SUSTAINABLE LIFESTYLES VENTURE (SLV) GUIDE TO TERM 1

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ESCP BUSINESS SCHOOL

UN environment programme

Welcome to the SLV.

The SLV consists of three modules spread out over your first year in the MSc in Sustainability Entrepreneurship & Innovation. This booklet contains everything you need to know about the SLV in term 1, and it will set the stage for the modules that will follow in terms 2 and 3.

The SLV has been co-created with the UN Environment Program. The UNEP team will accompany you throughout the three terms, directing you and giving valuable, scientifically-grounded advice on the sustainability potential of your work. UNEP's Sustainable Lifestyles program is designed to help people make better choices as consumers. They have identified five domains where lifestyles affect consumption and result in out-sized impacts on the environment: Food, Housing, Mobility, Consumer Goods and Leisure. In order for consumers to make better choices in those areas, they need to have better options, which is where sustainability entrepreneurs come in. Our joint aim is to give you an understanding of the nexus between consumer behavior and responsible production, such that you will be able to design the impactful business models that the world needs now.

Term 1 is arguably the most challenging of the three modules because in it you will manage the highest degree of uncertainty. To paraphrase a 2002 speech by former US Defense Secretary Donald Rumsfeld, there are known unknowns and there are unknown unknowns. In other words, you will have to find out information that you know you do not yet know, for example about a chosen sustainability problem and an industry niche. This is relatively humdrum territory for most of you. But in order to succeed at the SLV, you will also have to discover information that you do not know that you do not know. You will have to venture forth into the world to see what you find there, with no guarantee of success, and no pre-defined goal. You will, however, have a set of powerful tools at your disposal; tools that are intended to help you manage uncertainty.

Most of you are already adept at managing risk, which requires engaging in research and due diligence about

a given subject in order to take a decision. It was Frank Knight (1921) who distinguished between risk and true uncertainty. Risk management, he argued, requires studying past instances of what you want to do such that you can estimate your chances of success in undertaking your project, much like an actuary. This usually entails benchmarking, studying industry reports, looking at case studies and engaging in SWOT analyses, among many other skills. Once you have an idea of the probability of success for your project you hedge against failure, for example by engaging in scenario planning and preparing contingencies. This is essentially what high-level managers do, and so it is most of what business schools teach you to do…
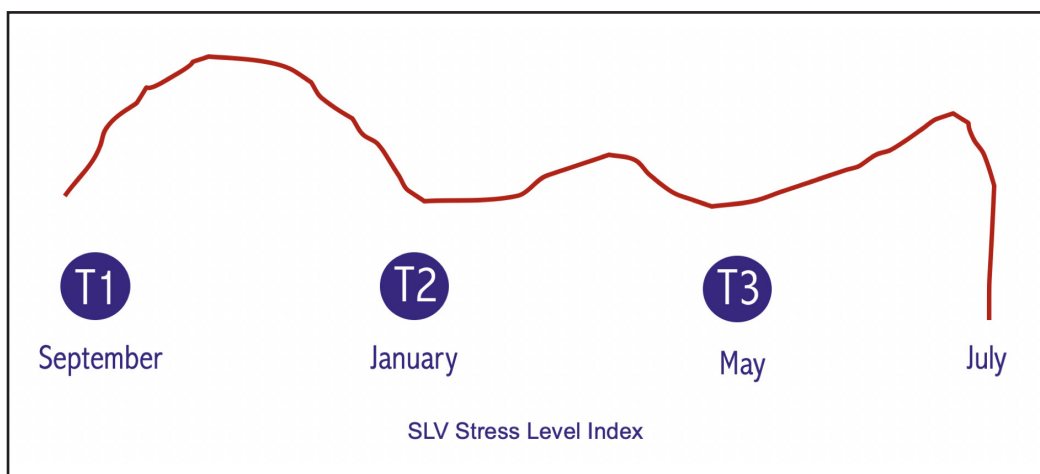
Uncertainty management, by contrast, is much more difficult because either no one has ever done what you want to do before (no past instances), or because the information you seek is simply unavailable. In such cases, the only way to advance is to forego searching for information and to act. Action means leaving the computer behind and, in the words of Steve Blank, getting out of the building. It means first-hand discovery. This is essentially what successful entrepreneurs do, and this is what you will learn in the MSEI, mainly through the SLV. Once you gather enough first-hand information, nebulous uncertainty begins to lift and you get a sense of your chances of success, i.e. you pass from uncertain into risky territory. Ideas are discovered, and then tested in the market. The risk management tools you already know start to become useful again, and the future becomes relatively predictable and bright. And your stress level drops accordingly!

The action-based tools that entrepreneurs use to manage uncertainty are now well-known, such that investors expect to see that they have been mastered and used by any serious would-be entrepreneur. These go by many names – Customer Development, Lean Start-up, Effectuation, Strategyzer to name a few – but the principles all adhere more or less to the method known as Design Thinking. This method is intended to cut through uncertainty; it is intended to let you discover what it is that you do not know you do not know. In the SLV, we will follow the basic design thinking methodology, but we will enrich it at every stage with

conceptual and practical tools from elsewhere, including the aforementioned tools that are directly related to it.

The method consists of five stages: empathy, definition, ideation, prototyping and testing. We will spend all of T1 on the empathy phase of the process, which involves using primarily ethnographic methods of observation to generate the data that will yield original and high-impact business ideas later on. Later on, as in at the beginning of T2. Until then, your job is to develop expertise around a chosen sustainability problem and industry niche. Nothing more, nothing less. The more data you gather, the more expert you become, the greater the chance that an impactful business idea will take flight in T2. This is why we spend a third of the SLV on ethnographic data collection.

Your biggest obstacle during this process will be yourself. You will reflexively begin to think about

use it, the easier it becomes. Once the ice is broken and you take on the persona of the ethnographer, most of you will find that what you learn is fascinating, exciting and unexpected. Remember, focus on understanding the users, and put everything else (yourself) to the side.

Your mission in T1 is, therefore, to use the ethnographic tools given to develop expertise by observing and talking to as many firms and consumers as possible in your industry niche.

And keep in mind, the methods used are not just a means to an end; they are also an end in themselves. These same methods are used in qualitative research, of the kind that most of you will use when you write your master's theses. Commercial ethnography specifically, and design thinking in general, are skills that are sought after by start-ups and Fortune 500 firms alike. You can put them on your CV. Furthermore, the opportunity you have to contact and meet the leaders of firms in an industry of your choice can help you gain insight into your future career plans, and even give you a foot in the door at companies where you may wish to work.

T1 — September

T2 — January

T3 — May

July

SLV Stress Level Index

problems and solutions because most of you will feel ill at ease without a pre-defined goal, i.e. without a problem to solve or a thing to optimize. You may not understand the point of the exercise, or you may simply find it pointless. Trust in the method. Learn the method. Spend your time and energy in T1 on first-rate data collection, which requires boldness and creativity. Challenge yourself to become an expert in these methods as you use them to develop expertise. Do not short-circuit the process by turning inward for problems and ideas. Even the most professionally experienced and seasoned entrepreneurs do not get their ideas from their own genius; they get them from the marketplace. It is therefore to the marketplace that you must go. And as with any new skill, the more you

Again, welcome to the SLV.

Think of this as the beginning of a great adventure, the end of which you cannot even imagine...

Sustainability Entrepreneurship: A Conceptual Note

by Robert Charles Sheldon & Florian Lüdeke Freund

The purpose of this conceptual note is primarily to define sustainability entrepreneurship, which is often subject to misinterpretation. Sustainability entrepreneurship and the sustainability ventures it yields have a number of moving parts, namely sustainability goals, levers and metrics. These also will be defined and explained. Lastly, this note will place sustainability entrepreneurship in the context of sustainable development, from which it derives. This section is intended to clarify the meaning of sustainable development, and in so doing to clear up confusion around what it is precisely that firms should be doing in the sustainability space. After reading this note, students should have a solid understanding of what sustainability entrepreneurship is and how it works, and they should be able to describe what it is firms may do to contribute to sustainable development.

PART I:

Let us begin with the definition of sustainability entrepreneurship:

"Sustainability entrepreneurship aims to conserve, restore and/or distribute more justly a natural or social resource via the profit-oriented commercialization of new products or services."

This definition has the following particularities:

1) Sustainability entrepreneurship involves a mission: sustainability ventures are created in order to help solve a specific environmental OR social problem.

2) The mission is achieved not by creating a non-profit or NGO, but by creating a profit-oriented enterprise, which means that sustainability ventures are by definition hybrid organizations (Haig and Hoffmann, 2012).

3) This mission is usually about preserving or restoring a natural resource for current and future generations, but it can also be about preserving a social resource, which is any human-created artefact.

Sustainability Enterprises Have a Mission.

The above definition differs from some definitions commonly used in the literature on sustainable entrepreneurship. First, that literature has tended to view sustainable ventures as those that are designed from inception to be as socially and environmentally responsible as possible, across their value chains or business models. In other words, they take an optimizing approach to sustainability, whereby the sustainable entrepreneur seeks to maximize economic gains as well as social and environmental responsibility, across the set of activities that comprise the firm.

While this definition does not preclude a venture having a specific sustainability mission, such a mission is generally not part of the definition. By contrast, the definition of sustainability entrepreneurship is centered on the idea of a specific social or environmental mission as a raison d'être for the venture alongside profitability. This definition in no way precludes the idea of holistic optimization, from inception, of social and environmental responsibility. In fact, it assumes implicitly that such optimization should, will and must occur, given the state of the world and changes in the business environment related to regulation and competition.

It is the requisite presence of the mission in sustainability entrepreneurship that makes it always an exercise in hybrid organization creation. Hybrid organizations have "social and environmental missions like nonprofits, but generate income to accomplish their mission like for-profits" (Haigh and Hoffman, 2012: 126). The challenge of sustainability entrepreneurs is therefore to design business models the purpose of which is to generate revenue AND achieve a significant net positive impact in a specific social or environmental area. This is a different exercise than that of making an otherwise commercial business model as environmentally and socially responsible as possible.

Sustainability Entrepreneurs Achieve their Missions via Levers

In practice, there are two fundamental ways in which hybrid commercial enterprise may achieve a sustainability goal. The first is through the business model, which is the means by which new ideas are applied commercially. Here the entrepreneur must design the business model in such a way that it will achieve the chosen sustainability goal. This involves using one or two parts of the business model, such as sourcing or production, as levers for achieving the desired environmental or social goal. For example, Aveda sells cosmetics with a red pigment that they source from an indigenous group in the Amazon rainforest. When they buy the red pigment, they help the indigenous people preserve their traditional way of life, and they help to conserve the rainforest. Sustainability levers are naturally tied to revenue, such that a virtuous circle is created: the more revenue Aveda generates selling lipstick A, the more its sustainability goal is achieved. This virtuous relationship between the sustainability goal and the economic goal is the hallmark of sustainability entrepreneurship.

The other way in which hybrid enterprises may achieve a sustainability goal is through product design, rather than business model design. Here the goal is achieved not when the consumer buys the product or service, but when he or she uses it. Usage is the sustainability lever, and it happens ex post or after purchase of the product. By way of example, there's nothing fundamentally sustainable about the way in which Tesla's cars are manufactured -- the impact is not so much in how the car is made, as in how it is used. The main sustainability benefit comes from using the car instead of a combustion engine car: every time the driver uses it, they are emitting that much less CO2 than if they were using the more polluting alternative.

They Measure Impact via Replacement and the Double Top Line

Underlying the business models of all sustainability enterprises is the idea that they replace existing products and services that are less sustainable, either directly or indirectly. A direct replacement would be the launch of a product or service that competes directly with a less sustainable or 'non-missioned' existing enterprise. This is the most common form of replacement by far. For example, one could say that an Aveda lipstick purchased is a L'Oréal or similar lipstick not purchased. It is in the difference between the two that impact is measured. The Aveda lipstick will have a quantifiable impact on the culture of an indigenous people; the L'Oréal lipstick will not. Likewise, the purchase of a Tesla will result in a quantifiable net reduction in CO2 emissions compared to the alternative. An indirect replacement would be a totally new product or service that obviates in some way the purchase of something else. For example, the iPhone did not just displace competing mobile phones, it also replaced digital cameras, personal digital assistants, and a number of other products, arguably yielding a net reduction in the consumption of those products.

In all cases of replacement, it is the quantifiable net difference between two products in terms of the sustainability goal that yields a direct and virtuous relationship between unit sales and impact. The more units are sold, the greater the impact. This is what makes it possible to record a so-called double top line, where impact is quantified right alongside revenue.

To sum up, sustainability levers, in-process or ex post ones, are the means by which the sustainability goal or mission is achieved. The products and services whose business models contain these levers replace ones whose business models do not, yielding a net difference. This difference, multiplied by the number of units sold, indicates how much impact the product or service has, which is recorded alongside revenue in the double top line.

Sustainability Enterprises May Aim to Preserve Social Resources.

Lastly, a final point of differentiation between sustainability entrepreneurship and the so-called holistic approaches lies in the nature of an eventual social mission.

Apart from being as socially responsible as possible in the design of their business models, a sustainability entrepreneur may choose as its mission to preserve or restore a human artefact, which is to say something that has been created by humankind. This can include tangible artefacts, like historical monuments, organizations and objects, as well intangible ones like cultural traditions, knowledge, institutions and methods of production. Missions that involve improving the state of human beings, such as by reducing poverty, hunger or homelessness are beyond the remit of sustainability entrepreneurship. This is not an arbitrary distinction. Apart from the fact that such missions fall rather squarely into the domain of social entrepreneurship, their exclusion from mission status in sustainability entrepreneurship is logically sound given its relationship to the concept of sustainable development. That relationship will be described in the next section.

Supporting features of sustainability enterprises:

Mission: In addition to generating profit, they are created to achieve a specific sustainability goal, not just to be as socially and environmentally responsible as possible, which makes them HYBRID organizations.

Levers: They use specific parts of the business model, such as sourcing, production or distribution, to achieve their sustainability goal.

Replacement: The product or service offered by a sustainability venture replaces something else in the market that is less sustainable and/or 'non-missioned'.

Virtuous circle: Unit sales are positively related to impact in the mission area.

Double top line: They measure impact in the mission area alongside revenue by calculating the difference in sustainability terms between their product/service and those that it replaces.

Responsible operations: They implicitly seek to be as environmentally and socially responsible as possible given economic constraints, across their operations.

PART II:

What is the relationship of sustainability entrepreneurship to sustainable development, the term from which it derives part of its name and meaning? In order to get at this, it is necessary to break the notion of sustainable development down into its constituent parts, which are development and sustainability. The classic definition of sustainable development came from the Brundtland Commission in 1987. It says that sustainable development is "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

Looking further into the text it is clear that development means economic development, the goal of which is to help ALL people meet their basic needs and aspirations. Development therefore has a strong social dimension, not just economic. It must be equitable, it must leave no one behind, and it must allow people to strive to be and to do what they want. Sustainability refers to using natural resources in such a way that they are not unduly diminished for others in society and for those that will follow in the future. It implies sustainable use, preservation, restoration, and some degree of conservation. It implies fairness or justice – the distribution of resources must be equitable, within, but also across generations into the future. Sustainable development means to engage in economic activity in order to solve social problems, but to do so in a way that does not deplete Earth's resources for future generations.

Levels of sustainable development

The notion of sustainable development is a macro level one, which is the societal level. It is concerned with how societies help people meet their needs and follow their aspirations in a sustainable way. Societies are run by governments, local, as in regions, national as in countries, and supranational as in the European Union. The main tool used to ensure sustainable development at this level is policy, laws and regulations.

The notion of sustainability entrepreneurship is meso level one, which is the organizational level. The corollary

of economic development at the meso level is, we argue, specifically entrepreneurship. Entrepreneurial organizations are the ones that, like development does, move the baseline. They are the ones that bring about the growth and progress that is implicit in the term development. Schumpeter (1934) would agree. He maintained, albeit in abstract economic terms, that economic development came about in only one way: through entrepreneurship.

The purpose of development, or of growth and progress, is different at the macro and meso levels. Those who govern societies have an obligation to help all of society's members meet their needs and aspirations. Those who govern companies have no such obligation, or capacity, to do so. Their job is actually to meet the

in a socially responsible way toward its stakeholders -- helps them meet their needs and aspirations -- while doing so in a way that preserves natural resources for future generations. In this context, a sustainability enterprise, by our definition, is the same, but with the addition of a mission to preserve or restore a specific natural or social resource.

Exercise: consider Figure 1 below. The global middle class is projected to grow much faster than previously predicted, a boon for development goals, and for consumer markets. Given the expected size of the global middle class in 2030, have the development goals found in the UN SDGs superseded the sustainability goals? What will it mean to have 5 billion people with spending power in 2030?

Source: Homi Karas, Brookings

Figure 1: The Size of the Global Middle Class (Billions)
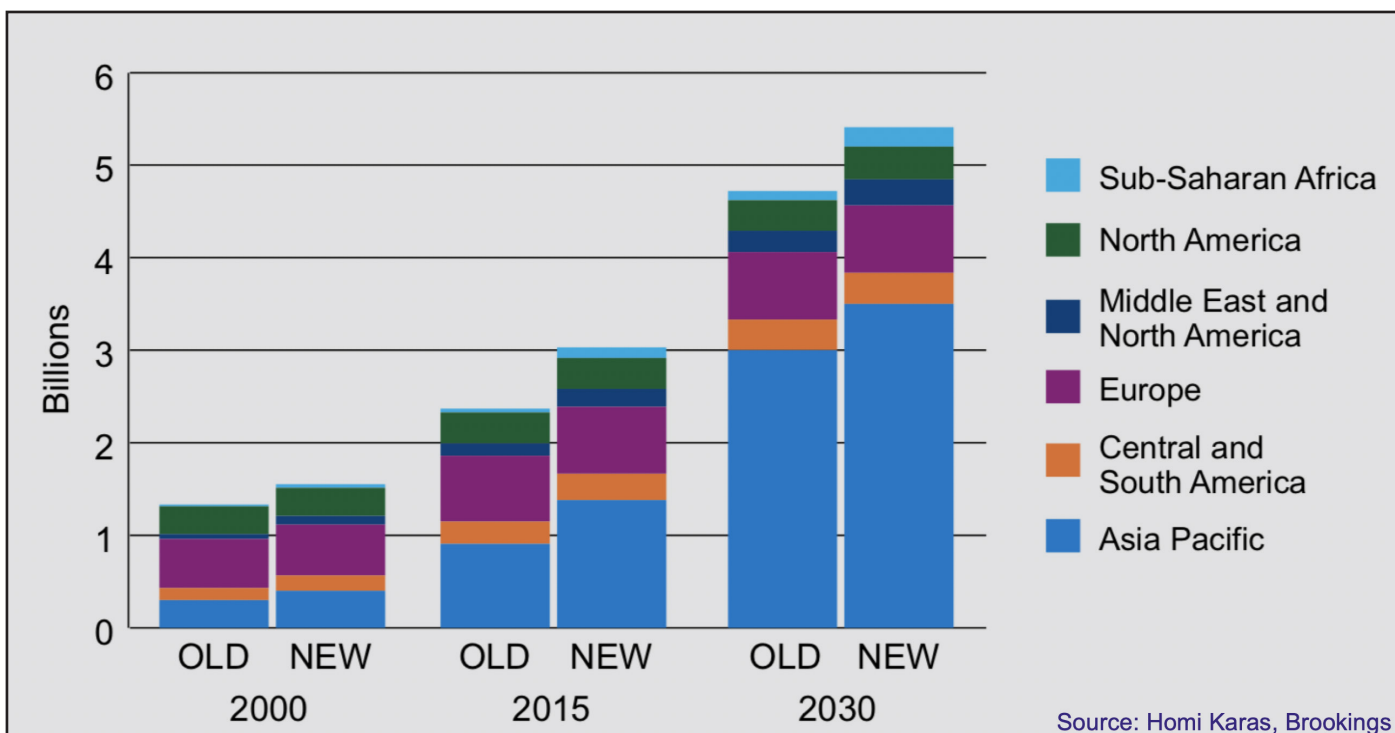
needs and aspirations of the company's stakeholders, which includes their customers, employees, suppliers, shareholders, and so on. This is the development equivalent of sustainable development at the meso level and, as at the macro level, it must be achieved in a sustainable way.

The implication of this is that the kind of social responsibility intended in the development part of sustainable development is always already captured in the creation, growth and governance of the firm. A sustainable enterprise is therefore one which operates

Launching the Design Thinking Process for Sustainability Entrepreneurs

A Teaching Note on Team Formation and User Group Identification

Context:

In the SLV your goal is to create a for-profit business that will help people to consume in a more sustainable way. You can do this by either (1) selling products and services the use of which helps to preserve a natural or social resource, for example electric cars or TooGoodToGo, and/or (2) producing products and services in a more sustainable way, for example the way VEJA or Aveda does. Produce and sell something new the use of which helps preserve a natural or social resource, or produce and sell something old in a new way that does so. In the former case, impact occurs when the product is used, and in the latter when it is produced. These are the basic forms of what is called Sustainability Entrepreneurship.

In the SLV, you will use the design thinking process to obtain the idea upon which your sustainability venture will be based. This process will unfold as follows:

T1: Use ethnographic and other research methods to become an expert in an industry niche and in an environmental or social problem. This process corresponds to the 'empathy' phase of the design thinking process. Do note that you will not be searching for problems and ideas in T1. Your sole aim is to learn through observation, interaction and fact-finding. T1 culminates in the submission of a detailed ethnographic report in which you demonstrate your acquired expertise. We spend a large amount of time on ethnography because the strength of this work will determine the strength and originality of the ideas that follow.

T2: Using the data gathered in T1, come up with a preliminary sustainability venture idea. This corresponds to the 'definition' and 'ideation' phases of design thinking. Once your idea is in hand, you will spend most of T2 making it tangible and testing it in the marketplace. The idea is referred to as preliminary because the feedback you receive will lead you to iterate, or even pivot to an entirely different idea. Testing will continue until the idea is validated. This process corresponds to the 'prototype' and 'testing' phases of design thinking.

T3: Integrate your ethnographic work and testing results in a formal business plan that you will pitch to a panel of experts and professionals.

Design Thinking and Teams

In order to begin the Design Thinking process you will first need to form a team and identify an industry niche that contains a set of user groups. This first step is critical because it is people – you, your team members, and your users – who comprise the foundational elements of design thinking, and the source of excellent new ideas. This represents a relatively radical departure from the conventional perspective on idea generation in entrepreneurship, where we often tend to view new business ideas as hypotheses generated by a lone entrepreneur with a unique vision. Contrary to this view, design thinking is, first of all, team-dependent, meaning that solutions are sought in a collective manner. Secondly, it is user-driven, meaning that the entrepreneurial solutions it generates come from observing real people with real problems. That is to say, business ideas do not depend on the entrepreneur; they depend on the user, and on the design team's ability to find and elicit information from the user.

Who is a user? Anyone who uses or would use a product or service. Consumers use products and services. These are referred to as end users. Distributors sell products and services, but they also use products and services, like those related to IT, security, management and transportation systems. Some products and services have multiple users – shopping carts are used by stores (distributors) as well as their customers (consumers). Producers make products and services, but they also use product and service inputs in the production or service provision processes. When businesses are looked at as using products and services they are referred to as intermediate users.

The All-important Design Thinking Challenge

In most applications of design thinking, for example in industrial design and management, forming a team and identifying user groups are mundane tasks because the users are evident in the design challenge, which is given at the outset by someone else. For example, one would respond to the challenge "make a better shopping cart" by observing people using shopping carts. By contrast, in the context of de novo entrepreneurship, in which a student is asked to come up with their own business idea, team formation and user group identification are not mundane tasks because no specific challenge is given. Designers must come up with their own challenge, which essentially consists of some version of the statement: "Improve the way in which X activity is undertaken." It is only when this challenge is in hand that the design thinking process can begin.

Before describing how teams will be formed and a field of user identified, here are some examples of the types of challenge you should have in hand at the end of the group formation exercise. The challenge will emerge from the problem area around which your group has formed. Initially, the challenge will be quite broad, as in:

"Improve the way wooden furniture is produced." (Problem: biodiversity loss due to deforestation)

"Improve the way people shop for groceries." (Problem: single-use plastics)

"Improve the way cement is made." (Problem: air pollution from cement production)

"Improve the way washing machines work." (Problem: biodiversity loss due to ocean plastic)

"Improve the way electronic toys are produced." (Problem: Biodiversity loss due to battery pollution)

"Improve the way farmers grow their crops." (Problem: CO_2 from chemical fertilizers)

"Improve the way construction companies build homes." (Problem: CO_2 from wasted energy)

In each of these examples an industry is named in which a variety of users co-exist. Coming up with a way to improve furniture production, for example, requires observing the people who buy the furniture (end users), but also the people who supply the wood, make the furniture and distribute the furniture (intermediate users). Your observations could ultimately lead you (in T2, not before) to start a company that distributes only furniture that you find acceptable, which is a B2C or B2B business aimed at end users. It could lead you start your own furniture manufacturing company, a B2B business aimed at intermediate users. It could lead you to start a company that supplies existing furniture manufacturers with needed inputs, another B2B business aimed at intermediate users. The same could be said of all the examples given above. It is the ethnographic work you will undertake in T1 that will lead you to a more specific challenge, such as "Give high-end wooden furniture manufacturers more sustainable sourcing options."

The question of sustainability. When coming up with your initial challenge, do not think too much about sustainability. It is the sustainability problem that has led you the industry, and your eyes and ears will be attuned to sustainability issues throughout your T1 fieldwork experience, such that the challenge will naturally, and rather quickly, narrow to include a powerful sustainability component. For now, when formulating the initial challenge, focus on the commercial landscape.

What if I already have an idea that I'm passionate about? Before getting started, an important aside for those students who may already have a specific business idea in mind: your solemn task is to **forget about that idea for now.** You may, however, let it guide you in this precursor stage of the process by using it to identify your sustainability problem of interest and, by extension, your set of industry user groups.

Your idea may turn out to be the one your team develops after the ideation stage of design thinking, or maybe it will have evolved between then and now. The key to design thinking is to stay open throughout the process, letting users guide you rather than your own ideas and intuition. In other words, stay out of your own way!

If you really want to pursue your idea in the SLV, rally three other students around the sustainability problem (not the idea) and form a team.

In-class Team Formation Process:

Below are the steps you will need to follow to find yourself in a team with user groups identified, ready to begin the design thinking process. Take 30 minutes to reflect on your personal areas of interest in the context of sustainability. You may use the Internet to brainstorm responses to the questions below.

Deliverables due at the end of the exercise:

1)   Your name and the names of the other three people in your group;
2)   Your sustainability problem;
3)   The industry niche you will focus on;
4)   A list of potential users in that in that niche, and
5)   The Sustainable Lifestyles domain (if any) that corresponds to your industry niche or the UNESCO category, if you have chosen to preserve an endangered social resource.
6)   The SDG goals that are relevant to your problem.

First activity – 45 minutes, Individual exercise:

1)   UNEP approach: name three problems each that you associate with the three interrelated crises of climate change, pollution and biodiversity. Be as specific as possible, breaking down big problems into smaller ones. For example: food waste contributes to climate change, food waste from where? Farms? Restaurants? Home kitchens? It also contributes to overproduction, which reduces biodiversity through excessive monocultures. Smog is a problem for cities, smog originating from where/what? Cement factories? Cars? Deforestation is a problem for biodiversity, deforestation where? The Amazon? Poland? Sweden? Amphibians are endangered, which amphibians where? Fast fashion is not a problem,, it's a thing. What's the problem with fast fashion?

It could be that synthetic fibers are made from petroleum and contribute to climate change, or that cotton production reduces biodiversity through the clearing of land and heavy pesticide use. It could be the CO2-heavy manner of distribution: sourcing and production both overseas, items ordered online and often returned. Or it could be microplastics, which contribute heavily to air and water pollution.
2)   UNESCO approach – Natural Heritage and Cultural Heritage. Identify three things in each category that could be in danger and should be preserved for future generations, e.g. 1) Natural heritage could include locally specific sites, like bogs or caves, while cultural heritage could include anything from historical buildings to artisanal methods of production to specific cuisines.

Second activity – 45 minutes, group exercise:

1)   Form groups of three with the two people nearest you.
a.   Choose ONE 'group answer' out of the 60 (4 people x 15 problems) individual answers above, i.e. narrow the 60 problems down to 15.
b.   Students should defend topics they are passionate about as each subject area is debated.
c.   Decisions should be made by consensus or, failing that, a vote. Keep in mind that some responses discarded during the debate will almost certainly be among those selected by another group.
d.   Once your group has its 15 group responses, write them on the board.
e.   If someone has already written a topic, do not write it again.

Third activity – Horse trading. 75 minutes, individual exercise:

1)   Put your name next to your first, second and third choice problem preceded by number 1, 2 or 3. If a problem already has four people signed up for whom that problem is their number one choice, that problem is closed. However, if one or more of the four people have indicated it is not their first choice, you can see if one of those people has gotten their

first choice and is willing to give up their spot in that problem area.

2)   If your first-choice problem does not get four people signed up, you and any others must abandon it and go to your number two or three choices.

3)   If a topic has a specific geographical component and you do not speak the local language, do not choose that topic.

4)   Once you have a group, do a language check – do you speak French and German between you? If not, consider trading places with someone in a different group that may have an excess of French and German speakers.

5)   The activity ends when there are ten groups of four or five built around unique sustainability problems.

Fourth Activity – Identify industry niches and user groups related to the problem.

1)   Make a list of the consumption and production patterns that contribute to the environmental problem, or in the case of a social resource, those that could contribute to a solution. On the environmental side, let's say the sustainability problem is deforestation in the Brazilian state of Mato Grasso. The user behavior driving deforestation there is primarily the consumption of products with soy in them. But beef production, palm oil and lumber for construction and furniture are also driving it. Producers use soy and palm oil as an input in many processed foods. Farmers use it for animal feed. Distributors supplying the construction industry use it, and so do furniture manufacturers. The only people that are not users in this list are the people cutting down the forest for timber and growing these crops. The rest are user groups, some on the consumer side, others on the production side.

On the social side, say you have selected a site of historical importance that you want to protect through commercial means, perhaps a 16th century château that has fallen into disrepair. What kinds of commercial activities could such a site support? Tourism, hospitality, events, restaurant, museum…

… If you've opted to conserve an artisanal manner of production, in what industries could the thing produced be used as an input? There could be any number of companies or consumer groups that could use such a site or that kind of input. Select the one you find most interesting and potentially impactful.

2)   Select one industry niche with an eye to impact. Soy, palm, beef, furniture, construction. Pick the one that interests you most and has the potential for greatest impact. The user groups it contains and the behavior of those groups will be the subject of your ethnographic work in T1.

3)   Situate the industry niche in relation to the lifestyle domains: food, housing, mobility, consumer goods and leisure or the UNESCO categories, and identify relevant SDGs.

4)   Upload the deliverable to Blackboard by the end of the day.

Teaching Note on Ethnography and on Writing an Ethnographic Report in the Context of Sustainability Entrepreneurship

The purpose of ethnography is to understand the behavior of one or more human subjects in a given context. In the words of Signe Howell (2018):

"The method is inductive and open-ended. As such, the method directs the anthropologist to study that which is of significance to the community studied rather than test a number of hypotheses formulated in advance of the fieldwork. Anthropology is a comparative discipline, seeking to unravel the complexity and variety of human understanding and human social and cultural life."

While rooted in anthropology, a version of ethnography has been used for many years in a commercial context in order understand the behavior of various user groups. Users are most often consumers, what we call end users, but they can also be businesses that buy products and services that they use to manage and grow their operations, what we call intermediate users. From an entrepreneurial perspective, we can refer to both types of users as potential customers. If you are aiming to start a B2B enterprise, you would focus mostly on intermediate users. Ethnography helps the researcher to design new and better products and services because it allows the researcher to gain insights into behavior, problems, wants and needs of potential customers that neither they nor even the potential customers may have been aware of.

Ethnography is first and foremost about observation, rather than about interviewing (more about interviewing later). In the words of the ethnographer Margaret Mead: "What people say, what people do, and what they say they do, are entirely different things." Indeed, about the least ethnographic thing a researcher can do is ask a subject point-blank what problems they are having undertaking this or that task. To quote Ellen Isaacs, a commercial ethnographer at Xerox, ethnography is about discovering the Hidden Obvious, which is what seems obvious only once you have discovered it. People often do not see their own problems or recognize their own needs. It is the job of the ethnographer to identify those, using some tried and true methods.

The purpose of ethnographic work in the commercial context is to understand how an individual or group of individuals uses a particular product or service OR engages in a certain activity in which a commercial product or service could potentially play a role. For example, one might study how people who hike use their cooking equipment or their tent, or one might simply study how people hike, or 'use' the natural and man-made environment in that setting. In both cases the aim is to identify patterns. Patterns occur when a phenomenon happens multiple times in multiple locations. A pattern may be defined by sameness, as in three of six users did, said or felt the same thing; or conversely, they might be defined by difference, as in some users did, said or felt things in a contradictory way, or else one user group did, said or felt things that contradicted another user group. Solid ethnographic work is critical to the design thinking process because these patterns will lead to user-centered problems in the definition stage of DT, which in turn will lead to user-centered solutions in the ideation stage.

Engaging in ethnographic work and design thinking more generally requires that practitioners take on a different frame of mind than what they are used to. The inability to take on this frame of mind will lead to frustration and failure. Managers are trained to solve problems and make decisions based on the soundness of their judgment, and the faster the better. This is one reason they often have a hard time with design thinking, which requires a complete suspension of managerial thought and action. The manager must become an ethnographer when initiating a design thinking process, suspending all judgement and preconceived notions about the user situation at hand. The frame of mind is scientific, objective, like that of a marine biologist observing whale behavior. This is as difficult for managers as is meditating for most people. Clearing one's mind of all thought sounds easy but is very difficult in reality, requiring considerable practice to achieve proficiency.

There are five main methods of observation that the commercial ethnographer employs, listed below. What ties them all together is the fact that they are based on first-hand observations of actual user behavior. Not all methods will be possible or relevant in all user situations.

Still observation – sit and watch unbeknownst to the subject(s). You can learn a lot about user behavior, and about how businesses work, just by sitting and watching. This approach generally only works in public places, like restaurants, shops, museums and train stations.

Active observation – observe the subject with his or her knowledge and permission, such as by following a shopper, and/or asking a user to think aloud while they do something. Think-aloud protocols are a well-known research method that allows the researcher to follow someone's thought process, and to interject at the right moment with the question 'why'?

Experiential observation – put oneself in the shoes of the user by actually engaging in the behavior under study. Buy the product or service yourself and use it, or engage in the activity under study. The 'a day in the life of' method falls under this category, in which the researcher spends the day with the user and participates in their activities.

Indirect observation – gather first-person testimonial-type data about user or supply chain behavior from sources like Youtube, Tripadvisor, and so on. This category includes digital methods of ethnography, where first-person data is recorded from social media and other sources related to a particular topic. It also includes past research containing case studies and direct observations of user behavior, from sources like academic articles, masters and doctoral theses. In this last case, observations include only raw, primary data, which has been gathered directly from subjects in the past by a researcher. It does not include statistical or aggregate data about users, data about an industry as a whole, nor does it include any analyses and conclusions that may have been drawn by a past researcher regarding their primary data.

Retrospective observation – use interview techniques to elicit from the user a retelling or reliving of one or more specific user experiences. The only kind of interviewing that is ethnographic in nature is that which gets users to describe past user experiences. Think of it like hypnosis: "Go back to the last time you shopped

here. Now, tell me, what are you wearing? Where did you park? What did you do when you got out of the car? How were you feeling when that happened or when you got to that point?" And so on. It is up to the practitioner to elicit the story, and to signal to the user along the way the level of detail or granularity that they is after with precise on-the-fly questions.

There are four big mistakes that managers make when engaging in ethnographic work and these must be avoided if the design thinking process is to succeed. The first and most egregious is going into the situation with a solution already in mind. This will act as a filter through which questions will be formulated and responses will be judged. Rather than really trying to understand how the user behaves, the practitioner will be tacitly testing his or her idea against the observed behavior, or in the worst case actually testing the idea by explaining it to users. It is natural for the managerial mind to start coming up with efficient solutions, but such thoughts need to be securely locked away during the ethnographic phase of design thinking. Similarly, the second mistake is a tendency to identify the problem during the ethnographic phase, essentially jumping the gun in the design thinking process. This managerial reflex will lead practitioners to ask users outright what problems they encounter, what they like and do not like, and so on. This is a failing strategy for two reasons: 1) it assumes that the user is conscious of what problems he or she faces, which is often not true, and 2) it prevents the practitioner from truly understanding the user's experience.

The last two big mistakes are related to ethnographic techniques of observation and interrogation. In the former case there is a tendency not to make observations that are sufficiently fine-grained, mostly for lack of patience. The marine biologist will spend countless hours just listening to and watching whales from a stationary position in solitary silence. The design thinking practitioner must take on the same, stoic frame of mind. Imagine doing an ethnographic study of people using a train station. One could sit on a bench for 30-minute stretches at different times a day watching users while taking notes in a journal, photos, videos and sound recordings. One could do the same

over the course of the day in different locations. Then one might approach a user and ask to follow him or her around as they navigate the train station, documenting the experience along the way. Observation takes time, patience and some imagination. The final mistake is not asking the right questions. In fact, the best approach is not to ask questions at all. Rather, one should use statement, like "tell me about the last time you shopped here." Once one has elicited a story, precise questions (e.g. why did you that? How did that make you feel? What did you do before that?) are asked along the way to help the user reveal as much detail as possible.

Fieldwork

One of the biggest challenges of ethnography lies in gaining access to the field when it involves non-public places. Here you must be bold, creative, tenacious and lucky, especially when it comes to trying to gain access to enterprises. Ethnography is key for understanding user behavior in a B2B context, i.e. companies using products and services or engaging specific activities for which they could potentially need products and services. How do you get in the door? Start by knocking, literally. It often pays just to show up. Make an appointment. Play the student card. Interviews are often the best way to get a foot in the door. Use alumni networks. Use LinkedIn. Once inside, try to parlay that interview into other interviews with actors you identified during the first interview. Ask to see relevant parts of the business. Once a relationship is created, the manager may even let you spend a day freely observing and talking to people. Another B2B strategy, depending on your industry, is to attend a trade show in that industry. Not only are people at such events 'captive', they are also psychologically off the clock (and often bored), and so are more likely to talk to you. This can be a great way to get a foot in the door with multiple companies at once. Cities like Paris and Berlin have hundreds of trade shows per year, so check the calendar!

Lastly, play the student card. It is not a lie to say that you are working on a project that requires you to get to know a company in X industry, nor is it a lie to say that you and your team are working on a business plan as part of your graduate studies and that would like to hear about the person's experience. Play the card carefully. It may be wise in some cases to omit the mention of sustainability when talking about your studies and the purpose of the visit. Indeed, you are not there to judge or analyze the company's sustainability performance, but the person to whom you are speaking could easily assume that, and if they do they are unlikely to grant you an audience.

Some golden rules: Hit the ground running. Do not wait long to contact people and do not wait for people to respond before contacting other people. Make a list of 30 companies that are relevant for your work. Try to track down contact names from the company's website or LinkedIn. Contact all the companies at once, as early as possible, and contact them again a week later if they have not responded. Meanwhile, keep looking for more companies to contact. Before you make contact, make sure you know what you want to observe in each company so that you can explain clearly what you want from the prospective interviewee. Suggest a 30-minute interview, knowing that most people will go over if you need them to. Fieldwork is not something you can do last-minute because it depends on other people and their availability, so strike hard and fast.

Remember that the best, if not only, way of becoming an expert in an industry is to talk to and observe people in that industry. If you cannot get into companies you're unlikely to be able to develop more than a superficial understanding of your subject.

Data Collection

Ethnographers are constantly recording their observations, which are by definition made over time, months but often years. The systematic recording of data is therefore critical if they are to be able to recognize patterns in their data during and after its collection. You should use the following tools to record your observations:

1)   Keep a journal and take notes during (if possible) and after every observation session.
2)   Take photos and videos on your phone (with permission).

3) Record interviews and testimonials (ask first).

4) Make quick sketches.

5) Use transcription software, like Trint (http://www.trint.com) to transcribe the interviews that you believe to be most important.

6) Create folders on your computer to store indirect observations downloaded from the web.

Not all of this data will go in your ethnographic report, but it will all be useful in T2 when you engage in the problem definition part of the design thinking process.

A note about language barriers. Language can be a limitation, but also an advantage. Ideally, between them, your group members will speak English, French and German. The person who is strongest in a given language should make first contact, and do so in the recipient's native language. Once contact is made, see if the contact would be comfortable doing the interview in English. While face-to-face experience is key to ethnography, it can still be undertaken over the phone or via Zoom, which means that relevant people and firms beyond France and Germany may be added to your contact list as long as there is someone in the group who speaks the language in question.

Writing an ethnographic report

An ethnographic report in the context of sustainability entrepreneurship is a scientific document that is rich with data in the form of field notes, drawings, photos, videos, audio recordings and more. In addition to ethnographic work, it also contains some secondary research about the sustainability problem and the industry niche that you are studying. Its aim is to consolidate your data, demonstrate the degree of expertise you have acquired during T1, and of course demonstrate that you have done work required.

The table of contents should look like this:

1) Introduction (1 page)

2) Background on the sustainability problem (3 pages)

3) Background on the industry niche (3 pages)

4) End user (consumer) observation highlights (15-20 pages)

5) Intermediate user (enterprise) observation highlights (15-20 pages)

6) Reflections (2-3 pages)

7) Appendices (unlimited)

Introduction. This section describes the purpose of the study, its context, and briefly summarizes the content of the report. In the case of sustainability entrepreneurship, this means describing the sustainability problem with which the group started, as well as the associated user behavior and supply chain(s) that were targeted for study in relation to that problem. It should include information about who the users and supply chain actors in the study are, and how the locations for the study, the places where these people are found, were identified and chosen.

Background on the sustainability problem. Gather as much scientific and geographically specific data as possible on the sustainability problem. Get as specific as possible. For example, it's alright to speak about deforestation and its impacts generally, but save most of the space for data about the specific locale you have chosen and the causes and consequences of the deforestation there. Informational interviews would be helpful here, again from locals if possible. Important: contextualize the problem in scientific terms by stating to which of the three inter-related crises is the problem related: pollution, biodiversity or climate change. If it relates to all three, describe the connections and state which of the three categories you are focusing on. If your group has chosen to preserve a social resource, use the UNESCO framework to describe the problem, e.g. under what category of World Heritage does the resource fall?

Background on the industry niche. How does the industry work? How big is it? Who are the major players? What are its growth prospects? Zoom in quickly on the geographical area you intend to focus on (e.g. Paris, Berlin, France or Germany). This is classical secondary market research. You only have three pages, so do not go too far down this path, and save most of the space for the industry niche in the starting locale. Important: contextualize the industry niche in terms of the UNEP lifestyle domains. Under which, if any, domain does the

industry niche fall. Why is this important in relation to your sustainability problem?

End user (consumer) observation highlights. You will have much more data than you could possibly use here, so focus on the highlights. These sections have to be organized and readable -- no data dumps! How you organize them is up to you. One organization suggestion is that you divide the chapter into sections based on locations where you observed people, as in shops or public spaces, and then break the sections down into type of observation. The section should she be rich with primary data — photos, pull quotes, screen captures, but only use the most compelling, given space limitations. All relevant and technically feasible methods of observation should have been used.

Intermediate user (consumer) observation highlights. This is the most important part of the work. Organize each section by company or organization and describe the observations made in each entity, illustrating with photos, pull quotes and more. You should have gained access to at least six firms, spread across different points of the value chain, and conducted at least ten retrospective interviews. Fact-finding interviews (i.e. ones not about specific user experience) are acceptable but should not be in this section. They should be in part 3. The deeper your data in each organization the fewer organizations you need. For example, if you conducted interviews with four actors and spent two days engaging in other forms of observation inside one firm, then you could do with fewer firms, perhaps three or four instead of six. All relevant and technically feasible methods of observation should have been used. Expertise happens here, so work hard to find and get access to corporate fieldwork sites.

Reflections. Reflect on the ethnographic experience by answering the following questions. What surprised you? What did you learn? What do you still need to learn? What do you wish you have done or been able to do differently? How would you rate your expertise regarding the sustainability problem and the industry niche? A key point to address here is your design thinking challenge: how has it evolved during your ethnographic work? Which user group(s) have come into focus or seem most promising in terms of commercial potential and sustainability impact? What sustainability leads have emerged, i.e. where is there potential for impact?

Note that you are not asked to analyze the data here, strictly speaking, as you would be at this point in a typical ethnography. The reason for this is that you will analyze your data at the very beginning of T2, during the problem definition stage of the process. It is, however, acceptable to mention or describe some emerging patterns, if they have become apparent to you.

Appendices. This is where you can put data like field notes, transcripts and photos that are not general in nature and not part of the highlights you put in your chapters. Note that the onus is on you to demonstrate your expertise in this report, and the most effective way to do that is to show that you did the work required as far as ethnography goes. Did you keep a consistent and detailed journal throughout the process? Did you do additional interviews that were not mentioned in the body of the report? Make sure you show all the work that your group did so that it gets accounted for in the assessment of your report.