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| **premise** | **comment** | **Freq** | **Similar** |
| PR01 | Verification of previous studies published is essential. However, in some cases it is necessary to consider that research questions and objectives may not be identical. | 3 | * Often the research questions are not exactly the same, so this analysis needs to define how this should be handled. * Checking what exists is essential to avoid conducting reviews from scratch, in addition, we can use elements from other SLRs as a basis for the review. You should search for similar reviews and this contributes positively to the research, however, it is very difficult to find SLRs that deal with the exact same topic and have the same research questions. * It is essential to check if other reviews exist and the decision to conduct a new one goes through an evaluation of the research topic. |
| The verification of the existence of other similar studies helps a lot to reduce efforts | 4 | * Always looking to see if there are any reviews on the same topic helps to save effort and avoid conducting a new review * Lots of revisions not needed. People instead of doing the revision from scratch should just complement and reuse what already exists. * Checking other SLR requires can save a lot of effort, depending on the context it is necessary to update or even redo. * Not checking for other revisions generates a lot of rework, and therefore a lot of effort. |
| The analysis of other secondary studies in the same context helps researchers in planning SLR:  1) get an overview of the area;  2) understand the real need for the review;  3) employ the most appropriate type of study (SLR, MS, Tertiary study) | 4 | * The lack of experience of researchers can hinder obtaining an overview of the area * Protocol planning should focus on understanding whether it is really necessary to conduct the review, making clear the need that justifies the work. * It is extremely important to verify what has already been done and adapt the type of study used according to what has already been published. * When doing this search, I have already found very similar reviews (with very similar research objectives and questions) that apparently did not consider the results of each other, this may be an indication that the authors were not doing this search. |
| Checking the time elapsed since publication is quite important and the decision to update may vary depending on the interest of community in the topic. | 1 | * We should also check the time elapsed since publication. We should also check the time elapsed since publication. Depending on the topic, it is acceptable to take 10- or 5-year reviews to reapply, however, for subjects that are more popular, the time limit would be between 2-4 years. |
| It is necessary to check any type of secondary study, as other studies may also meet some needs. | 1 | * It is necessary to check any type of secondary study, as other studies may also meet some needs. |
| PR02 | Reusing artifacts may not be feasible due to varying objectives and research questions and also lack of confidence in the process conducted (quality of review). | 4 | * It is not always possible to reuse everything, in general, reviews in the same scope can take advantage of some elements (e.g. selection criteria, quality, etc.) * Reuse may be affected because of different research questions * Reusing the artifact may not be feasible, but we can still use the artifacts as a reference. * Yes, we should reuse the components, however, currently many reviews are published in little-known venues and are not rigorous enough to be able to trust the process. This makes reuse impractical. |
| Reusing components is very important and can save you a lot of time | 3 | * Reusing is very important, it's something I do in my revisions. * Reusing components is important, so if there are ways to use components that have already been tested and tweaked it would make the job easier. * People instead of doing the revision from scratch should just complement and reuse what already exists. |
| Technical problems such as the operation of strings in databases hinder reuse and can make reuse unfeasible. | 1 | * The constant change of rules in search engines and databases greatly hinder reuse, it is good to reuse, as long as there are ways to mitigate these problems. |
| Reuse is already quite common | 1 | * This behavior is already quite common. |
| PR03 | It must be ensured that the topic studied is relevant to justify the existence of the review | 3 | * One must ensure that the topic studied will be relevant, so he avoids investing efforts in something that is not relevant. A fundamental factor to justify the existence of a systematic review is to understand if it will contribute positively to the area and if it is really necessary. * There is no justification for publishing a work that will not be useful to anyone. * It makes no sense to publish reviews that are not useful to the community, so we must first fulfill the criterion of being useful, ie clearly understand the applicability of the results and then discuss other aspects of the review. |
| Measuring what is useful or not is difficult, results can become useful only after some time. | 2 | * It is difficult to measure what is really useful in the area. It may happen that the researcher believes he is researching something useful and in the reviewer's view it is not that useful. * Results should be published regardless of whether or not they are of current interest to industry and academia, as research can only become relevant after a long time. |
| The results should have more impact on the industry | 1 | * It is common that the results reach the industry little, so it is necessary that the publications arrive faster in the companies. |
| PR04 | Some decisions made during the review are sensitive and depend on the research topic. For example, the selection of bases that can vary according to the maturity of the area. | 1 | * Sometimes it is necessary to include lesser-known and optimized bases to achieve greater coverage of the study. This varies greatly according to the topic, availability of studies. However, the use of these bases can be harmful when the topic is widespread. |
| Open Science is very important, but it is not always possible to document everything in one review. | 2 | * Open science is very important and contributes a lot to the sustainability of reviews. * It is not always possible to document everything in one review, so we should make it clearer which open science principles should be followed. |
| We must adopt these best practices to save efforts, so every effort made to minimize the negative impact on the current team and future researchers is important. | 2 | * Every effort made to minimize the negative impact on the current team and future researchers is important. * I agree that we should adopt these effort-saving best practices and within my research group researchers are encouraged to discover these good practices during interactions with colleagues and by studying the research group's previous productions. |
| The guidelines set for SLR should be followed irrespective of sustainability. | 1 | * Regardless of sustainability, documentation guidelines (for example) should be followed as these principles come from the SLR itself. |
| We should consider practices such as open science capable of benefiting the entire current research community and not just future researchers. | 1 | * We must consider practices such as open science capable of benefiting the entire research community and not just future researchers. |
| PR05 | Poorly documented reviews are very difficult to use making this factor very important. | 3 | * It is very important to document to allow verification (audition). * Regardless of sustainability, guidelines (eg for documentation) should be followed as these principles come from the SLR itself. * Poorly documented reviews are very difficult to use (as are other types of studies). |
| It is not always possible to externalize everything in reviews; hence, it is important to include external contributors. In addition, it is not always possible to verify everything and this may be the reason why Open Science did not brought significant benefits yet. | 2 | * In revisions, not everything can be verified, since the effort to verify is comparable to redoing everything again. Thus, the community's effort to be Open Science did not have many effects. * It is not always possible to explain everything in the documentation due to a bias of the researcher who is documenting. That is why it is important that external stakeholders participate and give their opinion on the clarity of the results. |
| In the area of software engineering, it is not a common practice to verify that all the steps of the review were strictly followed. | 1 | * There is an apparent lack of maturity in software engineering (unlike medicine). Since I don't see it as a common practice for researchers to thoroughly investigate whether all the steps of the review were followed. |
| We should create a better ways of transferring practical and useful knowledge to group members. This practice may reduce negative impact on group members preventing knowledge loss while members leaves the group. | 1 | * I strongly agree that we should establish a better way of “ on boarding ” in the review process. This would help researchers to adopt good practices and facilitate the transmission of practical and useful knowledge to group members, avoiding the loss of this knowledge. |
| PR06 | It is essential to mitigate threats to validity; furthermore, actions to mitigate them must be designed in SLR planning as means to mitigate risk. Research is worthless without the implementation of these actions. | 2 | * It is critical to mitigate all threats and produce reliable results, without which research is worthless. * I agree that we should mitigate threats to validity and these threats should be considered (a priori in planning) as a risk mitigation mechanism. |
| Studies do not always report reliable results. | 1 | * Published studies do not always report reliable results. |
| The increase in the reliability of the results mitigates efforts as it prevents future researchers from redoing the research. | 1 | * The mitigation of threats to validity contributes to saving future teams efforts. Thus, sustainability must consider the impact of certain decisions on other researchers. In this context, it becomes unsustainable for an author to be forced to redo something that a previous research set out to do and did not do. |
| Detailing the documentation is essential, however, the effort required to do this detailing must also be considered. | 2 | * The amount of effort needed to detail a review report should be verified. * Detailing is essential for sustainability |
| PR07 | Following the standards is essential and this has a direct impact on the quality of the review | 1 | * It is essential to follow the standards as they are derived from good experiences in the community and this has a direct impact on the quality of the SLR. |
| Following the standards is important, however, there are doubts whether it is possible to follow all the standards. In addition, these standards should be reviewed considering issues related to sustainability | 4 | * Patterns that have already been well established are important, but it's worth revisiting those patterns and seeing if they still represent the best way and perhaps new ways to make the process simpler. * Following the standards is important, however, I don't know if it's possible to follow everything proposed in the guidelines. * Best practices are the best we have so far, but current guidelines may not be sufficient to conduct sustainable reviews. * The question remains how much the defined standards and also those that have evolved over time are aligned with the sustainability vision |
| Even if the researcher tries to follow the process rigorously, experience is still a deciding factor. | 2 | * Even following the process rigorously, this does not guarantee that the process will be the most suitable, in which case experience is a decisive factor. * There is also a matter of maturity that, over time, the researcher is able to better understand what the best standards should be adopted. |
| PR08 | Reviews must remain iterative until the end of the process and changes to the protocol can be made after pilot testing and must be versioned . | 4 | * It is very common (even after pilot testing) to have to refactor elements of the protocol. Often our understanding after reading the studies also changes, so it is necessary to add or remove, for example, research questions. I don't agree that changes need to be made only until the pilot test. * The extraction form must remain iterative throughout the process. * The protocol can be changed until the end of the process, even these versions must be versioned and reused. * Iteractivity helps to understand the path that should be followed in the study based on the evidence collected, thus, it is very difficult to predict everything from the planning stage. |
| Iteractivity is essential, but too much can be harmful (especially in later stages of the review). Thus, the main changes should be concentrated until the pilot test, with a few exceptions. | 5 | * When iterative is excessive, it can be harmful, it is necessary to check to what extent making changes (which cost a lot of resources) are viable. Until the pilot test there is a greater possibility of changes, however, after that the changes should be limited. * Pilot testing is essential to better understand your review and better calibrate extract strings and form elements. Iteractivity must be maintained and most changes should occur until pilot testing. * Many changes are made in the course of the reviews, not just in the pilot tests. But if the researcher advances in conducting the review, excessive refactorings can be harmful. * In many cases, the researcher deviates from the defined protocol and this can cause problems, in general terms, we should stick to what is defined in the protocol, with some necessary exceptions. * There are some acceptable changes (eg extract form) in this sense keeping the whole process iterative is interesting. However, deeper changes like the search string are more difficult to make. |
| The fidelity of the review to the protocol is positive for the sustainability of the reviews. | 1 | * The fidelity of the SLR process followed against the protocol supports the sustainability of the reviews. |
| Iterative processes can improve the quality of study in groups without much experience. | 1 | * Often those conducting the review do not have that much experience, in which case the iterative process can greatly increase the quality of the study. |
| It should be iterative, but making the work iterative within short academic cycles, such as, master's degree is almost impossible. | 1 | * In the context of academic research, making the review iterative in the short cycle of a master's degree is humanly impossible. So I do believe that it should be iterative , but this is often not possible to do because of the short time. |
| PR09 | Community interests in research topics are quite volatile, so it is difficult to predict the long-term paths that research will take. However, it makes sense to envision creating reviews that have impact and are used for as long as possible. | 6 | * Community interest in topics is variable, so even if you expect the impact of your SLR to happen in the long term as well, it may not due to the loss of interest from researchers. * It is interesting that there is long-term impact, but prioritizing this can be problematic as community interest is volatile. * Technology evolves a lot, so depending on the effort required, long-term thinking may not pay off. * Change in technology is very frequent, so long-term contributions are difficult. The impact on the community must happen and the research must be continuous, so the paths traced by a review will hardly be permanent. * Research evolves very quickly, so it is difficult to predict the direction of the area over a long period of time. But it is important that reviews seek to have an impact and provide direction over a considerable period of time. * Define long-term goals in the area of Eng. Software is difficult given the constant change in technologies, however, sustainable SLR should envision being consumed for a longer time. |
| The theme (research topic) has a great impact on outlining long-term objectives, given that in more recent areas there is little evidence to help in the decision process. | 2 | * It is important to note the period and context (market) in which the SLR was conducted * SLR should have long-term goals, however, in areas that are very new and have few published studies, outlining and achieving these goals can be very difficult. |
| Reviews with the greatest impact on the community should be prioritized as they are more cited and are more useful and, consequently, more sustainable. Thus, a deeper analysis of the usefulness of these revisions should be made. | 3 | * High impact reviews will have more citations and will be more useful and therefore more sustainable. * Even if it is interesting for a review to consume fewer resources, the trade off should still prioritize the impact of the results on the community * To be sustainable, a deeper analysis of the usefulness of the review is lacking. This would prevent results from being forgotten or shelved. |
| Reviews can have short-term objectives (eg, identifying gaps and research), and long-term (eg, creating a knowledge base for the research area). In the long run, the more knowledge that is summarized, the better. | 2 | * SLR are entry points for a particular area of research, as they create a knowledge base, so the more knowledge that is summarized, the better. * SLR's can have short-term objectives (eg identifying gaps and research; and long-term (eg creating a knowledge base for the research area). |
| There is currently no cycle in which researchers review the reviews conducted and look for ways to expand and improve them. | 1 | * Today, there is no cycle in which researchers check the reviews conducted and look for ways to expand and improve. |
| Reviews are just a tool used to help shape research design, I don't believe her contribution should have a long-term impact, so her contribution is timely and informative. | 1 | * Reviews should be a tool used by researchers to help decide research design. I don't agree that they should impact the community over a long period of time, her contribution is timely and informative. |
| Long-term goals can be much more linked to the way it was done (structure, protocol) that support other studies to use it as a basis, that is, the study protocol becomes reproducible for a longer time. | 1 | * Long-term goals may be much more linked to the way it was done (structure, protocol, insights) that support other studies to use it as a basis, that is, the study protocol becomes reproducible for a longer time. |
| PR10 | The responsibility of using resources and reducing consumption is very important, however, there are many barriers that prevent, for example, the tools from being adopted and effective. | 2 | * Being responsible with the use of resources is essential for sustainability, although there are several barriers to adopting tools. * Tools to reduce effort are important, however, several points of the SLR are subjective and difficult to be executed by tools. |
| The resource concept must extend to physical materials (papers, computers and even disk storage) | 2 | * The resources consumed by SLR extend to other materials such as papers, computers, data processing tools. * Data storage (on the researcher's machine) can also be considered a resource. |
| We must consider that there is a trade-off in the use of resources when understanding what “responsible use” would be. For example, while spending more resources, we can increase quality and reliability by double-checking critical steps while minimizing bias and human error. | 2 | * It is important to note that there is a trade-off between: 1) spending more resources on conducting double-checking processes , 2) saving resources on conducting them. Both can affect quality by minimizing/increasing bias and human error. * The reduction of time can be done, however, when it is excessive it can harm the work, thus, it must be done with awareness of the objectives of the work and also not harming the quality of the results. |
| It is not always easy to find collaborators, so this responsible management is not possible. | 1 | * It is not always easy to find collaborators committed to research, responsible use of resources is not always possible. |
| Revisions must be aligned with the interest of the industry and resource saving is essential in the process. | 1 | * The development of reviews must be completely aligned with the interests of the industry. In this case, saving time, deadlines, results are always factors that drive our work. |
| PR11 | On the one hand, the more details that are given, it favors reproducibility/ auditability and mitigates negative impacts on future readers/researchers. However, doing this detailing also takes a lot of time and effort. Therefore, it is necessary to better understand this trade off. | 4 | * Detailing is important, however, it is necessary to verify the cost and time to perform this task, in larger reviews (mainly) the cost to detail the documentation must be better evaluated * Sustainability should consider ways to reduce some aspects of SLR and leave only the essentials. However, the tradeoff with respect to the reproducibility of the studies must be considered. The level of detail should be reviewed considering sustainability. * Review detail is another trade-off that needs to be explored. The effort spent on detailing a product that is more reproducible and has future impacts should be further investigated. * Detailing requires work and this compromises sustainability, on the other hand, this effort is justifiable as it allows other researchers to better understand the decisions taken. |
| The depth of detail needed should be further investigated in order not to compromise its understanding. | 2 | * It is necessary to investigate further the depth of the detail. * The detailing should be limited to the point that it does not compromise its ease of understanding. |
| Detailing is extremely important and the level of detail should be as high as possible. | 1 | * Detailing is extremely important and it would be perfect if everyone got to a really high level of detail. In master's cycles this is more difficult, however, for doctorate it is more possible. |
| PR11 | Good practices must be followed and a report created that guarantees transparency and reproducibility. | 3 | * The focus must remain on good research practices and a good report that ensures transparency and reproducibility. * You need to document the artifacts so that I don't need additional information to understand them. * Audible should be understood more in terms of the possibility of allowing future replication than checking whether the revision complies with the standard. |
| PR12 |
| PR13 |
| PR14 |
| PR15 | The language used depends a lot on the target audience we want to reach, however, accessibility also has to do with the comprehensibility of the available data. | 1 | * The language that should be used depends a lot on the target audience you want to reach.   Being accessible also means making SLR data available in a way that readers can easily understand it. |
| It is worth putting more effort into producing understandable, reusable, modifiable and adaptable reviews as in the long run in the overall research context this cost will be diluted. | 1 | * It is worth putting more effort into producing understandable, reusable, modifiable and adaptable reviews as in the long run in the overall research context this cost will be diluted. |
| PR16 | Reusing components can be quite difficult as they vary greatly by research topic. | 2 | * Reuse in SLR doesn't have as much impact as the components are very purpose-dependent and are hardly reusable. * Reuse is sensitive to the research topic, it is interesting to create reusable components, however, in some cases this is not possible due to limitations of the study itself and this does not make SLR untenable. |
| Technical problems can affect the functioning of components over the years | 1 | * Over time, some artifacts (like search strings) stop working due to technical issues. It would be interesting to consider ways to keep artifacts up to date to improve reusability. |
| There is an important difference between producing reusable components for SLR and solving problems specific to your study alone. | 1 | * There is an important difference between producing reusable components for SLR and solving problems specific to your study alone. |
| The term reusable already encompasses the term modifiable and adaptable | 1 | * The term reusable already encompasses the term modifiable and adaptable |
| Modifiability and adaptability are essential and open science policies can support these characteristics. However, there is a lack of maturity in the area in understanding how valid an update is. | 1 | * I strongly agree that modifiability and adaptability are essential. Open Science policies address this issue and can support these features. But I believe that there is still a lack of maturity in the area in understanding how valid an update is. |
| There must be a way to verify and validate if the component is really reusable, that is, if it has been validated and does not introduce problems in reuse. | 1 | * There must be a way to verify and validate if the component is really reusable, that is, if it has been validated and does not introduce problems in reuse. |
| Reusability is a necessary feature for the study to be replicated. | 1 | * I understand reusability as something necessary for the study to be replicated. |
| PR17 | Modifications to already published articles is not possible, it would be better if revisions were extensible | 1 | * It is not possible to modify the editorial system (modifying an article already published), however, it would be better if the revisions were extensible. |
| We should move towards creating reusable artifacts, as modifying something that already exists saves a lot of time compared to creating a new revision. | 2 | * When revisiting secondary and tertiary studies, modifiability is very important, as it facilitates the researcher's work in modifying what already exists and contributing by providing more information that had not been previously reported. * We must move towards making artifacts reusable for updating or renewal. |
| Modifiable and adaptability are not that important as it is very difficult to reuse components in SLR. | 1 | * Modifiable and adaptability are not that important as it is very difficult to reuse components in SLR. |
| PR18 | It is important to maintain the adaptability of protocol items to new goals. | 2 | * It is important to maintain the reusability of protocol items. For this, the table must be formatted so that the researcher can easily change it, including avoiding formats such as PDF or photos. * The fact of being able to adapt a review to new objectives is directly linked to sustainability. |
| Older revisions tend not to be as useful for reusing components. | 1 | * Old revisions tend not to be as helpful as artifact changes happen. |
| PR19 | Continuous updating may only make sense for some research topics. The determining factor is community interest in the topic. | 6 | * The interest of the community must be considered before performing any updates. Thus, it can be continuous, but only if there is interest. * Making the SLR process seamless may not be interesting due to the lack of community interest in the topic. * Depending on the research topic, continuous updating may make sense, however, this is not a rule and topics already outdated do not need this constant updating. * Depending on the area the review is being done, it doesn't make sense to continually update. Very new topics (such as COVID-19) and which are of very high interest, it may be interesting to wait for the area to mature before conducting a review. * In some surveys it is not interesting to continually update. * The update must occur organically, that is, according to the needs of the community. |
| Updating is essential, but the time window between updates must be considered. | 1 | * Upgrading is essential for sustainability, however, consideration must be given to the window of time needed to make the upgrade feasible (which can vary greatly). |
| Current revisions are snapshots of the area. So, when updated multiple times, the long-term review already achieves this goal. | 1 | * The SLR represents snapshots of the area, so in the long run, if the update is done multiple times, it already meets the goal of being continuously updated. |
| It is possible that for a review to be continuously documented and evaluated, this process takes a long time and hinders the progress of the project. Documentation should be the result of a good process and not a way of ensuring that the process was done with quality. | 1 | * The review must be well documented, however, this process can be time consuming and disrupt the progress of the project. Verification steps must be done ( kappa ), but I believe that documentation should be the result of a good process and not a way to ensure that the process was done with quality. |
| PR20 | Often a reuse must go through a refactoring | 1 | * It is important to mention that reuse often goes through refactoring. |
| Leaving artifacts public allows other authors to take ownership of updates, thus creating a conflict of interest | 1 | * Leaving artifacts public allows other researchers to take authorship of an SLR update without including the original authors. This creates a conflict of interest. |
| When possible, we should reuse quality elements produced by other people |  | * If it is possible to reuse quality elements produced by other people, it should be done |

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| PR21 | It is important to revisit what should be left available | 1 | * It is important to revisit what should be left available |
| All data collected in conducting the research must be available, however, for this to happen, group maturity and supervision by experienced researchers are necessary. | 1 | * All data collected from conducting the research should be recorded and I see a lot of added value in this. However, for this to happen in a research group, the group's maturity and the supervision of experienced researchers are necessary. |
| It is necessary to think of structures or ways to store this data. Thus, it is necessary to understand what evidence we need to store. | 1 | * It is necessary to think of structures or ways to store this. Thus, it is necessary to understand what evidence we need to store |
| PR22 | For the review to have an impact, the ideal is always to assume that the research must be aligned with the needs of the stakeholders , thus translating this need into research questions. | 1 | * For SLR to have an impact, the ideal is that the needs of those involved are translated into research questions. * I always assume that research needs to be aligned with stakeholders and this is part of everyday life. |
| Not always the needs of stakeholders need to be met in research questions, it is necessary to align and reconcile with scientists who also have their needs and avoid bias. | 1 | * The needs of stakeholders do not always need to be met in research questions, it is necessary to align and reconcile with scientists who also have their needs and avoid bias |
| PR23 | In many cases, the objective of the review is to know the area and identify gaps. In this context, it is quite difficult for inexperienced researchers to make significant contributions. | 2 | * In many cases, the main objective of the review is to better understand the research area and identify research gaps, in which case it is not always possible to create accessible and useful results for the entire community. * In many cases the review is used for the researcher to learn more about the area than to contribute, thus, it is quite difficult that without experience in the area the researcher contributes significantly. |
| Reviews that address the needs of specific communities can still be sustainable | 1 | * Reviews that address the needs of specific communities may still be sustainable. You don't necessarily have to be so comprehensive in your goals. |
| It is always possible to include research questions that will be useful to a wider community and we should aim to be more comprehensive in the reviews. | 2 | * It is always possible to include research questions that may be useful to a larger community. * There is always a researcher bias, but we should seek a scope of that topic. |
| Reviews do not need to have long-term goals, but only meet stakeholder needs . | 1 | * I don't believe the review needs to have long-term goals, but it needs to address stakeholder needs . |
| PR24 | Since research takes place simultaneously, community interest may be greater than it appears. | 1 | * It is possible that reviews aimed at a more specific problem will be sustainable, since other researchers at the same time may have the same interest and even imagining that the impact of the review will be low, in the future the interest may be confirmed to be greater than if imagined. |
| In addition to the research area, we should also impact the industry | 1 | * The results should positively impact the research area, but also the industry. |
| Reviews should not prioritize the impact on the research area, but on the stakeholders who are your target audience. | 1 | * Reviews should not prioritize the impact on the research area, but the stakeholders who are the target audience. |

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| **Critical Factor** | **comment** | **Freq** | **Similar** |
| CF1 | Communication is critical for decision making | 1 | * Exchanging information, mainly to resolve doubts about the inclusion and exclusion of studies, is very critical. |
| Communication is one of the main factors that lead the results to have an effective impact in the area. | 1 | * Communication is one of the main factors that lead the results to have an effective impact in the area. |
| CF2 | Stakeholder participation is essential to align expectations, and without this participation, wrong decisions are very likely to be made. | 2 | * The presence of domain experts is essential, since without this participation it is very likely that wrong decisions will be made. * This participation is very important. In my experience this happens fortnightly and we align stakeholder expectations in high-level discussions and prioritizing the business vision. |
| CF3 | This factor is critical since data synthesis becomes very difficult and can be done wrongly due to lack of knowledge. | 2 | * This factor is quite critical since it is possible to collect wrong information if there is no knowledge in the domain. * Knowledge about the area is critical, as we are often unable to synthesize findings correctly due to lack of domain knowledge. |
| Depending on the type of study (systematic mappings that are exploratory) knowledge may also be acquired during the study. | 3 | * The criticality of knowledge in the domain and on the SLR process varies according to the type of study. In larger studies (such as mappings), having prior knowledge may not be as essential given the exploratory nature of the study. * Prior knowledge is important, however, it is possible that some of this knowledge is acquired during the process. * It may happen that when driving SLR you are looking to build a body of knowledge. |
| If there is no prior knowledge in the domain, it is still possible to contribute, however, more resources will be needed | 1 | * Extra effort is required for an expert in the field to validate the data collected by the participants. |
| CF4 | Participant experience is critical, as novices have limitations in creating an overview of the area and reporting relevant results. | 1 | * The participants' experience in conducting SLR is critical, as novices have a hard time creating an overview of the area and reporting really relevant results. |
| It is not critical that everyone knows the review process, but at least one person (perhaps a leader) should have experience conducting reviews. | 5 | * It is essential 1 or 2 members with experience to ask questions about the process, however, it is not critical that everyone has knowledge of the SLR process. * Driving experience in the SLR process can avoid some pitfalls. But usually a leader who has experience is enough. * At least one person needs to know the process, but not necessarily the whole group. * I do not consider it critical to the point of invalidating the process. Even if all participants do not know the SLR process, it is possible to conduct it, however, it consumes much more time and energy. * Members' experience interferes, this is critical . However, it is not necessary for everyone to have this knowledge, but at least someone who has experience. |
| CF5 | Reusing high quality components can have a positive impact on quality and reduced effort | 2 | * Using higher quality and updated SLR components can have a positive effect (in terms of time and quality) of the conducted SLR. * Reuse is really critical , especially for the economic axis |
| The concern of creating reusable elements may not be feasible, however, making the elements available is critical. | 2 | * The concern to create elements that are reusable may not be feasible, but making the elements available and easily accessible to researchers is critical. * It's important, but production shouldn't suffer if I can't provide this feature. |
| CF6 | Guidelines can avoid common pitfalls in conducting SLR and that can lead researchers to repeat certain steps, consequently consuming more effort. | 1 | * Guidelines can avoid common pitfalls in conducting SLR and that can lead researchers to repeat certain steps, consequently consuming more effort. |
| There is still a community bias in accepting update articles that use snowballing techniques to update the SLR. | 1 | * There is still a bias in accepting update articles that use these snowballing techniques to update the SLR. |
| CF7 | Knowledge sharing is critical, both in interpersonal relationships and in making data available. There are some difficulties in this aspect due to different levels of training and lack of a culture of sharing and documentation. | 3 | * Showing lessons learned, insights and making data available are very important. As well as sharing experience in meetings. * Knowledge sharing is critical and there are many ways that knowledge sharing could affect sustainability. * Knowledge management and transfer is essential, although there are some difficulties due to the different level of training and the lack of a culture of sharing and documentation. |
| It should be taken into account to what extent the detailing is worthwhile, since when excessive it can consume a lot of resources. | 2 | * The transfer of knowledge and excessive detailing tends to consume a lot of energy (economic axis). However, this greatly impacts the social axis * One should check to what extent SLR detailing is worth it. |
| CF8 | The use of tools (in general, whether they are SLR specific or generic) is critical, especially in large overhauls, as they save a lot of effort and reduce lead time. | 4 | * Tools are essential for reducing driving time. * The use of tools is more critical in larger reviews, given the volume of information, in smaller reviews it has less impact. * Even though they are not specific tools for SLR, their use is essential and critical for conducting SLR. * Tools save a lot of effort and conducting revisions without the use of tools is impractical, meaning their use is critical. * In this case I will not look at the tools I know, but the tools as a whole. I agree that we need tools for automation |
| The use of tools (specific to SLR) is not critical, as it is possible to conduct it without the use of these tools. But in this case, the human factor will be decisive in determining whether the review will be sustainable or not. | 1 | * The use of tools is important (those specific to SLR), however, I do not consider it critical, since it is possible to conduct a sustainable review without using them. In this case the human factor (who is conducting the review) becomes decisive. |
| CF9 | Maturity is not critical, as today's tools are immature and we still use them. In addition, it is possible to use them in a complementary way, but this is undeniably more time consuming. | 2 | * There is an impact, but it is not critical. Even with tools with a low maturity level, it is possible to use several in a complementary way, but this undeniably takes a little more work. * The maturity of the tools is not so relevant as the current tools are not so mature and we are still able to use them. |
| Using problem tools consumes more effort during review | 3 | * The biggest impact of tool maturity is the amount of time and effort required to drive. * The use of tools is critical, in many cases incomplete or problem tools end up forcing the migration consuming even more effort. * Considering that we are using a tool for SLR, I consider the maturity of this tool to be critical. |
| The maturity of tools is critical and if there were more robust tools it would be possible to better play the role of each one in the review | 1 | * The maturity of the tools is essential and if there were more robust tools, the members of the process would gain more efficiency to perform their role. |
| CF10 | Inaccessible tools consume more time for the researcher to learn how to deal with the tool. | 1 | * Inaccessible tools consume more time for the researcher to learn how to deal with the tool. Thus, the greatest impact on the economic axis. |
| I don't consider it critical since after learning to use the tool, this is no longer a problem. | 1 | * It's not critical as once you learn the tool it's not a problem. |
| CF11 | Using techniques (e.g. snowballing) are proven to be effective in reducing time and effort | 2 | * There are studies that prove the efficiency of these techniques and when looking at time and effort this is really critical, however, I don't see much impact on other perspectives. * Using snowballing for driving is quite interesting and brings good results. |
| It is not a critical factor, since the priority should be reliability and currently these techniques do not have concrete proof of reliability. | 1 | * It's not a critical factor, as I prioritize reliability. Currently, these techniques do not yet have concrete evidence that they work with complete reliability. |
| CF12 | The management of all resources, including physical resources, is important, even adding a single person to the project can already be quite critical. | 2 | * Most reviews are done digitally (using computers and electronic resources), but it is necessary to manage all resources, including physical ones. * Adding a single person to the process can already have a big impact. Thus, resource management is quite critical. |
| This is already common, I don't think it's critical | 1 | * In the scope of research, this resource management is already common, so I don't think it's critical. |
| CF13 | If the primary studies were at a high maturity level, feasibility studies would save you from conducting multiple reviews that make absolutely no sense. | 1 | * I think if we can get to a degree of maturity where we have good resources and the articles are well written and the abstracts are useful. Feasibility studies would spare a lot of literature reviews that don't make any sense. |
| Feasibility studies may be an addition to help understand the impact of the review on the community, but I don't think it's critical. | 2 | * Feasibility studies can be an addition to help understand the impact and value to the community, however, it is not critical to conduct them to ensure that the SLR is sustainable. * The review is designed to meet the researcher's needs, but if it could be done it would be perfect. |
| This type of study is not feasible due to the amount of time and effort required to conduct and can further delay the process. | 3 | * Feasibility studies would only delay the process even further, so the pilot study should be enough to resolve all planning issues. * Feasibility studies would be interesting, however, its feasibility given the amount of time and effort required and the benefits it brings is questionable. * Feasibility testing would only delay delivery and require more effort, so it is not feasible. |
| In more mature areas (which have many studies) these studies can be important, however, in newer areas it is not so critical. | 1 | * In newer areas, feasibility studies are not that critical. However, in areas that already have many published studies conducting a feasibility analysis can be critical. |
| CF14 | Updating the review is very critical, mainly from the point of view of the efforts consumed to update, however, it only makes sense if there is interest in the results. | 2 | * Updating only makes sense if updated results are relevant to the target audience, but it does make sense that this maintenance is a critical factor * When there are many studies available, minimizing efforts is essential, so from the point of view of effort the maintenance of SLRs is very critical. |
| CF15 | The iterative process is critical and allows aligning objectives with available information, however, the number of iterations required will depend on the experience of the research team. | 2 | * The number of iterations can vary greatly with the experience of the research team, but being iterative is very important. * The iterative process is critical as it gives the opportunity to better reflect and align the research objectives with what is available of information. |