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THE SEMIOTIC CONSTRUCTION OF POST COVID TRANSFORMATION IN
THE STARTUP ECOSYSTEM

Master's Thesis

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Table of Contents

1. HISTORIOGRAPHY	8
2. A SEMIOTIC CONTRIBUTION TO THE STUDY OF ENTREPRENEURIAL ECOSYSTEMS	11
2.1 STARTUP ECOSYSTEM AS SEMIOSPHERE	12
2.1.1 <i>Digital Semiosphere and a Global Digital Culture</i>	14
2.1.2 <i>COVID-19 as a Digital Explosion in Lotmanian Terms</i>	15
2.1.3 <i>Self-Description and Identity Construction</i>	16
2.2 STARTUP ECOSYSTEM	18
2.2.1 <i>Micro Level: Startup Texts, People, and Products</i>	19
2.2.2 <i>Meso Level: Startup Infrastructure, Institutions, and Support Networks</i>	21
2.2.3 <i>Macro Level: Startup Culture and the Global Digital System</i>	21
2.3 DECONSTRUCTING STARTUP CULTURE	22
2.4 IDEOLOGICAL FIELD OF STARTUP AND ENTREPRENEURIAL SYSTEMS	26
2.4.1 <i>Myth and its Role in the Startup Ecosystem</i>	29
2.5 TYPOLOGY OF ENTREPRENEURIAL ECOSYSTEM NARRATIVES	31
2.5.1 <i>Startup Narrative</i>	32
3. DIGITAL ESTONIA	37
3.1 DIGITAL ESTONIA AS THE FRAMEWORK FOR A DIGITAL AGENDA	37
3.2 DIGITAL NATIONHOOD AND NATIONAL BRANDING - MAKING ESTONIA GLOBAL	41
3.3 ESTONIA IN COVID AND PUBLIC DISCOURSE ON DIGITAL INSURGENCE	43
4. MATERIALS AND METHODS	45
4.1 PROCESS OF DATA COLLECTION	45
4.2 ANALYTIC TOOLS FOR DISCOURSE ANALYSIS: APPROACHING THE DATA.....	47
4.3 PROCESS OF DATA ANALYSIS.....	48
5. ANALYSIS	51
5.1 OVERARCHING THEMES AND KEY DOMAINS.....	51
5.1.1 <i>Digitalization</i>	51
5.1.2 <i>Positivity</i>	53
5.1.3 <i>Pivot</i>	54
5.1.4 <i>Opportunity</i>	56
5.1.5 <i>Community</i>	57
5.1.6 <i>Digital Saviorism</i>	58
5.1.7 <i>New Normal: Work/Life balance & Role Changes</i>	60
5.1.8 <i>COVID Reveals Positives</i>	62
5.2 FUTURE	63
5.2.1 <i>Digitalization</i>	64
5.2.2 <i>Consumer Change in Digital Competency</i>	66
5.2.3 <i>Remote Lifestyle</i>	66
5.2.4 <i>Globalization</i>	68
6. DISCUSSION: INTERPRETING FOUNDER AND CEO INTERVIEWS	70
6.1 IDEOLOGICAL PERSPECTIVES.....	71
6.2 NARRATIVES	75
6.2.1 <i>e-Estonia Narrative in Action</i>	76
6.3 CULTURAL EXPLOSION	77

CONCLUSION	79
REFERENCES	83
KOKKUVÕTE	87
APPENDIX 1: DOMAIN CHART	89
APPENDIX 2: DOMAIN TREE.....	92
APPENDIX 3: FUTURE DOMAIN TREE.....	93

INTRODUCTION

COVID-19 was declared a global pandemic by the World Health Organization on March 11, 2020. What followed this uncertainty resulted in one of the biggest technological explosions and brought with it questions of the future and what this shift would mean for individuals, institutions, and governments in the epoch of “the new normal”. How would this pandemic reshape our lives in the upcoming days, years, and decades to come? The pandemic resulted in wide spread government mandated lockdowns that forced citizens indoors and created a need and dependency on digital applications and services (Krusten 2020, Kozubska 2020, Viney 2020). The effect of the pandemic was felt immediately in the startup ecosystem (SE), with companies needing to make changes, pivot direction, and make blind predictions that potentially determined the likelihood of their survival.

The aim of this thesis is to extract culture specific uses of discourse to understand the use of technology narratives in startup founder’s self-descriptions and understanding of the experience of the COVID-19 pandemic. I seek answers to the following research questions:

- 1) How are startup founders’ ideological perspectives apparent in self descriptive accounts through the COVID crisis?
Which discursive mechanisms and themes can be identified in the digital technology discourse surrounding technology and the COVID-19 pandemic?
- 2) How does COVID-19 constitute as a cultural explosion impacting the startup ecosystem?

Technology ideology, including the process of entrepreneurial identity creation, has been studied at length (Kozinets 2008; Gerpott & Kieser 2017; Birdsall 1997), however, there is a newly

formed gap in understanding the implications of the pandemic on the understanding of self and formation of self-description of members in this particular community. This thesis brings a semiotic approach to the study of entrepreneurial organizations and the influence cultural factors have on discourse. There are opportunities to learn from this cultural sector and to apply these findings to future research and to our understanding of processing mass cultural phenomenon.

The analyzed material is taken from interviews with Estonian IT and startup company founders and CEO's during the first two months of the COVID pandemic (April-May 2020). By speaking with key members in multiple IT subdivisions, I will be able to draw an integrated picture of the effect the pandemic had on the startup sector from the perspective of those within the field. I will be looking at semi-structured interviews from a critical perspective using discourse analysis as the tool with which to examine the extracted data. The extent the pandemic has increased *Techtopian Ideology* in this community will be explored and how meaning and identity is constructed by those searching for solutions in this sector will be studied

This study is rooted in the Tartu-Moscow school of cultural semiotics, particularly Juri Lotman's understanding of semiosphere and self-description (Lotman 1984, 1990, 2009). Semiotics provides a meta language that allows for the hierarchical modeling and description of entrepreneurial cultural systems. Communication occurs between all segmented elements of the unit with ideology framing the understanding of reality, discourse as the specific way elements are discussed, the startup ecosystem that includes institutions and support systems as structural units, and finally the individual and self-description. "If these perceptions influence subsequent behaviors and decisions then narratives can alter the trajectory of the ecosystem" (Roundy 216: 240). Accounts from key members in this community create a plausible prospective future landscape for us all.

This thesis is divided into four main sections. In the first, I cover previous literature into the topic of startup ecosystems and entrepreneurial institutions. The second chapter covers a semiotic framework with which to model and understand entrepreneurial ecosystems as meaning making mechanisms. The following subchapter explores the novel introduction of the COVID pandemic as a cultural explosion. Startup Culture is introduced as the discursive space. Technology ideology will be introduced followed by a description of common startup and information technology (IT) myths and narratives. The third chapter will give an overview of Estonia's startup network and provide a brief contextual summary of the time in which the COVID pandemic

occurred. The empirical chapter is divided into three main sections. First, a descriptive categorical overview of commonly used discursive mechanisms divided into coded themes, followed by future-oriented narratives, and concluding with a discussion of the implications of the discursive mechanisms. I will summarize my findings in relation to my research questions.

1. HISTORIOGRAPHY

In the past decades, different features of startups and its influences have been researched. I primarily focus on qualitative, cultural or social constructivist approaches. Prior research into startup communities have focused on the structural characteristics of the organizational culture. Initial interest in entrepreneurial ecosystems was based around the specifics of how these growth-oriented systems functioned and developed successfully. Such angles focused on revealing its structural elements with the purpose of defining it. Dutch sociologist Peter Ester (2017) outlines startup organizations as a tri-leveled ecosystem framework that is ideal for the understanding of the mechanistic units of this entrepreneurial sector. The concept of entrepreneurship, an essential element of startups, has become a relevant topic in academic inquiry. Published in the *Journal of Economics*, William Kerr et al. approach entrepreneurship as a form of experimentation with the constraints involved altering the trajectory of the organizations surrounding innovation (Kerr, Nanda, & Rhodes-Kropf 2014). Recent trends in the study of startups look at the various implication's startup culture has on identity creation and the values laden in its discourse. Ideology of information technology has been approached by such authors as William Birdsall (1997) and Robert Kozinets (2008) exploring how ideological fields influence consumer behavior and technology narratives. Anthropologist Kozinets is known for his invention of netnography (1995), an application of ethnographic methods to the understanding of digital interaction. From the communication and organizational studies perspective, Fabiola Gerpott and Alfred Kieser approach the attribute of charisma as a self-reinforcing entrepreneurial ideology (2017).

Narrative as story has been approached from all angles (anthropology, sociology, organizational studies, among others) and it has been abundantly shown that these texts have an impact on tellers and their community. Recent study has developed regarding the narratives

constructed in entrepreneurial ecosystems. Philip Roundy has examined and categorically defined the most common startup narratives constructed and their functions. His work makes use of identity construction, sensemaking, legitimacy, and attention (Roundy 2016). In Roundy's 2016 article *Start-up Community Narratives: The Discursive Construction of Entrepreneurial Ecosystems*, Roundy addresses the narrative theories found in entrepreneurial organizations. I will use his narrative schema to analyze my data. Ibarra & Barbulescu (2010) studied the role of narrative in identity work in macro work role transitions. Macro work role transitions refer to negotiated work identities across different career positions and jobs that require new role identification (Ibarra & Barbulescu 2010: 135). Their study points to important identity work that occurs in organizational institutions that frame concepts of identity as narrative and the evolution of said narrative across an individual's professional life. They provide key understandings of self-narrative that can be employed to understand self-referentiality in startup ecosystems.

The power of technological myth has been studied in a variety of forms, specifically the concept of technological sublime and how it has presented itself through technological advancements throughout history (Mosco 2004). This concept is instrumental in understanding the ideologies found in entrepreneurial organizations today. Mari-Liis Maddison has written extensively on self-description as well as how it relates to information communicative technology (2016, 2017). Madisson and Andreas Ventsel took a semiotic approach to the discourse surrounding vulnerabilities of Estonia's electronic identification cards (2019). Piia Tammpuu and Anu Masso (2018) observed the reconstruction of concepts of national identity on the understanding of identity through the case study of the Estonian government. COVID-19 discourse specifically was studied by Kristiina Peterson who focused on public health discourse in Estonia during her Master's research at Tartu University (2020). The prophecy of digital technology solving humanities problems is applicable to the understanding of the ways in which startup subjects make meaning from the COVID-19 pandemic.

Elliot Gaines proposes a semiotic based theoretical formula for the analysis of myths in cultural texts (2001). His approach offers a unique formula for applied myth analysis through extending Hjelmslev's model of semiotic formulation.¹ This formula for third order signification,

¹ [(E₁R₁C₁R₂C₂)] (R₃) (C₃)= Myth-Third Order Signification .Can be analyzed as: (E₃R₃C₃). The Expression E₃ is derived from the Second Order of Signification: (E₁R₁C₁R₂C₂) in Relation (R₃) to the signified Content (C₃) of Myth

demonstrates how communication takes place through myth (the connotation of the sign becomes the signifier of the myth (Gaines 2001)).

Literature on discourse analysis is abundant and has also been approached from various perspectives. Exploring symbol usage is a tool used to understand many disciplines and phenomena such as discourse analysis, sociology, organizational studies, and communication studies. Barley was one of the first to use semiotics in the study of occupational and organizational cultures (1983). Semiotics, in this study, demonstrated that organizational cultures expressed the contextual reality of funeral homes as collectively experienced by its employees (1983). A semiotic perspective contributes to the study of entrepreneurial ecosystems to understand how individuals make sense of their environment, organization, and their relationship to it. In other words, the cultural symbols that are collectively understood to create a reality and the interpretations of said symbols by the collective identity can be identified through semiotic tools. A concept central in this paper is that of identity formation, self-referentiality, and collective reality. In a study of Indian employees at V&D software company, Mishra and Gupta depicted the importance of organizational symbols in representing organizational reality specifically how symbolic category is made use of by an organizational community (2007). Found in the Indian Journal of Industrial Relations, Mishra and Gupta used semiotic theories to further previous studies to explore *why* groups arrive at a collective reality. This present study will go further to connect systemic codes, looking at how self-referentiality reveals the state of an organizational culture's collective reality, how myth of collective reality shapes how individuals speak, and discourse regarding their understanding and experience of a crisis. Semiotics is useful to decipher a shared understanding of culture and therefore an understanding of self in the context of a startup organization.

2. A SEMIOTIC CONTRIBUTION TO THE STUDY OF ENTREPRENEURIAL ECOSYSTEMS

Semiotics offers tools with which to understand the communicative qualities of entrepreneurial ecosystems as a research object. Analyzing startup communities specifically from a Tartu-Moscow semiotics of culture perspective (e.g. Lotman & Uspensky 1978, Torop 2005, 2009), allows to define this culture as a type of human symbolic activity with active agency in the creation process of signs as a way to give meaning to everything in reality (Lotman 1990; Geertz 1973; Jakobson 1960).

The following list of concepts will be used pertaining to the understanding of the research object. *Startup*- a business entity up to and including 10 years of operational history, which is starting activity with the purpose of developing and launching a business model or technological component with high global growth potential, that is innovative and replicable². Startup businesses are set apart from other technology companies by business model, growth intent, funding methods, and end target. Forbes defines startups as organizations formed to search for a repeatable and scalable business model, one that serves a major impact on their given market.³ Due to the characteristic of needing to find the right business model that scales in a colossal market, startups are typically online or technology-oriented businesses in the information technology industry. *Startup ecosystem (SE)* -Industry term that refers to the field and network of all participants related to startup entrepreneurship, which in sum impacts the developmental performance of startups and startup entrepreneurship. *Startup sector* - an economic sector consisting of startups founded, incorporated, and or doing business in a certain region. *IT*- Abbreviation for information technology. Other terms will be defined accordingly.

² Startup Estonia

³ Forbes.com (<https://www.forbes.com/sites/jaredhecht/2017/12/08/are-you-running-a-startup-or-small-business-whats-the-difference/?sh=6fe1b42226c5>)

2.1 Startup Ecosystem as Semiosphere

“We are immersed in the space of language. Even in the most basic abstract conditions, we cannot extract ourselves from this space, which simply envelops us, and yet it is a space of which we are also a part and which, simultaneously, is part of us.” (Lotman 1990: 114)

It is necessary to acknowledge the semiotic space within which the entrepreneurial ecosystem exists and can make signatory acts real. The comparison to semiosphere is done for the purpose of emphasizing communication as the composing mechanism and to emphasize the reciprocal necessity each communicative level has on the functioning of the others.

From a semiotics perspective, the semiosphere is the prerequisite space that guarantees the potential for semiosis, the abstract enclosed space where meaning making occurs (Lotman 2005: 208). Lotman’s approach allows for the modeling of this corporate system into communicative rules and principles. Such rules operate in this semiotic environment, creating meanings for startup founders, employees, and any individual involved in this entrepreneurial cultural community. The semiotic environment is the space in which interview subjects create subjective reality and meaning. It is the environment where things become meaningful through representations and symbolization containing the common codes and languages necessary for members to make sense for a collective identity (Lotman 1990: 129). Additionally, communication between members requires knowledge of an identical code as well as the same conception of memory between participants (Jakobson 1971: 558). This assumes and dictates there is a unified reality members derive meaning from. This unified reality, startup culture, dictates the codes and memory and thereby creates the mechanism of understanding and communication. Therefore, if this system is understood as Lotman describes the semiosphere, words and descriptions used by members reveal history, memory, and value in their entrepreneurial community.

The IT sector is comprised of much more than the institutions and people it employs but the multi-leveled communicative actions, whether between members or between individual and self, that operate to transfer information between a wide range of levels that form the culture and community identifying as the startup industry. With this being said, self-descriptions and self-narrated accounts, such as the interview data in this study, reveals culturally specific discourse and has the ability to reciprocally impact the mechanism for transferring culture such as narratives and myth (also known

as cultural texts). The functioning of the institutions themselves are impacted through self-referential accounts and cultural texts.

Just like any culture, startup culture, is dynamic and ever-evolving, reacting to changes outside of the semiosphere's "specific reality" (Lotman 2009 : 127). Changes outside the startup ecosystem, such as a global pandemic, impact the communicative interactions between the members at every level of the system. These changes have an impact on the internal structure and functioning of the system itself. (e.g. the discourse surrounding new developments in digital public utilities.) This in turn affects the members within the system and changes interactions between levels of the system, specifically how individual components (such as institutions) and members relate and understand themselves, and the structure as a whole

The culturization of elements of the natural world occurs by means of language, and more precisely through *naming* (Hartley et al. 2020: 58). In SE context, naming refers to the communicative discourse surrounding the ecosystem which gives meaning to reality for its members. The particular speech (words, phrases, rhetoric) used by members shows this culturization and reveals aspects of the entire community. Analyzing individual's discourse will therefore reflect the internal mechanisms of the semiosphere.

I would like to introduce the concept of borders on order to create a mechanistic understanding of COVID-19 as a cultural explosion that I will expand on in a following chapter. By defining boundaries and borders, it is possible to define what elements are included in the startup semiosphere. This allows for an organized and coherent whole that is necessary for discursive analysis for it allows us to recognize when one becomes a member of this community. Certain traits or characteristics belong to members inside the sphere that allows individuals to relate to each other and their collective. Delimiting and defining the borders separate and thus create identities by connecting those within and opposing those unfamiliar to the cultural system (Torop 2009: xxxiii). Constructing this invisible boundary allows to imagine the community within the semiosphere and that which lies in the "outside" space containing a separate language, culture, characteristics, and manner of viewing the world. This invisible boundary simultaneously acts as a translator and separator (Lotman 2005: 208–209). The interview subjects reflect the internal space of their system and so their self-referential narratives are dependent on the mechanisms of the IT semiospheric system to which they belong.

According to Lotman, the difference between individuals and cultures makes possible new generations of meanings, through translation, which is a distinctive feature of cultural change (1990: 134). Languages outside the boundary must be translated into the language of the internal space

(Lotman 1990: 140), and members of the system, the startup Founders, must understand events and circumstances in their own language and mechanisms of understanding. This leads to the idea of cultural explosion (Chapter 2.1.2) as a novel introduction of knowledge. In order for the startup culture to develop and change, new knowledge must be introduced; novelty is necessary for cultural continuance.

2.1.1 Digital Semiosphere and a Global Digital Culture

“It seems that humans only become aware of themselves as a single, global species when faced by a singular, globular threat” (Hartley, Ibrus, Ojamaa 2020: 4).

Modeling the global startup industry as a digital semiosphere permits an understanding of global digital culture. As each individual culture or ecosystem is not made to make sense of the world on their own, it is necessary to understand the regional systems on a macro level as part of a larger global system (Hartley, Ibrus, Ojamaa 2020: 32). With this model, the boundaries of a startup ecosystem are expanded allowing narrative and myth to reach broader membership resulting in techtopian ideology reaching a broader collective. “So, instead of a patchwork of separate cultures, the digital semiosphere demonstrates the extent to which there is now one self-knowing human culture of global extent, albeit one that actually works by means of difference creating as well as translations between these often-incommensurable systems” (Hartley, Ibrus, Ojamaa 2020: 59). Consider the digital semiosphere as the aggregate of individual startup ecosystems. It takes the modeling of a region-specific system to a macro global level uniting common language and textuality of each culture. As with an individual semiosphere, each separate unit compounding a digital semiosphere depends on the other. A digital semiosphere allows us to imagine the future possibilities of a unified global entrepreneurial ecosystem. Understanding startup and IT culture on this macro scale allows us to grasp the extent to which technology ideologies can spread. It is a potential way to model interviewee’s desires and planned future for their industry and sector.

2.1.2 COVID-19 as a Digital Explosion in Lotmanian Terms

“Everything novel in society and culture has an explosive impact” (Torop 2009: xxxvi)

I would like to introduce the concept of explosion for two purposes: 1) the original idea that the COVID-19 pandemic of 2020 was a cultural explosion and 2) that the applied notion of naturalization or naming occurred through this process.

The idea of *cultural explosion* describes the relationship between a semiotic system and that which lies beyond its borders (Lotman 2009: 135) through describing the correlations between the system in question and the ‘outside’ world. The COVID pandemic was an act of communication in terms of introduction of new information into the cultural semiosphere. The concept of *explosion* refers to the rapid, unpredictable, change in discourse at the core of the cultural unit; the moment external language enters the sphere of culture (Lotman 2009: 17, 137). “The boundary is continuously penetrated by noncultural elements, which simultaneously transform the sphere of culture and are themselves subject to substantial transformation” (Zylko 2001: 395). Moments of unpredictable change allows for a path of novelty, a “creative transformation of the structure of life” (Lotman 2009: 10). Most often used in a political or historiosophical sense, cultural explosions can be seen on micro scales within the confines of a semiosphere. Explosion can be tied to innovation as well as disaster and is the change in communicative processes (hence discourse). The occurrence of the global pandemic can be considered an explosion in these terms as it was an unexpected change outside the ecosystem that had an immediate and direct effect on every structural level within the system.

Startup culture, as any other culture, is a process and one that is constantly in motion. The flexibility and dynamism of the sphere allows for internal systems to develop to the changing present around it (Lotman 1990: 127). The onset of an explosion causes an immediate shift within the structural unit. For one, this shows the dependence of the structure on external reality, that which lies outside its boundaries of culture. The events that occurred during the pandemic, shifted the internal workings and internal elements of the IT and startup sector, which has the power and influence to subsequently affect the external reality that caused the initial shift. Secondly, naturalization, to treat culture as natural (Lotman 1990: 132), occurs when the system/semiosphere forgoes a new transition to equilibrium. The system must make meaning of the change through its cultural codes. The consequences of that change become a part of the new cultural language. An “invasion of an external reality”. If we consider the necessity of naturalization as the translation of foreign information into a native one (Lotman 2009: 147), we can imagine how the startup founders translated or understood the

changes of COVID-19 into a cultural language they understood. What this means is applying culturally specific discourse to dealing with the event by framing it in their particular methods of understanding reality. For example, the outside world's label of "crisis" has been renamed "opportunity" in the cultural language. This equates to a mechanism of naming during naturalization of a foreign cultural element.

Explosions are an obligatory part of any system, in a non-linear and non-binary cultural model, explosions are not destructive in nature but can be viewed as a momentary eruption that sends energy defused among multiple axis of the system (Lotman 2009: 166). The impact need not be negative but instead makes space for change and evolution to occur. The ternary system guarantees infinity of the evolutionary process. In the startup semiosphere, the explosion can be described as a sudden change that was felt throughout the system, its effects diffused through different elements and levels allowing the system to survive the impact and not definitively destroy the entire system. The individual elements are affected differently and have to adjust to the new changes in order for the culture to survive. The effects of change penetrate through the micro, meso, and macro levels of the startup ecosystem. Looking at this from a broader perspective, it is possible to see how this one event has the potential to change the system and predict a possible future.

2.1.3 Self-Description and Identity Construction

Theory of *self-description* can be used to understand how an individual makes sense of themselves and their connection to the world around them. The self-description and understanding of one's place in the world are dependent on the cultural and discursive context an individual finds themselves in (Lotman 1990: 129). In the startup and IT world, individual entrepreneurs describe their place and their work's place in the grand scheme of progress related to present context and the semiotic processes taking place on the level of culture as a whole. Semiotic self-knowledge gives cultural character specificity that allows to differentiate between members and others (Lotman 2009: 137). This refers to the startup culture that differentiates this particular sector from other technological or corporate organizations.

If culture is considered a constructed system consisting of rules for translating experiences into text (Lotman & Uspensky 1978: 214), then the founders' descriptions of experiences can be understood as elements of the text of memory and thus, culture. Self-description is a way culture

describes itself as well as an idealized version of the culture and its members. In other words, it reveals idealized notions, points of view, communication channels, and ultimately the ideology of a cultural system. It is a value statement of the culture allowing the culture to organize itself hierarchically.

Lotman understood the need for self-description as a cultural universal to be used as the basis for creating typologies of culture with the important component of cultural self-models (Lotman 1973: 5). “Self-model is a powerful tool for the regulation of the culture, which provides structural integrity and determines a culture’s qualities as an information reservoir” (Lotman 2010: 64). Startup members’ identifications are the building units of the ecosystem’s collective identity. Individual behavior becomes a form for collective behavior and collective behavior acts as an evaluative measure for the individual (Lotman 2009: 3). Describing one’s identity within the system is important as it creates the characteristics and understanding of the system as a whole through the creation of communication boundaries. It reveals “what a system communicates when it communicates about itself” (Luhmann 1995: 170). In this sense, a startup employee’s anecdotes and descriptions of self, reflect the culture of the entrepreneurial organization the individual works for. Through self-description, auto communication occurs that reinforces the system from within.⁴

The unified collective personality of the culture (known cultural traits for instance), contains accumulated experience (Lotman, Uspensky & Mihaychuk 1978: 216) which validates the notion that present interview self-descriptive accounts derive from culturally specific qualities and behaviors. The self-referential anecdotes are examples of how members can add to the development of startup culture and their community. These qualities give cultural participants active agency in developing the system. Additionally, subjects are conscious of their cultural selves, the identity in relation to the community, thereby creating unity through creating a model of itself (Lotman & Uspensky 1978: 227). The realization of the system gives existence to the system (ibid).

Furthermore, as self-descriptions develop in the core of a semiosphere, those that part from certain principles tend to be located farther towards the periphery, acting as a tool to articulate and fix the boundary of a culture (Lotman 1990: 127, 134). Startup and entrepreneurial organization founders are at the core of the semiosphere so their communication is more culturally structured and closest to that of a cultural ideal. The interview subjects in this study are representative of their community.

⁴ This study will not specifically focus on autocommunication. However, autocommunication is a form of communication between individual and oneself, or within an organization, where new information is not introduced but instead information is enhanced and reinforced (Lotman & Uspensky 1978: 214).

2.2 Startup Ecosystem

One way of breaking down the entrepreneurial sector is its metaphoric title of ecosystem which we can level into three core sections; micro, meso, and macro. The term ecosystem is not pertaining to known semiotic understandings of ecology and biosystems but is a unique metaphor for the social and institutional structures that comprise the IT startup sector. Much like a forest ecosystem, it is an adaptive system with an array of inter-relationships dependent upon one another. *Startup ecosystem* is a term used to refer to the industry as such to emphasize the interconnectedness of its network and its reliance on internal and external factors.

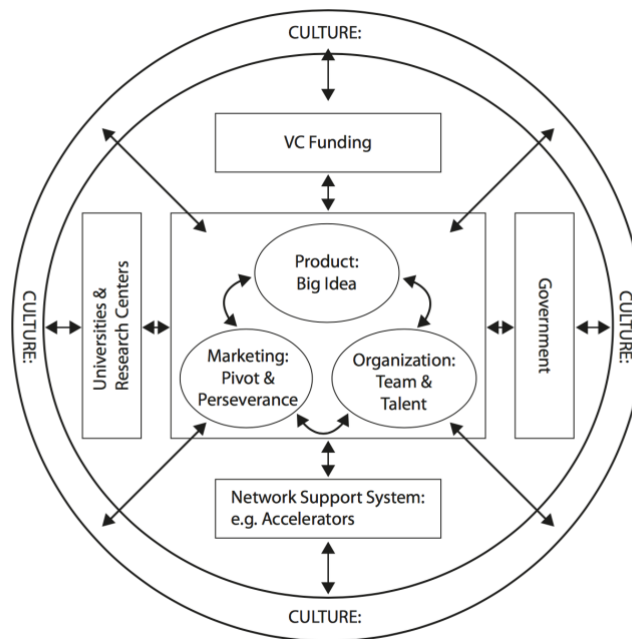
Startup ecosystems are recognized as drivers of information, technological progress, and economic development (Roundy 2016: 233). These systems include the institutions, social structures, and cultural values that sustain entrepreneurial activity and encompasses the individuals that promote and foster innovation. The ecosystem's components can be placed into a tri-leveled model encompassing the social structure of individual members (micro) to business development centers and government infrastructure and aid (meso) (Ester 2017: 41). This parallels Hartley's recent distinction of the digital semiosphere where micro level refers to cultural text, its use and creation; meso as the institutions; and macro as the global digital system (Hartley, Ibrus & Ojamaa 2020: 178). It includes all the resources, physical and mental, which strengthen and promote innovation. "It is an almost organic and prototypical system that generates an enduring and resilient habitat for innovation and startups to thrive" (Ester 2017: 37). An ecosystem provides the mindset for startup culture to develop its ideologies, discourses, and narratives. "Above all, it is an environment that stimulates a pro-innovation and entrepreneurial way of thinking that helps the creation of new businesses through a well-oiled network providing access to talent, knowledge, funding, mentoring and legal counseling, and to accelerators" (Ester 2017: 37). According to this definition, Estonia has a viable and flourishing startup ecosystem that is supported by government, has benevolent investor and accelerators programs, and maintains a dominant digital narrative.

Ester explains defining an ecosystem is important as it gives insight into the characteristics that matter specifically to each regional IT unit that allows it to remain perpetually innovative and successful while taking in individual cultural and institutional parameters specific to that region (Ester 2017: 37). The success of the ecosystem is a result of the proper functioning of each of its individual parts. A successful ecosystem is able to maintain functionality in times of stress or challenge, and must be capable of being adaptive to change (Pilgrim, Pretty 2013: 9). This quality describes the full

functionality of a startup ecosystem as each element is a unit in constant communication with the other and fully dependent on the success of each's independently functioning relationships.

Understanding this framework allows for assessing the individual's adoption of certain beliefs of value, behavior, and aesthetics that are particular to the discourse of digital technology. The technological environment setting is a combination of cultural characteristics rooted in an entrepreneurial mindset that reveals meaning in this framework. The following startup ecosystem model visualizes Ester's concept of the tri level system in which culture encompasses the institutions which house the members and micro level processes such as product and cultural texts (2016: 41). The arrows indicate reciprocal communication between every unit of the entrepreneurial ecosystem.

Figure 2.1. The Silicon Valley Innovation and Startup Model



Source: Ester & Maas (2016: 41)

2.2.1 Micro Level: Startup Texts, People, and Products

At the micro level is compiled product, people, and purpose (Ester 2016: 39). Language use and cultural discourse in action fall into this category. It includes the text, speech, cultural code and rituals of the system (Hartley, Ibrus & Ojamaa 2020: 177). Hartley, Ibrus & Ojamaa consider text as an elemental unit of this level (in their framework 2020:118). With this perspective, units belonging in this level, such as digital products or services, can be thought to take on meaning and capable of transmitting meaning and information. It allows these individual units to be thought of as active

communicators (e.g. a digital app representing a mission, company's purpose alludes to values, and interpersonal interactions take on a culturally communicative role). This view allows us to consider elements in the micro level as text, or single-text (Hartley, Ibrus & Ojamaa 2020:177).

Ester writes that the success of Silicon Valley results from the mechanisms in this micro level: "the innovation mission: the need to have a social impact and to offer practical solutions to pressing social issues" (Ester 2017: 42). This success is rather due to the macro level ideology driven missions and collectivist mentality to solve the world's greater issues. For example, the concept of a *disruptive* product, one which reshapes markets and creates significant impact, serves as a mentality that leads founder's initiatives in the micro level.

Ester continues that product scalability falls into this category as does the potential of a product's rapid growth (2016: 41). Through a semiotic perspective (and in accordance to Hartley, Ibrus & Ojamaa's identification) the product can be viewed as a sign embedded with meaning by its creators. Therefore, the reasons for success and growth results from the attachment of said product or service to cultural values and ideology. The entrepreneurs who make this scale and growth possible need to offer practical solutions and have a social impact through technological breakthroughs (Ester 2016: 41). Placing this type of meaning and intention into their product stems from an understanding of one's purpose in his/her reality. Therefore, when speaking of a product's potential success, it cannot be removed from the meanings attached to it.

One's day to day activity can be imagined at this micro level. Therefore, the processes of individual meaning making and semiosis is defined in this frame. This indicates that the process of identity creation is organized within the larger meso and micro levels of the startup ecosystem. That is to say, that institutions (meso), and cultures and ideology (macro) are containing the individuals and his/her construction of self. This also implies that the meanings made by members in this context impact the higher structural units of the system, i.e. impact organizational and institutional levels (meso), and ideological systems (macro). If culture is considered the integrated network of all lower level meanings of which it consists (Alexandrov 2000: 347; Lotman 2009 250), it is possible to understanding the workings and mechanisms of individual acts of communication, beliefs, traits, etc. and its collective impact on the startup ecosystem as a whole. This is another way to conceive members' understanding of themselves as a dynamic communication between the texts within the system. Members add to and shape the culture just as much as the culture determines their understanding of who they are.

2.2.2 Meso Level: Startup Infrastructure, Institutions, and Support Networks

The infrastructure and networks that form the structural backbone of the ecosystem are found in the meso level. This is the level where social and cultural institutions (those organizations that work to preserve or promote culture) organize themselves (Hartley, Ibrus & Ojamaa 2020: 178). These are the institutional facilitators and resources that are significant for teams to develop and maintain competitive advantage. The meso level includes institutional facilitators and resources such as vital angel⁵ and venture capitalist (VC) investors; university and research centers; government participation such as innovation policy, technology funding, and visa programs; and startup support infrastructure such as accelerators and legal advice (Ester 2017: 47). In order for the startup industry to flourish, there needs to be support from the government sector, “four public policy conditions need to exist: ease of market access; rules that encourage innovation; availability of startup capital; and a hiring environment that enables diversity, including visa availability for tech workers” (Bildt, et al 2016: 19). This level also describes the institutions where ideology is dissolved, dispersed, and distributed. This is a self-reinforcing system.

2.2.3 Macro Level: Startup Culture and the Global Digital System

Macro level can be viewed as the ideology and culture that encompasses the industry. The aggregate attitudes that mirror the individual micro levels of startups. It is the collection of overarching myths and narratives that frame everything these individuals do, the way they view their actions and decisions, which then leads to business direction. This level encompasses the disruptive approach, the need to change the world, and includes the macro cultural narratives of the ecosystem (Ester 2017: 58; Hartley, Ibrus & Ojamaa 2020). For example, once the ‘right’ product is discovered, founders can break through as a collective and make the world a better place. Such myths are embodied by individuals in their values and decision making. It is absorbed into their identity and takes on a role that perpetuates the agenda of the leaders in the community. In Ester’s words: “The macro level (outer

⁵ Industry term referring to a wealthy individual with business experience investing in the early-stage or seed round of a startup, usually within a sector or field (source Startup Estonia White Paper)

ring) points to the typical Silicon Valley culture that applauds entrepreneurship and shares innovation, favors the passionate pursuit of big dreams, emphasizes openness and learning, is risk prone and tolerates failure, and has the right startup frame of mind.” (2017: 39). It is a component that is carried alongside the other two levels much like belief systems carry through and create a lens for understanding individual purpose, action, and collective institution. Here lie the canons of innovation.

2.3 Deconstructing Startup Culture

Many entrepreneurial organizations are defined by their startup culture (e.g. Twitter⁶). *Startup culture* is the work processes, routines, behaviors, patterns, and worldviews of this organizational reality. In common lexicon, the term *startup culture* comes with a very particular set of ideas and expectations. By deconstructing, or breaking down this system into constituent parts, their underlying meaning and value assumptions can be interpreted. Deconstructing startup culture gives insight into the modes in which members replicate ideology; it is the discursive space where narrative, myth, and cultural rules of interaction are taught and disseminated. This social space is where the construction of self occurs and in which technology ideology exists in order to guide behavior and identity of its members. It is worth describing the characteristics of this culture as it aims to model and build a homogenous membership which includes a desired lifestyle, specific language use, rhetoric, behavior patterns, and personality traits. When one speaks about startup culture, they are referring to the identity and self-reflected ideal of this group. For the purpose of this paper, I would like to create a uniform understanding of what startup culture is.

Startup culture can be compared to conventional corporate culture in that it “is also influenced by national cultures and traditions, economic trends, international trade, company size, and products”⁷. In a company setting, culture is often implied and not expressly defined; it develops from the cumulative traits the organization hires. Whether shaped by intentional design or organic occurrence, corporate culture extends to a company’s core ideology and practice, and transmits to every facet of the business.

⁶ Twitter is a company known for its culture of rooftop meeting, free meals, complementary workout classes, with the priority of employee happiness. - Patel, Sujana. “10 Examples of Companies with Fantastic Cultures.” *Entrepreneur Europe*, 6 Aug. 2015, www.entrepreneur.com/article/249174.

⁷ <https://www.investopedia.com/terms/c/corporate-culture.asp>

Discourse rules and practices create meaningful statements regulating socio-culture (Bryan 2004: 402-403) in the startup ecosystem, they are the social practices through which technology ideologies can exist. Discursive context is not limited to solely speech, language and representation, but is a set of socially enforced regulations that govern communication and ways to categorize and model the world (Bryman 2004: 266, 402-403). Startup members are therefore actively engaged in the creation of their organizational reality. Through studying the way members of the startup community talk about experiences, it is possible to gain an understanding of normalized cultural discourse surrounding startup organizations, in addition to how the subjects form their subjective and collective realities within this sphere.

Various authors agree that there are common core values that startups must explicitly possess in order to yield successful and survive (Basic 2017: 98). If culture is conceptualized as a set of identifiable markers and values (Lotman & Uspensky 1978: 213), it is possible to compile a list based on their repetitiveness and patterns found in cultural texts. A list of startup values contains: agility and flexibility, innovation, freedom, authenticity, and creativity. This culture is characterized by a flat hierarchy that encourages open communication and **freedom** of **creative** thought (Basic 2017: 99). Values of **agility** and **flexibility** in terms of free-flowing creativity, including unfettered access to knowledge and information without barriers (a subsequently cited principal ideology). **Innovation** is a highly regarded underlying value found hidden in product development, working styles, and calls to action⁸. Energy and enthusiasm are said to set the tone for startup culture. Members define themselves and others as encompassing qualities of passion, drive, and authenticity. In this discourse, these words refer to the passion one feels for their job and mission- work is not labor to a startup founder. A startup must be unique and creative, display elements of ‘personality’; and convey **authenticity** in terms of respecting individual difference (Basic 2017: 99). The desire for **collectivism** (with the potential to be both a value and ideology) can also be included as it reinforces the belief that only together can members aid humanity by exploring digital solutions through the promise of change.

Deliberately or unconsciously, values are distributed through representations (representations are people, objects, values). These representations of the “ideal” startup techie are found in texts within startup culture and reflect and reinforce a particular value system. Such doctrines and manifestos familiarize members with particular business visionaries and gurus (e.g. Steve Jobs⁹), and consist of lists of “must read” books (e.g. *Zero to One* by Peter Thiel¹⁰), podcasts to listen to for

⁸ industry term referring to a prompt for immediate action or response by a user

⁹ Former CEO at Apple

¹⁰

growth, and the same influential thinkers and leaders to follow (e.g. motivational speaker Tony Robbins). Everyone is on the same page. Certain ways of dressing (casually), speaking (colloquially), and behaving (informally) all have meaning in this specific space and context. One must be 'literate' as a member of the community. These representations are also revealed through the categories of people taken into companies, promoted, and permitted access to certain resources. In other words, individuals must present themselves a certain way and demonstrate certain literacies in order to succeed in this field. Individuals aim to mimic these representations and it is also presented through the way members speak about themselves in relation to events.

Specific to startup discourse, members refer to themselves by culturally appropriate traits, narratives, and attributes that they wish to embody. The manner in which the startup community speaks about themselves (the rhetoric, phrases, aphorisms, lexicon, pictorial signification (logos)) all reveal value notions of the entrepreneurial ecosystem. They are symbols and physical representations of the group's ideology and together are emblematic symbols of this particular section of the ecosystem. Members mimic representations found in startup cultural dialogues and texts to identify and create their understanding of self. Forms of identity are displayed through dress, personal affects, use of language including rhetorical devices such as vocabulary or self-referential narrative. The community as a single, unitary system contains the character traits individuals attach to their selves (Lotman 2009: 3). These particulars are socially constructed based on elements of startup culture. For example, an individuals must present themselves and behave a certain way in order to be employed. These desires can be presented through self-referential means. Through cultural texts, it is expressed that success can only be achieved through persistent, confident, and entrepreneurial personalities. Therefore, specific personality attributes and self-described traits of resilience are necessary to be a successful member in this sector and ensure company survival. Behaviors that win approval get reinforced and replicated (Dutton & Dukerich 1991: 254). These identity characteristics become a part of the cultural normative features. Therefore, analyzing respondent interviews is a strong indicator of an ideal startup cultural model as well as value representation.

Language has influence on the manifestation of culture, so it is prime to look at discourses in use when trying to understand this community of people. The values startups promote are imbedded in phrases and terminology usually used in discourse surrounding their business ventures. Language use, rhetoric, and discourse of members are uniform. Insider discourse such as accelerator, burn rate, unicorn, and pitch deck for example, take on very different meaning outside this cultural setting. There are recognized aphorisms echoing in this culture: "Don't worry about failure; you only have to be

right once” (Drew Houston, Dropbox Co-Founder and CEO) and “I’m convinced that about half of what separates the successful entrepreneurs from the non-successful ones is pure perseverance” (Steve Jobs, Apple Co-Founder and CEO). Positive and eye-catching company mottos are circulated: “open company no bullshit”, “don’t #@!% the customer”, and “be the change you seek”. Such phrases are commonly seen in startup co-working spaces and offices, and commonly quotes by members.

The jargon of the startup world eludes to the over ambitious nature of its culture. A couple common words in the startup lexicon are *disrupt* and *pivot*. I predict these terms to appear frequently in discussions concerning entrepreneurial change impacted by COVID-19. These terms themselves embody narrative and can be thought of as signifying myth of IT ecosystems. The word *disrupt* is emblematic of startup culture. Defined, it means, “an interruption caused by a disturbance or problem”¹¹. Colloquially, this term is taken as a negative connotation, something having been destroyed or altered due to a negative act. In startup culture, however, disruption promises a new paradigm shift, a revolutionization in the technology landscape, radical technological change that “shakes up the status quo” (Ester 2017: 42). The industry term specifically refers to the fast change in market that equates to quicker and better ways of doing things. It is this “technology has to revolutionize the current state of things” mentality that is prevalent among founders and guides their intentions and incentives. The startup ecosystem “has embraced the idea of disruptive innovation to a nearly messianic degree, supported by its series of conferences, events, and meetings that celebrate disruptive innovation and its many merits” (Ester 2017: 7). Startups are always looking to be the next *explosion* on the scene. (Unpredictable and sudden cultural changes are referred to as *explosions* by Lotman (see chapter 2.1.3).) The change companies wish to generate is analogous to the abrupt change social cultures experience through time, and it is a unique way to describe the impact disruptive innovation hopes to achieve. Grand scale innovation is a startup narrative.

Pivot is another important buzz word in the startup ecosystem. Change is an expected business model in this industry and the ability to recalibrate and adjust is vital for any new startup venture. It is said that a startup’s resiliency and agility is displayed through effective and timely pivoting (Ester 2017: 27). This is an example of another business strategy akin to the commitment of staying fresh and current, the narrative of being ahead of the curve.¹² It is not about building the ideal product but instead building a product that maintains the ability to be flexible, remains relevant, and furthers the

¹¹ Definition of disrupt from where?

¹² A popular book in the startup industry, *The Lean Startup* (2011) by Eric Ries, notes that polishing a product in its early stages is not recommended but placing an app or service out to receive consumer feedback in order to make product adjustments is crucial. (via Ester 2017: 47)

collective ecosystem's purpose as opposed to the founder's personal initiatives. Particularly in the COVID-19 landscape, many businesses' ability to be flexible, and therefore sustainable, was put to the test.

2.4 Ideological Field of Startup and Entrepreneurial Systems

Delving into the macro level of the startup ecosystem, it is possible to uncover individual's relationship and communication with their reality. Interpreting this level reveals the meaning members give to their actions, their beliefs in the current state of affairs as a normal and natural order. Ideology is the doctrine, philosophy, body of beliefs, belonging to a certain individual or group (Althusser 1971). It is therefore the set of beliefs, values, customs, and ideas that serve to form a startup member's particular worldview.

William Birdsall wrote of the Ideology of Information Technology describing that "this ideology promulgates a set of economic values that are permeating the political and cultural spheres of society" (1996: 1). In all cases this remains true and has only intensified. Society has held information technology as the most effective means for moving away from an industrialized society into an information society (Birdsall 1996: 2). The support of past high-tech research and development gave rise to a movement and mentality of technological determinism that continues heavily to this day (*ibid*: 2-3). Technological determinism assumes that society's technological development is exclusive of its development of its social structure and values¹³.

Kozinets's *Ideological Field of Technology Ideology* illustrates the relationship and communication between individual and the digital world (2008: 865). Through a semiotic square model, Kozinets represents the relations¹⁴ between varying ideological elements articulating technology ideology's influence on individual's narratives (2008: 865). Individuals interpellate the ideology, from which the ideology gives them a strong sense of personal and social identity (Kozinets 2008: 866; Althusser 1971:37) When an individual becomes a subject, s/he internalizes the social relations, norms, and knowledge of the discourse (Althusser 1971:37). Even if involuntary, members exist inside the ideology and therefore adopt beliefs of value, of behavior, and of aesthetics that are

¹³ Oxford Reference

¹⁴ Kozinets's semiotic square model, represents the relation¹⁴ between Techtopian, Green Luddite, Work Machine, and Techspressive ideological elements (2008: 865). Ideologies within this field can contrast on basis of morality, reason, indulgence, and/or emotion.

particular to the discourse of digital technology. Once a member of the startup/ IT ideology, one's speech and actions are modified in accordance to said ideological beliefs. The culture's ideology informs the subjects in this study how to behave. Subjects do not question these ideological elements and instead accept them as universal truths, even without consciously doing so (Althusser 1971: 32). According to Kozinets, an individual is always navigating within the Ideological Field of Technology or can be found merging between separate and at times conflicting ideologies (2008: 868). Kozinets writes of a quadrant but I will include two that are prominent in the Startup ecosystem itself.

Techtopian Ideology or technology utopianism ideology, is the overwhelming idealistic belief that technological advancement and social advancement are one if we are to achieve our highest societal capabilities. In other words, it assumes we measure human progress by technological advancement (Kozinets 2008: 868). It is the general assumption that technology is good. Technology utopianism is not new, "one generation after another has renewed the belief that, whatever was said about earlier technologies, the latest one will fulfill a radical and revolutionary promise" (Mosco 2004: 8). *Techtopian* ideology was present well before the development of the first personal computer; it is unattached to the any specific feature of digital (Mosco 2004: 25).¹⁵ The story of hype can be considered a continual narrative. A techno-utopia would therefore be a post-scarcity idealized society based around advanced science and technology that has allowed these living conditions to exist (Kozinets 2008: 875). These optimistic values are linked to high growths in the success of the IT and startup industry. This over positivistic view and approach to digital technology is a prevalent one in startup culture. This fervor is one extreme on the scale of contending ideologies found in the paradigm of technological views.

Techspressive Ideology, coined by Kozinets (2008: 269) technology impressive, is a more recent ideological development, focusing on the "contemporary self-expression that is now required of the consumption of digital technology" (Kozinets 2008: 871). The mediated pleasure and escapism this model describe aids the overall feeling of unlimited possibility that tends to surround startup culture. A space where exploration, creativity, and novelty are embraced. Though social goals are lacking in the *Techspressive* ideology, the individual expression that is promoted aids in sparking startup 'creativity', which is a highly regarded cultural description for this community.

The combination of *Techtopian* and *Techspressive* ideology along with the belief in digital technology as a product for productivity and wealth, in addition to the added element of economic industrial growth, describe the general system of ideologies in the startup field.

¹⁵ e.g. it was present in past mythological promises attached to low cost energy and water (Mosco 2004: 25)

Many sources, including academic papers and media articles, describe entrepreneurial founders as idealists.¹⁶ As a world view, there is a sense of collectivism and radical optimism regarding the future and the interdependence of all humanity (techno-optimism). To add to the description of techtopian ideology, I will include the prevailing myth that “change leads to a positive outcome”. It is specifically the outlook of positivity and confidence in terms of technological change. According to Greg Ferenstein, founders believe that change in the long run is nearly always good, and as there is no inherent conflict between different groups in society; collectivism is the approach to solving our common problems (2015).

Furthermore, extreme beliefs of interdependence reinforce such beliefs that personal decisions have significant impact on other people’s lives. This is one explanation of why startup culture has a docket of motivational and wellness speakers and thinkers. Tesla Founder, Elon Musk is quoted as saying: “If we’re all in a ship together and the ship has some holes in it, and we’re sort of bailing water out of it, and we have a great design for a bucket, then even if we’re bailing out way better than everyone else, we should probably still share the bucket design.”¹⁷ This idealism is founded on the view that change is inherently progressive and there are no conflicts between major groups in society. It is a cooperative view of humanity.

Startup founders believe the solution to most of the world’s problems lie in innovation, conversation, or education (Ferenstein 2015). One’s purpose, therefore, becomes a matter of discovering the ideal solution to an informational problem. This stems from a general ideology that information solves most problems. Therefore, access to information is paramount. Accordingly, an additional division of IT ideology is the free distribution of knowledge (by author). Knowledge in this context refers to the information, facts, and skills necessary for the understanding of the business processes of the industry, both practical and social. This ties into the notion of collectivism and extends it to an altruistic diffusion of information. This is unmistakable when regarding the institutions in the meso level of an ecosystem. In this level, knowledge is distributed in multiple channels: state institutions, private universities, online platforms, and as of late, industry/company founded academies. Many IT companies, such as Google¹⁸, offer educational programs that are comparable to

¹⁶E.g. (Basic 2017); Ferenstien. An Attempt To Measure What Silicon Valley Really Thinks About Politics And The World .<https://medium.com/the-ferenstein-wire/what-silicon-valley-really-thinks-about-politics-an-attempted-measurement-d37ed96a9251>

¹⁷ <https://www.businessinsider.com/musk-calls-ev-business-sinking-ship-2014-7>

¹⁸ Google Career Certificates or “Google University” offers a certificate “equivalent to university studies”. Google allows employment through their courses, having the possibility of becoming "a technology expert" in just 6 months. (<https://grow.google>)

university degrees with the humanistic aim of access of education for all citizens of the world (amongst profit reasons). This also allows companies to control the knowledge transferred (through selecting and omitting information), in essence, controlling and securing certain ideals and sets of beliefs.¹⁹ This can be considered as an idealist perspective, as maximizing the human potential for the purpose of the greater good is very romantic.

2.4.1 Myth and its Role in the Startup Ecosystem

Cyberspace has become today's technological sublime (Mosco 2004).

Myth operates as a form of ideology allowing for culture specific narrative repertoire to originate that dispels technology specific ideologies. Approaching myth from Barthes's understanding, myth is a level of signification that is constructed by attaching meaning to a form which operates on the level of a collective consciousness of a group or culture (Barthes 1972: 131). They are the cultural codes and acts of communication with connoted meanings (Barthes 1972: 112). Myths are stories that in some way work to explain and pass along some aspect of cultural beliefs, norms, and values. If ideology is the body of beliefs, myth operates to pass along those values and naturalize concepts in order to create universality (Barthes 1972: 143). Gaines recognizes myth as ideological assumption in the forms of communication (Gaines 2001: 313). It is how we culturally structure our experience of the world.

Myth as a form of reality allows one to make sense of the seemingly incomprehensible by forming a vision of that which cannot always be realized in practice (Barthes 1972: 116). It can be compared to the idealistic mission statements startup companies connect to their purpose. An internalization of a mission driven mantra of making the world a better place is a staple part of the startup narrative. Myths are the stories people tell to help deal with contradictions in life or hardship, they are the responses to our limits in understanding the world around us (Mosco 2004: 28). It is powerful to study myths in reference to how members made sense of the COVID pandemic. Relying on myth is one method of relief, as it guided the interviewees decisions and provided meaning for their actions (e.g. in initial steps upon learning of the pandemic, self-dialogues to encourage oneself to continue in the face of uncertainty). This conception of myth as a living, meaningful story is

¹⁹ This is a means of regulating knowledge and disseminating ideology through institution (Althusser 1970).

particularly powerful because it suggests why people embrace them even in the face of other-wise compelling contrary evidence. Myth does not just embody a truth, it shelters truth by giving it a natural, taken-for-granted quality (Barthes 1972: 131; Mosco 2004: 29). In this regard, technology myth and techno-optimism create a level of faith for members in this community which allow them to proceed forth when outside forces begin to prove otherwise. This is imperative as it keeps ideology active and therefore, the culture moving forward even when a change, or threat occurs. Such myths make it easier for people to turn to technology for solutions to a various problems.

Myth need not present itself in narrative form specifically, but can appear in any cultural text. Signs and text in startup culture adopted into discourse and embedded with ideological meaning are concepts of eEstonia (Mäe 2017: 32) and an accelerator's co-working space, for example. Assessing what myths mean to people who produce them and believe in them, reveals much about the society that sustains them (Mosco 2004: 31). To decode myth found in respondents' discourse, the context in which they were originally generated and communicated must be familiarized, (startup cultural context). This allows reflection on what the respondents consider natural despite the myth's origin and also gives insight into its intention and motivation (Barthes 1972: 117).

Barthes suggests myths conjure up a desired end, "...it gives them a natural and eternal justification, it gives them a clarity which is not that of an explanation but that of a statement of fact" (Barthes 1972: 143). This desired end binds the individual to the reality they are experiencing, in essence allowing the end to justify the means as the end is the exquisite techno-utopia. Myths give reason and meaning for individual behavior whether striving for a group goal or individual ambition. In other words, myth inflicts human values with ideology.

Cyberspace²⁰ provides for a powerful basis for myth because the direct detachment from natural space allows for satisfying the characteristics of the unimaginable allowing seemingly impossible concerns of humanity to be solved through technological advancement (Mosco 2004: 3). Through myth there is promise and unfulfillable visions of *technological sublime*. It is precisely this ideology that encapsulates the dominant field of digital technology today. *Technological sublime* as defined by historian David Nye, is "a literal eruption of feeling that briefly overwhelms reason only to be recontained by it" (Mosco 2004: 23). Others call this power *cyber myth or dotcom myth*²¹. The rhetoric surrounding *technological sublime* involves seductive tales of promise and predictions of the future. Transcendent virtues become associated with increasing technological advances.

²⁰ Environment in which communication over computer networks occurs

²¹ The prophecy of digital technology solving world problems has been prominent since the 1980's. "Dotcom myths" were prevalent during the onset of the internet. (Mosco 2004: 4)

In addition to the romanticized notion of technology's possibilities, digital technology is believed pervasive, unavoidable, and indispensable; therefore we must accept it into our lives and not just understand it but conquer it. Progress will come no matter what and it is in our best interest to take control of this medium. It is the myth of reining technology. Such myth promises its subjects entrance into another reality where cyberspace will continue to transform the world through an unprecedented era of electronic democracy and virtual community. Narratives tell the story of what one's role in the furtherment of the digital sublime or cyber myth will be.

2.5 Typology of Entrepreneurial Ecosystem Narratives

Narratives form to construct how individuals view themselves at present and as future participants in the global digital semiosphere. Narratives are considered a chronological sequence of events, such as actions and experiences, with an intended purpose of transmitting cultural knowledge (Ibarra & Barbulescu 2010: 137). Narrative is a primary mode of discourse that transmits cultural stories, history, approved traits and characteristics (Lotman 1990: 272). It is a tool to shape one's own understanding and experiences (Roundy 2016: 234). Stories are uniquely suited for making sense of arbitrary or unexplainable occurrences by framing events into a coherent picture (ibid: 240). Narrative or story, interchangeable terms, have powerful influence on how individuals conduct themselves and consider their place in the world. The metaphors and phrases used in stories are not solely an individual's construction but the co-creation through the surrounding discourses found in startup culture. (e.g. when subjects use the same phrases, metaphors and lexicon, all alluding to the same values). The narratives that individuals in the IT community adopt shape their understanding of reality, as well as influences other's understanding of experiences (ibid: 234). Accordingly, narrative and myth are elemental in identity construction.

One method members perform and negotiate identity position is through narrative texts. Individuals are socialized by narratives as these accounts are legitimized as culturally accepted discourse (Ibarra & Barbulescu 2010; 141). Behavior and decisions are legitimized by referring to existing social narratives and cultural norms (ibid; 142). (e.g. A founder continuing his painstaking entrepreneurial journey because Brian Chesky of Airbnb was also rejected for numerous investments but now his company is worth \$31 billion.) From telling a story about the self, there emerges a sense of self (Ibarra & Barbulescu 2010 : 147). Self-narratives are expressive of and constitutive of identity.

Individuals choose elements of narratives that allow them to create their desired identity by processing new narratives and rejecting others (Ibarra & Barbulescu 2010: 137). Self-definitive speech defines the individual respondent (Lotman 2009: 3). Individuals embody the narratives that belong to the cultural institution they are a part of, finding one's identity within a culture specific narrative repertoire. Transitions that depart from known narratives are unfavorable looked down upon. This further encourages conformity in personal self-narrative. Decisions based on self-narrative are hardly contested as they are normative in the institutional sphere. For example, entrepreneurs secure higher positions in the social hierarchy and face fewer constraints if they adhere to certain self-narratives.

Narratives are dynamic and evolve according to changes in members identity, circumstances, or changes to the semiosphere (such as a cultural explosion). Stories and explanations, one tells oneself (auto-communication) are therefore also constructed by cultural discourse. In this sense, identity is not fixed, but active in response to changes in culture. This allows startup founders to remain a cultural fitting member, as well as find suitable self-description. Personal developments in members and the community constantly add new narratives back into cultural text. This is one argument why narrative is elemental in a system's future trajectory.

"Narratives can be so powerful that 'for things to be otherwise is literally unthinkable'" (Roundy 2016: 240). To the speaker, their statements perform as natural, however, meaning is ideological and embedded with connotation. Legitimizing the ecosystem ties into the spreading of hegemonic ideology within the entrepreneurial network. It is vital for the success and continuation of the entrepreneurial ecosystem. These stories are self-perpetuating as they reinforce the system in which they were created in (Ibarra & Barbulescu 2010: 149). In this manner, it is of key importance to consider self-narrative and discourse surrounding the self within the ecosystem, specifically pertaining to how one speaks about first-hand accounts of events.

2.5.1 Startup Narrative

In each level of the startup ecosystem, central narratives consume and compromise the culture. These stories play a huge role in a startup ecosystem context. "...[S]tories of successful local entrepreneurs who found start-ups that [go] on to become large, global market leaders' that might serve to 'inspire younger entrepreneurs to undertake similar journeys'"²² This statement suggests that narratives

²² citing Feld (2012) in (Roundy 2016: 234).

perform the function of spurring entrepreneurial activity.” (Roundy 2016: 234). From this perspective, the role of narratives fosters the creation and evolution of entrepreneurial systems. The professional ambitions and goals of individual founders are distinctly found in the repertoire of startup narratives. Startup culture offers its members specific expectations and visions of their future. One must first understand the specific domains of narratives in order to then understand member’s referentiality of their role and their desired role in the community.

There are several types of narratives that exist within the entrepreneurial ecosystem (see *Table 2.5*). Roundy describes three different types of narrative often found: *success stories*, *historical accounts*, and *future-oriented narratives* (2016: 236).

Success story narratives are those constructed to represent prior successes or current successes in an entrepreneurial ecosystem. They are the often-heard stories of entrepreneurs who successfully meet with a large sum of investor funding, are acquired by a big corporation for a huge sell out, or who generally retain a positive “exit” from the early startup phase (Roundy 2016: 236). Creative or disruptive technologies that secure large investments or high-profile clients are the ones that “make it”. Roundy includes that general ecosystem successes or regional successes also fall into this category (2016: 237). *Pivot* and *disrupt* often carry the narrative of a company’s success story (e.g. ... pivoted and produced a disruptive product, so can you).

Historical accounts serve the purpose of communicating history. In an entrepreneurial setting, these narratives focus on the significant moments in a particular region’s ecosystem history and the leaders who played a fundamental role in the systems development (Roundy 2016: 237). An ecosystem’s roots are communicated in these accounts highlighting particular cultural traits and significations (*ibid*).

Future-oriented narratives communicate the future perspectives, vision, and mission of an ecosystem. This can describe overall directional path, major infrastructure plans, specific technological trajectories, or sector investment trends that together create the picture of a possible future. These narratives are the member’s visions and desires for themselves and their collective future (Roundy 2016: 237).

Roundy points at six purposes narratives serve in a startup ecosystem (Roundy 2016: 237).

1. One main purpose of narratives is transmitting the ecosystem’s culture. As with any cultural unit, myth and narrative carry cultural knowledge from one generation to the next (2016). Entrepreneurial practices such as experience with certain business practices are similarly shared between ecosystem members. Specifically, if young entrepreneurs enter the scene, they

are educated through second hand experience, through stories of others' trials and errors. An ecosystem can maintain its success by sharing such knowledge through its network. Relationships are of vital importance for the success of a startup business. With this perspective in mind, individual behaviors and micro level interactions aggregate to make major impacts on the entire system. Roundy argues that the actions of individual agents that compound to affect macro level change are driven by socio-cognitive heuristic rules such as "'favor cooperation', 'give before taking', and 'help other participants'" (216: 238). (This is yet another reason why self-description is an important element in understanding this culture's current and future state.)

2. Narratives can serve as sense making tools in an entrepreneurial ecosystem. Much like the cultural-evolutionary approaches to narrative, these stories allow an individual to make sense of past and present experience by a temporally ordered scheme of events (Roundy 2016: 239). As an entrepreneurial ecosystem is a complex and dynamic network of levels, members construct or adopt narratives to both make sense of the system as well as their place in it.
3. The third purpose of startup narratives are for constructing the ecosystem's identity. The ecosystem must have a codified identity for participants to understand what they are a part of. Members must be able to identify what makes up the system and what separates it from others. Comparable to individual identity, an ecosystem's past and present events, actions, and characteristics combine to make a coherent whole (Roundy 2016: 239).
4. Legitimizing the ecosystem is a very important role certain narratives perform. Legitimacy is defined as the "generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definition" (Roundy 2016: 240). This impacts the general "taken-for granted" ideas within the system and encourages the adoption of other narratives in the repertoire. This is where an ecosystem's lifeblood lies. It reinforces the mission and purpose of the sector on a macro scale. Akin to ideology, it gives more value to member/s' actions and decisions. As these narratives influence legitimacy feelings, future developments are seen as inevitable and determined.
5. Narratives gain attention for the ecosystem both for members inside the community and for those outside the periphery. The functions garnering attention serve to bolster reputation and draw resources to an ecosystem (Roundy 2016: 240). Holding an audience's attention solidifies discourse in all manners of semiotic/meaning making level (Denning, 2008). These stories are filled with emotionally driven narrative, vividness, use of imagery, and makes for

very media sharable material. Emotionally driven material unites participants with a common emotionally invested goal. This also takes founder stories outside of the ecosystem into other semiospheres which 1) aid in perpetuating technology ideology and 2) gain support for the doings of the ecosystem.

6. Lastly, narratives serve the function of charting the ecosystem’s future. Individually it helps a story teller align themselves with a multitude of possible outcomes (Roundy 2016: 237). A group’s vision becomes clear in mission driven narratives. Founders quite often form a company based around such a mission statement. This aids to guide all members on the same path and communicates a concrete goal. On a system wide level, future narratives shepherd members towards a common possible destiny with aligned prospective and focus.

Purposes Narratives Serve in a Startup Ecosystem		
(Roundy 2016: 237-241)		
Purpose	Explanation	Example
1) Transmitting the ecosystem’s culture	Cultural knowledge from one generation to the next. Ideological beliefs, entrepreneurial practices, facts/skills, values, accepted behavior	Teaching new startups how to get funding. Values of ‘give before take’.
2) Sense making tools	Stories allow an individual to make sense of past and present experience by a temporally ordered scheme of events	Trajectory of TransferWise(Estonian Startup) from birth of idea to established company, or timeline of Estonian Ecosystem development
3) Constructing the ecosystem’s identity	Members must be able to identify what makes up the system and what separates it from others	Estonia’s Startup ecosystem is unique because of its powerful education system, highly digitalized procedures, ease to obtain work and entrepreneurial visa
4) Legitimizing the ecosystem	Generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definition	President being cooperative with startups gives authority and power to the relationship and ecosystem entity
5) Gain attention for the ecosystem	Functions garnering attention serves to bolster reputation and draw resources to an ecosystem	Positive startup related articles on news media
6) Charting the ecosystem’s future	Group’s vision, mission statement	Mission statements and future vision found in Startup Estonia White Paper 2020

Narratives provide the push to justify and tolerate setbacks and incites the drive to keep going. (which ultimately serve to push the ecosystem ahead.) Due to the nature of a startup organization, those founding or working for one need the perseverance and mental strength to cope with the uncertain terrain and chaos of starting such a volatile business. Until the company gets off the ground, a startup is often funded personally by founders or through outside investment such as family and

friends, venture capitalists, angel networks, or crowdfunding.²³ The willingness to work all hours, accept failures, and work in pressured environments is taught to be a requirement. The narrative of risk taking and tolerance of failure is woven into narrative and myth. This ties into above technology ideologies, optimism in particular. This also aids in the creation of the culture that surrounds startup life as this self-model feeds back into the system. “The industry's fetishization of failure stems from its broader talismanic faith that major setbacks are simply rewards deferred.” (Silverman 2015: 6). The outcome of the narratives is the same, years of expected hardship and struggle with the apex goal of providing value to the customer. This is the “greater good”. The means to achieve this end are fulfilled by young entrepreneurs with a dream and vision of changing the world. Entrepreneurialism becomes a core part of these individual’s identity and with it, a world view of radical idealism.

²³ Cite??

3. DIGITAL ESTONIA

Regional ecosystems vary due to culture specific innovation settings. As discussed above, a general startup model is rooted in an open, communication driven culture that cherishes an entrepreneurial mindset. Estonia is a European leader in startup innovation and as such, has committed itself to long-term digital policy efforts. In order to understand Estonia's startup ecosystem, it can be defined in terms of Ester's tri leveled framework. Micro- the product and people, the interview subjects; Meso- the instrumental institutions, including such initiatives as Startup Estonia; and the Macro level- the cultural environment of the startup ecosystem. An elemental component of Estonia's startup system lies in its digital narrative, which is fundamentally pushed through national branding initiatives. I begin with an overview of the meso structural and institutional components and then work through Ester's framework to arrive at digital narrative and its impact on the individuals that make the Estonian startup ecosystem successful. Mentioning again that each level communicates with and is contingent on the other two.

3.1 Digital Estonia as the Framework for a Digital Agenda

Infrastructure and policy are the backbone of a startup ecosystem. Estonia's economic and technological track record fuels institutional changes that support new ventures and innovation. These institutional pillars allow for the functioning of successful Estonian startups and are responsible for keeping Tallinn as a global center of innovative activity. The Estonian government encourages digital innovation on multiple levels including fulfilling Bildt's necessary four public policy conditions (ease of market access; rules that encourage innovation; availability of startup

capital; and a hiring environment that enables diversity, including visa availability for tech workers (et al 2016: 19)). Estonia's Startup Ecosystem is supported by laws that open access to finance and expansion making Estonia's small-scale ecosystem financially beneficial for its entrepreneurs and developers.

"The Estonian government has made continuous efforts over the course of the last two decades to build the reputation of Estonia as an advanced digital society and a leading e-government in the world." (Tamppuu & Masso 2018: 5). Estonia considers its prized infrastructure the internet with the aim of digitalizing as many public services as possible (Velmet 2016). Estonian citizens have been adjusting to a digital lifestyle since the first "Tiger Leap" program in 1996, which focused on providing all schools with up to date computers and internet access, and has come to signify the internetization and digitalization of the society as a whole. Many public sector developments²⁴ have led to the possibility of further ecosystem advances and a multitude of public services²⁵ that are now regularly in use by citizens, including voting and filing taxes, all while promoting overall public digital literacy (Tamppuu & Masso 2018: 6; Velmet 2016: 182; Mäe 2017: 33) Since 2015, foreigners are allowed access and use of eEstonia's digital infrastructure by means of e-residency. According to the executive summary of the Digital Agenda 2020 For Estonia, areas of focus by 2020 were increasing cyber security, ultra-fast broadband fiber optic cable networks, 5G activity plan, and adoption of artificial intelligence programs in the public sector, to name a few.²⁶

This systemic approach to shaping the digital transformation of a particular system is termed *digital agenda*²⁷. Estonia's approach is exemplified through the state initiative, Startup Estonia. Startup Estonia is a program beginning in 2015 through executive order of the Ministry of Entrepreneurship, and is the main supporter of the Estonian Startup community acting as an international representative of Estonian public sector driven startup initiatives.²⁸ The organization provides training for startups and members (e.g. offering free model legal documents) and advocates for sector development for economic, social, and political reasons ensuring that the IT-

²⁴ E.g. e-cabinet (2000), through which all government proceedings are digitalized and made accessible; and ID cards (2002), the digital authentication system for all citizens and residents

²⁵e-Public services include voting, completing taxes, filling medical prescriptions, state registries, and data exchanges, for example.

²⁶Government of the Republic of Estonia's Digital Agenda for 2020 docket
https://www.mkm.ee/sites/default/files/digitalagenda2020_final.pdf

²⁷ Definition found : <https://joernlengsfeld.com/en/definition/digital-agenda/>

²⁸ Startup Estonia

sector remains a priority for Estonian policy makers and business leaders. Startup Estonia acts as a mediating platform between members of the ecosystem and legislation and therefore is a great example of the state's digital branding initiative as it funnels from the state's mouth while reaching into active ecosystem institutions.

Through Startup Estonia, the state promotes a strong digital ecosystem claiming to support regional development and science-based decision making. The organization's website declares its aim to "supercharge the Estonian ecosystem in order to be the birthplace of many more startup success stories..."²⁹. Estonia has made clear its priority of ensuring the country's competitiveness at local, regional and international levels. Economic growth is not their only claimed incentive as Startup Estonia desires to enable a particular startup mindset, one that is inclusive of "every single Estonian and non-native resident regardless of age, gender, nationality, location or experience"³⁰. Startup Estonia launched the *White Paper* for the 2021-2027 period as a dossier of future development possibilities and collective visions for the Estonian startup community.³¹ The *White Paper* conceptualizes the organization's action plans for the future, strategic priorities, and desired global positioning. Additionally, this document defines core cultural terms and definitions for cohesive language, goals, and understanding across the community.³² This document acts as a self-model, personifying and describing an idealized community and its desired members. The Estonian government has invested into the building and fostering of the Estonian ecosystem (through a digital agenda), aligned the country's success to that of its digital technology sector as well as identifying itself as an innovative and impactful digital society.

The Startup Visa³³ program (2017) targets non-EU founders to grow their startup in Estonia. This is yet another government initiative to ensure a startup-friendly environment in Estonia. By harmonizing this directive with government programs, the state places stake in the IT sector, the understanding of the startup ecosystem's visions and its global power. The newest introduction is the Digital Nomad Visa³⁴ (2020), which allows remote workers to live in Estonia while legally working for their employer or their own company registered abroad. The Startup Visa and Digital Nomad Visa add power to the digital Estonia narrative.

²⁹ Startup Estonia

³⁰ Idib

³¹Startup Estonia White Paper: [https://media.voog.com/0000/0037/5345/files/SE_Whitepaper_Web%20\(1\)-1.pdf](https://media.voog.com/0000/0037/5345/files/SE_Whitepaper_Web%20(1)-1.pdf)

³² Startup Estonia White Paper: [https://media.voog.com/0000/0037/5345/files/SE_Whitepaper_Web%20\(1\)-1.pdf](https://media.voog.com/0000/0037/5345/files/SE_Whitepaper_Web%20(1)-1.pdf)

³³ <https://startupestonia.ee/visa>

³⁴ <https://e-resident.gov.ee/nomadvisa/>

The Estonian IT-sector saw growth during the time of the COVID crisis, with new investment deals and acquisitions indicating a period of development. According to the Estonian Startup Database, a total of 175M euros was invested into Estonian startups during the first three quarters of 2020.³⁵ Startups generated 782M euro in turnover in 2020, an increase of 43% from the year before. Estonia boasts over 1,100 startups and 7 unicorns³⁶ (as of April 2021) making Estonia the leading country in number of unicorns per capita.³⁷ The increase in employees in the startup sector is a quantitative illustration of the growing interest in the Estonian IT-sector. The state aims to increase startup sector GDP by 15% by 2025.

There are some critiques to the democratizing e-Estonia ideal. Aro Velmet discusses how Estonian e-lifestyle reshapes Estonian cultural heritage and that although it initially served the aim of democratizing the internet and creating democratic deliberation, such claims may no longer apply (2016:182). Velmet argues that the future of the internet is not promised such as the techtopian sublime myths predict but respond to regulation, user demand, historical context, etc. (Velmet 2016: 183). That leads to a second point of the e-state not resulting in greater freedom and prosperity but instead, redistributing power in society by establishing new norms and values of behavior (Velmet 2016: 184). This critique goes against known cultural myths and technological ideologies of “inevitable progress” that boast technological and innovative idealism. The union of technology and politics is perhaps inevitable for future growth, with rising opinions that the e-state is a political and symbolic project instead of promoting humanistic and neutral national progressive values. There is a heavy political agenda. Main stream Estonian news articles have also criticized the mystic e-Estonia, especially response to the COVID pandemic (McBride 2020). It is interesting to observe the discourse surrounding the pride of the modern Estonian state and consider whether trends will continue in this direction. Will this innovation instead lead towards a path of dystopianism?

³⁵ Startup Estonia White Paper: [https://media.voog.com/0000/0037/5345/files/SE_Whitepaper_Web%20\(1\)-1.pdf](https://media.voog.com/0000/0037/5345/files/SE_Whitepaper_Web%20(1)-1.pdf)

³⁶ Unicorn: startup term to describe a company whose goal is to develop and launch an innovative and repeatable business model with great global growth potential; that has a valuation of at least \$1B confirmed by a major international news outlet (Invest in Estonia & Estonian Founders Society).

³⁷ Invest in Estonia article shared by Startup Estonia

3.2 Digital Nationhood and National Branding - Making Estonia global

National branding is important in this context as it supports the overarching digital ideology found in the macro, meso, and micro levels of the startup ecosystem. Nation branding creates a representation of the nation and the representation of the desires it wishes to fulfill. With the Estonian government having such a strong hand in identifying the nation as a digital society, individual formation of self and purpose tie deeply into this virtual state (Annus 2020: 1, 9). It is this socio-cultural construction which builds the individual's self-understanding. One way to concisely define nation branding is to conceive it as a "particular form of national consciousness" that is produced at the intersection of "the nation" and the "tools, techniques, and expertise from the world of corporate brand management" (Mäe 2017: 33). This narrative creates an environment for a successful startup ecosystem and almost guarantees state support of programs that further encourage the success of this industry.

e-Estonia has become an Estonian lifestyle, one that is marketed to the world as a digitally advanced society offering innovative services as a model to follow. Computer code and digital infrastructure have been turned into national symbols, through which digital myth is carried. Labeling the country with the signifier of e-Estonia is powerful as it connotes the continued success of developing digital solutions in government, public management, administration, business, and education (Mäe 2017: 32). (Although Mäe emphasizes e-Estonia as an empty signifier.)³⁸ With this label, the nation has acquired a powerful digital narrative. Now, when one identifies as Estonian, they simultaneously identify as a member of a digital nation, one that is on the forefront of a changing and evolving digitalized global world. Estonia's narrative of a "cool, youthful energy, and people's passionate desire for improving their society" undoubtedly manifests confidence and positivity in the minds of those who create and develop for this sector (Annus 2020: 8).

Belonging to a nation that is highly invested in digital technology and presenting and marketing itself as such, influences many important factors. One, the individual's self-identification which also reveals the workings and ideologies of the field. Two, the values of the smaller communities within this sector which reciprocally aid in the creation of members selves. And thirdly, on a macro level, decisions made within the perimeter of this culture affect reality outside of it. The intrinsic

³⁸ Briefly, an empty signifier is a signifier without a signified Mäe argues the strength in this. (Mäe 2017: 39)

link between the levels in undeniable and the affects substantial. Estonia's e-branding strongly influences all sectors and we can describe it penetrating all levels.

e-Residency, the Startup Visa, and the Digital Nomad Visa offer an image of Estonia that is based on the elements in the broader e-Estonia narrative (Tammppuu & Masso 2018: 9). E-residency surpasses physical space which directly parallels the idea that individual decision has impact on a global scale. The vision of a virtual states injects individuals with the sense that the individual can surpass territorial boundaries and have access to and impact the world. It also allows foreigners to partake in the e-Estonia narrative and discourse convinced their actions similarly have the power to have influence on a global scale. It adds to the narrative of technology being a force for utopian saviorism. "We assume that the ways in which digital technologies which support the creation of a global digitalized state envisioned through e-residency relate to the symbolic meanings and values that these technologies are associated with" (Tammppuu & Masso 2018: 5). Technology is thus infused with symbolic meaning and cultural values.

Not only does the new understanding of a digital nation translate to a newly constructed national identity (Tammppuu & Masso 2018: 15), it translates to the identity of the entire startup Ecosystem that feeds from and feeds off of it. Those belonging to this society partake in this cultural rhetoric, understand themselves as a member of global economy and see their actions as adding to the goals of the nationalizing mechanism. The startups consume the narrative of being a global economic player, a digital pioneer, with the potential to affect their sector on a broad macro scale. By looking at how Estonia is presented to the world, the state's chosen desired narrative, there is insight into the accepted narrative of this Estonian startup ecosystem. The idea of a transnational society through e-services transforms the symbol of Estonia into a globally open state accessible with technological attractiveness. This idea translates to the ideology and narrative of Estonia's startup ecosystem and into the ways the individual member of this community sees themselves and their role in a borderless country. Nation branding and national image support the IT myths and narratives that stimulate and encourage the legitimized role of technology as a constructed discourse. The socially constitutive and politically legitimized role of technology is the hegemonical perspective and the e-nation as an image/symbol further supports this.

3.3 Estonia in COVID and Public Discourse on Digital Insurgence

The COVID pandemic hit Estonia late February 2020 and on March 13th the Estonian government declared a state of Emergency. The interviews in this study were conducted during the period of April-May 2020, with the first respondents having been in quarantine for nearly a month. The landscape during the time of the interviews was one of uncertainty for the public. The state reacted quickly to find solutions for the impacted medical system, the impending economic crisis, while insuring its citizens lives continued as normally as possible (Krusten 2020). In March, Estonia saw travel restrictions, flight cancelations, and international borders closed. Followed by increasing unemployment with over 10,000 employees applying for wage support by April (Whyte 2020).

It was discussed in news media that Estonia, along with some countries, may have a competitive advantage due to an already functioning digital infrastructure (Krusten 2020). In public discourse there was a low level of panic (3 out of 10 according to Politicio³⁹) and it was said “Estonia may be the nation best prepared for the consequences of the pandemic, both economically and socially” (Geesen 2020). General digital literacy made for a more equipped public, one that was prepared to handle the digital transition demands. Estonian entrepreneurs quickly got busy creating digital solutions. Online hackathons sponsored by startup ecosystem accelerations and foundations, project-ed innovative technology including platforms for virus related questions, helping companies connect with employers who lost work due to the pandemic, and multiple volunteer matching services. The technology that was developed during the pandemic period was praised as a clear and definite solution to Estonia’s problems and one’s that could be adopted by the rest of the world. For example, Estonia’s educational sector’s e-solutions were rapidly sought after by many other countries (Krusten 2020).⁴⁰ Estonia was a country to be modeled.

The pandemic outbreak resulted in a surge of telehealth downloads and application creations (Coombs 2020). Remote assistance became a global need and access to remote healthcare services became a swift necessity. Health insurers, hospitals, and the Estonian governments made

³⁹According to Politicio, panic was measured by comparing infection rates to intensity of media coverage, people going on shopping sprees, and other factors. <https://www.politico.eu/article/how-europe-is-responding-to-the-coronavirus-pandemic/>.

⁴⁰ It is noteworthy to mention there is mass interest from other countries (such as Georgia, Ukraine, Belarus, Arab Nations) into Estonia’s e-learning system. 38:03, Page 12. Breakthrough Follow On 1.

a strong push for the adoption and use of telehealth platforms to curb the spread of the virus. Estonia's HOIA app is a strong example of a push from the state's behalf of country wide adoption of a health application (Petrone 2020). It was a first of its kind product that allowed tracking of those infected to inform close contacts anonymously and provide instruction on next steps (Petrone 2020). This application was deemed impressive in terms of development speed and potential, and accordingly received a "warm reception" (*ibid*). Although, according to experts, this app never reached its full potential in terms of helping contain the virus (Allik 2021). The HOIA app has caused many to voice privacy concerns and unprecedented surveillance potential.

Initial positivity regarding to how the pandemic situation had been handled has now turned sour. Current 2021 concerns indicate citizens believe the state did not do enough to mandate and regulate vires safety measures (Allik 2020). News articles describe the government adding "additional stress" onto families due to the mishandling of education transitions (McBride 2020). While others echo the personal data concerns surrounding the HOIA application (Allik 2021). Digital has always been held in high regard amongst Estonia's citizen but there is now increased pessimism that the crisis has in fact uncovered systemic weaknesses of Estonia's agencies and e-State services (McBride 2020). Public discourse framing the states originally celebrate response has been meet with disapproval and skepticism .

4. MATERIALS AND METHODS

In chapter I will overview the process of data collection, method and processes of data analysis.

4.1 Process of Data Collection

Interviews were conducted during the period from April 1, 2020-May 12, 2020. The primary data collection took place through interviews with startup founders, as my aim was to discover self-referentiality from the perspective of industry leaders in startup and Tech organizations. The prearranged interview protocol allowed for flexibility and for the speakers' own interests to guide the conversation.

The interviews were conducted in multiple rounds. The first session was part of a global conference that lasted 24 hours organized and led by team members of Draper Startup House titled "Breakthrough". The Europe conference lasted a total of 4.5 hours including opening and closing remarks with approximately 30-40 minutes allotted to each interviewee. Five subsequent interviews were conducted weekly with new startup founders in a less formal setting. The discussed categories were the same but were arranged as a roundtable discussion with myself, two other DSH community managers⁴¹, and a panel ranging from 2-3 guest speakers from the IT/startup industry. The interviews were presented live and streamed through the company's Facebook platform. Interview data is saved in video format and also transcribed verbatim. As this study focuses on self-description, secondary material such as corporate details outside of necessary discretion will not be included.

⁴¹ Community Manager refers to the person in charge of digital strategies, community organization, and an expert on social networks, for an organization

Companies and founders were chosen based on access and 1) meeting the criteria of role as decision maker in the IT field, 2) positioned in the private sector, and 3) considered a notable figure in the IT industry by their peers (receiving recognition by independent sources such as news articles, speaking at conferences, etc). It was desired to have a wide range of varying sub sectors for diversity and to better assess the situation and experience of the ecosystem as a whole. The Breakthrough conference brought together experts and changemakers from across Asia, Europe, and America on the topic of managing business and life during and following the COVID crisis. The main topics of the interviews were predefined and included: how to form and manage remote teams, spotting pivot opportunities in 2020, dealing with financial hardships, and dealing with pressure. Discussion began with set questions revolving around these base concepts but naturally flowed to the speaker's personal interests, challenges, or successes. Additional questions were tailored and prepared with knowledge about specific company and CEO.

Main Interview Questions:

- What were the immediate challenges you faced when COVID hit?
- What were the first actions you took when this crisis occurred?
- Do you have a comeback plan? What is the timeline? What will change?
- Imagine the next normal in your company, industry and overall in the future

The purpose of the webcasts was twofold: 1) to create a forum for founders to share their experiences in order to educate others and open up space for peer discussion, and 2) to connect, unite, and attempt to make sense of the novel global situation taking place early 2020.

Interviews were conducted with Rain Rannu of SuperAngel, Paavo Paulkin of Netcorp, Brigit Lao of Foundation Innove, Priit Potter of Plumbr, Argo Sildvee of Velvet, Kaidi Ruusalepp of Funderbeam and Priya Abraham of Cyberconnecting.

4.2 Analytic Tools for Discourse Analysis: Approaching the Data

Discourse analysis examines how language functions in different cultural and social contexts providing an understanding of a specific social group and how they communicate (Bryman 2004: 265; Hodges & Kuper 2008; 570).⁴² Using discourse analysis as a tool, I aim to analyze the meanings expressed in language through a theoretically informed reading of the subject's answers. This method has the strength of revealing social consequences of the discursive presentation in a particular context or situation (Bryman 2004: 265). In my sample, discursive methods focus on the attitudes, values, and beliefs shared that are taken for granted, genuine, or natural in the context of COVID-19. This method will allow for the exploration of how narratives form to construct how these individuals view themselves at present (interview period) and as future participants in the global digital semiosphere.

This analysis method brings with it some conditional disadvantages. Interview structure as a data collecting tool poses various challenges in terms of data authenticity and true presentation of self, attitudes and beliefs. One being, speakers tend to tailor stories according to their audience. The legitimacy and coherence of a self-narrative is influenced by the audience and interviewer who cues the storyteller, at times interjecting with their own information, and guiding the story towards more sub culturally appropriate plots and morals (Ibarra & Barbulescu 2010: 143). In this case, participants were in a panel setting amongst other regarded members of their field led by a DSH moderator who guiding the session in a particular direction. The moderator and other panelists had the ability to interject, comment, as well as ask their own questions of the speaker. This had the potential for guiding respondents in a particular direction. Another influencing facet is the known audience of the speaker. In all interviews, the conferences were marketed and tailored towards the speakers' own community, mainly early stage entrepreneurs seeking guidance or support. Both reasons may cause speakers to express themselves in a particular manner or to include or exclude chosen pieces of information. As this study is based on qualitative analysis, there is a degree of researcher bias. This includes the approach and reading of answers when in

⁴² Discourse analysis can be approached in three categorical ways: 1) Formal linguistic discourse analysis focuses on text samples and linguistic study by descriptive methods. Formal properties such as sentence structure and use and combine structural units are of interest. 2) Empirical analysis or conversation analysis (applied linguistics), focuses on the use of language in its social settings through which social practices are constructed. 3) Critical discourse analysis, also termed Foucauldian discourse analysis. (Bryman 2004: 265; Hodges & Kuper 2008: 571)

search of certain themes and interests. Particular to this study, I was unable to consider my method of analysis before conducting the interviews. If it had been possible, I could have built analysis methods into the interview itself thus ensuring a clearer and more secure data set. I also was not consistently able to follow up with critical interpretive questions during the interviews. Although when possible, I condensed and interpreted subjects' answers to clarify meaning, which allowed subjects to confirm my understanding of their response.

To my benefit, my position with Draper Startup House (DSH)⁴³ allowed me access to prominent Startup leaders and permitted these interviews to take place. As a partial insider, it enabled context specific discussion in the interviewee's already cultured language and terminology. I was aware of general organizational structure but was in a position to learn about specific internal workings and culture. Since I do not consider myself a complete member in the field, I believe I am able to take a critical stance and reflection on the subject that allowed for a more detached analysis of the interview data.⁴⁴ The interviews were structured to follow a three-level modeled timeline of events (specifically- main impacts and challenges faced, logistics and comeback plans, and future scenarios). This made it easier to create categories for codification upon studying the data. It was advantageous to have lengthy descriptive answers to work with. In part due to open-ended continuous interviewee statements.

4.3 Process of Data Analysis

I will use a combination of interview analysis techniques to note patterns in meaning and integrate data, in order to make conceptual and theoretical coherence from a large quantity of text (Kvale 2007). As I am primarily focused on the meanings expressed by subjects, coding is a tool I have chosen to use for content analysis. Content analysis, or coding (Bryman 2004: 180) refers to labeling of one or more key word to a text segment in order to identify it as a categorical grouping (Kvale 2007: 5). Using content analysis as an approach allows for the examining, comparing, conceptualizing, and categorizing of data in a qualitative manner (Kvale 2007: 6). This will allow

⁴³ I have worked as a part time employee of Draper Startup House as a Community Manager beginning June 2019

⁴⁴ Participant as observer:

for comparative analysis of the relations between the codes, domains⁴⁵ (groupings of similar themes or codes), and overall context.

The first step following transcription was to listen and read through the text multiple times making notes about my first impressions regarding keywords, phrases, and indicators of themes. Transcripts made it easy to locate word and phrase use and to discover discursive similarities between speakers. Working with a hard copy transcript, colored highlighters were used to mark different common codes. Dominant codes/themes were categorized as *domains* (See *Appendix 1 & 2*). This is not an exhaustive categorizing of codes but an attempt to trace as many overlapping categorical terms amongst the speakers. Categories were chosen based on topics that appeared in theory as well as those frequently mentioned by the respondents. The logic in domain creation was significant words and overarching themes that relate to defined startup values also possibly evident of ideological perspectives. Each was labeled with a unique category name. These segments were then grouped and recorded in a separate document. (At times it was necessary to condense meaning into shorthand, or briefer statements in which the main sense of what was said is rephrased (Kvale 2007: 7). This allowed me to state what was meant by the subject as simply as possible in order to tie together consistent themes into descriptive statements.)

Representative quotations from the text were then underlined and included in the second revised document containing the grouped domains. In the same step, aphorisms and metaphors were located that supported cultural views or could be considered symbols for culture specific ideology. The text was examined for word choice that also pertained to themes or to common technological narratives (e.g. pivot and disrupt). After analysis, connotative codes were mapped out in the final phase. This allowed for ease of perceiving any consistencies in frequency and use. Connotative codes refer to outside myth and narrative which the speaker is not necessarily aware of (Barthes 1985: 49). This is to see which narratives transcend across different sectors to see how events are perceived similarly at the reflexive level of this particular community. I took note of any possible future oriented myth deriving from the experience of COVID pandemic.

I arrange my findings below with 1) key themes and domains in reference to experiences during the onset of the pandemic (Chapter 5.1 Overarching Themes), 2) followed by common future

⁴⁵ James Spradley offers a definition of a domain as “any symbolic category that includes other categories is a domain. All the members of the domain share at least one feature of meaning” (Spradley 1979:100)

expectations/narratives (Chapter 5.2 Future). Within both these categories I group the common codes spoken, identifying dominant key words used by the majority of respondents.

5. ANALYSIS

Categorization of like domains allowed me to determine the presence of common topics within the subjects' answers. Consistency across speakers revealed uniformity in ways of thinking that have resulted from being members in this community. Each domain consisted of like codes and sub categories that presented startup values or principle beliefs. (see *Appendix 1 & 2*) The significant topics and key words were: digitalization, positivity (team spirit), pivot (resilience), opportunity/chance, community (people first attitude), digital saviorism, global/globalization, new normal (digital nomad, remote, hybrid). Some domains overlap but I aimed to join together those with similar intentions. Statements are those made by the speakers even if not always directly prefaced with "interviewee said, subject said, member said, etc...." In this chapter I provide a descriptive overview and follow with explicative analysis in Chapter 6.

5.1 Overarching Themes and Key Domains

This sub chapter defines dominant themes according to startup core values providing an outlined, structured breakdown of the respondents' discourse.

5.1.1 Digitalization

The most consistent domain was that of digitalization. This appeared both in discussing present necessity and very heavily when discussing the future. Answers for this question were split into 1) those who needed to pivot business model, 2) those whose business model was not necessarily affected but terms of working had changed, and 3) those whose business was either already all

digital and remote OR selling a digital service and saw an increase in demand during this time. In terms of understanding the present situation, founders whose businesses were already mostly digital and remote, stressed an easy transition not mentioning much stress at all. As many of the founders' business were SaaS (service as a service), there was not much change in terms of day to day work activity. Instead, these subjects were very calm when addressing the question of first steps taken upon comprehending the severity of the pandemic. *"We are fine."* *"Nothing changed for us."* A majority of the subjects were already working remotely prior to the pandemic and were comfortable and well accustomed to using digital resources. Their teams also had a much easier transition or explained feeling almost none at all. These companies certainly had a competitive advantage. Founders emphasized the importance of digitalization as a survival tactic. *"I think organizations that are not digitally mature, were hit really hard and affected the most. We are a fully remote company. We are a team geographically dispersed across different time zones, we're used to working remotely, for us this is business as usual, not a big change."* Companies whose business and working model was already digital and remote spoke of this period with ease without requiring a transition phase. For them, immediate impact was solely the removal of face-to-face interaction *"but no real change from the working point of view"*.

With the need for full transition to remote work, tools to collaborate and manage work virtually became a new norm. Companies saw the importance of project management and remote communication tools, and focused on obtaining reliable and secure software to ensure productive methods of work. The companies that has the easier time during the crisis already had a majority of their collective communication on a virtual platform. *"We were basically prepared for what might be happening in the very near future"*, one respondent confidently reported.

Companies offering digital services, SaaS, observed an increase in product demand. One founder who specialized in helping businesses digitalize, expressed growth in demand for their product across all sectors. Another founder in the Cybersecurity sector spoke of increased awareness and interest in her services as well. Overall, digitalization was an immediate demand. The education sector had to immediately transition into remote learning, as well. It was described as an extremely challenging period for this sector. It was pointed out that some educational services received an immediate increase of 3,000 times more subscribers. This experience contrasted the companies that sold physical products via a digital medium.

Those whose businesses did not sell digital services all spoke about customer doubt and uncertainty. Not necessarily in terms of their product use specifically, but regarding the general attitudes of consumer as skeptical and uncertain due to the crises. Subjects whose startups offered physical products said “*people were panicking.*” Startup companies may be confident but acknowledged that their customers harbor a lot of insecure feeling that come through in their purchasing and consumption decisions. To compare, the speakers of digital service companies did not speculate or question general consumer uncertainty to the same degree. This was not seen as concern. Overall, both felt customer priorities had suddenly changed.

In dialogue revolving around digital success, speakers noted that “*traditional businesses are suffering*”. This was always referred to in terms of an “other”, someone outside their startup sector. We have arrived at the point where business that are not almost entirely on a digital model are considered “traditional” or “old fashioned”. Interview subjects noted that these companies are only now seeing the necessity of change towards a digital agenda. A change that “*needs to happen*”. This also implies that the offline business model will be one most companies move away from.

“But I think what he's saying is that we as humans, businesses, families, countries, governments were forced into adopting and accepting technologies and changes. The normal circumstances would have taken years. It's education, it's working from home, huge government agencies and huge corporations work from home. It's about e-health, it's everything”. The rapid degree of digital adoption is emphasized. Founders were adamant in their beliefs that “*We can't go back*” in terms of this newfound digital progress. The world now sees that this “*do-able*”. Perspectives have changed and “*it is a good period for us*”. The positive outlook of promise can be extended beyond individual companies to the entire ecosystem. As one respondent claimed, “*The shift towards digitalization is a good period for all.*”

5.1.2 Positivity

Perhaps of equal mention was the topic of team spirit and the need to remain positive. Founders said they felt responsible for their employees' spirits and found creative ways to ensure that some aspect of humor and playfulness remained during the shift to at-home remote work. Practically all

interviewees regarded being positive as a necessary state of being through the course of the pandemic. Either directly “*we need to keep team spirits going in tough times*” or with related expressions such as “*It has to be fun for our whole team*”. Founders pointed out that they searched for new ways of keeping colleagues energized and engaged. “*As leaders we have to be innovative. Lots of non-work hangout via zoom or google hangouts. In Slack having deep humor chats with laughs. Teasing and laughs are needed.*” Humor was said to be a great tool for keeping moral high. This ties directly to the notion of company spirit and community. Interview subjects spoke about humorous chats in Slack⁴⁶ that are not work related, encouraged sharing of animal videos and pictures for the sake of “*...trying to foster a positive mindset.*” “*The problem is keeping moral and spirit alive.*” (Which has been discussed is an important condition for the startup environment). Multiple founders mentioned the call for humor as one of the first step they took and advised others to follow suit.

5.1.3 Pivot

Many subjects spoke of their ability to recalibrate and pivot. Both in terms of dire necessity, as it was their company’s survival at stake, or in finding better strategies for growth due to the circumstance. Those that were not digital, said that they immediately moved to become an all-digital work space with a bit of required time for adjustment. These were the companies that had to “*roll with the punches*”. One of the first problems described to be solved was “*So, how do we pivot?*” The term **pivot** in particular is used chiefly to speak about company change. “*... whether it's testing your offers, or testing new products, ... just keep going ..., the word of the day, and I think the word for any startup is **pivot** ..., you just got to keep going and just don't give up...*” Similarly, the importance of changing in the moment was emphasized: “*Change now, if you don't do it now, there will be no future growth.*”

Companies that experienced *disruption* were those who needed to pivot business model and those whose terms of working had changed. These founders were the ones that discussed their company pivot at length and spoke heavily about the necessity of being able to be **flexible** and

⁴⁶ Slack is a digital communication application

agile in a crisis situation (compared to their counterparts). The “*business we had to invent as a result*”. This identifies the creative and flexible characteristics needed of an entrepreneur. “*Let’s assess the situation as a startup.*” This further implies a set of characteristics and ways this community is expected to handle challenges, with resilience and fortitude. In this domain I noted the constant mention of the word **resilience**. “*Every entrepreneur has natural resilience*”. The principle of never giving up and working through challenges is emphasized. “*We are flexible. We are a startup*”. “*So I think one of the biggest thing for us, and I think for all startups, entrepreneurs is that you're going to try a lot of things that are not going to work. But you have to keep trying, you just can't give up. And it's really about persistence.*” These excerpts evoke the startup characteristics mentioned in above chapters and in previous studies.

Many companies point out that they initially came together to brain storm in a group setting. This reflects the linear ‘non- hierarchical’ scheme of companies similar to that described in the Startup Culture chapter. The leaders collaborated by inviting all colleagues to participate in discussions regarding the immediate effects of the pandemic as well as projecting future challenges and problem solving together. It was pointed out that this created an environment where all member’s voices felt heard and concerns could be addressed (some overlap with Community domain). “*Your employees’ know the secrets of company and weak points of company, if they can see risks, this is the best risk exercise.*” The interview subjects stressed that they were consistently aware of pivoting needs and most companies had multiple brainstorming stages. Subjects referred to this time as the space to discover the **change** and **opportunity** hidden in the crisis as a team. It is important to note the collaborative effort in decision making. This opposes traditional business structures where a select few make decisions, delegate and inform others of new direction, plans, etc.

Vision was also mentioned in some form or another by all the respondents. Not forgetting about the “*big picture*” and “*reminding each other why we do what we do*” were frequent statements heard. If this is to be our “*new normal*”, “*then never forget about the vision and never forget about the big picture, even if it's a crisis time and especially look in the future on how will we change.*” The “*big picture*” respondents refer to are their company or collective missions, the cultural myths of the community. These serve the purpose of creating community affiliation (bringing people together) through ideological means. Statements directed to the audience to help entrepreneurs included: “*find the opportunity*” / “*you can create impact from anywhere*” / “*If it’s*

your dream to start a business, you will. ” / “There is always a way out and you just need to find a better solution”. The respondents spoke self-referentially as well as addressing the viewers in terms of these “missions”

5.1.4 Opportunity

The idea of opportunity was expressed in two distinct ways in the interviews. One is that certain companies said they saw increase in business demand due to digitalization (as mentioned above), the second is the attitude of opportunity. Most interview subjects pointed out that they saw a positive turn or opportunity in the crises: *“Crisis had good impact on business, a positive impact”* (e.g. SaaS, EdTech, Cybersecurity respondents.) For startup culture, crisis and challenge always mean opportunity and the COVID pandemic proved an ample pain point⁴⁷. Respondents described this virus as a chance to solve a problem. One speaker asked of his team : *“What extra things can we do in this challenging time to make the most of it and find the opportunities.”* One founder spoke of the numerous partnerships that came out of necessity. Another subject said he found the opportunity to speed up some of their company’s digital service offerings, such as making it a priority to speed up completion of online courses.

“And I think this, this crisis could give us pretty innovative ways how to solve this problem more efficiently.”

*“...we said okay, well we have to **pivot**. What are we going to do here?... let’s take this **opportunity** with COVID and try to **reinvent** our business.”*

*“...but it’s clearly an **opportunity**.”*

“We had to use the crisis immediately... We used the crisis perfectly.”

Opportunity not just in terms of happy coincidence, but specifically the positive manner with which interviewees spoke about the pandemic. This is *“the growing zone” – find purpose, be grateful. This is when the world is becoming a better place, when we can take the perspective of finding **opportunity**.”* *“It’s actually an **opportunity** for us. It a chance.”* It is important to note the language used in this instance. This was one of the most important impressions because it is

⁴⁷ A pain point in Startup/IT vernacular is a persistent or recurring problem (as with a product or service) that customers are experiencing

expressly what the startup culture along with all related institutions have instilled in these individuals. It is distinctly taught that an entrepreneur's objective is to find solutions, for whatever the problem may be. Startup ideological principles are placed into practice through the speakers' acknowledgement of positivity in crisis.

5.1.5 Community

The fifth domain is that of community with an emphasis on people first. Types of management and leadership was discussed and relationships with colleagues and consumers emphasized. In terms of handling employees and communication, the topic of transparency was highlighted. This parallels the startup "hierarchy"⁴⁸ and culture of open communication across all levels. Entrepreneurs manage the communities around us, and in doing so, they carry around large amounts of responsibility and can affect a lot of changes (respondent answer). Multiple respondents emphasized that everything comes down to personal relationships in startup success. Due to this 'natural' fact of business, founders had to immediately find a way to transfer this impact through digital alternative means. One of course, for maintaining the company logistically and second, the necessity of fostering the relationships that startup ventures are built on. One way to do this was founders sought digital equivalences to networking type sessions. Online communication had to mirror real life, Slack systems replaced in-meetings and brought people together on one platform.

Managers talk about 'my people' and how to "take care of my people". Democratic management style was emphasized and empathetic communication styles highlighted. Founders said they felt it their job to take care of their employees, customers, and some felt it was their mission to help the entire world.⁴⁹ *"I am CEO, so I have to keep in touch with my key people... I'd rather to call or just to have a Skype meeting. And then we have those 30 minutes, check-ins, three times, two times a week, just to keep the info flow going"*. On a micro scale, internal business level, the founders convey they feel responsible to show respect and care for both employees and

⁴⁸ Hierarchy is in quotes because startups aim to have level ranking and position.

⁴⁹ This topic will be discussed more in a later section but I group transparency with these bigger mission statements because the ultimate intention is one and the same.

customers, and one manner of doing so is through qualities of honesty and sincerity. A couple subjects spoke of the necessity of trust. Trust for the founder and the customers' trust in you as a founder. This domain indicates a "people first" approach. This aligns with the ideology of technology as a savior (providing "good") and a cooperative view of humanity. Methods of handling communication came down to empathy regardless of sector. Respondents were adamant in their understanding of the challenging position most people were placed in due to the pandemic (economic, work/home life, etc.), and emphasized treating others with patience and consideration of circumstance (e.g. not expecting swift replies to correspondence).

Respondent directly said they feel responsible for the people around them. *"So, you know, this is our **responsibility**, I feel this is why we are here. And so as far as [company name omitted] goes, that's our responsibility to be there, and then help revive in our own little ways, this entire system as much as we can."*

*"...we become entrepreneurs to, you know, take on the **responsibility** of whatever world that you want to build, on your shoulder"*

*"...you have built for this, you're put in this situation because you are trained and you have taken up this **responsibility** of being a leader so this comes as a part and parcel of the job."*

*"So while we battle the realities of our own business, on one end, it also is our **moral responsibility** to fight for the larger cause of the community."* I find this an important example of the power of digital ideologies. Their individual descriptions of self are engrained with value statements of startup culture. Founders place responsibility on themselves as well as on their company and community to fight for a cause greater than themselves. This will be further discussed in Chapter 6 Discussion: Interpreting Founder and CEO Interviews.

5.1.6 Digital Saviorism

The self-described need to impact change I have referred to as "digital saviorism" as the respondents have taken a hero role in the course of the pandemic. In this domain lies the sharing of knowledge and altruism. Nearly every member spoke of either making educational courses available for free, providing local communities with computers or products, or offering free

utilities- the IT world's version of community service. Multiple organizations gave computers to low income families:

"...every child should have a computer. It's sort of like the one who didn't, we had a national collection or call for computers. So everyone, even private persons who could donate the computer, they repaired it and gave it to their pupils. So everyone actually had a technological device for studying. And then the private companies who actually provide the T, 3g or 5g connection, they upgraded the chips in the mobiles or in a computer for free."

"We did our small part. We gave almost hundred computers to families with ... And, you know, in this family, there was maybe like five kids, but just one computer. So we gave them three computers so they could take part of that. So this is just one small thing. But very many companies and including some startups have been done those nice gestures during the crisis. And, you know, many of them will continue to do them afterwards as well." Providing such products and services was seen as a responsibility of the startups. The second quote also maintains that companies will actually continue in these altruistic ways, it is in line with cultural values. This develops from the ideology that every citizen needs to be digitally literate and have access to digital devices. In a manner of speaking, this ensures steps towards the Techtopian ideology of advancing society forward through technological means. If everyone in the country has a device, it performs the narrative of an advanced digital country.

Others spoke of a boost in webinars and YouTube "How To's" (note: which also have the potential for global reach). Echoing the ideology of a free flow of knowledge. Another subject and his team arranged and hosted hackathons, an event with the purpose of collaborative computer programming that can have an extended reach. The goal is to help, a "360degree circle", sharing knowledge within the startup ecosystem. Founders felt the need to be altruistic *"and also companies have helped those people in ways that they didn't do before."*

"It's about mentoring as many companies as possible. We are taking care. We are taking part of a global crisis, as mentors and encourage our team members to take part."

"Because I think this is such a platform for everyone to learn through everything", referring to the pandemic. *"So what can we learn from each other?"* Subjects were quick to jump to the assessment that this is a learning opportunity.

"We have seen that there are so many new companies, people think also towards more digital service offerings that they need. They need knowledge, they need to understand how to run

their services well. And we saw that there's so much know how that we have that could be so, so useful to that. So that's, that's definitely one of the things that we are going to do.”

“We see that there's so much that we can bring from the customers who are more advanced and explain and teach the customers who are still starting.” The respondents speak about actively engaging in knowledge exchange, even providing a platform for more accomplished businesses to help beginners. Founders expressed their desires to continue to help and mentor the public by encouraging viewers to reach out via social media and LinkedIn to ask any further questions.

One subject spoke about the “wonderful opportunity” to educate those outside the IT/startup ecosystem on digitalization. Since all companies are going digital or trying to do things digitally: *“this gives a chance to learn how to get to customers digital”*. This is noteworthy because it is not just educating within their ecosystem with internal cultural knowledge and narrative but educating those outside the community to the workings inside the system. The aim of which is to influence adoption of digital tools and know-how, to adopt the digital lifestyle. The distribution of products and knowledge furthers the digital agenda by placing digital access and competency in the hands of its consumers. In the grand scheme of things, this is forwarding the aim of the Entrepreneurial Ecosystem through increased acceptance and dependency.

5.1.7 New Normal: Work/Life balance & Role Changes

A focus in all sessions was the shift in work/life balance due to relocating to the home. The concept “new normal” was expressed a lot, both in terms of present changes to one’s way of life and in terms of what a “new normal” post pandemic could look like. The concerns respondents expressed are ones not limited to the startup ecosystem but felt by many individuals impacted by pandemic lockdowns.

A challenge that most interviewees pointed out was the multitasking that had to occur in the home. If they had not been remotely working before, they were now at homebased, and if they had before the crises, they found themselves in the home with family, pets, and other people’s schedules and concerns. Everyone was forced into a new situation of feeling “on” 24/7. The initial relocation indoors brought with it complications of balance and boundary as mixing home and

work life for most people was a new concept. Role and identity of individual member needed to shift accordingly.

“When should we work? When does the work they start? Is it from 9:00 to 5:00, as it used to be? And is it more flexible and so on? Should I be at the computer all the time and the house should organize and work? And maybe the most difficult question is that people are not sure how they will be evaluated.” The pandemic caused disorder in day to day life that conflicted with individual’s established identity and lifestyle balance. One aspect of their identity, “work self”, has come into conflict with other differentiated modes of behavior and being. Resultingly, new roles and identity must be created to adjust to this shift. According to the respondents, there was also concern regarding how one would be evaluated in terms of work presentation, quality, etc.

Travel had come to a standstill so it was no longer only those that had the freedom to work whilst traveling (known as digital nomads) that were free from an office, but many who are not considered nomadic but now work remotely. This is a new way to identify. It has shifted our concept of a “digital nomad” and will shift how individuals define themselves.

Mental health was a regular topic that fell alongside the need to find balance in one’s new working conditions. Many subjects emphasized the importance of the obligation you have to yourself and others to keep your mind healthy. (Because if not, you will not be able to help the world. The idea that what you do in your personal life makes you successful, was touched upon.) An entrepreneur’s healthy lifestyle impacts the success of his/her business venture, sale of products and services, and aptitude of the team. Adding a healthy lifestyle *“to your personal daily agenda, in order to display perseverance in order to display vision, and also to keep your team motivated, because not everybody on your team might have a similar level of perseverance, or resilience that you, as a leader actually have.”* It is the responsibility of the leader to maintain their well-being for the purpose of others, whether that be their direct team, their larger community, or in order to make impactful change on the world. This also speaks to how one is perceived by others. *“If you disseminate, if you radiate well-being, then you also build trust, nobody would believe and resilience trainer who always looks exhausted, and who is actually at the verge of a heart of a nervous breakdown or nervous attack. So I think it's really radiating trust. And for that purpose, you really have to look after yourself.”* Such examples indicate the startup value belief that micro decisions have the power to affect lives outside one’s own. Through internalized social norms,

members take pride in their personal health and wellness lifestyle in addition to professional ambitions.

5.1.8 COVID Reveals Positives

Each founder discussed some manner of positives revealed through the COVID pandemic. Though the word uncertain was used often, everyone celebrated this crisis as an opportunity in one way or another. For some this meant business was expanding rapidly, for others it meant a necessary pivot resulting in them working in a new undiscovered way. Respondents specifically noted that new effective mediums of communication have been learned, new products and services discovered, and for most people, the introduction of a new working style. *“And I think this electronic meeting culture that is now, you know, advancing, I think that's going to more or less stay because people are feeling this is way more effective. And every time people are discovering the new tools or working more effectively together while being physically about.”* According to an interviewee, Zoom, Slack, and other conference applications taught the lesson of efficiency and time management. The possibility of remote work has shown to be possible for employees in most every sector. *“Things that were said were never going to happen, will happen.”/ “Companies realize that YES it's possible to work remotely. AND workers will know that it's possible and not want to go back”*. Due to forced remote working and schooling, digitalization has accelerated faster than society has ever seen.

In general, the founders stressed an overall increase in general digital competency, and this increase was rapid. The adoption rate and knowledge growth were regarded as an extremely positive results of the virus. *“But I would say that one of the best things also which came out of it is the digital competence, the rise of digital competence in adults and teachers as such, so what we didn't manage to do in 20 years we have done in two weeks.”* Digital literacy is a key component in furthering digital adoption. If the public is more familiar and comfortable with using digital tools, there can be a move in the direction of a more digitalized society. *“So when you didn't pay attention, how teams for example, work or business Skype, then you were forced to figure it out within hours. So sort of like the pressure behind it.”* Those that had not taken the time to learn, or did not deem it necessary to learn, were essentially put in a position where they were forced to. The

digitalization necessity reached farther than companies' individual needs to survive, but to the public who needed the tools to continue with their daily life.

Founders spoke about change in consumer's attitudes towards each other and the world. *"The idea of being busy is changing. Everything is humanizing. And value time and who they're spending it with. And being 'busy' isn't popular'. It's taking care of the people around you."/* *"People are more intentional. People are more aware of each other. People have more time to think of their lives and dream when they're home. To think of the future."* Founders spoke about individual consumer mindset change in terms of unity. Not just startups but individual citizens stepping up to fill a void. *"And I think that due to working remotely, we are much more intentional with what we say and how we get to know people. So we have to be aware of what they're going through. But I do believe that we all are living with a keener awareness of the need to be empathetic."* This adds to myth of a utopian digital world. Many speakers hope these positives aspects will remain when things 'return to normal'. Respondents associated the increase in digitalization with having a positive humanistic result- individuals are able to use their free time in a more fulfilling way and also become more mindful in general.

To summarize, the most often discussed themes were digitalization, positivity, pivoting, opportunity/chance, community, digital saviorism, and the "new normal". These domains included codes that allude to known startup values and beliefs of agility and flexibility, innovation, freedom, authenticity and creativity, and collectivism.

5.2 Future

"...the decisions people and governments take in the next weeks will probably shape the world for years to come."

The second half of the interviews focused on the future after COVID-19. What can founders see as a possible direction for their company, what trajectory is the sector going in, and the future in

general for their field? “Future- oriented narratives can describe major initiatives that are planned (e.g., major investments in a particular technology, the creation of a new group of funders or upgrades in infrastructure) and how they are expected to impact the future trajectory of the ecosystem. In essence, they communicate what a possible future might look like” (Roundy 2016 :237)”. The possible future outlined by the respondents is collected in the chart below (see also *Appendix 3: Future Domain Tree*). The key domains are: digitalization, consumer behavior change, remote lifestyle, and globalization.

5.2 Future Oriented Narratives (From Interview Data)/ Domain Tree provided in Appendix

Digitalization	Consumer Behavior Change	Remote Lifestyle	Globalization
Global digital agenda - Digital collaboration - Digitalization demand - Digitalization necessity e-Services -E-health, e-Edu, e-Gov	-Digital acceptance -More use of digital Services and Products	Change in concept of work/working relationship -Work/life balance -Digital Nomad Hybrid work/learning	-Global vision for themselves/self-referential -Global vision for company -Global vision for sector and ecosystem

5.2.1 Digitalization

The first future oriented narrative I observed was that of digitalization. This includes a global digital agenda, with digital collaboration, digital demand, and digital necessity. Interview subjects described an increase in IT services available on the market within the first 1-2 months of the pandemic (March-April 2020) and just as digitalization was necessary in the initial stages of COVID-19, digitalization will continue to be a top demand in every sector once the situation normalizes. According to the speakers, as a society, we are moving towards a global digital landscape. (This is spoke about very positively and emphatically.) Founders describe this next phase as a “new wave”. *“Everything will operate differently!”/ “And the decisions people and governments take in the next weeks will probably shape the world for years to come.”/ “It is better to continue with a digital agenda that has proven so successful”*, one respondent advocating for keeping things digital. *“A lot more money being spent on modernization of your living spaces, workspaces, and so on.”* Modernization in this discourse refers specifically to rise to meet new digital standards. *“...we see some efforts from companies which are actually speeding up their*

digitalizing process, compulsively, somehow.” Companies are feeding into the cyber myth and feeling as if they must adhere in order to not get left behind. It can be summarized that those outside the startup ecosystem will begin to adopt digital practices and build business around new necessary digitalized components and a new understanding of what is possible with digital tools.

Founders say they acknowledge the already changing structure of the entrepreneurial ecosystem from a more regional level to a larger global scale. *“So, you know, 30 years ago, most top offices were only in Silicon Valley. Now we see that everywhere. Back then, this was a very exclusive club. Now there's way more former entrepreneurs who have become investors, that are angels, that are investors in every stage of the startup journey in many, many countries. So the model itself is very much evolving.”* The digital landscape is expanding to include a wider population and the structure of startup ecosystems are expanding and changing thus encompassing a larger semiotic sphere. The implications of an increase in individual digitalization means the possibility of a growing digital ecosystem:

“But now with this increase of the remote work, I'm clearly, you know, seeing and I'm interested in solving some of those borders, because if you're doing remote work, then it doesn't really matter if the founder is on the next street or is in the other side of the world because you're still communicating through, you know, Zoom or hangouts or any of the electronic channels.” Respondents say they see a growth in possibility and as a result, the global ecosystem will expand.

The second topic within this category is that of e-Services and microservices. Microservices are coding “architecture” that arrange applications as a collection of services to serve a business goal⁵⁰. (Amazon, Netflix, Uber are examples of microservices.) It is a method of digitalizing or making available the scheme of digitalization. Microservices that were mentioned in particular were crypto related, banking service such as micro-payments, and micro-mobility (shared system of bikes, scooter, etc.). Government services and portals will be transferred to a digital platform, if they have not been done so already. Examples given of this were e-Health, e-Education, and e-Government. The directly articulates that citizens’ every day activities will in some shape or form be transferred to cyberspace. The respondents also viewed this transition as preventative in the case of future disasters- therefore a change that society needs to make immediately and swiftly.

⁵⁰ <https://microservices.io>

5.2.2 Consumer Change in Digital Competency

Founders expressed they predict a change in consumer behavior in regard to future demand and purchase choice. This shift will be spread even across all sectors. The founders spoke of a general transformation of the “everyday” “ordinary” person’s use and demand of digital products and services. *“Our customers are saying like, actually now’s the time to change something and go digital.”* The prediction reveals more digital consumerism and acceptance of it. *“For instance, all the startups that focus on home delivery of goods are now doing very well because suddenly there has been a very, very dramatic shift in consumer behavior that was forced in the crisis. But there is a very high likelihood that this behavior will continue after the crisis. If you get used to ordering a lot of good stuff at home, then you might do it also one year, two years, five years from now, and there you have it.”* Consumers are adopting digital services in to their lifestyle and are beginning to enjoy and rely on them. Additionally, respondents’ discourse reveals their own inclination towards a desire of a wider digital acceptance, and therefore a wider acceptance of techtopian ideology. This change is spoken about in terms of *“consumer mindset change”* and *“consumer psychology change”*. Furthermore, expansion of technological utopianism and digital sublime onto customers results in revenue and sales. A greater number of consumers agreeing with said principle and myth furthers the entrepreneurial ecosystem’s success.

5.2.3 Remote Lifestyle

Remote work was a key topic across all interviews when it came to future predictions. *“There has been a dramatic shift towards remote working at the moment and the remote workers actually gain a significant competitive advantage”* Life after COVID is predicted to change employer and employee ideas of what day-to-day work can look like as well as what work/life balance means for someone in and outside this sector. It is a new way of understanding one’s identity and role. *“The world is going to realize that remote work from home will allow some possibilities they did not have before.”* This directly targets the mindset of members within the community and will certainly have an impact on the approach of work organization in the future. The majority of

speakers discussed plans of their companies remaining in a remote working environment and imagined others to do the same. If not fully, then certainly hybrid possibilities for all sectors. There has been an influx of remoting working tools that has cleared the path for remote work as a norm for the future.

As such, a surplus of remote work has the effect of allowing employees to work from anywhere, changing lifestyle and consumption behavior. Respondents said that companies need not hire locally anymore, which will dramatically change the understanding of what it means to be a member of this community as it makes inclusion from almost anywhere in the world possible. One founder notes that although the digital nomad movement has been on going, there will be an increase in interest in this particular lifestyle and with that, an increase in nomadic centered services and programs (such as the startup visa). It was noted that the implications are boundless because new institutions need to be developed in order to make this option possible on a large scale. One subject spoke of the new demand for remote working health insurance which secondly requires certain governmental and health policies to change accordingly. This shift challenges the traditional worker/employee model. Collectively, the group said that global expansion is possible now more than ever before due to new hybrid work options and a newfound interest in a digital nomadic lifestyle.

Respondents in the education sector commented how teachers and schools are already looking towards a future with remote learning. Some form of hybrid learning is predicted to remain. *“I think for education, it’s really hard to, from Estonian perspective, to go back to where we were at the beginning of March [2020].”* Education is taking a significant digital leap toward an eService model. The EdTech respondent alleged new ways of learning means students now need to become more self-aware and self-independent learners, learning how to learn needs to change. It was brought up that this also requires “training” parents and teachers how to educate differently.

There is an evolution of the traditional school environment. Digitalization will result in changing how students and teaching need to approach learning- which has the effect of developing culture as a whole. Once again, the virus impacted change to the startup industry that consequently impacts culture outside the system.

5.2.4 Globalization

A final important domain is that of globalization. Speakers referenced needing to have a global vision, in multiple different ways.

Respondents emphasized environmentalism as a great concern for customers and startups. Eco driven startups⁵¹ are gaining momentum, they said. *“This crisis has ‘humanized’ us and reminded us that we are all in this together.”* This realization/mentality will drive interest into the eco/environment solutions sector. Investors also commented on the eco trend as an industry where funding will be channeled in the near future. This echoes the idea that digitalization will save our planet. Respondents said that through this global pandemic more people are aware of how connected we truly are- there is a sense of togetherness because of this crisis. *“People finally recognizing the problem and can think about GLOBAL problems...”* *“... technology is absolutely a powerful connector, and it can enable to serve underserved markets. It can bring capital to those countries who have very limited access to capital or those entrepreneurs who have limited access... It will build the bridges and it will also build the trust among the countries and across the borders.”* There is a perspective of collectivism in their responses. It was emphasized technology has the power to transcend across borders and connect individuals, communities, and governments.

Others stressed the need for a “global vision” in terms of business direction and possibilities. The interviewees said there is intense desire in this industry to not just take businesses international but to “see the bigger picture” (of strengthening the digital semiosphere). *“...global expansion will be more possible than ever before, because companies will realize that they are not dependent on the physical space...not dependent on the headquarters. So sure, let's open an office in Thailand. Singapore, let's open an office in Berlin. And except, because it's not as restrictive as before, and the employees ready to get out.”* One subject said about the “new normal”: *“I would say, we are living in a very globalized world. And I also think that it's going to stay a very globalized world.”* Another subject said their new *“key aspect is making sure that we can communicate across time zones and respects people’s boundaries with working from wherever they are.”* Implying this to become a new norm. Respondents see the ability to bring more people into the entrepreneurial ecosystem, which is verbalized as their mission.

⁵¹ An Eco-Startup is one driven towards eco-solutions, impact innovation, and environment friendly green business ideas.

Also in the domain of globalization is the standardizing of digital services and products worldwide. For example, one subject spoke about countries needing to meet similar privacy laws, eEducation will be standardized. Estonia's digital signature, was given as an example of a "basic" digital service that the world cannot exist without. There was agreement that the world cannot exist without "basic digital communications". There is a new idea of what constitutes "basic" services that will be expected around world. (This does raise the question of who decides what constitutes a "basic level" of communication.) The countries who "*are maybe a little behind, they will make a bigger jump in the future.*" The respondents predicted that the level of essential digital services will change and equalize (around the world). Nations are following suit (said in reference to Estonia) in terms of public sector digitalization. This projection fundamentally expands the global digital semiosphere.

6. DISCUSSION: INTERPRETING FOUNDER AND CEO INTERVIEWS

The presence of common themes (domains) reflect the shared culture and cultural texts of the participants interviewed in this study. Interview subjects used many of the same phrases and favored the same aforementioned values reinforcing conclusions found in previous studies in this area. The domains refer to startup cultural values, implying discourse alludes to cultural ideology. This is important from the perspective of ideology because it means the interview subjects pulled from the same canon of principles, bodies of belief in order to deal with the crises.

Each division of the interview data can further analyzed from a semiotic perspective. Once the text has been broken down, divided, and categorized, I can draw inferences from the units, to understand how respondents' specific discourse connects to overarching ideological perspectives, general myths and general narratives, understood in the field of study of entrepreneurial systems. To conclude, I will briefly delimit how the founder's self-descriptive experiences support my original label of this event as a cultural explosion.

I would like to note the context of the Breakthrough Conference. The intention behind the Breakthrough sessions aligns directly with the values of community collectivism of the subjects in this study. Draper Startup House (DSH) organized the event "during the crisis bringing all the founders an opportunity to present [themselves] through this crisis". DSH built an online community to transition offline support into a series of talks around overcoming hardships by and for members of the startup sector. "With the end goal of a community that sticks together and grows together, we have made it our mission to help inject inspiration into the community and help lift others up as they rise up to the challenge"⁵². In addition to values of collectivism, this

⁵² Breakthrough Press Packet Material

exemplifies the attempt to bring in-personal cultural interactions (such as networking and mentoring sessions) into an online digital environment.

6.1 Ideological Perspectives

I have studied the data for themes and patterns and found underlying ideological similarities. Selected statements and phrasing reflect technological ideologies including attitudes of collectivism, opportunism, and digital saviorism. Topics discussed 1) promote positive associations with digital technology 2) encourage narratives of resilience and responsibility of members, and 3) attaches success to digitalization. All three ultimately further the startup ecosystem's progress and secure a competitive advantage for the future.

Categorizing codes reveal the native interpretation the subjects had regarding the COVID pandemic. The significant domains indicate there is indeed a common understanding of the experience, all of which are informed by discussed typologies of ideologies. Questions tackling immediate challenges and first logistical steps allowed respondents to frame the COVID pandemic from their collective perspective. This worldview is indicative of culturally specific discourse in understanding the shifts and changes to their sector. First, the dominant themes (digitalization, positivity, opportunity, community, etc.) show that there is indeed a unified reality and discourse in terms of this event and the digital technology community. The patterns (such as taking a positive approach to solving problems, labeling the crisis an opportunity, returning to the benefit of digitalization, and use of uplifting phrases) indicate how rhetoric and aphorisms are ingrained into individuals of this community and are referenced in times of crisis. Particular personality traits such as resilience and adaptability are emphasized, that are considered necessary and hold power in the cultural context. Positive thinking, for one, comes into play to ensure the success and effectiveness of the startup ecosystem. Cultural traits play an important role in how subjects deal with challenges.

Jointly, the common topics of the respondents all correspond with known startup values of agility and flexibility, innovation, freedom, authenticity, creativity, and collectivism (indicated in *Chart 5.1*). In the case of this global pandemic, the values of the community made it possible to find advantage in a crises that is otherwise defined as overwhelmingly detrimental for society.

The founders' positions on consumer behavior reveals their views on the positive relationship with customer acceptance of and action towards digitalization. For once the public embraces digitalization, there can be a grand scale change in the way society views their relationship with technology. Founders imply that a greater acceptance of digital tools and services by customers means a large-scale willingness to embrace a digital agenda, and movement towards a global digital landscape. It is the "...systems of meaning that tend to channel and reproduce consumers' thoughts and actions so as to defend dominant interests in society—and proceed to treat particular ideologies as totalized and static categories" (Kozinets 2008: 878). The IT sector benefits from consumers aligning with their values and opinions in terms of digital innovation and advancement. Technology ideologies of individual consumers shape consumer behavior and also push society in the direction of a *Techtopian* ideal. This can also be said for subjects' approach to discussing remote work. The attitude of a necessary transition towards a digital nomadic lifestyle, not only permits work and workforces that are independent of physical space but also creates a demand for new innovation and institutions to support this type of lifestyle. This is another advocacy for a global expansion of digital methods towards a digital landscape.

Taking this into a broader social context, it is possible to see how digital utopianism is accelerated by the need to digitalize during the COVID pandemic. The interviewees emphasize the necessity of digital services for our present and future success and advancement. The contextual shift of a global pandemic strengthened members attachment to and use of ideological narratives in the face of uncertainty. This is displayed through the rhetoric and discursive approach of the subjects involved. Respondents emphasized this through such phrases as: "*if they don't change, there's going to be a very different world for them in five years' time.*" Startup founders are feeding into cyber myth and acting as if they must adhere, in order to not get left behind.

Above all, the subjects felt some share of responsibility to contribute to the world around them. They acknowledge the power they hold to **empower** change. Even if they do not recognize it themselves, they allude to common myths of saviorism and utopianism. Subjects directly describe members in their community as "*carry[ing] quite a large amount of responsibility and can empower quite many changes*". The understanding of each founder and business owner as responsible for helping and impacting the world was powerful. This topic was returned to often and the use of the world responsibility was common. The responsibility characteristic appears throughout various technological narratives and myth. The self-described need to impact change

derives from the techtopian ideology of utopianism. I have referred to this attribute as *digital savior* because there is a solidified narrative of belief in helping others as one's or the ecosystem's grand purpose.

Similarly, founder spoke in terms of “democratizing” systems with technology. “*How can we help people live a life **they** want to?*” Providing the world digital tools and services fills such needs. It is not spoken of as the need of the company, but instead the **need** of the people that the startup ecosystem is trying to satisfy. This further supports the startups' vision of changing the world, the notion of digital innovation helping humanity, and the founders each finding themselves a hero in their personal narrative.

The perspective of looking at this pandemic as an opportunity was fairly unanimous. It was described as a chance to think creatively, as a favorable circumstance in which to problem-solve. The word *opportunity* itself was a significant term that appeared across all sub sectors of interviewees. What I would like to emphasize is twofold. One is the direct affiliation with the cultural characteristics of the community (which has been spoken about) and on a deeper level, the presence of the Techtopian ideology that floods through the startup ecosystem as well as the entire digital semiosphere. Describing a global pandemic as “*the growing zone*”, is due to the cultural perspective on hardship and challenge. Such positive laden words reframe an otherwise stressful and uncertain circumstance into a manageable fortuitous event. This attitude and outlook on the world are responsible for how respondents view the global pandemic. It is responsible for the choices they made regarding themselves, and their team, and guided their speech and use of rhetoric when discussing the circumstances surrounding the COVID pandemic. It is knowledge of the world from the perspective of the respondents. Such opportunity opens the door to wider acceptance of digital products and services thus increasing dependence on such products with the desired hope of amplifying the affiliation of technological innovation with social advancement. Their startup cultural ideologies are responsible for framing this event as a component on the path towards grand scale digital change.

Observing the use of specific language, word choice, and key signifiers used by the speakers, such as *pivot* and *disrupt*, shows the use of symbol in a social context. The term *pivot* is laden with ideological meaning. The positive implication these token words have, all accomplish evoking a positive attachment to failure, challenge, and hardship to ensure members continued strive for the progress of the startup ecosystem. Through which the progress and continuation of

dominant values systems and beliefs such as technological utopianism is upheld. It is beneficial for the sector that individual mindsets and worldviews support their system.

The discursive patterns also indicate the superior position the subjects view themselves in the discourse. For example, repeated use of “traditional” to counter their sector’s position during the crisis, indicates their optimistic view on digitalization as the correct business model. “Traditional” is a term used to describe some thing or method as outdated and differentiates past from future in the trend of the majority. Interview subjects referred to their sector’s digital capabilities in a way that showed conviction in their adept response in the face of crisis. Other comments alluded to the world needing to meet a set of digital standards that their sector had already set in place. The subjects’ perspective is dominant and superior to the “other”, none startup ecosystem members. The language used in interviews support the call for digitalization and future identities that pair with promoting global digital expansion. The layers of meaning nuanced in the rhetoric considering the context of language used, supports how the startup ecosystem controls the success of its institutions and sector.

The mission of an organizing is their core beliefs and values; however, it also indicates the desired direction or “project” of a company, the reason for existing. In this way, missions can also be considered narratives as they carry a story of what the company wants to achieve with a desired goal. The subjects often alluded to known startup myths such as altruistic missions to endure and continue through the crisis. Startup culture ensures effective resilience contributing personal meaning for the subjects to guide them through the pandemic. That is to say, *mission* are powerful stories that subjects retell themselves in order to make sense of their purpose. For example, profit was not referred to as a motive for business nor a motive for persevering through the crisis period. (In fact, the word profit was nearly absent.) Instead, purpose was spoken about in terms of missions. “*Remember our mission. It is to help people.*” “*Our mission is to create impact. To empower...*” Purpose was described as the ways in which a company can help individuals, society, and humanity. “*We are selling a vision that we want for the world*”. My interviews analysis did not included tone specifically; however it is noteworthy to mention the energy and excitement the subjects took on when talking about their missions of impact.

Technological sublime, the seductive tale of technology’s future promise, was a common mechanism used to understand this crisis. Such myth unifies the community to a common goal of the conditional whole. Subjects’ frequent references to *missions* is also indicative of the strongly

held belief that technology will solve seemingly impossible concerns of humanity. It is a way of managing this community with the communal goal of expanding and strengthening the view of technological idealism and emanating the digital sublime aura.

Furthermore, the subjects place superiority in digitalization and the expansion of a digital semiosphere (similar to superiority shown in reference to their sector's experience and handling of the crisis). Generally, those companies not offering digital services were not as positive regarding the future. These subjects relied more on hope, and were found to use phrases such as "*holding on*" and "*staying strong*". Meanwhile those subjects directly involved with digitalization services were very positive regarding the future and growth. This positive association with digital and negative attachment to none-digital, indicates belief in its dominance and the association between stability/success and technology.

6.2 Narratives

"...every single sensible founder is a gift to the world."

In addition to ideologically fueled rhetoric/discourse, other cultural narratives emerged. Respondents latched onto known cultural manifestos and narratives to psychologically/ mentally push themselves and their company through the COVID pandemic. Crisis develops and reinforces narratives that become new fixtures in group memory. The 2020 COVID pandemic and how it was dealt with becomes a new story in the repertoire.

Narratives that transfer some form of industry knowledge or "how-to" information serve the purpose of transmitting the startup ecosystem's culture. Viewers are educated through second-hand experience. Additionally, the speakers advocated for the sharing of industry information, experience, and methods of business practice. These narratives also encourage individual behavior that aligns others to the startup rules of interaction. Respondent's narratives of lifestyle and wellness serve to transfer cultural ideals and patterns of behavior. The stories of prioritizing one's health infers one's individual, seemingly personal, decisions, have impact around the globe. The uniform promotion of traits also constructs an ecosystem's identity which has purpose for both members and outsiders to be able to identify the system as a separate collective unit.

Such self-referential thinking stems from the culture the respondents are embedded in. The verbal acknowledgement of this experience of self, separates the subject and in this case the entire startup culture from others. The respondents understand their community as a singular unit through which these cultural goals can be achieved.

Success-story narratives were used to encourage resiliency and to remind of prior and current success in the startup sector. Success narratives connoted by cultural lexicon and aphorisms pay mind to past accomplished entrepreneurs who withstood and triumphed in hardships comparable, albeit different, to the pandemic situation (the late 1990's Dotcom boom was one that was mentioned). Some respondents referring to the success of the entire Estonian Startup ecosystem or the general concept of eEstonia as a model. Another example was the reference to the very successful rideshare (e.g. Bolt) and food delivery (e.g. Wolt) applications as encouragement to continue innovating and building one's own company during the pandemic period.

Subjects response to the question of the imagined "new normal in your company, industry, and overall future", indicate the desire of expanding the startup ecosystem into a global digital landscape. Samples of this include future-oriented narratives such as the need for worldwide "basic" digital services and descriptions of business expansion that are no longer dependent on physical space. These narratives serve to chart the startup ecosystem's future. There is an optimistic prediction that the previously listed transitions will give birth to new behaviors (in consumer actions, in governmental involvement, investing trends, etc.).

6.2.1 e-Estonia Narrative in Action

The interview subjects referred to Estonia as a country to follow in terms of innovation and digital public infrastructure. The following selections show the digital Estonia/e-Estonia narrative in action: *"... I just wanted to say that I think the attitude of Estonia and the Estonian peoples is quite remarkable, because I also think that the country itself is like, quite ahead of many countries, European or actually also worldwide. And I must say that in the public sector and the public educational sector in Germany, I could not even imagine that it would work out as well as it did with you."*

“... And I would like to see a lot more on digital collaboration as Estonia has demonstrated recently, with a number of digital hackathons, large scale digital hackathons, to identify solutions specifically to help people through the simmering crisis.”

“And I think a lot of other nation states can actually learn from Estonia, because Estonia certainly has a very sophisticated digital agenda when it comes to education when it comes to e-health, and when it comes to remote collaboration, and entrepreneurship.” These excerpts are examples of the power of narratives in shaping other’s impression and judgement of a culture and constructed reputation for Estonia’s startup ecosystem. Narratives such as these have the ability to draw attention to what Estonia as a society is building and contributes to further legitimizing this system’s choices and direction in terms of digital advancement (and therefore, digital agenda). More so, it reinforces the beliefs of its members and solidifies their mission within the ecosystem.

6.3 Cultural Explosion

The collected data supports the novel description of the COVID pandemic as a cultural explosion. The technology boom during COVID was generated by events outside of the semiosphere that disrupted the space inside so drastically and unpredictably that an immediate shift was felt. The introduction of an unpredictable occurrence penetrated and transformed the space within the culture’s bounds. This event can be interpreted as a moment external language was drawn into the space of startup/IT culture resulting in shifts in terms of language and future consequence. The shift was described by the subjects whose accounts of the events demonstrate that a change took place in order to deal with the new information flux. Through concepts of naturalization, the startup founders translated and understood the changes of COVID-19 in their own cultural language. For example, the outside world’s label of “crisis” had been renamed “opportunity”.

The moment of possibility was filled by technological solutions to said chaos. If innovation is the answer to change, this presumes or reinforces the belief that innovation and new technology is the adjustment needed for the culture to survive. Novelty has to emerge due to explosion and the startup ecosystem’s answer to that is digital innovation. Displayed through the subject’s discourse is the idea that the answer of innovative change is the solutions to society’s problems.

If we consider change as a stable condition of culture (Lotman & Uspensky 1978: 223), then the answer to that for this semiosphere is the progress of innovation- technological progress become an inseparable change of IT/startup culture. It regulates the system by directing it towards change, a “necessity for continual self-renewal” (Lotman & Uspensky 1978: 226). One that is not only understood and accepted by its members, but welcomed and revered. What follows the explosion, the epoch of balance, is presently referred to as the “new normal”.

Members’ reactions to the change were based on ideological belief, specifically the technology utopian worldview that gave reason and meaning to the external events ‘exploding’ around them. In this case, technology is the natural answer and that the actions of the subjects are of key importance to the changing world. This was displayed through the common theme of the subjects’ anecdotes of handling the event itself and their self-descriptions. (e.g. the reference to change through terms such as *pivot*, the discussion of a “new normal”, the initial chaos that was described along with the answer of innovation to fill said void, and discussions surrounding the understanding that COVID-19 shifted and will further develop most all social and cultural areas emphasize this conclusion.) Self-referential narratives allowed respondents to place themselves in the context of this change and so, the context of the outcome. There is a re-evaluation of the event that had occurred followed by an interpretation of what had happen. Such self-description gets added to the narrative of the COVID -19 pandemic, focusing on how the system managed the change. Simultaneously, it impacts how the members describe their place within it. Resultingly, this has impact on community identity and memory, influencing the way the community describes itself; in the narrative of the pandemic, they have become the heroes. The discourse surrounding this event indicates it is an explosion in Lotmanian terms and one that is predicted to usher in a new more expansive era of digitalization.

CONCLUSION

This master's thesis focused on the digital technology discourse during the 2020 COVID pandemic and how meaning was constructed through self-referential accounts by key members in the startup ecosystem. A semiotic theoretical framework offered vocabulary and method with which to approach the research subject. I used previously constructed models of startup ecosystems and brought in a novel discussion of the COVID-19 pandemic as a cultural explosion. Ideology, myth, and narrative, and their role in startup culture was covered through a semiotic framework/vocabulary. Digital Estonia provided the reader a contextual overview (of the pandemic period). Previously studied entrepreneurial ideological values became my influence for code creation and modeling of my study.

The chosen method of investigation was discursive analysis of interviews with CEO's and Founders in various subsectors of the Estonian startup entrepreneurial ecosystem. My analysis focused on ideological perspectives that were evident in subjects' rhetoric and description of experiences during the COVID crises as well as future predictions and expectations post pandemic. Through this study I was able to find answers to the following questions:

How are startup founders' ideological perspectives apparent in self descriptive accounts through the COVID crisis?

Which discursive mechanisms and themes can be identified in the digital technology discourse surrounding technology and the COVID-19 pandemic?

Analysis reveals that founders' discursive accounts (rhetoric and themes) are determined by the ideology of their entrepreneurial and startup community. Answers exhibit startup cultural values through commonly discussed themes/topics related to their experience. These values (agility, flexibility, innovation, freedom, authenticity, creativity, and collectivism) are indicative of grander technological ideologies. *These* ideologies served to guide members actions and understanding of their experience.

The common narratives (i.e. the common themes of digitalization, positivity, pivot/resilience, opportunity, community, digital saviorism, globalization, new normal) reflect the relationship of the individual respondents to each other and his/her community as a cohesive cultural unit. Respondents use of similar discourse indicates they pulled from a common cultural repertoire of known and identified IT myths and narratives. Overall, the analysis showed a deep dependence on the use of narrative to make sense of the crisis. Collectively, the startup and IT narratives used by the participants 1) promoted positive associations with digital technology, 2) encouraged resilience and responsibility of members, and 3) attached success to digitalization.

Common themes referenced in self-descriptive accounts reflect a heightened positive outcome from the overall experience. Generally respondents had a positive perception of change, a positive perspective of the COVID crisis (in terms of technology discourse). The portrayal of the experience as a positive and opportunistic one echoes the explorative and creative ideology described by the *Techtopian* or *Techspressive* model. This was demonstrated by the self-described search for solutions –referring to the pandemic as an opportunity, as a chance to pivot and provide more innovative solutions for the world.

The crisis was seen as validation for individual missions and for the ecosystem's grand vision of fulfilling the *Techtopian* ideals and broadening the digital semiosphere. This event was seen as validating their collective goal of a broader global digital society- "proof" that digitalization is indeed the correct solution to society's problems. There was heavy reliance on ideologies of technology utopianism that perpetuate a cooperative progressive view of humanity that justify respondents' actions and collectively justify the direction of the startup ecosystem as a whole. Overall, the analysis showed that the discourse surrounding digital technology's place in society has been amplified.

Through the respondent's answers, it is possible to create an image of the "new normal" and it seems to be moving towards the ideal of the digital semiosphere. Respondents' dominant

role in their industry (as influential founders and leaders) gives foundation to their predictions of the future. The founders' predicted landscape is a good indicator of future direction as these narratives are carried back into cultural discourse and strengthens future collective consciousness.

The data analysis is supported by the contextual information surrounding digital Estonia. This study shows a possible impact digital branding (narrative) has had on subjects' understanding of the crisis as it is an element of one's constructed identity. Narratives frequently mentioned Estonia as a country to model, in terms of digital infrastructure, in terms of entrepreneurial attitude, and of the personal innovative drive of its citizens. As these particular founders were from the Estonian startup ecosystem, their discourse represented eEstonia's concepts of digital nationhood, that of digital pioneer-ism, and concepts of transcending national borders and changing the world. The respondent's narratives were also consistent to the state desired narrative of a digital society.

How does COVID-19 constitute as a cultural explosion impacting the startup ecosystem?

COVID-19 can be interpreted as the moment external language was drawn into the space of the startup semiotic system- the introduction of a novel occurrence that penetrated and transformed the space within the culture's bounds. Discourse surrounding the pandemic supports my designation of the pandemic as a cultural explosion.

The onset of the pandemic was described as initial chaos. Discussion surrounding the immediate effects of the crises suggest it was an explosion/change felt throughout all levels of the system. As the interviews progressed, it was made clear that the answer to this void was that of additional and improved digital solutions. The respondents consistently referred to the time period post impact as the "new normal", a time in which digital nomadism, remote working, and hybrid lifestyles would become an accepted and common norm. This indicates a period a change in terms of processes, methods of activity (behavior), for both their community and those outside the startup ecosystem. Collectively, the respondents' answers described and predicted further extensive developments in most all socio-cultural areas (government, health care, politics, individual, interpersonal, etc.). Such changes will in effect usher in a new age of digital relation, altering the manner in which society considers their relationship with technology. From a semiotic perspective, this has potential to impact the communicatory channels and meaning making mechanisms of those involved. The explosion impacted change that was then felt outside of the direct cultural system. The requirement of change has been fulfilled by the answer of digital innovation.

Through concepts of naturalization, the startup founders translated and understood the changes of COVID-19 in their own cultural language. The pandemic was not considered a devastation or catastrophe but instead, an **opportunity**. Lotman emphasized the novelty and unknowns that result from cultural explosions- there is more than momentary chaos, but long-lasting change to both the space inside and outside of the semiosphere. At this moment in time we cannot fully grasp the impact this digital cultural explosion has and will have on society, we may only speculate. This current period may mark the beginning of a post information or post digital age.

This study makes apparent how ideological perspectives are evident in self descriptive accounts through a cultural explosion. The members' self-descriptive accounts revealed their considerable reliance on startup ecosystem discourse, a dependency on the cultural texts of myth and narrative to endure and make sense of the crisis, and to ensure continuance of the startup ecosystem. Digitalization and innovation became a solution to the cultural explosion (crisis) and its global repercussions. Overall results are consistent with theories of *digital sublime* and *technological optimism*. This qualitative study into pandemic discourse shows the impact a collective culture's view of reality has on their understanding of the COVID-19 crisis and their place within it.

The entrepreneurial elite of one semiosphere has in mere months become a driving force that propels how the majority of the world interacts and identifies with digital technology. For future study, it would be interesting to follow up with each founder and look at specific discursive changes over time. This would allow for the observation of degrees of change in technology discourse and consider if past self-descriptive narratives have remained the same or transformed.

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KOKKUVÕTE

Koroonaviiruse-järgsete muutuste semiootiline ülesehitus idufirmade ökosüsteemis

Käesoleva uurimistöö eesmärk on näidata diskursuse kultuuripõhist rakendust, mõistmaks tehnoloogia narratiivide kasutust idufirmade enesekirjeldustes ning arusaamistes COVID-19 pandeemia kogemuse valguses. Uurimise all on järgnevad küsimused:

Kuidas on idufirmade loojate ideoloogilised perspektiivid nähtavad enesekirjelduslikes tunnistustes koroonaviiruse kriisi ajal?

Milliseid diskursiivseid mehhanisme ja teemasid võib leida digitaalsest tehnoloogia diskursusest, mis puudutavad tehnoloogiat ja COVID-19 pandeemiat?

Kuidas väljendub COVID-19 kultuurilise plahvatusena, mis mõjutab idufirmade ökosüsteemi/sectorit?

Analüüsitud materjal on võetud intervjuudest Eesti IT ning idufirmade loojatelt ja tegevjuhtidelt koroonaviiruse pandeemia esimese kahe kuu jooksul (2020. aasta aprill-mai). Andmed on kogutud pool-struktureeritud intervjuudest erinevate IT-allosakondade juhtivate liikmetega. Diskursusetooriaid kasutatakse selleks, et uurida kriitiliselt intervjuueeritavate anekdootlikke ja isiklike kogemusi ning ühendada need laiemas kultuurilise ja sotsiaalse kontekstiga. Tehnoloogia diskursus ja sellega seonduvad ideoloogilised mehhanismid (k.a müüt ja narratiiv) on samuti uurimisobjektideks.

Uurimustöö tugineb Tartu-Moskva semiootikakoolkonnale, eeskätt Juri Lotmani arusaamisele semiosfäärist ja enesekirjeldusest. Semiootika pakub vahendeid, millega mõista ettevõtluse ökosüsteemide kommunikatiivseid omadusi, andes seejuures metakeele, mis

võimaldab ettevõtluse kultuurisüsteemide hierarhilist modelleerimist ja kirjeldamist. Käesolev uurimistöös pakub uutset vaadet COVID-19 pandeemiale kui kultuurilisele plahvatusse.

Analüüsi käigus selgus, et idufirmade rajajate diskursuses mängib suurt rolli nende ettevõtluse ja idufirmade kogukonna ideoloogia. Vastused demonstreerivad kultuurilisi väärtusi sagedasti arutatud teemade kaudu, mis on seotud nende kogemustega. Need väärtused (agiilsus, paindlikkus, innovatsioon, vabadus, autentsus, loomingulisus ja kollektivism) viitavad suurematele tehnoloogilistele ideoloogiatele. Need ideoloogiad juhtisid asjaosaliste käitumist ja oma kogemuste tajumist. Läbivad narratiivid (digitaliseerimise teemad, positiivsus, tegevussuuna muutmine, võimalused, kogukond, digitaalne “päästmine”, globaliseerumine, uus normaalsus) peegeldavad individuaalsete vastajate suhet üksteise ja nende kogukonnaga kui sidusa kultuurilise üksusega.

Idufirmade liikmete enesekirjelduslikest tunnistustest tuli välja nende arvestatav sõltuvus idufirmade ökosüsteemi diskursusest ning sõltuvus müütide ja narratiivi kultuurilistest tekstidest, et kriisi paremini mõista. Kollektiivselt asjaosaliste poolt kasutatud idufirmade ja IT narratiivid 1) edendasid positiivseid seoseid digitaalse tehnoloogiaga, 2) ergutasid liikmete vastupidavust ja vastutust ning 3) seostasid edu digitaliseerimisega. Üldiselt suhtusid vastajad positiivselt muutustesse ja koroonaviiruse kriisi (mis puudutab tehnoloogia diskursust). Tekkinud tühimik ja kaos vajasid kultuurilist uudsust, mis saavutati sellega, et nõuti rohkem ja paremat tehnoloogiat. Digitaliseerimine ja innovatsioon muutusid lahenduseks kultuurilisele plahvatusse (kriisile) ja selle globaalsetele tagajärgedele. Üldiselt on tulemused kooskõlas *digitaalse ülimuslikkuse* ja *tehnoloogilise optimismi* teooriatega.

Uurimistöo toob nähtavale selle, kuidas ideoloogilised perspektiivid on ilmsed enesekirjelduslikes tunnistustes läbi kultuurilise plahvatusse.

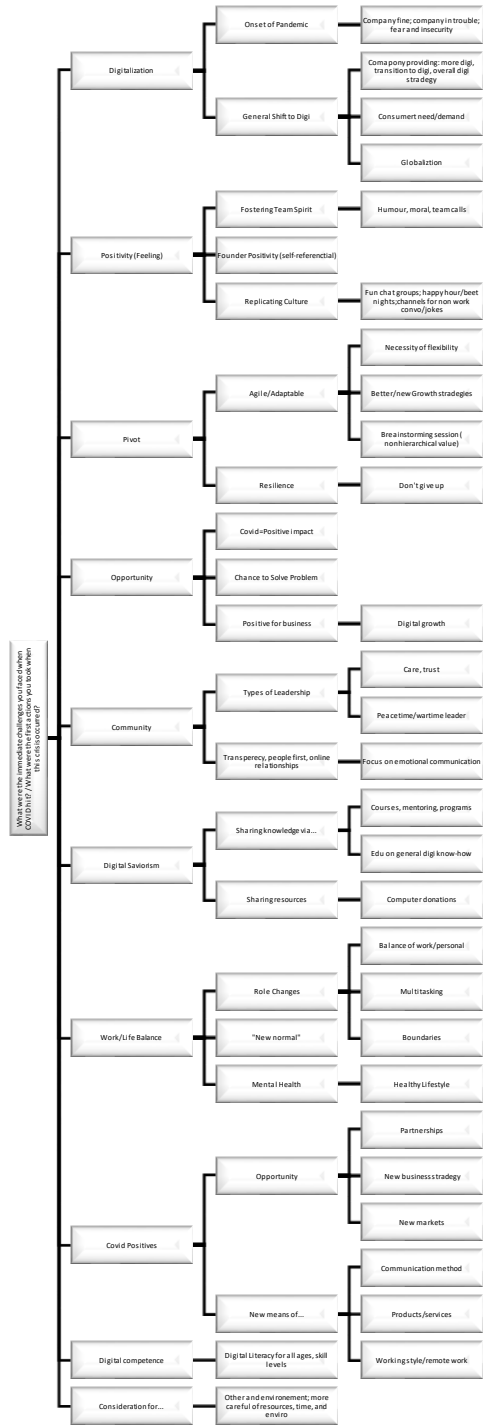
APPENDIX 1: Domain Chart

5.1 Domains/Themes for Making sense of Pandemic (From Interview Data) There may be overlap as these values and themes are intertwined.

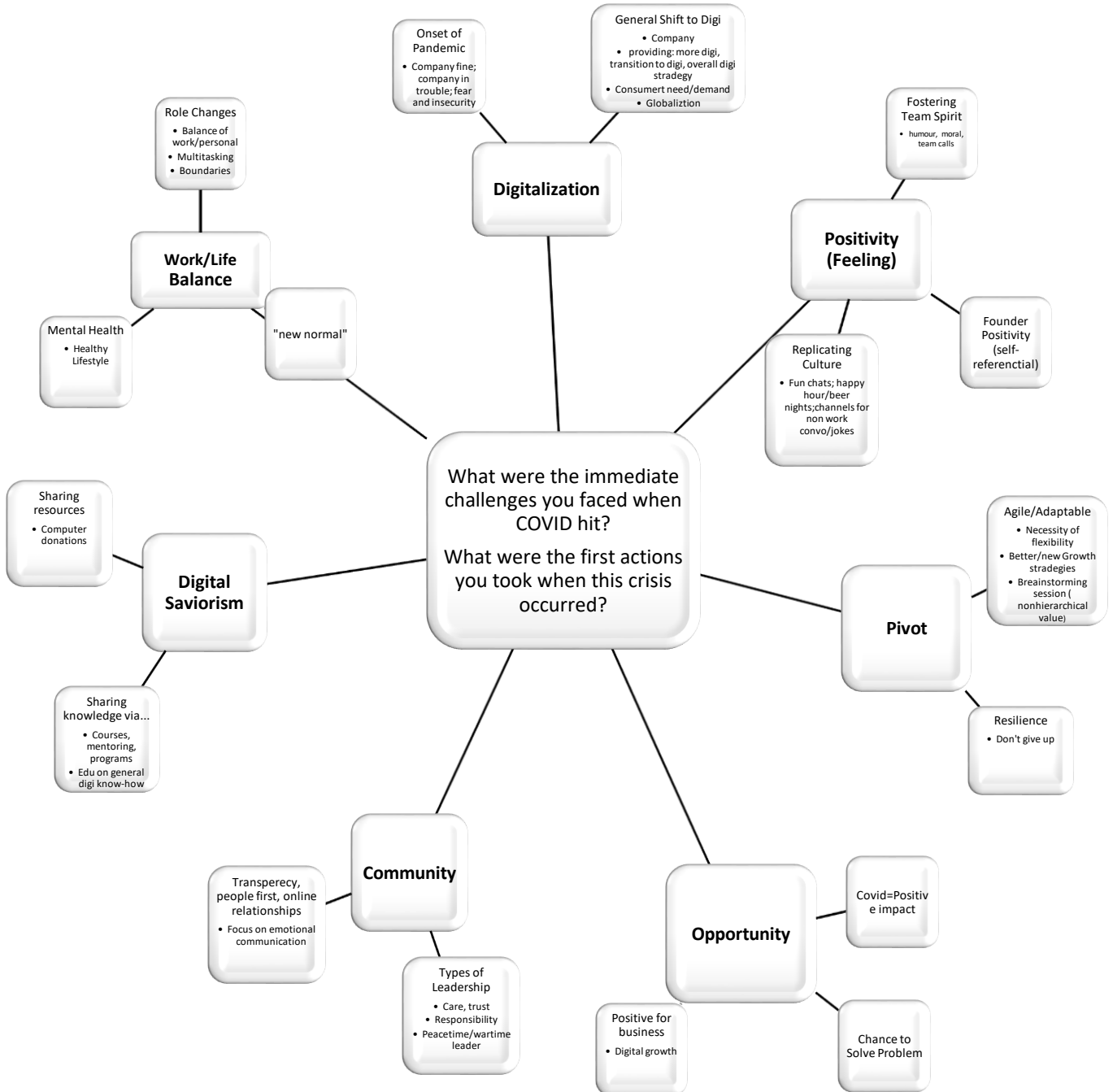
Domain/Themes	Codes		Values/Ideology
Digitalization	Onset of pandemic	-Those already fine -Those in trouble (Transition) -Fear and insecurity	Innovation Agility Flexibility
	General Shift Towards digitalization	-Company providing even more digital services -Company needing to transition to digital -Consumer need and demand for digital -Businesses in general need to look at digital strategy -Global	
Positivity (feeling/mood)	Fostering Team spirit	-humor	Freedom Authenticity Positivity
	Founder needing to remain positive (self-referential)	-moral -frequent team calls	
	Replicating startup culture online	-fun chat groups -Happy Hour calls/Beer Nights -channels for non-work conversation and jokes	
Pivot	Agile & flexible	-Necessity of flexibility for survival -Finding better growth strategies for growth (flexibility) -Brainstorming sessions (nonhierarchical value)	Agility Flexibility Creativity
	Resilience (SU trait) Adaptability (SU trait)	-Don't give up	
	Vision and the big Picture (mission)	-Mission -remember the reason for doing your work	
Opportunity	-Crisis had positive impact -Change to solve problem -Pandemic was a positive for business, for digital growth		Innovation Positivity Collectivism Creativity

Community (People first)	Types of manager/management/leader	-Care, trust, responsibility -Peacetime wartime leader	Authenticity Collectivism Positivity
	-Transparency -People First -Personal relationship transition online	-focus on emotional communication	
Digital Saviorism	Sharing knowledge via ...	courses, mentoring, programs. Educating on general digital know how	Innovation Collectivism Freedom
	Sharing resources	(computer donations)	
Work/Life Balance	Role changes	-balance of personal and work life -multitasking -boundaries	Freedom Creativity Flexibility Authenticity
	“new normal”	-hybrid, digital nomad	
	Mental Health	Healthy lifestyle	
COVID Positives	Opportunity	-Partnerships - new business strategy - new markets	Innovation Flexibility Freedom Collectivism
	New means of ...	-New communication style -New products and services -New working style (Remote work)	
	Digital competence	Digital literacy for all ages, skill levels	
	Consideration for others and environment	More careful of resources, time, and way environment is cared for	

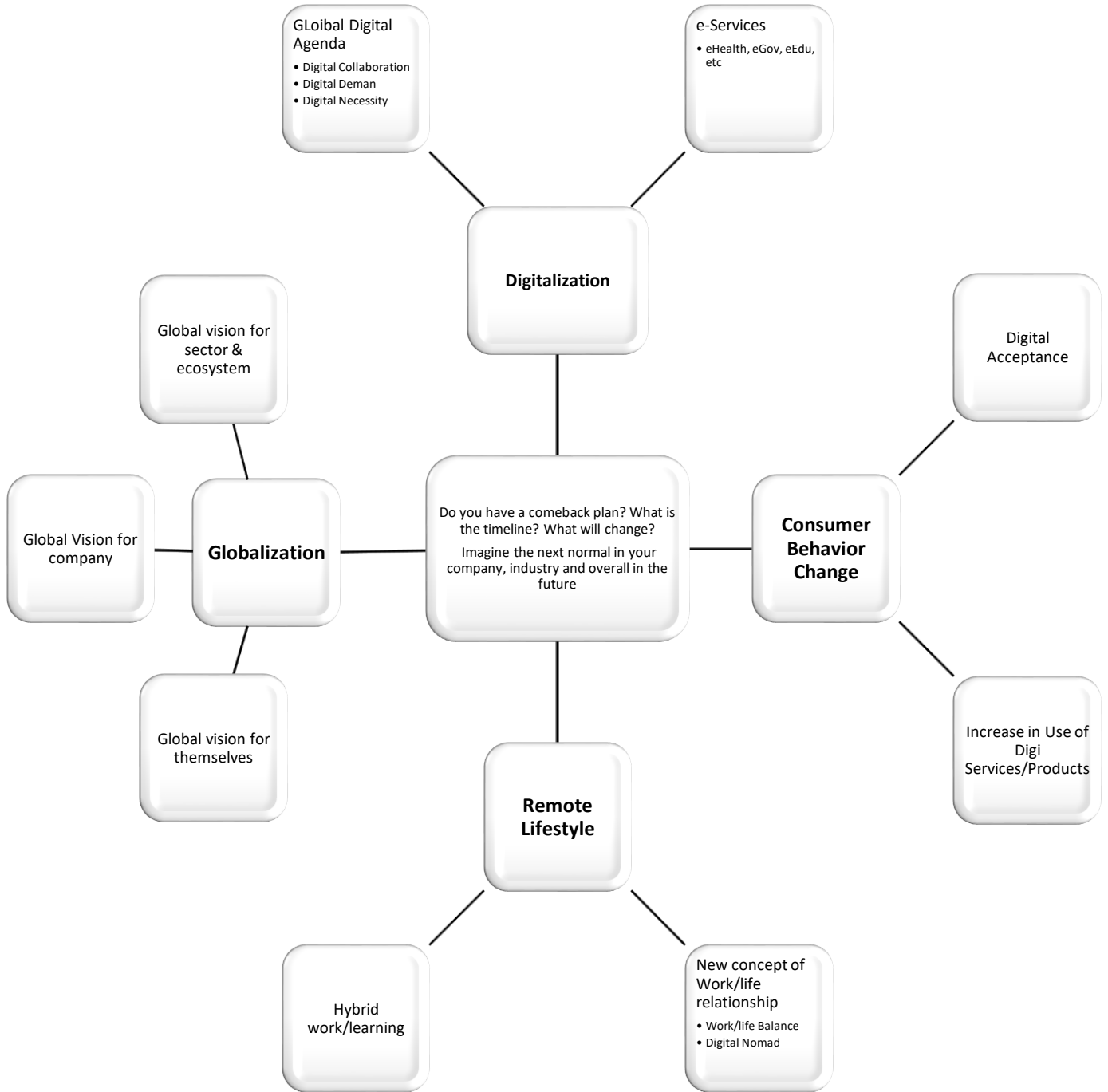
5.1 Domain Organization Tree



APPENDIX 2: Domain Tree



APPENDIX 3: Future Domain Tree



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