	11,7%	63,3%
Individual responsibility	0,0%	7,1%	19,6%	50,0%	23,2%	7,1%	73,2%
Work in interdisciplinary environments	1,7%	5,0%	23,3%	53,3%	16,7%	6,7%	70,0%
Intercultural competency	1,7%	5,0%	45,0%	43,3%	5,0%	6,7%	48,3%
Flexibility	1,7%	8,6%	36,2%	41,4%	12,1%	10,3%	53,4%
Adaptability and ability to change mind-set	5,0%	6,7%	25,0%	48,3%	15,0%	11,7%	63,3%
Work-life Balance	1,7%	11,9%	30,5%	40,7%	15,3%	13,6%	55,9%
Self-management and organization	1,7%	10,3%	19,0%	58,6%	10,3%	12,1%	69,0%
Business model understanding	1,7%	6,8%	44,1%	44,1%	3,4%	8,5%	47,5%
Entrepreneurship	3,3%	11,7%	31,7%	35,0%	18,3%	15,0%	53,3%