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Supplementary Material for the Study on Categories of Change Triggers in Business Processes

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1 Introduction

Nowadays, business processes in enterprises are supported by software systems and information technology (IT). Both domains face various changes during lifetime. In case of evolution and changes in the business domain, it is necessary to ensure that associated software systems/IT are still aligned in order to remain competitive [1]. Thus, the change management can be considered as one of the most important activities in the requirements engineering [3]. As a result, a business process can affect the corresponding software system and vice versa. Thus, the change triggers in business processes need to be considered [4].

In the mid 1970s, the author Swanson defined three dimensions in order to describe software maintenance activities. He distinguished between corrective, adaptive, and perfective maintenance based on a discussion on change triggers [6]. In the domain of information system, Swanson's categorization is used, adapted, or extended. In the domain of business processes, there are some papers examing a list of change triggers (e.g., [5, 7]). However, there are not any systematic and comprehensive categorizations of change triggers in business processes.

To address the limitations of existing approaches, we conducted a literature review to identify the change trigger categories in business processes [2]. In this technical report, we provide the supplementary material for our literature review [2]. We present our method for the database search. Thus, an overview of the search terms and the search engine queries for each database is given. Further, the number of document results for each search query and timespan of the analysis are provided.

The reminder of this technical report is organized as follows: The next section summarizes our search strategy. The final section concludes the technical report.

2 Search Method

To identify the categories of change triggers in business processes, we conducted a literature review, as described in [2]. In the literature review (cf. [2]) we considered papers published until 31.12.2017. The main search method in our literature review was the database search. To identify efficient search queries, we conducted a pilot study. As a result, the search queries consist of the research domain (i.e., "business process" and "workflow") and the phrase search of synonyms of the change facet (e.g., "trigger" and "change"). However, the database search resulted in a very high number of hits. Thus, we could only analyze a subset of the database results. To prioritize the search queries with more document results and to avoid publication bias, we used two methods: i) In the first method, we decomposed the second phrase search term in the search query. If the number of hits was less than 1000, we considered the first 20 papers. Otherwise, we decomposed the phrase search with four search terms of the search query and analyzed the first 10 papers of each new search query. ii) In the second method, we prioritized the newly published papers. If the number of hits is less than 500, we considered the first 20 papers. If the number of papers is more than 500 but less than 1000, we additionally considered the first 20 papers between the years 2011 and 2017. Otherwise, we additionally considered the first 20 papers between the years 2006 and 2011 (cf. [2]).

In the following, we give the additional material for our literature review [2]. The search queries, which are used for each database, as well as the number of hits per search query, are presented. Further, we provide the timespan for each search query and the settings of the database. The electronic databases used to search for relevant literature were Google Scholar (GS), Web of Science (WoS), Scopus, and BASE.

For the phrase search of synonyms of "trigger" and "change" we used "change trigger*", "trigger* for change*", "trigger* of change*", and "trigger event*". Table 2.1 gives the search queries, which are the cross product of the research domain (i.e., "business process" and "workflow") and the phrase search of synonyms of "trigger" and "change".

Table 2.1: Overview of search queries including the search term "trigger"

Database	Adapted Search Queries for Search Term "trigger"	Results
	change trigger*	
GS	("business process" OR workflow) AND ("change trigger" OR "change triggers") Default Settings. Timespan: 1900-2017	612
	("business process" OR workflow) AND ("change trigger" OR "change triggers") Default Settings. Timespan: 2011-2017	339

WoS	TOPIC: (("business process" OR workflow) AND change* AND trigger*) Timespan: 1945-2017. Indexes: SCI-EXPANDED, SSCI.	36
Scopus	ALL (("business process" OR workflow) AND "change* trigger*") AND PUBYEAR < 2018	22
BASE	("business process" OR workflow) AND ("change trigger" OR "change triggers") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	2
trigger* for change*		
GS	("business process" OR workflow) AND ("trigger for change" OR "trigger for changes" OR "triggers for change" OR "triggers for changes") Default Settings. Timespan: 1900-2017	429
Scopus	ALL (("business process" OR workflow) AND "trigger* for change*") AND PUBYEAR < 2018	4
BASE	("business process" OR workflow) AND ("trigger for change" OR "trigger for changes" OR "triggers for change" OR "triggers for changes") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	0
trigger* of change*		
GS	("business process" OR workflow) AND ("trigger of change" OR "trigger of changes" OR "triggers of change" OR "triggers of changes") Default Settings. Timespan: 1900-2017	162
Scopus	ALL (("business process" OR workflow) AND "trigger* of change*") AND PUBYEAR < 2018	9
BASE	("business process" OR workflow) AND ("trigger of change" OR "trigger of changes" OR "triggers of change" OR "triggers of changes") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	0
trigger event*		
GS	("business process" OR workflow) AND ("trigger event" OR "trigger events") Default Settings. Timespan: 1900-2017	~6550
	("business process" OR workflow) AND ("trigger event" OR "trigger events") Default Settings. Timespan: 2006-2011	~2100
	("business process" OR workflow) AND ("trigger event" OR "trigger events") Default Settings. Timespan: 2011-2017	~3840
WoS	TOPIC: (("business process" OR workflow) AND trigger* AND event*) Timespan: 1945-2017. Indexes: SCI-EXPANDED, SSCI.	53
Scopus	ALL (("business process" OR workflow) AND "trigger* event*") AND PUBYEAR < 2018	34

BASE	("business process" OR workflow) AND ("trigger event" OR "trigger events") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	3

For the phrase search of synonyms of "reason" and "change" we used "change reason*", "reason* for change*", and "reason* of change*". Table 2.2 gives the search queries, which are the cross product of the research domain (i.e., "business process" and "workflow") and the phrase search of synonyms of "reason" and "change".

Table 2.2: Overview of search queries including the search term "reason"

Database	Adapted Search Queries for Search Term "reason"	Results
	change reason*	
GS	("business process" OR workflow) AND ("change reason" OR "change reasons") Default Settings. Timespan: 1900-2017	439
WoS	TOPIC: (("business process" OR workflow) AND change* reason*) Timespan: 1945-2017. Indexes: SCI-EXPANDED, SSCI.	118
Scopus	ALL (("business process" OR workflow) AND "change* reason*") AND PUBYEAR < 2018	6
BASE	("business process" OR workflow) AND ("change reason" OR "change reasons") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	0
	reason* for change*	
GS	("business process" OR workflow) AND ("reason for change" OR "reason for changes" OR "reasons for change" OR "reasons for changes") Default Settings. Timespan: 1900-2017	~2620
	("business process" OR workflow) AND ("reason for change") Default Settings. Timespan: 1900-2017	866
	("business process" OR workflow) AND ("reason for change") Default Settings. Timespan: 2011-2017	459
	("business process" OR workflow) AND ("reason for changes") Default Settings. Timespan: 1900-2017	181
	("business process" OR workflow) AND ("reasons for change") Default Settings. Timespan: 1900-2017	~1250
	("business process" OR workflow) AND ("reasons for change") Default Settings. Timespan: 2006-2011	369
	("business process" OR workflow) AND ("reasons for change") Default Settings. Timespan: 2011-2017	644

	("business process" OR workflow) AND ("reasons for changes") Default Settings. Timespan: 1900-2017	479
Scopus	ALL (("business process" OR workflow) AND "reason* for change*") AND PUBYEAR < 2018	20
BASE	("business process" OR workflow) AND ("reason for change" OR "reason for changes" OR "reasons for change" OR "reasons for changes") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	3
	reason* of change*	
GS	("business process" OR workflow) AND ("reason of change" OR "reason of changes" OR "reasons of change" OR "reasons of changes") Default Settings. Timespan: 1900-2017	218
Scopus	ALL (("business process" OR workflow) AND "reason* of change*") AND PUBYEAR < 2018	2
BASE	("business process" OR workflow) AND ("reason of change" OR "reason of changes" OR "reasons of change" OR "reasons of changes") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	3

For the phrase search of synonyms of "force" and "change" we used "change force*", "force* for change*", and "force* of change*". Table 2.3 gives the search queries, which are the cross product of the research domain (i.e., "business process" and "workflow") and the phrase search of synonyms of "force" and "change".

Table 2.3: Overview of search queries including the search term "force"

Database	Adapted Search Queries for Search Term "force"	Results
	change force*	
GS	("business process" OR workflow) AND ("change force" OR "change forces") Default Settings. Timespan: 1900-2017	824
WoS	TOPIC: (("business process" OR workflow) AND change* force*) Timespan: 1945-2017. Indexes: SCI-EXPANDED, SSCI.	120
Scopus	ALL (("business process" OR workflow) AND "change* force*") AND PUBYEAR < 2018	45
BASE	("business process" OR workflow) AND ("change force" OR "change forces") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	1

	force* for change*	
GS	("business process" OR workflow) AND ("force for change" OR "force for changes" OR "forces for change" OR "forces for changes") Default Settings. Timespan: 1900-2017	~1960
	("business process" OR workflow) AND "force for change" Default Settings. Timespan: 1900-2017	~1060
	("business process" OR workflow) AND "force for change" Default Settings. Timespan: 2006-2011	337
	("business process" OR workflow) AND "force for change" Default Settings. Timespan: 2011-2017	465
	("business process" OR workflow) AND "force for changes" Default Settings. Timespan: 1900-2017	36
	("business process" OR workflow) AND "forces for change" Default Settings. Timespan: 1900-2017	907
	("business process" OR workflow) AND "forces for change" Default Settings. Timespan: 2011-2017	351
	("business process" OR workflow) AND "forces for changes" Default Settings. Timespan: 1900-2017	34
Scopus	ALL (("business process" OR workflow) AND "force* for change*") AND PUBYEAR < 2018	45
BASE	("business process" OR workflow) AND ("force for change" OR "force for changes" OR "forces for change" OR "forces for changes") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	10
	force* of change*	
GS	("business process" OR workflow) AND ("force of change" OR "force of changes" OR "forces of change" OR "forces of changes") Default Settings. Timespan: 1900-2017	~1690
	("business process" OR workflow) AND "force of change" Default Settings. Timespan: 1900-2017	312
	("business process" OR workflow) AND "force of changes" Default Settings. Timespan: 1900-2017	14
	("business process" OR workflow) AND "forces of change" Default Settings. Timespan: 1900-2017	~1390
	("business process" OR workflow) AND "forces of change" Default Settings. Timespan: 2006-2011	433
	("business process" OR workflow) AND "forces of change" Default Settings. Timespan: 2011-2017	587
	("business process" OR workflow) AND "forces of changes" Default Settings. Timespan: 1900-2017	37

Scopus	ALL (("business process" OR workflow) AND "force* of change*") AND PUBYEAR < 2018	11
BASE	("business process" OR workflow) AND ("force of change" OR "force of changes" OR "forces of change" OR "forces of changes") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	10

For the phrase search of synonyms of "driver" and "change" we used "change driver*", "driver* for change*", and "driver* of change*". Table 2.4 gives the search queries, which are the cross product of the research domain (i.e., "business process" and "workflow") and the phrase search of synonyms of "driver" and "change".

Table 2.4: Overview of search queries including the search term "driver"

Database	Adapted Search Queries for Search Term "driver"	Results
	change driver*	
GS	("business process" OR workflow) AND ("change driver" OR "change drivers") Default Settings. Timespan: 1900-2017	~1480
WoS	TOPIC: (("business process" OR workflow) AND change* driver*) Timespan: 1945-2017. Indexes: SCI-EXPANDED, SSCI.	57
Scopus	ALL (("business process" OR workflow) AND "change* driver*") AND PUBYEAR < 2018	82
BASE	("business process" OR workflow) AND ("change driver" OR "change drivers") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	8
	driver* for change*	
GS	("business process" OR workflow) AND ("driver for change" OR "driver for changes" OR "drivers for change" OR "drivers for changes") Default Settings. Timespan: 1900-2017	~2110
	("business process" OR workflow) AND "driver for change" Default Settings. Timespan: 1900-2017	772
	("business process" OR workflow) AND "driver for change" Default Settings. Timespan: 2011-2017	393
	("business process" OR workflow) AND "driver for changes" Default Settings. Timespan: 1900-2017	57
	("business process" OR workflow) AND "drivers for change" Default Settings. Timespan: 1900-2017	~1340

	("business process" OR workflow) AND "drivers for change" Default Settings. Timespan: 2006-2017	495
	("business process" OR workflow) AND "drivers for change" Default Settings. Timespan: 2011-2017	619
	("business process" OR workflow) AND "drivers for changes" Default Settings. Timespan: 1900-2017	72
Scopus	ALL (("business process" OR workflow) AND "driver* for change*") AND PUBYEAR < 2018	49
BASE	("business process" OR workflow) AND ("driver for change" OR "driver for changes" OR "drivers for change" OR "drivers for changes") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	14
	driver* of change*	
GS	("business process" OR workflow) AND ("driver of change" OR "drivers of change" OR "driver of changes" OR "drivers of changes") Default Settings. Timespan: 1900-2017	~3520
	("business process" OR workflow) AND "driver of change" Default Settings. Timespan: 1900-2017	~1090
	("business process" OR workflow) AND "driver of change" Default Settings. Timespan: 2006-2011	307
	("business process" OR workflow) AND "driver of change" Default Settings. Timespan: 2011-2017	585
	("business process" OR workflow) AND "driver of changes" Default Settings. Timespan: 1900-2017	70
	("business process" OR workflow) AND "drivers of change" Default Settings. Timespan: 1900-2017	~2340
	("business process" OR workflow) AND "drivers of change" Default Settings. Timespan: 2006-2011	751
	("business process" OR workflow) AND "drivers of change" Default Settings. Timespan: 2011-2017	~1380
	("business process" OR workflow) AND "drivers of changes" Default Settings. Timespan: 1900-2017	115
Scopus	ALL (("business process" OR workflow) AND "driver* of change*") AND PUBYEAR < 2018	56
BASE	("business process" OR workflow) AND ("driver of change" OR "drivers of change" OR "driver of changes" OR "drivers of changes") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	14

For the phrase search of synonyms of "cause" and "change" we used "change cause*", "cause* for change*", and "cause* of change*". Table 2.5 gives the search queries, which are the cross product of the research domain (i.e., "business process" and "workflow") and the phrase search of synonyms of "cause" and "change".

Table 2.5: Overview of search queries including the search term "cause"

Database	Adapted Search Queries for Search Term "cause"	Results
	change cause*	
GS	("business process" OR workflow) AND ("change cause" OR "change causes") Default Settings. Timespan: 1900-2017	~1200
WoS	TOPIC: (("business process" OR workflow) AND change* cause*) Timespan: 1945-2017. Indexes: SCI-EXPANDED, SSCI.	177
Scopus	ALL (("business process" OR workflow) AND "change* cause*") AND PUBYEAR < 2018	132
BASE	("business process" OR workflow) AND ("change cause" OR "change causes") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	9
	cause* for change*	
GS	("business process" OR workflow) AND ("cause for change" OR "cause for changes" OR "causes for change" OR "causes for changes") Default Settings. Timespan: 1900-2017	265
Scopus	ALL (("business process" OR workflow) AND "cause* for change*") AND PUBYEAR < 2018	4
BASE	("business process" OR workflow) AND ("cause for change" OR "causes for change" OR "cause for changes" OR "causes for changes") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	15
	cause* of change*	
GS	("business process" OR workflow) AND ("cause of change" OR "cause of changes" OR "causes of change" OR "causes of changes") Default Settings. Timespan: 1900-2017	981
	("business process" OR workflow) AND ("cause of change" OR "cause of changes" OR "causes of change" OR "causes of changes") Default Settings. Timespan: 2011-2017	568
Scopus	ALL (("business process" OR workflow) AND "cause* of change*") AND PUBYEAR < 2018	6

BASE	("business process" OR workflow) AND ("cause of change" OR "cause of changes" OR "causes of change" OR "causes of changes") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	15

For the phrase search of synonyms of "need" and "change" we used "need for change" and "need to change". Table 2.6 gives the search queries, which are the cross product of the research domain (i.e., "business process" and "workflow") and the phrase search of synonyms of "need" and "change".

Table 2.6: Overview of search queries including the search term "need"

Database	Adapted Search Queries for Search Term "need"	Results
	need for change	
GS	("business process" OR workflow) AND "need for change" Default Settings. Timespan: 1900-2017	~10100
	("business process" OR workflow) AND "need for change" Default Settings. Timespan: 2006-2011	~3090
	("business process" OR workflow) AND "need for change" Default Settings. Timespan: 2011-2017	~4930
WoS	TOPIC: (("business process" OR workflow) AND "need for change") Timespan: 1945-2017. Indexes: SCI-EXPANDED, SSCI.	4
Scopus	ALL (("business process" OR workflow) AND "need for change") AND PUBYEAR < 2018	73
BASE	("business process" OR workflow) AND "need for change" year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	17
	need to change	
GS	("business process" OR workflow) AND "need to change" Default Settings. Timespan: 1900-2017	~17500
	("business process" OR workflow) AND "need to change" Default Settings. Timespan: 2006-2011	~7370
	("business process" OR workflow) AND "need to change" Default Settings. Timespan: 2011-2017	~12500
WoS	TOPIC: (("business process" OR workflow) AND "need to change") Timespan: 1945-2017. Indexes: SCI-EXPANDED, SSCI.	9
Scopus	ALL ((("business process" OR workflow) AND "need to change") AND PUBYEAR < 2018	119

BASE	("business process" OR workflow) AND "need to change" year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	17

For the phrase search of synonyms of "origin" and "change" we used "origin* for change*" and "origin* of change*". Table 2.7 gives the search queries, which are the cross product of the research domain (i.e., "business process" and "workflow") and the phrase search of synonyms of "origin" and "change".

Table 2.7: Overview of search queries including the search term "origin"

Database	Adapted Search Queries for Search Term "origin"	Results
	origin* for change*	
GS	("business process" OR workflow) AND ("origin for change" OR "origin for changes" OR "origins for change" OR "origins for changes") Default Settings. Timespan: 1900-2017	7
WoS	TOPIC: (("business process" OR workflow) AND origin* AND change*) Timespan: 1945-2017. Indexes: SCI-EXPANDED, SSCI.	169
Scopus	ALL (("business process" OR workflow) AND "origin* for change*") AND PUBYEAR < 2018	0
BASE	("business process" OR workflow) AND ("origin for change" OR "origin for changes" OR "origins for change" OR "origins for changes") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	0
	origin* of change*	
GS	("business process" OR workflow) AND ("origin of change" OR "origin of changes" OR "origins of change" OR "origins of changes") Default Settings. Timespan: 1900-2017	131
Scopus	ALL (("business process" OR workflow) AND "origin* of change*") AND PUBYEAR < 2018	2
BASE	("business process" OR workflow) AND ("origin of change" OR "origin of changes" OR "origins of change" OR "origins of changes") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	0

For the phrase search of synonyms of "source" and "change" we used "source* for change*"
and "source* of change*". Table 2.8 gives the search queries, which are the cross product of the
research domain (i.e., "business process" and "workflow") and the phrase search of synonyms
of "source" and "change".

Table 2.8: Overview of search queries including the search term "source"

Database	Adapted Search Queries for Search Term "source"	Results
	source* for change*	
GS	("business process" OR workflow) AND ("source for change" OR "source for changes" OR "sources for change" OR "source for changes") Default Settings. Timespan: 1900-2017	144
WoS	TOPIC: (("business process" OR workflow) AND source* AND change*) Timespan: 1945-2017. Indexes: SCI-EXPANDED, SSCI.	211
Scopus	ALL (("business process" OR workflow) AND "source* for change*") AND PUBYEAR < 2018	0
BASE	("business process" OR workflow) AND ("source for change" OR "source for changes" OR "sources for change" OR "sources for changes") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	2
	source* of change*	
GS	("business process" OR workflow) AND ("source of change" OR "source of changes" OR "sources of change" OR "sources of changes") Default Settings. Timespan: 1900-2017	~1730
	("business process" OR workflow) AND "source of change" Default Settings. Timespan: 1900-2017	757
	("business process" OR workflow) AND "source of change" Default Settings. Timespan: 2011-2017	406
	("business process" OR workflow) AND "source of changes" Default Settings. Timespan: 1900-2017	156
	("business process" OR workflow) AND "sources of change" Default Settings. Timespan: 1900-2017	858
	("business process" OR workflow) AND "sources of change" Default Settings. Timespan: 2011-2017	406
	("business process" OR workflow) AND "sources of changes" Default Settings. Timespan: 1900-2017	163
Scopus	ALL (("business process" OR workflow) AND "source* of change*") AND PUBYEAR < 2018	78

BASE	("business process" OR workflow) AND ("source of change" OR "source of changes" OR "sources of change" OR "sources of changes") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	2

For the phrase search of synonyms of "lever" and "change" we used "change lever*", "lever* for change*", and "lever* of change*". Table 2.9 gives the search queries, which are the cross product of the research domain (i.e., "business process" and "workflow") and the phrase search of synonyms of "lever" and "change".

Table 2.9: Overview of search queries including the search term "lever"

Database	Adapted Search Queries for Search Term "lever"	Results
	change lever*	
GS	("business process" OR workflow) AND ("change lever" OR "change levers") Default Settings. Timespan: 1900-2017	323
WoS	TOPIC: (("business process" OR workflow) AND change* AND lever*) Timespan: 1945-2017. Indexes: SCI-EXPANDED, SSCI.	48
Scopus	ALL (("business process" OR workflow) AND "change* lever*") AND PUBYEAR < 2018	8
BASE	("business process" OR workflow) AND ("change lever" OR "change levers") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	1
	lever* for change*	
GS	("business process" OR workflow) AND ("lever for change" OR "lever for changes" OR "levers for change" OR "levers for changes") Default Settings. Timespan: 1900-2017	354
Scopus	ALL (("business process" OR workflow) AND "lever* for change*") AND PUBYEAR < 2018	12
BASE	("business process" OR workflow) AND ("lever for change" OR "lever for changes" OR "levers for change" OR "levers for changes") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document).	0
	lever* of change*	
GS	("business process" OR workflow) AND ("lever of change" OR "lever of changes" OR "levers of change" OR "levers of changes") Default Settings. Timespan: 1900-2017	274

| Scopus | ALL (("business process" OR workflow) AND "lever* of change*") AND PUBYEAR < 2018 | 4 |
| BASE | ("business process" OR workflow) AND ("lever of change" OR "lever of changes" OR "levers of change" OR "levers of changes") year:[1900 TO 2017] doctype:(12* 13 14 15) (Advanced Search for Journal, Conference Paper, Report, and Review with Search in the Entire Document). | 0 |

3 Conclusion

In this technical report, we gave the supplementary material for our search method during the conduction of our study. The goal of the study was to identify the categories of change triggers in the business processes using a literature review. As the number of hits in the database search was very high, we could not analyze all hits resulted by the database search. Thus, we had to adapt the search terms and the search settings in the databases in order to identify the potential papers more efficiently. This technical report presented the adapted search engine queries for each database, as well as the number of hits at the time of the database search. Further, we provided the settings used for each database and the timespan for each search query.

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