

## Review of: "Answer to Ph.D. Viva Voice Questions by Doctoral Candidates: In the Case of the Ph.D. Thesis Entitled "Determinants of Entrepreneurship Sustainable Development in Africa": Short Communication"

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The author has researched an important aspect of answering the questions which could be raised by the examiners. The overall duty of a guide/supervisor centers around the following issues:

- 1. Summary of the thesis will be the "Abstract" of the thesis. At the time of proposing a research title, the researcher should have focused on the research problem statement, identified the need for research, and stated the objectives of the thesis. Two or three members of the doctoral committee and the guide would have to carefully examine, modify and update the objective. Again, at the time of submitting the "synopsis", the researcher has to prepare a concise summary so that three external examiners will choose the thesis and agree to examine.
- 2. Motivation for researcher to take up this topic for research: a) To explore and find solutions for the stated problem, b)

  To publish a set of papers so that the students, faculty members, and the society will be benefitted, c) Increase the returns on education, d) To suggest further research to optimize the solution., and e) Get a reserach degree for employment in a reputed university/industry with good salary.
- 3. Address of the thesis: This has to be well written through objectives of the thesis to suggest best solutions like improving the resource utilization, reduce waste, improve safety, improve the environment, etc. Again, this depends on the topic and its relevance to global context.
- 4. Strongest Influence to develop a needed solution through reserach: a) Suggestions from the previous researchers, b)

  Based on the current advancement in software, c) To reduce the accidents, d) To maximize the productivity, e) To
  improve exports and GDP, and many more depends on the topic of reserach, the context, and the expressed needs of
  the employers.
- 5. Strongest influence on the researcher: A well-known research paper cited in the literature survey, or the biggest industrial accident, and the Policy of the President/Dean/Guide. It depends on the agency that funded the reserach.
- 6. Three important papers that relate to Ph.D. Thesis: It depends on the field of reserach, statement of the problem, strength of the identified research paper in the literature survey.
- 7. Published paper closest to the researcher's paper: It depends on the topic of importance, the strength of researcher, objectives of the research work, etc. Again, this will vary from topic to topic. The best paper will be well recognized and it will also be rewarded.



- 8. Recent Major Development in the area of research: It depends on the quality of research, impact that it made on the human and knowledge capital.
- 9. Research Methodology: It depends on the objectives, resources available, suitability of alternatives, guide's perception, background of the researcher, software available, tools available, etc.
- 10. Evaluation of the Work: Through seminars, feedback from the peer reviewers, citations, patents filed, books published, etc.
- 11. Correctness of Findings: 1. Statistical analysis, validation, and feedback from the users.
- 12. Strongest and weakest parts of the thesis: Depends on the research method used, error reduction, quality of outcome, feedback from the doctoral committee/ examiners, and the researchers feedback during public viva-voce, etc.
- 13. Generalization of Contributions: It depends on the sample size, type of data collected, analysis, restrictions in the research, etc.
- 14. People who will be most interested in the research work: Stake holders, end users, industries that may adopt the research work, guide/supervisor, funding agencies who may share the royalties, besides the family members of the researcher.
- 15. Relevance to research practitioners: a) Whether the suggestions are reliable? b) Can I get consistent outcome? c) Are there any shortcomings? 4) Are they economical? Many more questions are to be answered.
- 16. Contribution to knowledge capital: a) A set of reserach papers, b) Advanced production process which ensures accident-free application, c) Pollution free environment, d) Noise free environment, e) Ensures high productivity, etc. These depend on the research topic.
- 17. Long-term Contributions: Under stable economy, availability of resources, and stable technology but not under new disruptive technologies. Again, these depend on the area of research.
- 18. Learning from the Ph.D. work: Problem-solving skills, critical thinking, preparing high quality statement of the problem, relevance of the research, creating implementable solutions, contribution to knowledge capital, and many more.
- 19. Advice to Research Students in this Area: a) Short-comings of the present research work, b) Suggestions for further reserach, c) Suggestion on desired area, etc.
- 20. Proposal for future research: Based on funding, resources, population, need for critical solutions, impact of other demand.
- 21. Every textbook on reserach methodology provides guidelines to the above 20 questions and the Doctoral Committee further assists the researcher. When the participants (other faculty members and reserach students) of public viva voce have all the freedom to raise tough questions.