



Grey Literature Resources generate and drive Awareness to a Circular Economy: An Explorative Research Project

Dominic Farace and Jerry Frantzen

GreyNet International, Netherlands

Circular Economy is an economic system aimed at eliminating waste and the continual use of resources. Circular systems employ among other means the reuse and sharing of resources. This regenerative approach is in contrast to the traditional linear economy, which has a 'take, make, dispose' model of production.

Ellen MacArthur Foundation and Wikipedia

**Twenty-Second International Conference on Grey Literature
'Applications of Grey Literature for Science and Society'
National Research Council of Italy • November 19, 2020**



Project Goals

- To gain insight into the opinions of GreyNet's community of practice with regard to circular economy and to determine if there is consensus
- To explore the way in which grey literature resources can be seen as a vehicle for other industries in a circular economy
- To show how grey literature can be perceived as a driver in the information industry

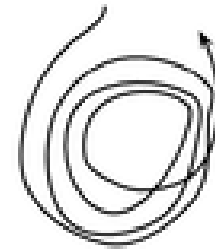
Twenty-Second International Conference on Grey Literature
'Applications of Grey Literature for Science and Society'
National Research Council of Italy • November 19, 2020



Method of Approach



**Questionnaire
constructed and carried
out via an online survey**



**Web search
based on a sample
of five Industries**

**Twenty-Second International Conference on Grey Literature
'Applications of Grey Literature for Science and Society'
National Research Council of Italy • November 19, 2020**



Survey Questionnaire

- In formulating the ten questions that comprise the instrument used in this study, a short list of terms and concepts were drawn from a recent Seminar on Circular Economy and Grey Literature.
- Each of the terms and concepts selected would have a particular connotation and use in both of these fields of study.
- From the list compiled, nine of the terms and concepts were selected and further elaborated. This aided in formulating the nine close-ended survey questions. The tenth question was open ended
- The final edited version of the online questionnaire was then entered in SurveyMonkey and a link was generated for online distribution

Twenty-Second International Conference on Grey Literature
‘Applications of Grey Literature for Science and Society’
National Research Council of Italy • November 19, 2020



Survey Population and Respondents

Survey Population	Survey Respondents	% Questions Answered
GreyNet's Distribution List, Social Media, and Web Access Portal	72	93.75%

- The population of the survey was not strictly controlled. However, all recipients via GreyNet's Distribution List, the GreyGuide Portal, and GreyNet's social media (Facebook and LinkedIn) are considered to have an affiliation with grey literature.
- The survey was online accessible from March 4th through March 31st 2020
- There was no specific control carried out on the data acquired from the survey. None of the categories of responses were grouped or otherwise normalized. It can be noted that 24 (33,3%) of the respondents provided their contact details solicited in the final question of the survey.

**Twenty-Second International Conference on Grey Literature
'Applications of Grey Literature for Science and Society'
National Research Council of Italy • November 19, 2020**



Overview Survey Results

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Q1	45	19	7	0	0
Q2	40	26	4	1	0
Q3	25	28	13	6	0
Q4	18	27	23	4	0
Q5	26	31	13	2	0
Q6	26	29	9	8	0
Q7	44	21	5	0	0
Q8	5	25	32	7	2
Q9	28	35	7	1	1

A clear majority of responses were in agreement on **seven** of the questions dealing with open access, loss of information, information overload and underuse, persistent identifiers, knowledge transfer, production to publication, and public awareness

A marked uncertainty was found with regard to **two** of the questions dealing with a dated mindset on grey literature and the reusability – replicability of research data

Twenty-Second International Conference on Grey Literature
'Applications of Grey Literature for Science and Society'
National Research Council of Italy • November 19, 2020



Web Search Procedure

- Five industries identified with a Circular Economy were selected for the web search – Agriculture, Utilities, Logistics, Textile, and Automotive.
- Google and Google Scholar are the two web search engines used for the project. It is widely held that the majority of content in Google is primarily not controlled by commercial publishing, while Google Scholar's content is.
- The search terms that were used both standalone and in combination include: “circular economy”, “grey literature”, and the five industries mentioned above.
- The results of the web search were ranked by their number of hits
- For comparative purposes, the web search was first carried out in June 2020 and repeated in October 2020



Google Search Results

<https://doi.org/10.20965/ijm.v11i25.00000000>

GOOGLE (Primarily not controlled by Commercial Publishing) **June 10, 2020**

"circular economy" 7.610.000	"circular economy" and "A.B.C.D.E."	Ranking	"circular economy" and "A.B.C.D.E." and "grey literature"	Ranking	"grey literature" 1.520.000
Industries:					
A. Agriculture	4.220.000	1	9.250	1	
B. Utilities	362.000	5	4.380	3	
C. Logistics	1.660.000	2	5.120	2	
D. Textile	546.000	4	2.100	5	
E. Automotive	718.000	3	4.090	4	

GOOGLE (Primarily not controlled by Commercial Publishing) **Oct. 5, 2020**

"circular economy" 9.370.000	"circular economy" and "A.B.C.D.E."	Ranking	"circular economy" and "A.B.C.D.E." and "grey literature"	Ranking	"grey literature" 1.700.000
Industries:					
A. Agriculture	8.480.000	1	15.600	1	
B. Utilities	420.000	5	3.790	5	
C. Logistics	3.580.000	2	11.400	2	
D. Textile	643.000	4	8.070	4	
E. Automotive	1.310.000	3	8.990	3	



Google Scholar Search Results

<https://doi.org/10.26069/grammet.2025.000.67>

GOOGLE SCHOLAR (Primarily controlled by Commercial Publishing) **June 10, 2020**

"circular economy" 88.000	"circular economy" and "A.B.C.D.E."	Ranking	"circular economy" and "A.B.C.D.E." and "grey literature"	Ranking	"grey literature" 144.000
Industries:					
A. Agriculture	13.900	2	392	1	
B. Utilities	5.360	5	107	5	
C. Logistics	18.100	1	274	2	
D. Textile	11.400	3	125	4	
E. Automotive	9.120	4	162	3	

GOOGLE SCHOLAR (Primarily controlled by Commercial Publishing) **Oct. 5, 2020**

"circular economy" 101.000	"circular economy" and "A.B.C.D.E."	Ranking	"circular economy" and "A.B.C.D.E." and "grey literature"	Ranking	"grey literature" 162.000
Industries:					
A. Agriculture	32.800	1	481	1	
B. Utilities	5.860	5	120	5	
C. Logistics	19.700	2	347	2	
D. Textile	12.400	3	148	4	
E. Automotive	10.100	4	189	3	



Some Concluding Remarks

- Results of the survey show a significant level of consensus in GreyNet's community of practice
- Uncertainty regarding the FAIR principle of reusability juxtaposed to replicability requires more consideration
- While Google and Google Scholar provide indicative results, other search engines and databases are needed to corroborate findings
- In order to better assess the role of grey literature, search by type of publication and publishing body would be of value
- As part of the information industry, grey literature can be seen as both a driver and a vehicle for other industries in a circular economy



Project Spinoff

The term circular economy did not appear in any of the survey questions. However, the terms and concepts used in formulating the survey questions are found in both the fields of grey literature and circular economy.

Twenty-four of the 72 survey respondents, who chose to provide their contact details were later asked if the survey and survey data had potential for reuse? And if so, how would they envision its use in relation to another area of study?

Comments from three of the recipients follow: ① to understand the socio-economic consequences of the FAIR approach, ② in repurposing data from COVID-19 tests and observations into research guides, literature searches, and informational webinars, ③ to engage the research community in reflecting and articulating its needs for open sources.

**Twenty-Second International Conference on Grey Literature
'Applications of Grey Literature for Science and Society'
National Research Council of Italy • November 19, 2020**



Thanks!

Looking Forward to Your Comments

**Twenty-Second International Conference on Grey Literature
'Applications of Grey Literature for Science and Society'
National Research Council of Italy • November 19, 2020**