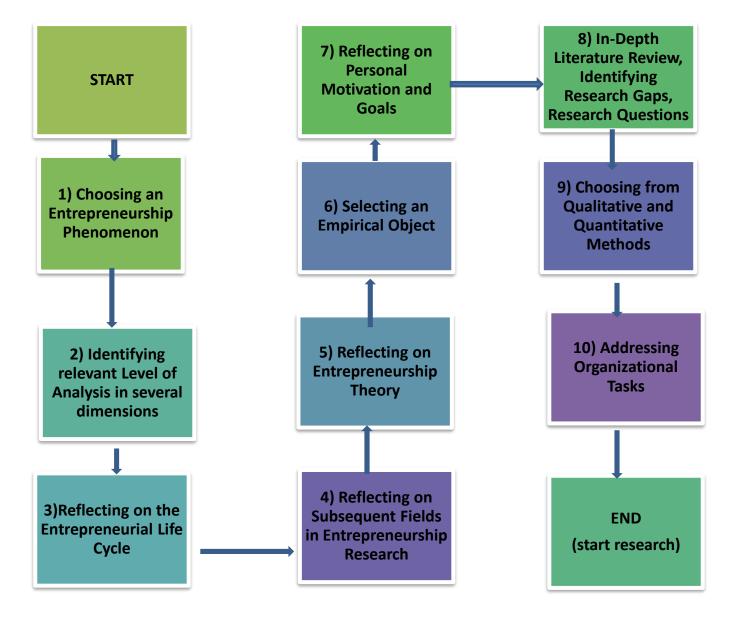
Contemporary Issues in Entrepreneurship and Avenues for Future Research

- The "Ten Step Heuristic" by Sassmannshausen and Gladbach act as road map designed to guide PhD students and researchers who have yet not defined their research interest and have little or no experience in Research – example Entrepreneurship.
 - It is complementary to the "six research specifications" (Low & MacMillan, 1998) as well as to the twelve "topics to be covered by all good research" introduced by Hofer and Bygrave (1992).
 - In fact, the checklist provided by Hofer and Bygrave (1992) is a reliable instrument to measure one's personal success after working through the "Ten Step Heuristic".
 - Useful if researchers are facing the invaluable challenge of academic freedom.
 - It might not only useful for PhD candidates, but also more generally help various researchers who are in the process of identifying new research challenges or are facing a temporary lack of creativity.



The "Ten Step Heuristic" to jump-start research in the field of Entrepreneurship

Step 1- Entrepreneurship Phenomenon: What phenomenon in the field of Entrepreneurship do you want to address?

- The phenomenon of Entrepreneurship still has no clear borders. The academic debate on the nature Entrepreneurship still continues.
 - Narrow down what kind of phenomenon you are going to refer to:
 e.g. contemporary research topics in Entrepreneurship such as
 strategic entrepreneurship, corporate entrepreneurship,
 entrepreneurial orientation, international entrepreneurship,
 institutional entrepreneurship, policy/political entrepreneurship,
 social entrepreneurship/poverty alleviation, venture capital and
 IPOs, cognition, gender, creativity, culture, family business, etc.
 - Understand the difference between a phenomenon and theoretically grounded definition.
 - In general, a phenomenon is built on a group of elements who are somehow similar in their empirical attributes..
 - A theoretical definition can sometimes be applicable for much broader set of element than just a single phenomenon, but at the same time not for each and every single element within a phenomenon.



Step 2- Level of Analysis: What level of analysis are you interested in?

- At least two dimensions are under consideration here, later we can add more dimensions.
 - First, the phenomenon of Entrepreneurship can effect *elements* of certain hierarchical scale, e.g. the personal level, organizational (often i.e. firm) level, regional level, industry level, environmental level, national economical level, and the international economical level.
 - In a second dimensions, levels are not reflecting hierarchies of element but of dynamic processes, reflecting initial conditions, processes, context and outcomes (Aldrich & Martinez, 2001).
 - Researchers should reflect what level they want to address and should advise them to consider multi level analysis, combining at least two or three levels in both dimensions.
 - A study that would not cover a wide span of levels (for instance only initial condition) and not relating its findings with other levels(for instance processes and outcomes) will remain descriptive or explorative in nature at its best.
 - The same holds true for studies examining only outcomes without relating them to any of the previous levels. (Low & MacMillan, Davidsson & Wiklund, 2001, - as just one example of a multi-level/multi dimensional study – Groen, 2005).



Step 2- Level of Analysis: What level of analysis are you interested in?

- E.g. SMEs can be investigated at multi-levels
 - More specifically, research on SMEs may focus on five levels of analysis that include: the individual, the group, the organization, the industry, and the society (Haron & Hashim, 2015).
 - Although there are five levels of analysis to study SMEs, the review reveals past studies primarily confine their analysis to a single level only (Chanler & Lyon; Hashim & Ahmad, 2005; Welter & Smallbone, 2011).
 - Investigating the behaviors of SMEs at different levels or units of analysis is not only useful to academics, but also beneficial for both entrepreneurs (business owners) as well as public policy makers.
 - For instance, from the perspective of the entrepreneur, the success of the individual enterprise will be affected by various factors that need to be observed at different level of analysis.
 - But not studying the individual enterprise at the different levels of analysis, the probability of key factors being overlooked increases and this will most likely result in unanticipated events taking the entrepreneur by surprise.
 - In addition, from the public policy maker's perspective, the insights generated by multi-level studies have the potential to improve the effectiveness of the numerous efforts by the government to increase the number of successful SMEs in the country.



Step 3- Life Cycle: What phases in the entrepreneurial life-cycle do you want to examine?

- In Entrepreneurship Research, different phases of the entrepreneurial process can be under examination.
 - From idea generation, business planning, launching, establishing and growing a new venture to exist or sustaining a business or the succession of a family business.
 - Before selecting a phase of interest, researchers should answer the question to what life cycle concept they refer to?
 - Distinguish early stage phenomenons like idea creation and business planning, prototype development, the stages of legally starting the venture, market entry, and the later stages of growth and exiting (or retaining) the business.
 - Others refer to the model of opportunity recognition (or creation), development, evaluation and exploitation, others are based on technological life cycle or market cycles.
 - Researchers should know the different models and take a decision on the stages they are interested in.
 - Models can also be recombined.



Step 4- Research Topic: Which topic/subsequent field in entrepreneurship research are you interested in?

- Often combines common research fields with the phenomenon of entrepreneurship.
 - 'entrepreneurship' with a second research topic like in.
 - Entrepreneurship and finance, entrepreneurship and venture capital, entrepreneurship and networks, entrepreneurship and social capital, strategic entrepreneurship, entrepreneurship education, social entrepreneurship, and so forth.
 - Is interrelated with the disciplinary dimension in the previous step.
 - However, if Entrepreneurship is to regarded "as a distinctive field of research" (Low, 2001 p.17), we will need at least some scholars who take courage to focus on the core of Entrepreneurship



Step 5- Entrepreneurship Theory: What entrepreneurship theory or construct do you want to contribute to?

- A single Entrepreneurship Theory in terms of normal science paradigm (Kuhn, 1962) does not exist (see Harrison & Leitch, 1995), yet not even a unifying definition has occurred.
 - Entrepreneurship is an interdisciplinary field; from which discipline should our framework origin (Fallgatter, 2004)?
 - However this decision would be taken, wouldn't such a decision exclude other disciplines with their fruitful contributions?
 - Would the establishment of a dominant paradigm therefore support or hinder the future development of the field?
 - Entrepreneurship deals with unforeseeable creativity, unpredictable novelty and unanticipated innovation.
 - As Landstrom (2005, p.21) pointed out: Entrepreneurship is an inherently complicated and ambiguous phenomenon, and the content of the concept changes over time.



Step 5- Entrepreneurship Theory: What entrepreneurship theory or construct do you want to contribute to?

- A meaningful and rigorously empirical research involve the use of theory for SMEs
 - As previously emphasized, many of the studies of SMEs to date have ignored to examine SMEs from the perspective of modern management theory (Haron & Hashim, 2015)
 - Despite the tremendous increase in knowledge in the areas of management theories, little research has been conducted to investigate the relevant and applicability of these theories to explain and predict the behaviors of SMEs (Hashim & Abdullah, 2000; Hashim & Ahmad, 2005).
 - It is high time research attempts being made to adapt theories from other field of studies (theories in management, economics, sociology and psychology) to help explain and predict the strategic behaviors of SMEs.
 - For e.g, since SMEs are considered economic units, theories borrowed from the field of business economics can be used to help in explaining why certain SMEs adopt different strategies such as the low cost strategy, the product differentiation strategy, and the niche strategy.
 - By using induction and deduction reasoning, attempts can also be made to develop theories of SMEs. Similarly, various theories of strategic (such as contingency theory, resource-based view theory, socio-cultural theory, and the uncertainty-based theory) can be exploited to help desribe, explain and predict internal and external factors that can influence the behaviors of SMEs as well as performance.



Step 6- Empirical Objects: What "real world objects/matter" do you want to examine?

- Contemporary research needs to combine theoretical reasoning with empirical analysis
 - In case the previous steps have directed towards a study on the phenomenon of new venture creation (step 1),
 - The transition from the phase of planning the venture to entering the market (step 3),
 - A real world object would combine individual and firm level (step 2) could for instance mean
 - "Entrepreneurs who are in the process of launching their first venture"
 - However, this definition of an object is much too broad. It is important to narrow down this phenomenon.
 - For instance, research could be limited to entrepreneurs who are scientists at non-private universities in a certain state of Malaysia (or the US, or any other country) who are spinning off technology based venture in the year 2015, whereby the construct of "technology based venture" is indicated by use of patents.
 - Now the sample under examination is much more well-defined.
 - The thread of heterogeneity in your data is significantly reduced (Davidson, 2008) and the outer conditions at the macroeconomic and institutional levels are standardized.
 - The likelihood that empirical variance in entrepreneurial outcomes has been influenced by variables under examination- and not by uncontrolled randomness – has increased (Gartner, 1995)
 - This is also means that the precise definition of the research object will allow formulating precise – and thus testable-hypotheses in the further progress of a study.



Step 7- Motivation: What is your personal philosophy about you doing research?

- What is your personal motivation for conducting research?
 - A reflection on the personal motivation can help avoiding this human weakness.
 - Whatever a researcher's/student's philosophy is, he or she should make it explicit.
 - Personal goals and motivation should influence the research design in a positive way, while consciously avoiding possible negative consequences.
 - A research design that is not aligned with the personal motivation can be a pain that will stick to the neck for many years.



Step 8- Do you really know the literature in your field of interest?

- Reading needs guidance and support of experienced instructors who know the literature.
 - To train students' abilities in the art of critical readings, instructors should discuss some of the readings with their scholars in small group setting.
 - Only thereafter students should spell out and write down their research question.
 - Just writing it down can already be an iterative process of several hours spend on narrowing down, making it precise, fighting with heterogeneity, taking into account the literature that has not being evaluated earlier etc.
 - And still, a research question will not be finalized in just a few hours.
 - Instead, the formulation will be revisited several times during weeks of the research process.



Step 9- Methodological Choices: What methods are applicable to address the issue you have chosen?

- The aim of a study should determine the use of research methods- and not the other way around.
 - The number of methods is almost without limits.
 - Some debate over qualitative or quantitative research.
 - We argue that this is not an "either/or-option".
 - Start out conducting qualitative research to gain an understanding of the empirical object under examination (including the identification of a set of influential variables) and to explore the boundaries of the phenomenon.
 - Thereafter well-grounded quantitative research can produce insights especially about how the various variables- which have been identified by the qualitative approach interact in total.
 - Phd students should use the opportunity to demonstrate their skills in both approaches.
 - To show that a candidate really understands the methods seem to be more important than the questions of sample size and other common methodological issues.
 - Good quality studies are in no means inferior to quantitative work.
 - However, it is sometimes harder to get them published, especially by so called 'leading' journals.



Step 10- Addressing Organizational Tasks: Asking practical question!

- Only now, after working through all the previous questions, we should address two groups of practical questions: (1) urgent technical and (2) important strategic questions.
 - The first group consists of questions such like: Where to get data from (make or buy decision)?
 - How much time and resources to spend?
 - How to fund and execute empirical research?
 - Sometimes, entrepreneurial spirit (e.g. the ability to work around bottle necks) is needed to find convenient answers to such questions.
 - Practical issues have been real obstacles only in sporadic cases.
 - Thus the need to redefine the project will hardly ever occur since in most cases small adjustments of the research questions will already allow to continues with the research process.
 - The strategic considerations: who will benefit from (or be interested in) the results?
 - What publication strategy could work well with the research.
 - Which journal would care?
 - In how many subsequent articles can the research be divided for multiple journal publication?



Ten Step Heuristic success!

- Those strategic questions can be easily answered after following through the process
 - If not, then it is likely that something went wrong on the way.
 - In this rare event, especially Step 1 to 6 need to be revisited.



GOOD LUCK

