

APPENDIX A

A. Get feedback on how this service is evaluated (PRIMARY EVALUATION)

The initial evaluation of the idea was positive	90% respondents found it interesting or very interesting
Concerning the possible participation of the respondents in this service the results were almost balanced	55% were absolutely positive while 35% were likely/moderate and a 10% declared unlikely to participate
Regarding the value of the idea in terms of the environment and saving resources as well as the benefits for the region, replies were absolutely positive	More than 80% agreed in the service's intention
Respondents replied that this service may change current recycling processes	An 80% agreed that this is possible
Regarding people's living standards and attitude more than 50% were positive that this could be happen	A range between 55% and 80% agreed
Participants found the idea a smart way to recycle which includes a sense of reward	More than 85% agreed with these two motives

B. Get information on the potential value of this idea (VALUE and SUSTAINABILITY)

Respondents were not so sure that this service could create growth in the region where it will be applied	A 45% found it definitely possible while the rest 55% declared that it might be possible or impossible
They have identified though that it will bring income to all participants	A 60% found it possible
Companies and households will accept to participate	More than 60% declared that this is possible
Respondents were positive that environmentalists will embrace the idea	A 100% were positive on that
Regarding local authorities, it was proved that they will not be so willing to support the idea	A 40% found it not so possible/moderate while another 40% was positive. At this point there was a balanced reply which created a question in the intentions of governments and authorities

C. Get information on potential obstacles (BARRIERS, OBSTACLES and ENEMIES)

Participants found the idea not so easy to be implemented or at least with some difficulties	A 15% replied that this will be almost easy. A 50% replied that this could not be easy / moderate.
There was a negative attitude among participants about the intentions of other groups that could be affected from this service identifying that there will be obstacles and resistance.	It is worth to mention that only a 20% declared that the service will not find any obstacles
Industry and other companies may be the possible enemies in that effort, according to the respondents	A 70% declared that companies from the industry will not participate
Regarding the financial assessment of the service respondents agreed that it might be expensive to be implemented	An 85% found it expensive to be applied
Is it worthy to apply or not this idea. Will this thought considered as a possible barrier?	A 40% replied that comparing to other factors there might be no so obvious benefits for the idea to be applied. A 60% instead agreed that finally it could be feasible to do so.

APPENDIX B

Profile of the respondents

Table 1. Groups of participants/frequencies

You are participating in this survey as:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A consumer	56	70.0	70.0	70.0
	A member of a non-governmental institute / Environmentalist	5	6.3	6.3	76.3
	A researcher	12	15.0	15.0	91.3
	An industry expert	7	8.8	8.8	100.0
	Total	80	100.0	100.0	

Table 2. Gender of participants

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	39	48.8	48.8	48.8
	Male	41	51.2	51.2	100.0
	Total	80	100.0	100.0	

Table 3. Age of participants

What is your age?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-29	20	25.0	25.0	25.0
	30-39	27	33.8	33.8	58.8
	40-49	26	32.5	32.5	91.3
	50-59	6	7.5	7.5	98.8
	60-69	1	1.3	1.3	100.0
	Total	80	100.0	100.0	

Table 4. Educational background of participants

What is your educational background?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High School Graduate	6	7.5	7.5	7.5
	Holder of a Master/PhD Degree	54	67.5	67.5	75.0
	Secondary Education	2	2.5	2.5	77.5
	University Graduate	18	22.5	22.5	100.0
	Total	80	100.0	100.0	

Table 5. Marital status of participants

		Marital Status			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Divorced	4	5.0	5.0	5.0
	Married	42	52.5	52.5	57.5
	Single	33	41.3	41.3	98.8
	Widowed	1	1.3	1.3	100.0
	Total	80	100.0	100.0	

Table 6. Living status of participants

		Living status			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Living alone	24	30.0	30.0	30.0
	Living with your family/others in your household	34	42.5	42.5	72.5
	Living with your spouse/partner	22	27.5	27.5	100.0
	Total	80	100.0	100.0	

Table 7. Professional status of participants

		Professional status			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Employed	67	83.8	83.8	83.8
	Student - Not yet in the market	6	7.5	7.5	91.3
	Unemployed	7	8.8	8.8	100.0
	Total	80	100.0	100.0	

APPENDIX C

Evaluation of the service

Table 8. Evaluation of the service at a first glance

How do you evaluate the proposed service "Recycling Stock Market Using Information & Communication Technologies (RSM)" at a first glance?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(2) Not interesting	1	1.3	1.3	1.3
	(3) Of low interest	1	1.3	1.3	2.5
	(4) Moderate	2	2.5	2.5	5.0
	(5) Of some interest	12	15.0	15.0	20.0
	(6) Interesting	37	46.3	46.3	66.3
	(7) Very interesting	27	33.8	33.8	100.0
	Total	80	100.0	100.0	

Table 9. Intention to participate in the service

Do you intend to participate in RSM when applicable?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1) Extremely unlikely	1	1.3	1.3	1.3
	(2) Very unlikely	2	2.5	2.5	3.8
	(3) Unlikely	3	3.8	3.8	7.5
	(4) Moderate	10	12.5	12.5	20.0
	(5) Likely	20	25.0	25.0	45.0
	(6) Very likely	29	36.3	36.3	81.3
	(7) Extremely likely	15	18.8	18.8	100.0
	Total	80	100.0	100.0	

Table 10. Possible benefit for the environment

Recycling Stock Market will benefit the environment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1) Strongly disagree	1	1.3	1.3	1.3
	(4) Moderate	4	5.0	5.0	6.3
	(5) Agree	22	27.5	27.5	33.8
	(6) Agree very much	32	40.0	40.0	73.8
	(7) Strongly agree	21	26.3	26.3	100.0
	Total	80	100.0	100.0	

Table 11. Saving of valuable resources

Recycling Stock Market will save valuable resources

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1) Strongly disagree	1	1.3	1.3	1.3
	(4) Moderate	6	7.5	7.5	8.8
	(5) Agree	20	25.0	25.0	33.8
	(6) Agree very much	32	40.0	40.0	73.8
	(7) Strongly agree	21	26.3	26.3	100.0
	Total	80	100.0	100.0	

Table 12. Incentives for the consumers

It will give incentives to consumers for recycling more and more

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1) Strongly disagree	1	1.3	1.3	1.3
	(3) Disagree	1	1.3	1.3	2.5
	(4) Moderate	7	8.8	8.8	11.3
	(5) Agree	28	35.0	35.0	46.3
	(6) Agree very much	23	28.7	28.7	75.0
	(7) Strongly agree	20	25.0	25.0	100.0
	Total	80	100.0	100.0	

Table 13. Possible change in current recycling processes

It may change current recycling processes followed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1) Strongly disagree	1	1.3	1.3	1.3
	(3) Disagree	1	1.3	1.3	2.5
	(4) Moderate	20	25.0	25.0	27.5
	(5) Agree	30	37.5	37.5	65.0
	(6) Agree very much	18	22.5	22.5	87.5
	(7) Strongly agree	10	12.5	12.5	100.0
	Total	80	100.0	100.0	

Table 14. Change attitude possibility

It will help people to change attitude

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1) Strongly disagree	1	1.3	1.3	1.3
	(2) Very much disagree	4	5.0	5.0	6.3
	(3) Disagree	3	3.8	3.8	10.0
	(4) Moderate	17	21.3	21.3	31.3
	(5) Agree	25	31.3	31.3	62.5
	(6) Agree very much	21	26.3	26.3	88.8
	(7) Strongly agree	9	11.3	11.3	100.0
	Total	80	100.0	100.0	

Table 15. Possible affection in people's living standards

RSM will affect the living standards of participants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1) Low possibility	2	2.5	2.5	2.5
	(2) With little possibility	4	5.0	5.0	7.5
	(3) Not so possible	12	15.0	15.0	22.5
	(4) Moderate	17	21.3	21.3	43.8
	(5) Possible	27	33.8	33.8	77.5
	(6) Very possible	13	16.3	16.3	93.8
	(7) High possibility	5	6.3	6.3	100.0
	Total	80	100.0	100.0	

Table 16. Beneficial for the region that will be applied

RSM will benefit the region that will be applied

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1) Strongly disagree	1	1.3	1.3	1.3
	(3) Disagree	1	1.3	1.3	2.5
	(4) Moderate	18	22.5	22.5	25.0
	(5) Agree	29	36.3	36.3	61.3
	(6) Agree very much	22	27.5	27.5	88.8
	(7) Strongly agree	9	11.3	11.3	100.0
	Total	80	100.0	100.0	

Table 17. Participants have benefits from recycling

The characteristic that makes "Recycling Stock Market" attractive is that: Participants have benefits from recycling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1) Strongly disagree	1	1.3	1.3	1.3
	(4) Moderate	4	5.0	5.0	6.3
	(5) Agree	31	38.8	38.8	45.0
	(6) Agree very much	25	31.3	31.3	76.3
	(7) Strongly agree	19	23.8	23.8	100.0
	Total	80	100.0	100.0	

Table 18. Garbage has value because you can earn money

The characteristic that makes "Recycling Stock Market" attractive is that: Garbage has value because you can earn money

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1) Strongly disagree	1	1.3	1.3	1.3
	(3) Disagree	8	10.0	10.0	11.3
	(4) Moderate	14	17.5	17.5	28.7
	(5) Agree	23	28.7	28.7	57.5
	(6) Agree very much	22	27.5	27.5	85.0
	(7) Strongly agree	12	15.0	15.0	100.0
	Total	80	100.0	100.0	

Table 19. There is a sense of a game in this service

The characteristic that makes "Recycling Stock Market" attractive is that: There is a sense of a game in this service which is interesting

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1) Strongly disagree	1	1.3	1.3	1.3
	(3) Disagree	7	8.8	8.8	10.0
	(4) Moderate	21	26.3	26.3	36.3
	(5) Agree	25	31.3	31.3	67.5
	(6) Agree very much	14	17.5	17.5	85.0
	(7) Strongly agree	12	15.0	15.0	100.0
	Total	80	100.0	100.0	

Table 20. *This is a smart way to recycle*

The characteristic that makes "Recycling Stock Market" attractive is that: This is a smart way to recycle

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1) Strongly disagree	1	1.3	1.3	1.3
	(3) Disagree	3	3.8	3.8	5.0
	(4) Moderate	2	2.5	2.5	7.5
	(5) Agree	25	31.3	31.3	38.8
	(6) Agree very much	28	35.0	35.0	73.8
	(7) Strongly agree	21	26.3	26.3	100.0
	Total	80	100.0	100.0	

Table 21. *There is a reward for recycling*

The characteristic that makes "Recycling Stock Market" attractive is that: After all there is a reward for recycling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1) Strongly disagree	1	1.3	1.3	1.3
	(3) Disagree	2	2.5	2.5	3.8
	(4) Moderate	6	7.5	7.5	11.3
	(5) Agree	25	31.3	31.3	42.5
	(6) Agree very much	29	36.3	36.3	78.8
	(7) Strongly agree	17	21.3	21.3	100.0
	Total	80	100.0	100.0	

APPENDIX D

Sustainability of the idea

Table 22. RSM will create growth in the region

The implementation of RSM is expected to create growth in the region that will be applied

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid (1) Impossible	1	1.3	1.3	1.3
(2) Almost impossible	4	5.0	5.0	6.3
(3) Rather impossible	5	6.3	6.3	12.5
(4) Moderate	25	31.3	31.3	43.8
(5) Almost possible	21	26.3	26.3	70.0
(6) Possible	19	23.8	23.8	93.8
(7) Highly possible	5	6.3	6.3	100.0
Total	80	100.0	100.0	

Table 23. RSM will bring income to consumers and companies

The implementation of RSM will bring income both to consumers and companies

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid (1) Impossible	1	1.3	1.3	1.3
(3) Rather impossible	3	3.8	3.8	5.0
(4) Moderate	21	26.3	26.3	31.3
(5) Almost possible	20	25.0	25.0	56.3
(6) Possible	28	35.0	35.0	91.3
(7) Highly possible	7	8.8	8.8	100.0
Total	80	100.0	100.0	

Table 24. The service may penetrate in households

The service may penetrate in households

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid (1) Low pervasion	1	1.3	1.3	1.3
(3) Rather low pervasion	6	7.5	7.5	8.8
(4) Moderate	15	18.8	18.8	27.5
(5) Adequate pervasion	28	35.0	35.0	62.5
(6) Rather high pervasion	24	30.0	30.0	92.5
(7) High pervasion	6	7.5	7.5	100.0
Total	80	100.0	100.0	

Table 25. Companies will accept to participate

Companies will accept to participate in order to contribute in the philosophy of recycling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1) Low possibility	4	5.0	5.0	5.0
	(2) With little possibility	1	1.3	1.3	6.3
	(3) Not so possible	2	2.5	2.5	8.8
	(4) Moderate	14	17.5	17.5	26.3
	(5) Possible	28	35.0	35.0	61.3
	(6) Very possible	25	31.3	31.3	92.5
	(7) High possibility	6	7.5	7.5	100.0
	Total	80	100.0	100.0	

Table 26. RSM will be a marketing tool for companies

Companies will accept to participate because the service could be a marketing tool for them in order to attract more customers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(2) With little possibility	1	1.3	1.3	1.3
	(3) Not so possible	4	5.0	5.0	6.3
	(4) Moderate	2	2.5	2.5	8.8
	(5) Possible	28	35.0	35.0	43.8
	(6) Very possible	33	41.3	41.3	85.0
	(7) High possibility	12	15.0	15.0	100.0
	Total	80	100.0	100.0	

Table 27. RSM is an opportunity for expansion for companies

Companies will see this service as an opportunity for expansion

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(2) With little possibility	1	1.3	1.3	1.3
	(4) Moderate	21	26.3	26.3	27.5
	(5) Possible	25	31.3	31.3	58.8
	(6) Very possible	24	30.0	30.0	88.8
	(7) High possibility	9	11.3	11.3	100.0
	Total	80	100.0	100.0	

Table 28. Environmentalists will embrace the idea

Environmentalists will embrace the idea					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(3) Not so possible	1	1.3	1.3	1.3
	(4) Moderate	3	3.8	3.8	5.0
	(5) Possible	19	23.8	23.8	28.7
	(6) Very possible	34	42.5	42.5	71.3
	(7) High possibility	23	28.7	28.7	100.0
	Total	80	100.0	100.0	

Table 29. Local authorities will support the idea

Local authorities will contribute to the implementation of it					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(2) With little possibility	5	6.3	6.3	6.3
	(3) Not so possible	9	11.3	11.3	17.5
	(4) Moderate	13	16.3	16.3	33.8
	(5) Possible	33	41.3	41.3	75.0
	(6) Very possible	14	17.5	17.5	92.5
	(7) High possibility	6	7.5	7.5	100.0
	Total	80	100.0	100.0	

APPENDIX E

Potential obstacles

Table 30. Ease of implementation

Do you think that it could be easy to implement the idea of RSM?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid (1) Definetely not easy	2	2.5	2.5	2.5
(2) Almost not easy	3	3.8	3.8	6.3
(3) Probably not easy	19	23.8	23.8	30.0
(4) Moderate	22	27.5	27.5	57.5
(5) Probably easy	20	25.0	25.0	82.5
(6) Almost easy	8	10.0	10.0	92.5
(7) Definitely easy	6	7.5	7.5	100.0
Total	80	100.0	100.0	

Table 31. Barriers/obstacles from other parties

Do you think that there will be any barriers or obstacles in the implementation of RSM from other parties such as professional organizations, companies, experts, governments?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid (2) Almost no	2	2.5	2.5	2.5
(3) Probably no	10	12.5	12.5	15.0
(4) Moderate	8	10.0	10.0	25.0
(5) Probably yes	38	47.5	47.5	72.5
(6) Almost yes	8	10.0	10.0	82.5
(7) Definitely yes	14	17.5	17.5	100.0
Total	80	100.0	100.0	

Table 32. Possible conflict with the current situation

A possible barrier in the implementation of RSM could be the conflict with the current situation of recycling industry and market

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid (2) With little possibility	1	1.3	1.3	1.3
(3) Not so possible	9	11.3	11.3	12.5
(4) Moderate	7	8.8	8.8	21.3
(5) Possible	34	42.5	42.5	63.7
(6) Very possible	14	17.5	17.5	81.3
(7) High possibility	15	18.8	18.8	100.0
Total	80	100.0	100.0	

Table 33. Raise of legislation issues

A possible barrier in the implementation of RSM could be the raise of legislation issues

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1.3	1.3	1.3
(2) With little possibility	2	2.5	2.5	3.8
(3) Not so possible	8	10.0	10.0	13.8
(4) Moderate	12	15.0	15.0	28.7
(5) Possible	28	35.0	35.0	63.7
(6) Very possible	20	25.0	25.0	88.8
(7) High possibility	9	11.3	11.3	100.0
Total	80	100.0	100.0	

Table 34. Companies participation

A possible barrier in the implementation of RSM could be the avoidance of companies to participate

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid (2) With little possibility	3	3.8	3.8	3.8
(3) Not so possible	9	11.3	11.3	15.0
(4) Moderate	15	18.8	18.8	33.8
(5) Possible	38	47.5	47.5	81.3
(6) Very possible	11	13.8	13.8	95.0
(7) High possibility	4	5.0	5.0	100.0
Total	80	100.0	100.0	

Table 35. Individuals participation

A possible barrier in the implementation of RSM could be the avoidance of individuals to participate

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid (1) Low possibility	1	1.3	1.3	1.3
(2) With little possibility	3	3.8	3.8	5.0
(3) Not so possible	8	10.0	10.0	15.0
(4) Moderate	13	16.3	16.3	31.3
(5) Possible	36	45.0	45.0	76.3
(6) Very possible	13	16.3	16.3	92.5
(7) High possibility	6	7.5	7.5	100.0
Total	80	100.0	100.0	

Table 36. *The idea is expensive*

A possible barrier in the implementation of RSM could be that the idea is found to be expensive to apply

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(2) With little possibility	1	1.3	1.3	1.3
	(3) Not so possible	6	7.5	7.5	8.8
	(4) Moderate	8	10.0	10.0	18.8
	(5) Possible	31	38.8	38.8	57.5
	(6) Very possible	21	26.3	26.3	83.8
	(7) High possibility	13	16.3	16.3	100.0
	Total	80	100.0	100.0	

Table 37. *Benefits from the application of the service / Are there any?*

A possible barrier in the implementation of RSM could be the thought that there are no obvious benefits applying this service

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1) Low possibility	13	16.3	16.3	16.3
	(2) With little possibility	11	13.8	13.8	30.0
	(3) Not so possible	19	23.8	23.8	53.8
	(4) Moderate	13	16.3	16.3	70.0
	(5) Possible	9	11.3	11.3	81.3
	(6) Very possible	7	8.8	8.8	90.0
	(7) High possibility	8	10.0	10.0	100.0
	Total	80	100.0	100.0	

Appendix F

Crosstab analysis – Relation between Group of participants and Evaluation of the service

You are participating in this survey as: * How do you evaluate the proposed service "Recycling Stock Market Using Information & Communication Technologies (RSM)" at a first glance? Crosstabulation

Count

		How do you evaluate the proposed service "Recycling Stock Market Using Information and Communication Technologies (RSM)" at a first glance?						Total
		(2) Not interesting	(3) Of low interest	(4) Moderate	(5) Of some interest	(6) Interesting	(7) Very interesting	
You are participating in this survey as:	A consumer	0	1	1	4	25	25	56
	A member of a non-governmental institute / Environmentalist	1	0	0	2	2	0	5
	A researcher	0	0	0	5	5	2	12
	An industry expert	0	0	1	1	5	0	7
	Total	1	1	2	12	37	27	80

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	38.080 ^a	15	.001
Likelihood Ratio	29.295	15	.015
N of Valid Cases	80		

a. 20 cells (83.3%) have expected count less than 5. The minimum expected count is .06.

Appendix G

Analysis of Means (standard deviation / minimum-maximum values)

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
How do you evaluate the proposed service "Recycling Stock Market Using Information and Communication Technologies (RSM)" at a first glance?	80	2	7	6.05	.953
Do you intend to participate in RSM when applicable?	80	1	7	5.41	1.290
Recycling Stock Market will benefit the environment	80	1	7	5.83	1.016
Recycling Stock Market will save valuable resources	80	1	7	5.80	1.048
It will give incentives to consumers for recycling more and more	80	1	7	5.63	1.118
It may change current recycling processes followed	80	1	7	5.15	1.104
It will help people to change attitude	80	1	7	5.00	1.322
RSM will affect the living standards of participants	80	1	7	4.53	1.368
RSM will benefit the region that will be applied	80	1	7	5.20	1.084
The characteristic that makes "Recycling Stock Market" attractive is that: Participants have benefits from recycling	80	1	7	5.69	1.026
The characteristic that makes "Recycling Stock Market" attractive is that: Garbage has value because you can earn money	80	1	7	5.15	1.284
The characteristic that makes "Recycling Stock Market" attractive is that: There is a sense of a game in this service which is interesting	80	1	7	4.99	1.268
The characteristic that makes "Recycling Stock Market" attractive is that: This is a smart way to recycle	80	1	7	5.73	1.125
The characteristic that makes "Recycling Stock Market" attractive is that: After all there is a reward for recycling	80	1	7	5.61	1.108
The implementation of RSM is expected to create growth in the region that will be applied	80	1	7	4.72	1.283
The implementation of RSM will bring income both to consumers and companies	80	1	7	5.14	1.145
The service may penetrate in households	80	1	7	5.06	1.140
Companies will accept to participate in order to contribute in the philosophy of recycling	80	1	7	5.00	1.350
Companies will accept to participate because the service could be a marketing tool for them in order to attract more customers	80	2	7	5.55	1.030
Companies will see this service as an opportunity for expansion	80	2	7	5.23	1.043
Environmentalists will embrace the idea	80	3	7	5.94	.891
Local authorities will contribute to the implementation of it	80	2	7	4.75	1.268
Do you think that it could be easy to implement the idea of RSM?	80	1	7	4.29	1.371
Do you think that there will be any barriers or obstacles in the implementation of RSM from other parties such as professional organizations, companies, experts, governments?	80	2	7	5.03	1.283
A possible barrier in the implementation of RSM could be the conflict with the current situation of recycling industry and market	80	2	7	5.20	1.247
A possible barrier in the implementation of RSM could be the raise of legislation issues	80	2	7	5.06	1.226
A possible barrier in the implementation of RSM could be the avoidance of companies to participate	80	2	7	4.71	1.116
A possible barrier in the implementation of RSM could be the avoidance of individuals to participate	80	1	7	4.79	1.240
A possible barrier in the implementation of RSM could be that the idea is found to be expensive to apply	80	2	7	5.30	1.163
A possible barrier in the implementation of RSM could be the thought that there are no obvious benefits applying this service	80	1	7	3.59	1.867

Appendix H

Comparison of Means – (5 questions)

Report

You are participating in this survey as:		How do you evaluate the proposed service "Recycling Stock Market Using Information and Communication Technologies (RSM)" at a first glance?	Do you intend to participate in RSM when applicable?	RSM will affect the living standards of participants	RSM will benefit the region that will be applied	The characteristic that makes "Recycling Stock Market" attractive is that: This is a smart way to recycle
A consumer	Mean	6.29	5.70	4.95	5.54	5.93
	N	56	56	56	56	56
	Std. Deviation	.825	1.174	1.197	.873	1.024
A member of a non-governmental institute / Environmentalist	Mean	4.80	4.60	3.20	4.00	4.60
	N	5	5	5	5	5
	Std. Deviation	1.643	1.517	.447	.000	.894
A researcher	Mean	5.75	4.83	3.50	4.42	5.67
	N	12	12	12	12	12
	Std. Deviation	.754	1.030	1.314	.669	.778
An industry expert	Mean	5.57	4.71	3.86	4.71	5.00
	N	7	7	7	7	7
	Std. Deviation	.787	1.799	1.574	1.976	1.826
Total	Mean	6.05	5.41	4.53	5.20	5.73
	N	80	80	80	80	80
	Std. Deviation	.953	1.290	1.368	1.084	1.125

Appendix I

ANOVA case – (5 questions)

ANOVA Table

		Sum of Squares	df	Mean Square	F	Sig.
How do you evaluate the proposed service "Recycling Stock Market Using Information and Communication Technologies (RSM)" at a first glance?	Between Groups (Combined)	13.607	3	4.536	5.924	.001
	Within Groups	58.193	76	.766		
	Total	71.800	79			
Do you intend to participate in RSM when applicable?	Between Groups (Combined)	15.253	3	5.084	3.327	.024
	Within Groups	116.135	76	1.528		
	Total	131.388	79			
RSM will affect the living standards of participants	Between Groups (Combined)	34.454	3	11.485	7.690	.000
	Within Groups	113.496	76	1.493		
	Total	147.950	79			
RSM will benefit the region that will be applied	Between Groups (Combined)	22.526	3	7.509	8.121	.000
	Within Groups	70.274	76	.925		
	Total	92.800	79			
The characteristic that makes "Recycling Stock Market" attractive is that: This is a smart way to recycle	Between Groups (Combined)	12.369	3	4.123	3.578	.018
	Within Groups	87.581	76	1.152		
	Total	99.950	79			

Appendix J

ANOVA case – (full questionnaire)

ANOVA Table^a

		Sum of Squares	df	Mean Square	F	Sig.
How do you evaluate the proposed service "Recycling Stock Market Using Information and Communication Technologies (RSM)" at a first glance?	Between Groups (Combined)	13.607	3	4.536	5.924	.001
	Within Groups	58.193	76	.766		
	Total	71.800	79			
Do you intend to participate in RSM when applicable?	Between Groups (Combined)	15.253	3	5.084	3.327	.024
	Within Groups	116.135	76	1.528		
	Total	131.388	79			
Recycling Stock Market will benefit the environment	Between Groups (Combined)	13.143	3	4.381	4.867	.004
	Within Groups	68.407	76	.900		
	Total	81.550	79			
Recycling Stock Market will save valuable resources	Between Groups (Combined)	14.139	3	4.713	4.930	.004
	Within Groups	72.661	76	.956		
	Total	86.800	79			
It will give incentives to consumers for recycling more and more	Between Groups (Combined)	24.337	3	8.112	8.285	.000
	Within Groups	74.413	76	.979		
	Total	98.750	79			
It may change current recycling processes followed	Between Groups (Combined)	19.214	3	6.405	6.323	.001
	Within Groups	76.986	76	1.013		
	Total	96.200	79			
It will help people to change attitude	Between Groups (Combined)	31.873	3	10.624	7.608	.000
	Within Groups	106.127	76	1.396		
	Total	138.000	79			
RSM will affect the living standards of participants	Between Groups (Combined)	34.454	3	11.485	7.690	.000
	Within Groups	113.496	76	1.493		

	Total	147.950	79			
RSM will benefit the region that will be applied	Between (Combined) Groups	22.526	3	7.509	8.121	.000
	Within Groups	70.274	76	.925		
	Total	92.800	79			
The characteristic that makes "Recycling Stock Market" attractive is that: Participants have benefits from recycling	Between (Combined) Groups	9.530	3	3.177	3.278	.025
	Within Groups	73.657	76	.969		
	Total	83.187	79			
The characteristic that makes "Recycling Stock Market" attractive is that: Garbage has value because you can earn money	Between (Combined) Groups	41.679	3	13.893	11.928	.000
	Within Groups	88.521	76	1.165		
	Total	130.200	79			
The characteristic that makes "Recycling Stock Market" attractive is that: There is a sense of a game in this service which is interesting	Between (Combined) Groups	18.330	3	6.110	4.274	.008
	Within Groups	108.657	76	1.430		
	Total	126.987	79			
The characteristic that makes "Recycling Stock Market" attractive is that: This is a smart way to recycle	Between (Combined) Groups	12.369	3	4.123	3.578	.018
	Within Groups	87.581	76	1.152		
	Total	99.950	79			
The characteristic that makes "Recycling Stock Market" attractive is that: After all there is a reward for recycling	Between (Combined) Groups	21.803	3	7.268	7.346	.000
	Within Groups	75.185	76	.989		
	Total	96.988	79			
The implementation of RSM is expected to create growth in the region that will be applied	Between (Combined) Groups	39.251	3	13.084	10.963	.000
	Within Groups	90.699	76	1.193		
	Total	129.950	79			
The implementation of RSM will bring income both to consumers and companies	Between (Combined) Groups	26.259	3	8.753	8.614	.000
	Within Groups	77.229	76	1.016		
	Total	103.487	79			
The service may penetrate in households	Between (Combined) Groups	23.953	3	7.984	7.707	.000
	Within Groups	78.735	76	1.036		

	Total		102.687	79			
Companies will accept to participate in order to contribute in the philosophy of recycling	Between (Combined) Groups		24.869	3	8.290	5.288	.002
	Within Groups		119.131	76	1.568		
	Total		144.000	79			
Companies will accept to participate because the service could be a marketing tool for them in order to attract more customers	Between (Combined) Groups		22.136	3	7.379	9.094	.000
	Within Groups		61.664	76	.811		
	Total		83.800	79			
Companies will see this service as an opportunity for expansion	Between (Combined) Groups		15.186	3	5.062	5.436	.002
	Within Groups		70.764	76	.931		
	Total		85.950	79			
Environmentalists will embrace the idea	Between (Combined) Groups		4.274	3	1.425	1.854	.145
	Within Groups		58.413	76	.769		
	Total		62.687	79			
Local authorities will contribute to the implementation of it	Between (Combined) Groups		29.187	3	9.729	7.559	.000
	Within Groups		97.813	76	1.287		
	Total		127.000	79			
Do you think that it could be easy to implement the idea of RSM?	Between (Combined) Groups		46.774	3	15.591	11.661	.000
	Within Groups		101.613	76	1.337		
	Total		148.388	79			
Do you think that there will be any barriers or obstacles in the implementation of RSM from other parties such as professional organizations, companies, experts, governments?	Between (Combined) Groups		4.393	3	1.464	.886	.452
	Within Groups		125.557	76	1.652		
	Total		129.950	79			
A possible barrier in the implementation of RSM could be the conflict with the current situation of recycling industry and market	Between (Combined) Groups		6.187	3	2.062	1.344	.266
	Within Groups		116.613	76	1.534		
	Total		122.800	79			
A possible barrier in the implementation of RSM could be the raise of legislation issues	Between (Combined) Groups		6.959	3	2.320	1.578	.202
	Within Groups		111.729	76	1.470		

	Total	118.687	79			
A possible barrier in the implementation of RSM could be the avoidance of companies to participate	Between (Combined) Groups	4.307	3	1.436	1.160	.331
	Within Groups	94.081	76	1.238		
	Total	98.388	79			
A possible barrier in the implementation of RSM could be the avoidance of individuals to participate	Between (Combined) Groups	3.602	3	1.201	.775	.512
	Within Groups	117.786	76	1.550		
	Total	121.387	79			
A possible barrier in the implementation of RSM could be that the idea is found to be expensive to apply	Between (Combined) Groups	1.826	3	.609	.441	.725
	Within Groups	104.974	76	1.381		
	Total	106.800	79			
A possible barrier in the implementation of RSM could be the thought that there are no obvious benefits applying this service	Between (Combined) Groups	43.974	3	14.658	4.814	.004
	Within Groups	231.413	76	3.045		
	Total	275.388	79			

Appendix K

Conceptual Framework

This is a step-by-step analysis of how the service could work, if it would be implemented in a region.

Operation of the service

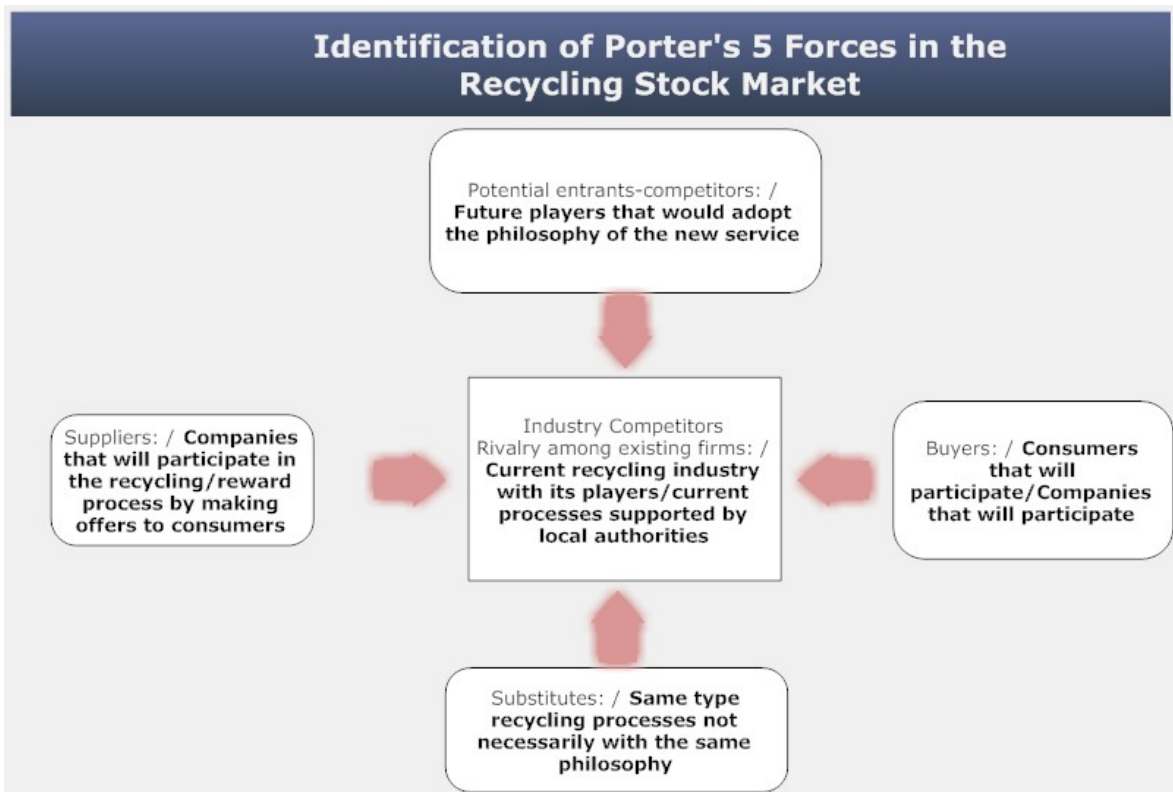
- People consume products;
- These products could be recycled (aluminum, glass, paper and plastic);
- These recyclables will be collected in quantities from certain collection points;
- Consumers in return will get a receipt, as a proof for what they have recycled each time; this will be received through their mobile phones; registration is necessary;
- Recyclables will be driven in a warehouse;
- A set of procedures will be applied on the recyclables according to specific standards (cleaning, disassembling, unpacking, sorting, counting of quantities etc);
- Quantities of the available recyclables are placed in a private on-line web auction system (like eBay);
- In this system, access has all interesting parts (recycling industry, companies, liaisons etc);
- Every transaction will be available on-line in order to secure clarity;
- Interesting parts place their bids in the specific available quantities. The auctions have specific period of time. Also they may be of free-starting price or with a fixed starting price, according to the international prices of the specific recyclable (e.g. aluminum);
- The highest price at a given period wins and takes the quantity;
- Everything is done digitally;
- The company receives the payment;
- Shipment of the winning recyclables is sent to the winner;
- There may be more than one auctions within a working day and different auctions that could run in parallel for different recyclables (e.g. aluminum cans and glass bottles);
- This is the standard process;
- Moreover, the company will keep the right to directly negotiate with specific big companies (industries) for the return of their used products (reverse logistics) at a given price, since these recyclables are collected in huge quantities (e.g glass milk bottles of a specific brand directly to the company, coca-cola glass bottles directly to The Coca Cola company etc.);

While the process described above covers the inter-companies network, on the other side consumers who keep a receipt of the recyclables that have recycled, and they are registered to the company's central system (information database) will be rewarded under the following scheme:

- In the end of each auction and calculating the final price of quantities that have been sold to the winner, each recyclable will get a price, just like the stocks which take prices or change prices according to demand and offer scheme;
- A certain number of recyclables will form a share (for example 4 glass bottles equals to one share);

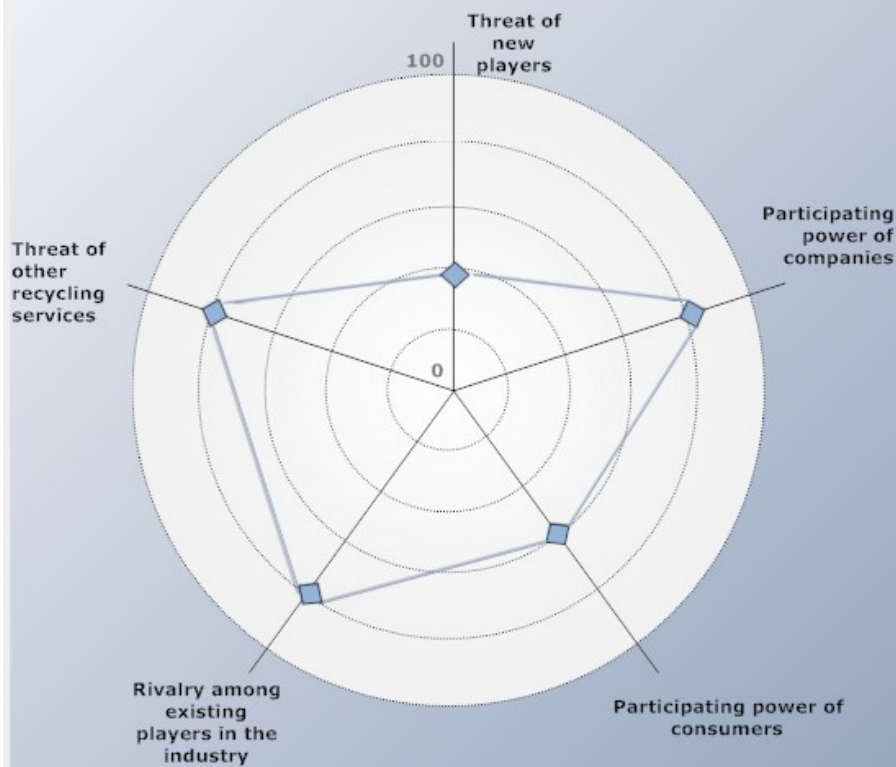
- The value of each share depends on the current prices of the specific recyclable (e.g glass) and may vary from day to day or from hour to hour;
- Assuming that a share has a price at a given time and knowing what products each end-consumer has recycled he/she will be appointed a number of shares;
- These shares have a value;
- Consumer will be informed in his mobile phone the number of his/her shares and their current value;
- He/She can keep the shares as an investment and wait, expecting their value to increase, or he/she may exchange their value to purchase consuming goods;
- These shares will be valid to super markets and other participating companies and in exchange of a price under the form a coupon;
- Consumers will have the opportunity to purchase products through the use of their shares and pay part or a whole of specific products. These products will be the products of the companies that will participate in the whole concept;
- In addition, the company may approach other companies that are interested in participating in the whole concept of recycling, through their Corporate Social Responsibility policies and are willing to direct funds to the auction system;
- In return they will gain access to the network of consumers and secure their brand awareness as well as advertisements on offers on their products;

Appendix L



Appendix M

Industry attractiveness:
Assess the recycling industry and benchmark
it according to survey's results



Appendix N

■ "Recycling Stock Market" SWOT Analysis

STRENGTHS

- Innovative idea.
- Focus in the environment.
- Adds value to a service.
- Stimulate consumers to participate.
- High technology acquaintance.

WEAKNESSES

- Extra values and benefits both for companies and consumers.
- Unique service.
- Creates regional consciousness.
- Implies competitive advantages.
- It appears to have obvious benefits.

OPPORTUNITIES

- It may be expensive to apply.
- There might be legislation issues.
- Participants are not sure that will help their regions.
- It is not clear that will help households.
- Possibly will not affect directly the living standards and recycling processes of both people and companies.

- There is a need to find ways for increasing the recycling percentages in Europe.
- Innovation and innovative thinking is a strategy that is accepted and supported throughout the Union.

THREATS

- Current recycling industry is not expected to see the new service with interest.
- Local authorities probably will not embrace the idea.