



SUSTAINABILITY IN BUSINESS

LCA Discussion Forum 23, Sept. 23rd, 2004

The Critical Review Process according to ISO 14040: Experience & Effects

Results of a small enquiry among LCA peers

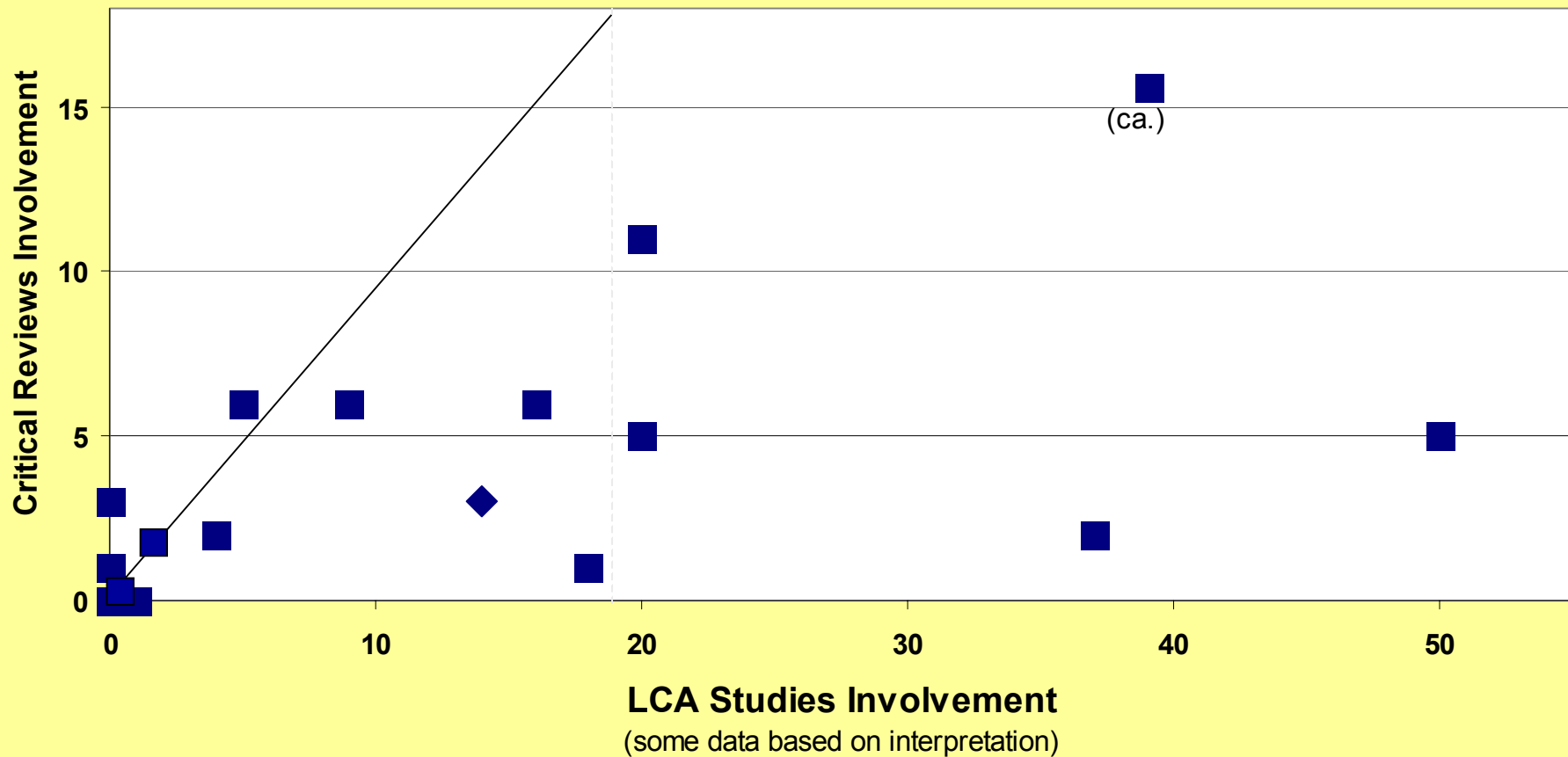
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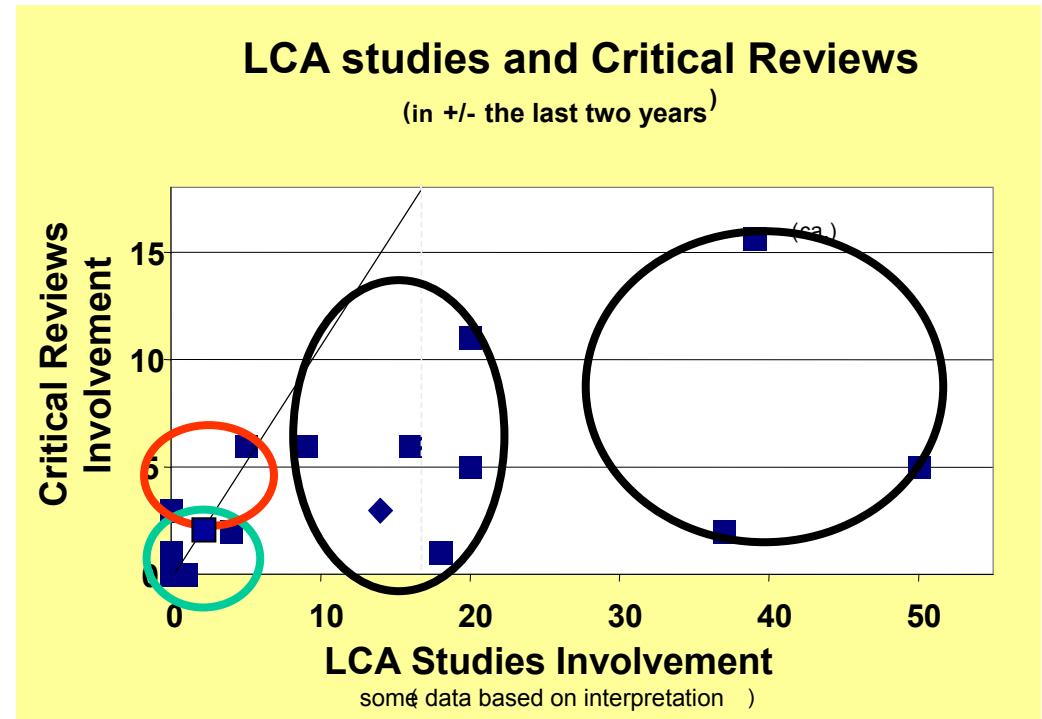
- **Content:**
 - A Question on practical experience with LCA & with CRP**
 - A Question on quality effects of CRP**
- **Sent to 55 co-editors of the Int. J. of LCA**
- **Replies with content: 22 persons**
(others: no email contact possible; no response; no time)
- **Qualitative comments on effects of CRP: 21 persons**
- **Quantitative information on involvement in LCA and CRP: 16 persons**

LCA studies and Critical Reviews (in +/- the last two years)



(For comments see next page)

- Quantitative information on involvement in LCA and CRP: 16 persons
- The information is ,per person' (not necessarily the same studies on x- and y-axis!)
- 6 persons had little practical experience recently
- 3 persons participated in as many or more CRPs than in LCA studies
- 9 persons were involved in some or many studies – with / without CRP
- In total: involvement in 230 LCA studies & in 70 CRP
- few mentioned regular internal reviews



CRP helps in the areas of:

- **Reassure the commissioner ***
- **Foster consistent Goal & Scope definition ***
(general quality incentive to the practitioner)
- **1404x compatibility ***
- **Methodological consistency** (background data; LCI-LCIA-linking, ...) *
- **Reasonable interpretations; sensitivity analyses**
- **Document quality** (clarity, transparency on limitations, ...)
- **Quality of summaries**
- **External credibility; reassurance of external readers**

* = if CRP ran in parallel to the LCA study

(inquiry results)

CRPs could usually not:

- **Often, CRP would not analyze the data in detail**
(in others, it did find data errors!)
- **In a CRP starting only after the LCA study is finished, effects are limited**
- **CRP** (i.e. the whole discussion process) may take more time than planned

(inquiry results)

Planning:

- **When to start the CRP: during the LCA project or only after the study was (almost) finished?** Many reviews only started at the draft final report stage; but this limited the positive effects of a CRP
- **Who is reviewed: Top LCA professional or beginner?** (The role of the review may be different)
- **Panel review needs money & time** (but may be worth it)

Human aspects:

- **If you live from CRP, you are inclined to be ,nice‘**
- **Disputes between reviewers**
- **Dogmatic reviewers**

(inquiry results)

Guidance:

- Better guidance for CRP?
- How detailed should the review the inventory data & results be?
- If the CRP starts ,early‘, ie. in parallel to the study – does the reviewer become a semi-consultant? (And is this a problem?)
- Reviewers‘ comment is shown in the full report – but in summaries etc.?

Review types:

- ,Peer review‘ and ,interested parties review‘ are mixed up sometimes
- ,Defensive‘ reviews (quick & dirty) vs. ,ISO review‘
- Internal vs. External review
- And the review of an article?

(inquiry results)

- **Internal critical review was in few responses mentioned as systematic approach – and probably has a high quality potential**
- **Approach for internal and external review would be similar**
- **General feeling: ,Quality aspects of the CRP‘ might get little and no systematic attention**

- Overall, CRP for LCA studies gets a positive grade, esp. if done in parallel to the study
- Differentiate clearly
 - .. critical Review at **end of LCA** (short & sharp)
 - .. critical Review **parallel to LCA** (detailed)
- Define better how to include CR-comments in reports' summaries?
- **Worthwhile to consider: Develop a systematic internal critical review (as part of systematic quality management)** At E2 we apply the '4-eyes-principle': Important documents, such as concepts, proposals or presentations, are internally discussed or reviewed.