

**MINIMIZING CONCEPTUAL VIOLENCE THROUGH INTEGRATION**

# **IN ORGANIZATIONS**

by

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## **CASE STUDY SUMMARY:**

### **“PREPARING FOR THE PERFECT PRODUCT LAUNCH”**

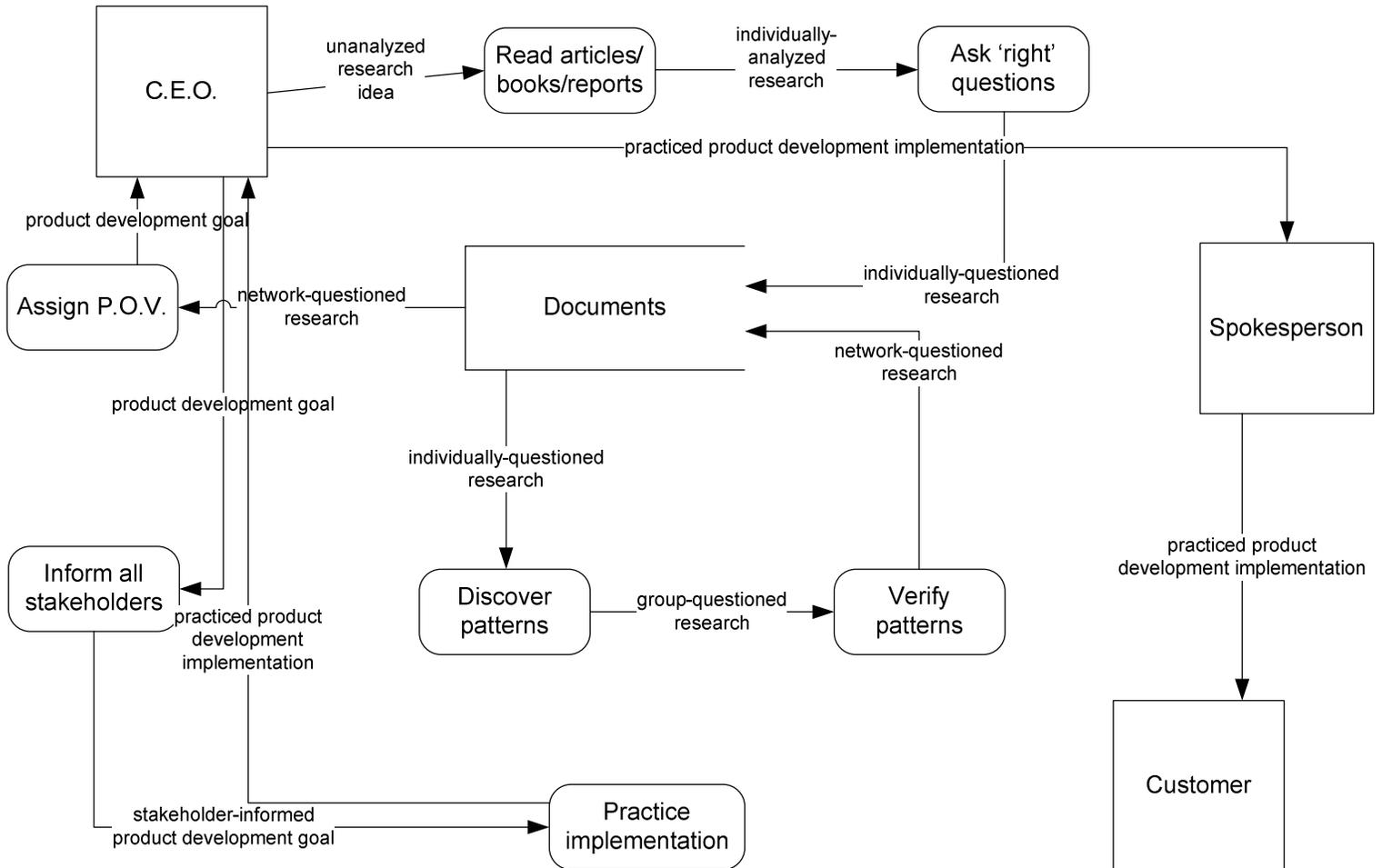
In an April 2007 edition of the Harvard Business Review, Steelcase CEO James Hackett wrote about his company’s struggle to prepare for the “ten percent” of the time (46) that their innovation process faltered. Hackett attributed this problem to Max Bazerman’s concept of “bounded awareness,” (*ibid.*) which states that stakeholders often fail to see relevant business information during the decision-making process and therefore make bad decisions or no decisions at all.

To counteract this problem, Hackett devised a four phase “critical thinking” (*ibid.*) strategy: think, set the point of view, plan the implementation, and implement. (48) In the think phase, the idea is to get team members thinking individually about a research idea for a potential product. The team members start out as admittedly “naive beginners,” (47) but quickly attempt to work toward becoming experts on the subject matter through a kind of intense autodidactic studying process. (48) Team members are then expected to be able to “ask the right questions” (47) about the research, again individually. Pooling all of their individually-produced documentation into a repository for group evaluation, members are then asked to work together to discover patterns in their work. (48) Once patterns are discovered, they are expected to verify these patterns (*ibid.*) by tapping into the company’s established network of international connections - “the smartest people in the world” (*ibid.*) - and getting their input before proceeding.

Hackett then emphasizes the importance of assigning the team’s resulting point of view (*ibid.*) to a particular person in order to “prevent second-guessing and ongoing debate.” (49) Reporting then to the CEO, (49) senior management will - if approved -

disseminate this information to all stakeholders involved in the project. In the plan-to-implement phase, (*ibid.*) practice becomes the company's main activity. Workers at all levels of the company are trained to handle this hypothetical product development situation. (*ibid.*) If all goes well, senior management then selects a spokesperson for the company and - if a customer orders - (50) the development is implemented.

**MODEL #1**



## **DISCUSSION OF MODEL #1**

The perspective offered by this data flow diagram (DFD) sees the Steelcase team members as part of the system - quite literally inside of it. Just like the students in *How I Learned to Stop Worrying...*, (Phillips 6) the team members have been dissolved into the system and transformed into a series of processes and flows. In reference to his model's perspective, Phillips writes "what had been a student is now just anything that produces papers and course content." (*ibid.*) Here, what had been a team member is now, essentially, just anything that produces documents.

But this narrow focus produces the benefit of describing quite clearly Steelcase's otherwise mysterious process of taking a vague research idea and transforming it into a well-defined product development objective. (Hackett 48) "Improve research idea" was initially written in as a process when brainstorming the diagram; however, that process was deleted as it was ultimately granulated (Phillips 6) into component parts (read articles/books/reports, ask 'right' questions, etc.) This DFD, then, describes exactly how the research idea is improved by Steelcase. Teleologically speaking, it could be taken as an ideal tool for illustrating to stakeholders (both within and outside of the company) how Steelcase goes about its product development process. This range of applicability, (Lessard 15) then, brings us to questions of the diagram's ontology. This is certainly a human-oriented representation, (Lessard 14) as - although technology would certainly be involved in carrying out certain tasks - the DFD focuses on how the people in the organization navigate the product development process. Despite this focus on people, however, the DFD remains a "hard" (Checkland 41) representation of the organization, as it only models objective functional requirements (Professor) and makes no attempt to

account for “soft” (Checkland 41) subjective qualities, e.g. usability. It is in this sense that one would be violating the ontological assumptions (Lessard 15) of the DFD by attempting to make it represent - for instance - goals. For that, one would be better off constructing a new model that holds ontological assumptions relating specifically to goals, (*ibid.*) such as a questions, options, criteria (QOC) model. (Lessard 13)

The boundaries of this system reside with the terminators (Lessard 3) - the CEO, the spokesperson, and the customer. The primary terminator could be said to be the CEO, as s/he receives and transmits more information than the other two terminators. Similarly, neither the spokesperson nor the customer would receive any information at all without the CEO. Considering a reconceptualization (Phillips 5) of these boundaries, one could imagine the CEO as inside of the system instead. The CEO receives and transmits information about the product development goal, and then receives and transmits information about the practiced product development implementation. As Phillips asks, (5) what inputs does the CEO need to do these things? Let us imagine that the CEO receives this information via the Steelcase company intranet. A DFD could then be designed with the intranet as the terminator instead, (*ibid.*) bringing the CEO into the system and illustrating exactly how the CEO receives his or her information.

MODEL #2

1. CEO GIVES UNANALYZED RESEARCH IDEA TO TEAM MEMBERS
2. TEAM MEMBERS READ ARTICLES/BOOKS/REPORTS ON IDEA
3. TEAM MEMBERS INDIVIDUALLY ASK 'RIGHT' QUESTIONS ABOUT RESEARCH
4. TEAM MEMBERS PRODUCE DOCUMENTS INDIVIDUALLY AND DELIVER TO DOCUMENT REPOSITORY
5. TEAM MEMBERS ANALYZE EACH OTHERS' WORK, DISCOVERING PATTERNS
6. TEAM MEMBERS VERIFY PATTERNS BY CONSULTING COMPANY'S VAST NETWORK OF CONNECTIONS
7. TEAM MEMBERS ASSIGN POINT OF VIEW (POV) FOR PROJECT
8. OWNER OF POV INFORMS CEO OF PRODUCT DEVELOPMENT GOAL
9. IF APPROVED, CEO INFORMS ALL STAKEHOLDERS OF PRODUCT DEVELOPMENT GOAL
10. COMPANY PRACTICES IMPLEMENTATION OF PRODUCT DEVELOPMENT
11. RESULTS OF PRODUCT DEVELOPMENT IMPLEMENTATION PRACTICE ARE TAKEN TO CEO
12. IF APPROVED, CEO CHOOSES SPOKESPERSON TO COMMUNICATE RESULTS OF PRODUCT DEVELOPMENT IMPLEMENTATION PRACTICE TO CUSTOMER(S)

## **DISCUSSION OF MODEL #2**

What, then, is lost in model #1? Certainly, some of the processes could be more granular. (Phillips 6) “Assign POV” could potentially be broken up into smaller components, as Hackett talks more specifically about exactly how the point of view is assigned. (48) “Practice implementation” could similarly be more finely granulated, as the process for going about this (49) is also detailed in the article. This additional granulation (Phillips 6) is not exactly accomplished in model #2, but the perspective offers certain advantages: namely, the form now carries meaning.

As in the case of the Round Robin addressed to Samuel Johnson, (1786) this representation of the content now carries meaning in its form. The circuitous design of that list made the statement that no name should be considered more responsible than any other. (*ibid.*) While the DFD is able to communicate more clearly where the information is flowing at all stages of the project, its form is rather haphazard and meaningless. The essence of the Steelcase technique is deductive - starting big, and narrowing down from there. (Hackett 48) Steelcase senior management starts with a fairly hazy “big idea” about what team members should start researching, and by the end of the process that idea has been well-defined and narrowed down. (*ibid.*) Model #2 conveys this narrowing down process in its form - starting with the “big idea” at point one and gradually narrowing that down all the way to the well-defined stage of point twelve.

The ontological assumptions here are similar to the DFD in that its intended application (Lessard 15) could also be said to be showing stakeholders the Steelcase product development process. The concepts are once again human-oriented (Lessard 14) and therefore cannot represent the world of goals (Lessard 15) either. However, an

appropriate use of this model might be to provide clarification to stakeholders unfamiliar with reading modeling diagrams. The chronologically numbered list is somewhat more intuitive than the DFD, as DFD neophytes may be confused as to where to start reading the diagram, for instance. A limitation of the list is that many of the communication patterns are lost, such as how many times the document repository must be consulted in the process. Writing all of these communication flows into a list form simply comes across as too verbose and unwieldy. The list, however, provides a general overview of the process while sacrificing some of the specifics. One could then imagine showing model #2 to a higher level stakeholder - such as an executive - who does not particularly care about individual communication flows and just needs an idea as to what is going on. Here, the boundaries of the system are not so easily identifiable. The CEO, spokesperson, and customer are all bound up together with the team members. This is another downside to the non-diagrammatic (Lessard 15) textual representation.

As Brian Cantwell Smith says, “every act of conceptualization, analysis, categorization, does a certain amount of violence to its subject matter.” (816) Accepting the limitations inherent in each form of representation, then, one could surmise that a reasonable approach would be a kind of integration, (Kethers 1114) much like the Co-MAP process (1113) discussed by Stefanie Kethers. Kethers writes that a single viewpoint will always “offer only limited support for representing and analysing the information flows, coordination structures, or goals of the actors involved in the process.” (*ibid.*) The DFD would be well-suited to an employee on the ground in the company who must know where to take his or her information immediately after devising it; however, the DFD would likely be too much unnecessary information for an executive. The

executive might prefer the list form of representation, as a more generalized overview is provided. As in the case of Co-MAP, (*ibid.*) then, rather than prioritizing one form of representation over another, the more productive approach might be to strategically develop an integration of different representations to properly accommodate stakeholders at all levels - both within and outside of the company.

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