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Creating Shared Value in Bottom-of-Pyramid Supply Chains

MASTER'S THESIS

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Contents

Abstract

Purpose: This thesis aims to discover how the bottom-of-pyramid environment affects the creation of shared value in the supply chain. There seems to be a gap in the research about how enterprises can successfully design and operate their supply chains at the bottom of the pyramid, while also attempting to meet sustainability goals. The purpose is to show the challenges that supply chain managers face in this environment and the practical solutions they can apply to create shared value, in alignment with the existing theories and qualitative empirical data.

Design/Methodology: This thesis first identifies the kind of organisations that are among the multiple stakeholders in the supply chains at the bottom of the global income pyramid. Second, it assesses theoretical approaches to the bottom-of-pyramid supply chain models as a primary framework and introduces the philosophy of creating shared value as a secondary framework to contrast with the primary one. Then, applying a qualitative research method, it draws on the findings from semi-structured interviews of 13 supply chain management experts from different markets, industries, and organisation types, who were asked to share their profound practical thoughts about the creation of shared value in bottom-of-pyramid supply chains.

Findings: The key findings show that the bottom-of-pyramid environment affects supply chains and interrelates with shared value creation. The challenges that these organisations tackle relate primarily to the social bottom line, from which certain economic problems arise, while environmental issues seem to represent a lower priority. These supply chains were found to be complex networks, with the active participation of a broad variety of stakeholders with or without a profit focus, which could be market-oriented, mission-driven, or government-related. The results show that supply chain experts at the bottom of the pyramid must focus on managing a culturally and organisationally very diverse environment, where the adequate segmentation and technological innovation are key tools to achieve progress and market scale.

Originality/Contributions: The originality of the research comes from the pioneer approach to combine a bottom-of-pyramid supply chain management framework with the shared value creation framework and to phrase recommendations accordingly, irrespective of geographic location, industry, or organisation type. The results provide theoretical contributions to the field by revisiting existing models and to the managerial practice by phrasing recommendations.

Abbreviations

Concepts

BOP	Bottom of the Pyramid
CSR	Corporate Social Responsibility
CSV	Creating Shared Value
KPI	Key Performance Indicator
LDC	Least Developed Country
MNE	Multinational Enterprise
NGO	Non-governmental Organisation
RQ	Research Question
SC(M)	Supply Chain (Management)
SCOR	Supply Chain Operations Reference
SQ	Subquestion
TBL	Triple Bottom Line
TOP	Top of the Pyramid

Organisations

ACTED	Agency for Technical Cooperation and Development
AESA	Agriconsulting Europe S.A.
CdA	Casa do Agricultor
DIAK	Empreza DIAK
EY	Ernst & Young
GCERF	Global Community Engagement and Resilience Fund
GDC	The Global Distributors Collective
IFC	International Finance Corporation
MÖS	Hungarian Interchurch Aid Agency
UN	United Nations

1. Introduction

According to the United Nations Development Programme (UNDP) in 2014 there were 2.2 billion people living either near or in multidimensional poverty at the base or bottom of the income pyramid (UNDP, 2014). They are most typically located in the least developed countries and rural areas of emerging markets (Prahalad, 2005). A recent UNDP report from 2019 demonstrates some changing trends about the BOP societies. Certain convergence appears in basic capabilities, meaning that the poorest are catching up in terms of entry-level technology and dealing with recurrent economic shocks. However, at the same time there is a tendency of divergence in enhanced capabilities such as effective access to present-day technologies or resilience to unknown new shocks (e.g. climate change), so inequality and lack of development persist (UNDP, 2019).

All kinds of organisations face difficulties at BOP markets; corruption, poor infrastructure, non-existent distribution channels, illiteracy, lack of robust and enforceable legal frameworks, conflicts, and sometimes violent extremism or even war are major deterrents, therefore it would be understandable if conventional Western-style enterprises simply left these consumer segments to get served by local companies or government agencies (Anderson & Billou, 2007). However, despite these hardships, entrepreneurs still seek opportunities to enter BOP markets and develop strategies to sell their products and services to the impoverished, since the top of the income pyramid (TOP) is already saturated (Tasavori et al., 2014). Some non-traditional organisations (NGOs, international aid donors, etc.) play an important role in the business environment of these BOP markets as they push the entering businesses towards sustainable practices or creating shared value – especially in case of companies operating with global supply chains (Perez-Aleman & Sandilands, 2008; Carmagnac, 2021).

London & Hart (2004) discover a discontinuity between the development of MNE practices and academic research, so there is a broadening literature gap about global capabilities and business strategy at BOP markets. Perez-Aleman & Sandilands (2008) reinforce that there is still a need to cover the missing knowledge in the literature about how the implementation of social and environmental standards in supply chain management (SCM) can foster the inclusion of those at the BOP. Hence, the literature gap can be narrowed to the creation of shared value (CSV) in BOP markets and establishing sustainable SCM.

To understand the whole picture about BOP SCs, we must acknowledge that several differences exist depending on external geographic, demographic, industrial, or institutional factors, however if one thoroughly observes the most impoverished in our planet, it is easy to find similarities in certain behavioural patterns, situational characteristics, and everyday challenges. In collaboration with multiple stakeholders around the world, Gapminder’s Dollar Street (2018) research collection illustrates that regardless of the location, the economic situation identifies patterns in the BOP consumers’ habits, which makes their challenges realistically addressable not only for social scientists but also business experts managing flows along global SCs. Therefore, it is understandable that scholars differentiate TOP SCs from the BOP and seek to apply different strategies (Stölzle 1999; Bendul 2012; Bendul et al., 2017; Schönsleben 2018; Harrison et al. 2019).

1.1. Problem statement

There seems to be a gap in the research about how enterprises can successfully design and operate their supply chains at the BOP, meanwhile they also target to fulfil sustainability goals (Bendul et al., 2017). Previous research acknowledges that indeed there are differences between how SCs are managed at the TOP and BOP. The market patterns, the models describing the processes, the solutions for the problems differ whether businesses target Western-style high-income societies or the BOP – who are often potential consumers living in urban slums or scattered around the remotest areas of LDCs or emerging markets.

This study comes to define who are the stakeholders at the BOP, what do the SC managers of different organisations can do to both take the responsibility in improving this social segment and draw profit from the latent business opportunities, hereby creating shared value.

1.2. Research question

The target area of the problem statement is the BOP market segment, where this research seeks to discover improvement opportunities, therefore it delimitates the scope of the research – both geographically and socially. Among the many sustainability concepts and approaches, the CSV is the chosen one, because on the one hand it already interlinked when crated by Porter & Kramer (2011) with Prahalad's BOP concept (2005), moreover establishes the definition of shared value so other scholars just refer back to it (Dembek et al., 2016). Finally, it can be interpreted as an ‘intermix’ with other sustainability concepts (Daood & Menghwar, 2017).

CSV at the BOP alone is not specific enough, as it is required to define in what management context is the value creation analysed. Since interaction within companies is needed for value creation at the BOP, through flows of goods and information, this leads the researcher to analyse SC networks and activities.

RQ: How does the bottom-of-pyramid environment affect the creation of shared value in the supply chain?

SQ1: Who are the stakeholders in the bottom-of-pyramid supply chain?

SQ2: What are the theoretical ways of creating shared value in the bottom-of-pyramid supply chain?

SQ3: What practical solutions are proposed to create shared value in the bottom-of-pyramid supply chain?

The research question starts with *How?* because the whole investigation addresses to explore the relationship between the concepts. This characteristic will further impact the design, philosophy, and strategy of the research.

On the way to answer the research questions, there are necessary steps, which guide the research flow and enable a substantial discussion. This RQ supposes that BOP SCs are different from the conventional TOP ones, therefore this difference must be defined answering SQ1, which is going to consider these SCs through the lens of all relevant stakeholders.

Then some theoretical opportunities to CSV at the BOP must be explored by SQ2, in aim to identify what these organisations can choose from when they seek to create value, in other words, what solutions offered by academic literature exist.

After answering SQ1 about the BOP environment and framing the opportunities to CSV with SQ2, the two stages of analysis will enable an answer to the RQ via SQ3. The nature of SQ3 brings about the need for a profound qualitative content with a special focus on the practical solutions.

1.3. Thesis structure

1.	Introduction	Phrases the problem statement, the RQ and the thesis structure.
2.	Methodology	Explains the research purpose, philosophy of science, theory development, design, and validation. After that introduces the 2 stages of the research process.
3.	Theoretical framework	Conducts a thorough literature review about the SC, BOP and CSV concepts.

4.	Research stage 1	Proposes the theoretical frameworks, on which the data collection lays (SQ2).
5.	Research stage 2	Explains the data collection procedure and the qualitative analysis (SQ1 & SQ3).
6.	Findings	Introduces and describes the collected data, showing the frequencies and proportions of what was found.
7.	Analysis	Analysis the collected data; familiarises with each source, then analyses the data by contrasting the theoretical concepts, finally identifies relationships and trends.
8.	Discussion	Explains how the results answer the RQ and SQs, and discusses academic and managerial implications, limitations, and future research opportunities.
9.	Conclusion	Concludes the research.

2. Methodology

In this chapter after defining the research purpose (2.1.) the appropriate philosophy is chosen (2.2.) and approach to theory development is thoroughly explained (2.3.). Then the research design is introduced (2.4.), which contains research stage 1 about the literature review (2.5.) and research strategy 2, which is the collection and analysis of the primary data (2.6.).

2.1. Research purpose

The aim of this research is to understand how the characteristics of the BOP locations affect the value creation in the supply chain. This study is to prove whether there are any locations-specific challenges, which make BOP SCs different from the SCs in the developed countries. Since different kinds of organisations operate and intend to create value in these markets, and all of them own up- and/or downstream SCs, this investigation reveals the kinds of specialties the organisations encounter because of the unusual business circumstances at the BOP.

The investigation about how value is created at the BOP supply chain contributes to both theory and practice: it will conceptualise the existing literature and empirical experience about the shared value creation and then add some managerial contributions as guidance to the possible problems, so it can be considered as an *applied research*. Additionally, the focus is to explore relationship between supply chain management and bottom of pyramid locations, what is happing in that environment, aiming to answer a research question that starts with *How?* therefore it is framed to be an *exploratory study*.

2.2. Research philosophy

This master thesis acknowledges a pluralist approach, meaning that there are many different research philosophies to choose from and it will opt for the one, which fits the best with the research questions and provides the most adequate outcome. *Interpretivism* is the best philosophy applicable for this research due to several reasons.

On the one hand, this master thesis studies human beings and their social world at the BOP with significant cultural and environmental diversity, high complexity. Therefore, insights and interpretations may be observed in this reality but no law-like generalisations. On the other, Prahalad brings about a similar approach when describes this market segment stating that *"all of us are prisoners of our own socialization. The lenses through which we perceive the world are colored by our own ideology, experiences, and established management practices (Prahalad, 2005 p. 6)."* Other scientific approaches deepen this perception stating that the world is constructed by cultures, and the cultures by individuals. Since the literature review and interviews are going to originate from culturally different regions, it is acknowledged that features like power distance, uncertainty avoidance, individualism, emotional roles or time orientation may differ (Hofstede, 2011).

Finally, this master thesis is to create knowledge with the lens of a *subjective researcher* with an *axiology* type assumption – focusing on values and ethics (Saunders, 2015). Therefore, *social constructivism* has an emphasis on emancipation, in other words, the BOP component of the research sees the world as a construction and supposes that power is involved, because not all humans are equal in the environment of imbalance and hegemony.

2.3. Approach to theory development

Current research uses an *abductive* approach, because the analysis is built up by two steps with different purposes. Stage 1, which is the literature review, is *inductive*, defines general observations searching for an answer to the research question (SQ1 and SQ2), explores the phenomenon, identifies patterns, and tries to choose the most relevant existing framework to investigate further. The second step is *deductive*. After the theory about the value creation at the BOP supply chain is gathered and described, subsequent data is collected, and more experience is investigated in form of semi-structured interviews. In the logic utilised the premises at stage 1 are already known, and stage 2 is based on them to further generate conclusions. Generalisation is not done from the general to specific or vice versa, but throughout the interaction between the specific and general (Saunders, 2015).

Due to the novelty of the research topic, most of the literature is expected to be empirical, therefore the overall procedure is a *deductive approach to empirical research*, which contributes mostly to the empirical field, but also in a smaller degree broadens the theoretical knowledge, eventually modifies the existing one.

2.4. Research design and validation

This research follows the methodology of a *sequential mono-method qualitative research design* and utilises one strategy. The researcher needs to interpret the subjective and socially constructed world, the so that lays the foundation of a *qualitative research*. Then the abductive approach chosen bases both on theory and data, which leads to a thorough initial literature review, then a *mono-methods* primary research.

As the master thesis follows the design of an *exploratory study*, it is useful to reflect on both the literature in the search and interviews with the experts. Due to characteristics of this design, semi-structured interviews are allowed; flexibility and adaptability must shape the research flow, which leads the researcher from a broader problem statement to a narrowed solution.

Stage 1 uses the strategy of *documentary research*, as the literature review expects to give an abundant qualitative description about the value creation at the BOP supply chain, roles of the actors involved and influence of different factors. Stage 2 uses the strategy of *semi-structured interviews*, which are the most convenient to understand the dynamics of the topic and the interaction between the subject of the case (the supply chain of an organisation) and the context (BOP environment). This strategy assists to make a comparison with the existing theoretical observations (based on stage 1) and with rich and nuanced empirical descriptions further elaborate on that. Multiple interviews are going to be used, where the contextual factors (type of organisation, industry, geographical location) are different to allow a *theoretical replication*.

The time horizon of the master thesis is *cross-sectional*, meaning that the value creation at the BOP supply chain is not focusing on how the literature and empirical data evolved throughout history, but analyse the actual situation and experience in the last decade.

The validation technique applied by this research is *triangulation*, which bases on the utilisation of two or more sources of data in case of qualitative studies (Denzin & Lincoln, 2011; Saunders, 2015). This is the appropriate way to become sure that the data means what the interpretivist researcher think it means within its socially constructed reality. Finally, the *reliability* of the research is assured by clearly providing the name of the organisations, the role of the expert interviewees and their target markets, despite keeping their names anonymous.

2.5. Research stage 1 – literature review and framework proposal

Research stage 1 applies already existing documentary material to prove the validity of the frameworks based on the theoretical investigation. This conceptualisation is crucial, since qualitative data interpretation is subjective, characterised by richness and fullness, therefore the frameworks identify the main variables, components, and guide the research as mixture of theory derived from literature and own expectations (Saunders, 2015).

2.5.1. Data collection

On the first round of the literature the review the origins of the RQ concepts are familiarised, defined and structured. For this purpose, articles about SCM, BOP and CSV concepts are considered and summarised.

On the next round of the literature review, the relevant peer-reviewed academic articles and some international organisation reports are studied, making an emphasis on the most recent works. For this reason, the search for literature includes several sources of information: EBSCOhost, Google Scholar, JSTOR, Sciencedirect and Wiley Online Library. The language of the searched papers is English. The three component concepts of the RQ are simultaneously applied as advanced search keywords. '*BOP'* and '*shared value*' and '*supply chain*' keywords drive the search. Initially the results are tightened to papers since 2016, i.e. the last five years, but as earlier articles were found relevant, the publication year interval is extended.

Given a complex RQ the findings of the literature review are not entitled to provide an answer, rather guide the researcher towards a clearer picture. SQ1 and SQ2 however get a proposed answer via literature review and establish the basis of a framework proposition that guides further to research stage 2.

2.5.2. Framework proposal

Based on research stage1 the theoretical approaches to BOP, shared value and supply chain are thoroughly reviewed, then the ones which are found the most relevant for the purpose of current research are combined. Findings and definitions of scholars are taken into consideration to build up a framework contrasting the CSV levels of Porter and Kramer (2011) and the revisited BOP-tailored SCOR framework of Bendul et al. (2017). This research considers the SC and CSV as the management and the philosophy and the BOP as the geographical and social circumstance in which these two are applied. Therefore Bendul et al.'s findings about *Sustainable supply chain models for base of the pyramid* are contrasted with CSV levels and establish the basis guidelines to research stage 2.

2.6. Research stage 2 – semi-structured interviews

Research stage 2 bases on primary qualitative data and analyses semi-structured interviews with experts about the BOP SCs. The frameworks deduced form stage 1 guide the data analysis, which encompass multiple theoretical dimensions. 13 interviews allow for analytic generalisations and phrasing empirical observations to theory.

2.6.1. Interviewee selection

The RQ contains three theoretical concepts, the basis of the interviewee selection criteria will reflect on the same. The BOP environment defines the demographic and economic segment targeted by the research, any organisation that operates close to these communities can be applicable. Since the RQ does not specify either any delimited geographical areas or industry, the included organisations may have a different profile and localisation in terms of their activities and target markets. Additionally, the RQ does not concretise either the purpose of the organisation, thus both non-profit and for-profit actors are equally considered.

The SC aspect of the RQ demands for qualitative data relevant for the SCM field, therefore the profile of the interviewees takes into conservation their expertise in managing the flow of goods, services, capital and information in these BOP markets, without requiring a special focus on either the upstream procurement or downstream distribution side of the SC but considering both.

Finally, the CSV approach brings about a rationale focusing on sustainability, but – as the exact delimitation of CSV by Porter and Kramer is not completely implemented in the management philosophy of most organisations – another alternative sustainability-related approached are also taken into consideration for the inclusion criterium.

Inclusion criteria	Rationale
Organisations with relevant experience at the BOP	Regardless of the industry, organisations, which operate in emerging markets close to the BOP segment, having the impoverished as stakeholders
Interviewees with SCM experience	Experts and professionals, who have experience in managing the flow of goods, services, financial assets, and information at the BOP
Organisations whose activity try to address to solve or fight economic, social, or environmental challenges	The purpose of the research is to focus on organisations with CSV philosophy; however, organisations may follow different approaches to sustainability, therefore alternative sustainability-related initiatives qualify as equally relevant

Table 1 – Interview selection criteria (developed by the author)

Nr.	Organisation	Interviewee profile	Main market	SC relevance
1.	Agency for Technical Cooperation and Development (ACTED)	SC Project Manager at a French NGO	Democratic Republic of the Congo	humanitarian logistics, local supplier enablement
2.	Hungarian Interchurch Aid Agency (MÖS)	Project Manager – specialised in emergency intervention and reconstruction – at an interchurch association	Afghanistan	humanitarian logistics, reconstruction
3.	Casa do Agricultor (CdA)	CEO of sustainable private company with sustainability focus	Mozambique	agricultural distribution at the BOP
4.	local business – Nepal	Ex-UN diplomat, founder & CEO of local small enterprise	Nepal	local community enablement, stakeholder management with foreign enterprises
5.	Global Distributors Collective (GDC)	Leader of a global last-mile distributor collective, international association	not concertised (relevant experience in India)	200 last-mile distribution companies operating around the world
6.	Agriconsulting Europe (AESA)	Project Manager at European for-profit consulting group	not concertised (Cambodia, Comoros, Madagascar, Mauritius)	sustainable project management in emerging markets, local community development
7.	Ernst & Young (EY)	Sustainable SC consultant at an MNE	India	SCM projects at the BOP
8.	Empreza DIAK	Founder of a non-profit social enterprise	East Timor	integration of local producers into the national SC
9.	local business – Venezuela	Local business owner, SME	Venezuela	stakeholder management, representation of international organisations
10.	M-PESA	Supply Chain Manager at an African telecommunication company, MNE	Ethiopia, Kenya, Lesotho, Nigeria, Sudan, Tanzania, Uganda	company with social inclusion philosophy, local community enablement
11.	Bopinc	Supply Chain Manager at a BOP-focused sustainable enterprise	Kenya, Ethiopia, Uganda	distribution company, connecting low-income consumers
12.	Global Community Engagement and Resilience Fund (GCERF)	Head of Portfolio Management Unit, ex-UNDP employee	not concertised (relevant experience in Mali, Somalia, Uganda)	supporting local and community-based organisations, actions against terrorism and violent extremism
13.	IFC	Former Global Lead, Innovation & Sustainability, Global Knowledge & Learning Practice	not concretised (Côte d'Ivoire, Brazil, Dominican Republic, Ghana)	financial market assistance at the BOP SC with a sustainability focus

Table 2 – Semi-structured interview sources (developed by the author)

Based on the above three inclusion criteria, potential interviewees were looked for via professional social media channels and institutional networking, i.e. using the premium services provided by the business community of LinkedIn, moreover the network of Copenhagen Business School (Denmark), NOVA School of Business Economics (Portugal) and Corvinus University of Budapest (Hungary). Customised emails were sent out to the experts who met the inclusion criteria with an explanation of the research purpose and guideline about the interview conversation as attachment (appendix II.).

More than 40 emails and social media connection requests were sent out to potential interviewees, but the niche scope of profile, lack of personal knowledge and time delimitations narrowed the answer rate. Finally, 13 interviews have bene successfully conducted, some others did not seem completely relevant for the research purpose, some subjects decided not to proceed to the interview phase meanwhile ca. half of the connected experts refused to respond.

Methodological literature acknowledges that a number of interviews conducted between 4–10 are sufficient for drawing meaningful conclusions, therefore the volume of data collected can be considered consistent (Ellram, 1996).

2.6.2. Data collection

The *one-to-one semi-structured interviews* guide this exploratory study towards an answer to the RQ and aim to synthesise important background and contextual data. It is harmonised with the purpose of the research, therefore seeks to infer causal relationship between variables stated in the RQ. On the one hand, it helps to explore the reasons why certain components qualified for the framework, probes how applicable the framework is, additionally helps top drive the research to new directions and areas, which previously may have not been considered (Saunders, 2015).

Given the remoteness of the BOP locations and the cultural and professional diversity of the interviewees, the personal contact is a pillar of the data collection. The experts have the opportunity to reflect, and they have no time-consuming need to write down their thought. Due to the changing environment at the BOP and the newness of the investigation topic, this research method is justifiable as describing the experience available in this exact time.

Bias in the interview session is overcome applying a theoretical framework based on research stage 1 as main guideline, additionally a previous preparation for the cultural diversity of interviewees makes the process more professional. To further strengthen the validity, a mixture of both probing questions and closed questions is applied following a comprehensive, structured, logical flow with no interference with each other, finally extra room is left for open-ended questions and to philosophise.

The composition of the interview questions follows a logical flow and contains both closed-end and open questions. On the one hand, the closed questions probe the validity and complements the statements of the framework elements applied in research stage 1. On the other hand, the open questions leave room for more in-depth empirical elaboration of the theoretical concepts and contributions to the research with valuable findings beyond the literature.

The interview guideline starts with (1) organisational questions, shortly summarises the market with its (2) main environmental, social and economic changes, then appoints to the BOP supply chain identifying the (3) key stakeholders. This is followed by the (4) probing of the framework, which alternately asks the interviewee to first elaborate on the findings about BOP supply chains in form of an open question, then eventually asks about any component to which the interviewee assigned special attention or no attention at all. Finally open questions inquire further details, examples, implications, best-practices about the (5) BOP challenges leading the data collection to answer the RQ.

Interviews are collected from a wide set of interviewees. At this stage 2 the objective is to get the whole picture about the BOP supply chains, therefore experts representing a diverse range of stakeholders are included in this phase. Moreover, since the BOP supply chains bring about also a geographical diversity, including a wide range of the target markets is also considered.

The interviews have been scheduled via Microsoft Teams for a 60–75-minute time frame, the interviewees were informed that the conversations were recorded to further transcript and analysis purposes, to which all of them gave their consent. Moreover, the roles and organisation names of the interviewees were provided by them, which is relevant for the analytical phase. Despite none of the subjects asked directly for anonymity, all of them will remain anonymous, as their personal identification is irrelevant for the purpose of the research. As the subjects come from at least 8 different nations, diverse scientific and business backgrounds, with a 6:7 female–male ratio, with 12 interviews conducted in English, 1 in Spanish (then translated), the *interpretivist researcher* approach is evidently necessary.

2.6.3. Template analysis of the data

After gathering a broad amount of qualitative data, a sort of *thematic analysis* called *template analysis* is implemented to categorise and code the semi-structured interview transcripts. This method allows the researcher to apply systematic yet flexible analytics and it is in harmony with the interpretivist study addressing to explore the phenomena (Saunders, 2015).

First, (1) the interview texts are transcribed, and the researcher gets familiarised with the data adding some summaries. Second, (2) the coding procedure starts, where an already existing initial *coding templates* guides the process. When the interview questionnaire is put together, frameworks from research stage 1 already guided the questions, therefore the sections and the hierarchised keywords of those frameworks will provide the initial coding template of the analysis. Once new data is identified, the *a priori* coding template and keywords incorporate the *in vivo* keywords, moreover the temple may be subject to alterations, the hierarchy may get rearranged. Thus, already a higher level of structure is earlier present than in case of a simple thematic analysis.

Third, (3) when the text is reread and recoded enough times, the codes show the occurrence and non-occurrence of certain phenomena and leave room for the observation of related themes, patterns. Hence the codes are grouped into analytical categories and a thematic map identifies the main relationships and patterns, always referring to the RQ. Finally, (4) some *testable propositions* are drawn and pave the path towards the findings and discussion.

For the analysis of the data a software called NVivo is utilised. It facilitates the researcher to assign hierarchised codes to the pieces of qualitative data, then helps creating some quantitative illustrations about the non-numeric findings, which sets the ground for the analysis chapter.

3. Theoretical framework

The research question (similarly to the title) contains the three theoretical concepts of SC (3.1.), BOP (3.2.) and CSV (3.3.), which are explained and define in detail in the following subchapters. Then the role of different organisations at the BOP is briefly summarised (3.4.) and the importance of their relationships is grounded by the relational view (3.5.).

3.1. Conceptualising Supply Chains

The principal abstract object pointed out by the research question is the supply chain, which is conceptualised in the literature based on two elements. The first element is determined by

Cooper et al. (1997) as (I) *scope*, meanwhile Mentzer et al. (2001) defines it as *complexity*. Both authors treat this element as the one that refers to the number of organisations that compose the supply chain.

In figure 3, about the number of actors that build up the supply chain, Mentzer et al. maps three different interpretations. (1) The *direct* supply chain includes one single supplier and customer connecting to the focal organisation and does not look beyond this limited boundary; (2) the *extended* supply chain considers more tiers of suppliers and customers along the up- and downstream supply chain but still thinking linear. The most complex interpretation is (3) the *ultimate* supply chain, which adds to the multiple tiers of actors even other kinds of organisations, which come into the picture and shape SCs more like a network.

In Cooper et al. (1997)'s definition the SC is composed by every organisation starting from the initial supply point to the ultimate consumption point, therefore the *ultimate* supply chain conceptualisation matches the best their approach. In contrary, the supply chain operations reference (SCOR) – described by Lambert (2008), designed and applied by consultancy firms and ASCM[1] – a model that resembles the *extended* supply chain approach (figure 4).

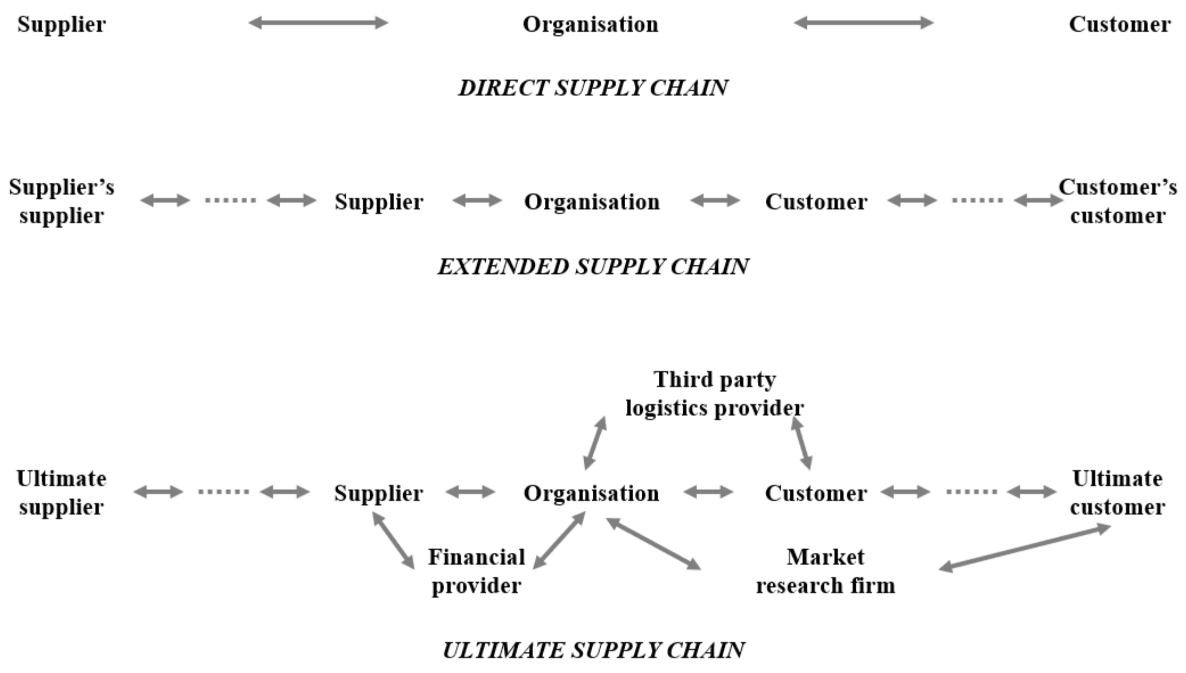

Figure 3 – SC scopes by Mentzer et al. (2001)

[1] Association for Supply Chain Management

Carmagnac (2021) in a more contemporary approach studies the concept of sustainable SCs and fixes to the focal company–upstream supplier relationship including non-traditional actors (NGOs, aid agencies, etc.) that adapts to the contemporary reality of how SCs at the BOP look like and shows similarities to the *ultimate* supply chain model.

The second element on which supply chain is conceptualised is (II) *processes*. The SCOR model defines the processes of (1) plan, (2) source, (3) make, (4) deliver, (5) return and (6) enable integrating all members of the extended supply chain (figure 4.).

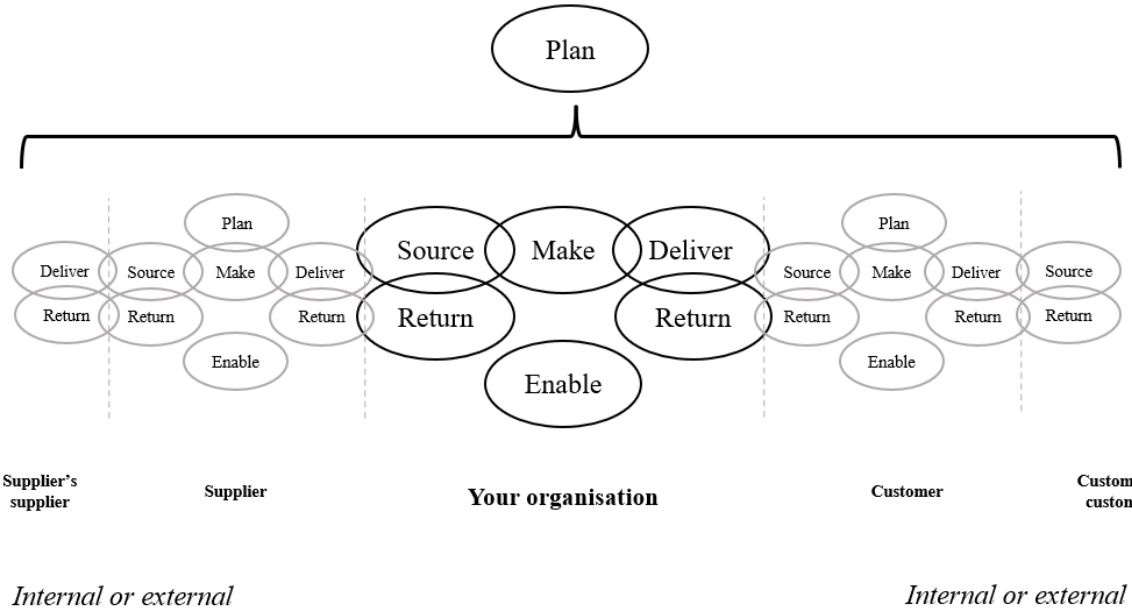

Figure 4 – SCOR framework by Lambert (2008) and ASCM

The second element according to Cooper et al. (1997) embody in the form of both *processes* and *flows*. In their model the processes are (1) customer relationship management, (2) customer service management, (3) demand management, (4) order fulfilment, (5) manufacturing flow management, (6) procurement and (7) product development and commercialisation. These seven create a flow from the supplier to the customer's direction, manifesting the (A) *product flow*. Additionally, they also shape a process for reverse flows called (B) *returns channel*, and a third flow, with interacts individually with all stages of the supply chain, typified as (C) *information flow* (figure 5).

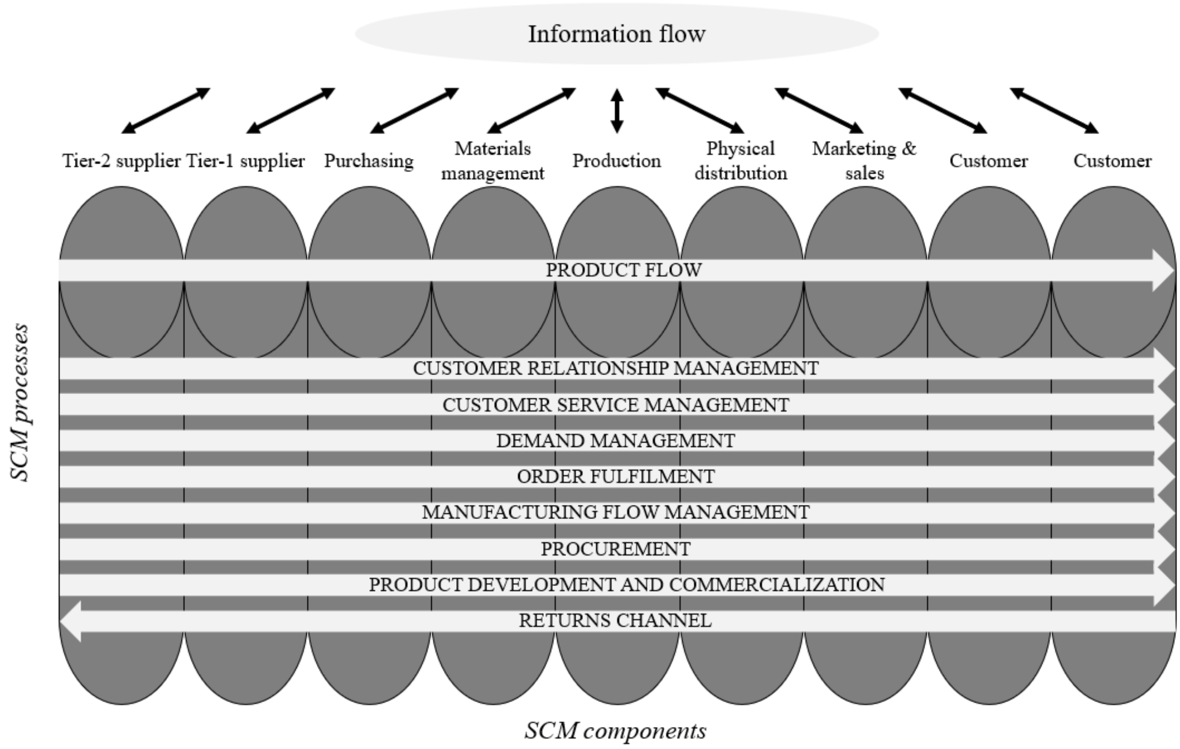

Figure 5 – SC processes and flows by Cooper et al. (1997) – redesigned

In this research SCs are treated as *ultimate*, which rather are a network than a single channel, adding the non-traditional actors as relevant players at the BOP. In terms of processes, no delimitations are made since the value creation can technically happen via different processes.

Bendul et al. (2017) synthetised SCM and BOP stating that "*sustainable supply chain management discourse has focused on ecological aspects and neglected social issues, while Base of the Pyramid studies have neglected ecological considerations (p. 107).* They used a multiple case study design, which shows similarities with the semi-structured interview methodology of this research. Moreover, they also considered multiple organisation types (MNEs, SMEs, NGOs, and political institutions), different products and distant geographic locations for their analysis, so this pattern of theirs also resembles this case. They opt for the implementation of the widely accepted SCOR framework, which they consider to be relevant for the analysis and evaluation of SC activities. They omit the inclusion of *return* processes because of gaps they found while collecting data, however this research will consider reverse flows and include this process jointly as *Deliver & Return*. The SCOR model's *enable* process however will be excluded due to its interpretational overlaps with CSV's local cluster development level. Hereby, Bendul et al.'s revisited BOP SCOR model and findings make a sufficiently recent, relevant and reliable initial BOP framework to apply for this research and further contrast it with another categorisation about CSV.

3.2. Bottom of Pyramid

The phrase of BOP was coined by Prahalad in 2005 in his work titled *The Fortune at the Bottom of the Pyramid* and since then multiple times applied, revisited, and broadened by other authors. In the problem statement he was seeking solutions for the situation of the moist impoverished and with an *“approach that involves partnering with them to innovate and achieve sustainable win–win scenarios where the poor are actively engaged and, at the same time, the companies providing products and services (pp. 3–4).”* Actors at the BOP should not be interpreted in a one-to-one relationship, as besides the poor, the civil society (NGOs), the government and firms are also present in this fast-developing market. In his definition, entrepreneurship should be a solution to eradicate poverty in this social layer: multinational corporations (MNCs) should incorporate into their strategy to serve this latent market and became part of the corporate strategy beyond simple CSR.

Although Prahalad’s BOP concept is still applicable two decades later, some progress in terms of the world’s poorest have been experienced. In the 2018 *World Inequality Report* the ‘market we do not know’ consists of 1 billion people, in contrast to Prahalad’s 4 billion discussed in 2005 (Alvaredo et al., 2018). Moreover, as different income groups are present in each country – independently whether it is categorised as an LDC or an emerging market – customers will have different needs and require different business strategies to get those needs satisfied. The conventional business strategies in emerging markets often targeted the middle- and upper-income social segment of these countries (TOP), and ignored the BOP societies owing to their low purchasing power, different customer behaviour and lack of proper infrastructure (Anderson & Billou, 2007). This leads to the phenomenon that even large MNCs are exposed to failure at BOP markets and they need additional focus and modification of business model (Tasavori et al., 2014; London & Hart, 2004).

In LDCs even serving elite TOP customers can be challenging because of the lack of Western-style business environment and rule of law enforcement (Hoskisson et al., 2000). Thus, BOP societies are poorly served by low-quality vendors and exploited by supplier intermediaries (Prahalad & Hammond, 2002). Local business partners may come from a small number of organisations, who are mainly focused on the local TOP, so serving the BOP societies mean both a complex challenge but a tremendous opportunity (London & Hart, 2004), but for sure, there are lots of hidden risks on the way, due to their extreme heterogeneity, therefore BOP may cover both LDCs and emerging markers (Webb et al., 2010). This implies that doing business at the BOP, they should rather focus on the poor social segment instead of the whole country, as *“emerging economies should not be viewed as following a homogeneous pattern of economic development in which all markets are evolving toward a more Western-style business environment (London & Hart, 2004, p. 355).”* The global segmentation of countries may consider domestic cultural characteristics and there are two ways of doing it: strategy-makers either cluster countries along *similar dimensions* and focus on a subset of countries at the time or, they define global *segments that transcend national borders* recognising domestic differences (Kaynak & Hassan, 2014).

Despite scholars tend to have the focal company control at the BOP, it must be recognised that SCM within these circumstances is the ‘locus’ of changes towards sustainability, so relationships and network mindset are required (Carmagnac, 2021). Sustainability expands beyond and boundaries of dyadic relationships and the integration of local communities, non-traditional actors delivers significant social and economic benefits at the BOP (Hahn & Gold, 2014; Touboulic et al., 2018). The environment in these locations differs from the formal sector, there are institutional voids and partnership structures are required and strongly recommended (Van den Waeyenberg & Hens, 2012; Matsuura & Isada, 2017; Brix-Asala & Seuring, 2020).

The extension of BOP may be differentiated between the terms *BOP 1.0*, which adapts existing products to unserved customers often with NGO collaboration, meanwhile *BOP 2.0* takes a step forward and seeks opportunities of co-creation, innovation, and value proposition among the underserved poor (Hart, 2017); some even further discuss *BOP 3.0* ‘sharing fortune’ or *4.0* ‘enabling fortune’ (Borchardt et al., 2020). All together embrace efforts to target the population at the BOP, which philosophy is also cited in the literature as *inclusive business* (G20, 2015).

3.3. Creating Shared Value

In this subchapter the conceptual background (3.3.1.) the criticism (3.3.2.) and the approaches to CSV (3.3.3.) are explained. The idea of shared value was first introduced by Porter & Kramer (2006) discussing *The Link Between Competitive Advantage and Corporate Social Responsibility*, but later further developed in Porter & Kramer (2011).

3.3.1. Conceptual background

Porter and Kramer’s problem statement grounds that there are several reasons that threaten the capitalist system and business is the main one, because firms prosper at the expense of the broader communities, causing social, environmental an economic problems. As firms cause social costs with their activities some *externalities* appear, which they do not deliberately bear. Thus, they sacrifice these long-term environmental externalities on the altar of short-term financial gains. Therefore, policymakers must intervene and reduce competitiveness and growth and force companies to internalise these social costs. Due to this conflict between stakeholders – firms, which cause the problems versus governments and NGOs, who are expected to solve them – it is assumed that they are obstacles to each other, however they should rather collaborate in the shared value creation.

Dembek et al. (2016) analysed the literature about how shared value was more frequently used as a common word without a proper definition rather than a theoretical concept. In the cases where it was defined, most studies showed that authors often cited Porter and Kramer defining value as “*policies and operating practices that enhance the competitiveness of a company while simultaneously advancing the economic and social conditions in the communities in which it operates (Porter & Kramer, 2011 p. 6).”* Those who use a different definition of shared value interpret value creation of different types for various stakeholders, however most commonly all definitions root back to Porter and Kramer’s ‘original’ conceptualisation (Dembek et al., 2016).

3.3.2. Criticism and overlaps with other theories

After Porter and Kramer’s released the phrase about CSV, Schumpeter (2011) criticised the concept to be ‘undercooked’, moreover similarities between CSV and the already existing concept of *blended value* were identified (Emerson, 2003a). Beschorner (2013) criticises Porter and Kramer because of inventing the new concept of CSV, instead of simply redefining or exploring the most recent CSR approaches of that time. ‘Laws and ethical standards’ are not properly explained in their work about CSV. Neither they take into consideration less powerful actors, but prioritise only the most relevant stakeholders, nor differentiate from the other actors, the so-called ‘claimholders’ – referred in even earlier research (Waxenberger & Spence, 2003) –, moreover they just complement individual ethics with institutional ethics (Hajduk, 2015). Limitations arise also regarding the role of social scientists, who were not involved in the alignment of social progress and corporate self-interest (Dyllick, 2014; J. Beschorner & Hajduk, 2017).

A loud criticism was formulated against CSV claiming that Porter and Kramer were not rigorous enough when developing the CSV concept and its theoretical background, moreover issues regarding to its originality from *CSR* prevailed in the literature (Beschorner, 2013; Crane et al., 2014). CSR has often been misunderstood and – in Porter and Kramer's interpretation – these issues were positioned at the periphery and not the core of business mindset. In contrast, the 'logical progression of CSR' – which is the theory of creating shared value (CSV) – should become the philosophy at the core of business thinking and it should be the purpose of the corporation that legitimises its business activities. CSV should not be viewed as a concept that raises costs, but one that opens doors for innovation, new methods, and management approaches, therefore "*expands the total pool of economic and social value (Porter & Kramer, 2011 p. 5)".* Moreover, this concept is applicable independently from the geographical location, however the opportunities to CSV may differ in advance economies from those at the emerging markets, BOP societies. Daood & Menghwar (2017) highlights perspectives about CSV being kind of CSR where it positively relates to financial returns, or an economically different way of CRS put in practice.

In contact with *stakeholder theory* CSR is understood as a stakeholder management practice where stakeholder interests, corporate values and societal issues are considered (Freeman, 1984; Freeman et al., 2007; Daood & Menghwar, 2017). *Sustainability* theories conflict less with CSV, since latter is not per se sustainable, and the firm does not need to have a social mission as core objective (Hart, 1997; Daood & Menghwar, 2017). *Blended value* is considered broader than CSV, therefore latter is an integral part of economic, social and environmental value creation aspect of blended value, but ignores blended returns (Emerson, 2003a, 2003b; Daood & Menghwar, 2017).

Overlaps between the two concepts applied in the title and research question of present investigation are also discussed by scholars. The perspective of Daood & Menghwar (2017) is relevant for this thesis, stating that "*CSV is an extension of BoP, the latter focusing on the bottom of the economic pyramid while the former targeting whole economic pyramid (p. 518)."* Therefore, the CSV is going to be treated as the broad management philosophy of value creation and BOP as its narrowed geographic market delimitation, being the BOP only one aspect of CSV (Porter & Kramer, 2014). Hereby the overlaps are acknowledged as both concepts claim that social issues are addressable on a profitable way with redesigned products and reconfigured value chain (Dembek et al., 2016).

Additionally, the *triple bottom line (TBL)* concept was considered by this research as an academic source for social, economic and environmental sustainability, but finally was not chosen as the core framework (Elkington, 1998). It is not used and explained in detail due to its interchangeably with *sustainability* (Arowoshegbe et al., 2016), hereby it is only mentioned in this research for the description of the BOP SC problems whether they are of social, economic or environmental nature, affecting the 'people, profit or planet'.

3.3.3. Approaches to CSV

Throughout the years several approaches to CSV appeared, authors interpreted the concept differently and proposed different frameworks to step ahead from the initial concept of Porter and Kramer. Zhao et al. (2018) identifies three premises to CSV. First, they define the concept as the creation of both economic and social values, where the creation of social value is the premise of creating economic value. Then they affirm that CSV must be consistent with the overall strategy of the enterprise, mainly through the business implementation, then social responsibility or donations. Finally, they define CSV not to share value by means of redistribution but expanding the value of economy and society.

Porter & Kramer (2011) identifies three ways to CSV once they coin the phrase, but this framing is neither actionable nor measurable enough. Therefore, in Porter et al. (2011) the shared value strategy and measurement is integrated in a four-step framework, which favours the managerial application three levels of shared value. Bockstette & Stamp (2012) utilises a comprehensive effort that extends across a company when translating CSV into action. They link ten building blocks to company vision, strategy, delivery, which provide a blueprint for successfully adopting CSV. The concept of 'collective impact' is applied by Kramer & Pfitzer (2016), which understands CSV beyond the one focal company, but in a network ecosystem, where a collective impact effort with five elements is required strategy to value creation.

Daood & Menghwar (2017) intermixes the approach to CSV with other philosophies and phrases fourteen perspectives about how these concepts interact with each other (appendix I.). Finally, the most recently Nobre & Morais-da-Silva (2021) applied a systematic literature review method to gather relevant articles between 1998 and 2019 and defined twenty-two capabilities that are required to enable organisations to create sustainability values in BOP ecosystems.

Author	Concept	Categorisation	Main subcategories
Prahalad (2005)	Innovation at the BOP	12 principles	(no subcategories)
Porter & Kramer (2011)	Levels of Shared Value	3 ways (decoupled)	reconceiving products and markets redefining productivity in the value chain enabling local cluster development
Porter et al. (2011)	Integrating Shared Value Strategy and Measurement	4 steps	strategy measurement
Bockstette & Stamp (2012)	The Building Blocks of Creating Shared Value	10 building blocks	vision strategy delivery performance
Kramer & Pfitzer (2016)	Collective Impact	5 elements	(no subcategories)
Daood & Menghwar (2017)	Perspectives about CSV	14 perspectives	sustainability blended value BOP CSV
Nobre & Morais-da-Silva (2021)	Capabilities of BOP Organisations	22 capabilities	BOP Responsible Consumption BOP Responsible Business Model BOP Responsible Management BOP Responsible Innovation

Table 6 – CSV-related concepts decoupled to subcategories (developed by the author)

3.4. Organisations at the BOP

The ultimate SC concept brings about that there are multiple actors at the BOP SC. Porter and Kramer (2011) stresses in their definition that CSV collaboration is needed between profit and non-profit organisations. The ideal role of governments is also expressed, as stakeholders, who need to enable shared value. Zhao et al. (2018) also finds that CSV develops interaction with heterogeneity of organisations and also linked to political connections.

Alfaiate (2021) describes the organisations serving the BOP customers in a scale with two extremes ranging from organisations which care the most about impact at one end, and organisations which prioritise profit purposes at the other, similarly to Porter and Kramer (2011), who also states that the boundary is blurred between for-profit and non-profit organisations. However, the demonstration by Alfaiate adds an axis, which implies that NGOs have more impact focus, meanwhile for-profit organisations prioritise economic value ahead of shared value. This categorisation is nevertheless more convenient to depict the blurred boundary, as it conceptualises the transition from an NGO to a multinational enterprise with profit maximisation philosophy. Alfaiate's approach presents the NGOs as organisations with the biggest impact creating opportunity, however Porter and Kramer (2011) identifies in terms of effectivity business will be far more effective than governments and NGOs, therefore more shared value can be created throughout multinational organisations. Other scholars also claim false that governments and NGOs are the major catalysators of the BOP progress (Kramer & Pfitzer, 2016). Companies at the BOP must team up with non-traditional actors (governments and NGOs) and take advantage of these synergies, moreover non-business partners in BOP SCs may usually be in a focal positions and intermediate between MNEs and their customers (Hahn & Gold, 2014; Kramer & Pfitzer, 2016; Carmagnac, 2021). Together, CSV promotes the business progress and coordinates social development, and tends to control the power balance of the relationship in the supply chain not to sacrifice values inter-enterprise (Matsuura & Isada, 2017; Zhao et al., 2018).

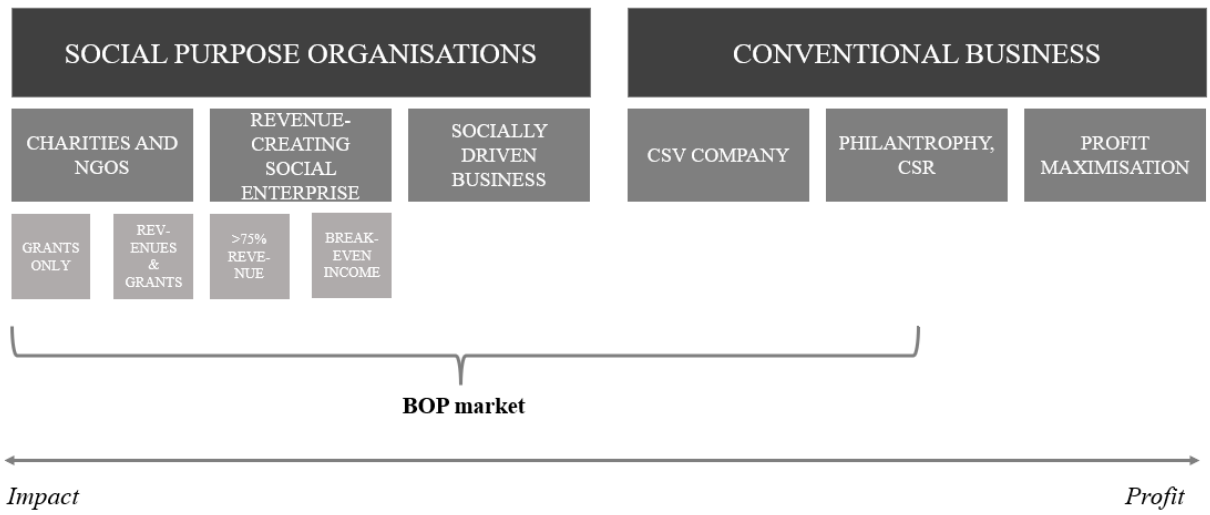

Figure 7 – Organisations at the BOP by Alfaiate (2021)

NGOs are often labelled as the civil society, third sector or non-profit sector, which describes the aspects of society extending beyond the private and public sector (Schwartz & Pharr, 2003), being considered as one of the three key actors in the cross-national environment influencing global economy, together with governments and firms (Eden, 2004). They establish dyadic relationships with both the governmental and business actors; besides, they even have an impact on the relationship between these two (Eden, 2004). They are non-profit organisations serving societal interest providing advocacy or operational efforts (Teegen et al., 2004). The advocacy strategy of NGOs can be either insider or outsider (Peterson, 1992). If they take the *insider* strategy, they may influence powerful institutions or work together with decision-makers, meanwhile applying an *outsider* strategy they can change public opinion (Teegen et al., 2004), but in both ways they intervene into the exchanges among business, society, and government. In contrast, Carmagnac (2021) assigns four roles (*instigating*, *supporting*, *facilitating* and *leading*) to the non-traditional actors at the BOP supply chain.

For-profit and non-profit organisations compose a so-called *NGO–Industrial Complex,* which contains a subset of standards, fair trade products and social reporting (Gereffi et al., 2001). If a SC is spread globally, businesses try to source from the small-scale local producers at BOP markets, however they are often unable to meet the rigorous sustainability standards set by NGOs (Raynolds, 2004). Imbalance in the network appears and CSV is also threatened since larger companies in wealthier nations can earn these certificates earlier than poorer BOP enterprises that are impeded by the lack of infrastructure and high costs (Pattberg, 2006).

The interaction between for-profit and non-profit often has two stages according to Perez-Aleman & Sandilands (2008). In the first step the NGO *executes pressure* on the businesses via customers and market campaigns enforcing ethical sourcing code for their SCM practices. On the second stage the business and NGO *establish an alliance* with the purpose of working together on joint projects, which they also call cross-sector social partnership, as for-profit and non-profit organisations address the social and environmental issues together. This research examines CSV at the BOP regardless of the type of relationship setup, whether it was *agency-driven* or *corporate-driven* i.e., established with the help of large partners or built up internally by integrating local actors (Brix-Asala & Seuring, 2020).

3.5. The relational view

The thorough definition of the component concepts of the RQ, the theoretical approach of the whole investigation is properly paved to be relatable to the *relational view* (Dyer & Singh, 1998). Additionally, the research question itself contains the verb 'affect', which supposes a relationship between the concepts, moreover, brings about a social constructivist research philosophy, which sees the world as built up by human activity and social interactions.

Notwithstanding, other theories have been considered and screened if they are in alignment with special characteristics of BOP societies and the sorts of relationships at these markets. Porter (1980) frames the *industry structure view* that considers the competition in the industry, suppliers' and customers' bargaining powers, new entrant, and competitor threats as sources of 'supernormal returns.' In this specific research however, multiple organisational relationships at the BOP are considered, regardless of their industry affiliation, and the ownership of rent-generating process does not rely on the competition between them, but value is rather crated via collaborations (Bartley, 2003; Eden, 2004; Porter & Kramer, 2011). Another theory, the *resource-based view* looks at the firm and not the industry. It suggests that companies owning valuable, rare, intangible, and non-substitutable resources can gain competitive advantage (Barney, 1991). However, this approach would give an overview on what the firm's possessions is in the resource-scarce BOP environment and would not consider synergies form collaboration with other stakeholders (Arnold & Valentin, 2013).

The most appropriate theory is coined by Dyer & Singh (1998) as the *relational view* that the best can support and explain value creation at the BOP. They define 'relational rents' as supernormal profit, which is jointly generated thanks to the 'idiosyncratic interfirm linkages.' Their view moves away from the attributes of market relationship, they take a step forward from the simple profit that a buyer–seller relation can generate and expect productivity, when trading partners are willing to take relation-specific investments. The relational rent concept is the best in line with Porter & Kramer's value concept, therefore the theory is relatable to CSV.

Moreover, components of the relational view further strengthen the application of the theory. The *interfirm relation-specific assets* are present when considering concepts such as BOP 2.0 where the buyer–supplier relationship is beyond simple market coordination mechanisms (Khalid et al., 2015; Hart, 2017). The *knowledge sharing routines* and *complementary resource endowments* acknowledge that to create shared value at the BOP SC different organisations possess different resources and shared value is created throughout collaboration and the exchange of these resources (Eden, 2004; Perez-Aleman & Sandilands, 2008; Porter & Kramer, 2011; Kramer & Pfitzer, 2016). Finally, effective *governance* determines relational rents since it promotes transaction cost reduction and willingness of partners to engage in value creation – that is in line with revisited approaches to CSV (Porter et al., 2011; Bockstette & Stamp, 2012; Kramer & Pfitzer, 2016; Nobre & Morais-da-Silva, 2021).

Revisiting the relational view can bring about some criticism as the initial theory do not consider the relationships as dynamic but rather treats them static, without taking into consideration the alliance lifecycle and diminished alliance performance with time (Dyer et al., 2018). Likewise, the same observation of dynamism was stated by Porter and Kramer (2011) about the Prahalad's BOP concept, which further strengthens that the relation view is in line with the concept of CSV at the BOP.

4. Research stage 1 – framework proposal

To answer SQ1 and SQ2 the theoretical background provided a broad overview and supported the suggestions of two frameworks that will further transform the thematic analysis into a template analysis, in other words, predefining the main codes and subcodes a priori.

4.1. SC scope expectation – actors at the BOP

The answer for SQ1 shapes the relationship about the actors, main stakeholders at the BOP SC. It is expected to get mapped an ultimate SC, where the focal company connects multiple tires of the upstream and downstream SC. Moreover, scholars repeat that governmental voids characterise these markets, therefore they are substituted by the role of non-traditional actors, NGOs, aid agencies (Hahn & Gold, 2014; Kramer & Pfitzer, 2016; Carmagnac, 2021). Applying the relational view to the research, the shared value creation at the BOP is enabled by the synergies between these actors and thanks to the complexity in the literature, an ultimate SC network depiction is expected (Mentzer et al., 2001).

4.2. Primary framework proposal – BOP SC model

Dimensions of SC	Standardised concepts applied in traditional TOP SCs	Models applied in BOP SCs
PLAN & SOURCE	Simultaneous engineering and logistic-oriented product design	Design focusing on basic functionalities
	Industry parks/commercial freight villages	Customer-centric design and local development teams
	Supplier Relationship Management concept	Low material cost
	Collaborative Planning, Forecasting and Replenishment concept	Low lifecycle cost
	Vendor Managed Inventory	Early supplier involvement and supplier relationship management
MAKE	Just-in-time/Just-in-sequence production	Labour intensive assembly method
	Lean manufacturing	Outsourced assembly method to final customer or distributor
	Kanban production	Low variance
	Modular design	Modular design
		Reduced and less appealing packaging
DELIVER	Customer Relationship Management	Locally embedded distribution channels
	Efficient Consumer Response	Traditional and new distribution channels
	Multi-channel-management	Outsourced service and maintenance
	Integrated services and products	Integrated services and products
	Intermodal transport	Tailored marketing

Table 8 – Supply chain operations at the TOP and BOP based on the adjusted SCOR model dimensions (TOP analysis is based on Bendul, 2012; Harrison et al., 2019; Schönsleben, 2018; Stölzle, 1999; BOP based on Bendul et al., 2017)

Bendul et al. (2017) followed the SCOR framework and crated a model tailored to the realities of the BOP environment. After the previous chapters’ thorough literature review on the BOP, the recommendations of Bendul et al. are considered recent, relevant and applicable to serve as a guidance on the way to answering the RQ. Moreover, the observations they make, and the BOP SC model they come out with can provide a sound ground for the questionnaire composition in the data collection phase of the research. Above table 8 illustrates the concepts found by other authors concerning TOP SCs and the model of Bendul et al. about the BOP SCs. The latter is the relevant starting point for this research and the components are further explained, converted into analytical codes and supported by keywords in chapter 5.3.

Taking a step forward from Bendul et al. the SCOR model’s SC process of *return* is going to be considered in the questionnaire together with *delivery*. In both the above model and current research, the *enable* component is excluded – in this case it would cause disturbing overlaps with the local cluster development level of CSV (chapter 4.3.).

4.3. Secondary framework proposal – ways of CSV

Although about the ways of creating value multiple approaches have been studied, the most of the shared value definitions refer to Porter and Kramer (2011). Therefore, their approach to CSV with the three main steps has been revisited, decupled to subcategories, and linked to their observation whether it had any relevance for SCM or BOP markets. The CSV model is going to be treated as the secondary framework of this research, hence used for the analytical coding of the collected data (see chapter 5.3.) but not used directly to apply targeted questions during the data collection phase.

First way of CSV resembles Prahalad’s BOP concept and favours (1) *reconceiving products and markets*. It is identified as a great opportunity, since the “*societal benefits of providing appropriate products to lower-income and disadvantaged consumers can be profound, while the profits for companies can be substantial (Porter & Kramer, 2011 p. 8)”.*

One of the challenges is to recognise that underserved BOP markets are not static, since they differ in terms of geographical location, technologic development, societal needs, etc. Therefore, organisations must identify which is the way to redesign (1a) *products* and explore new methods to reach these (1b) *markets*.

The second way of CSV is via (2) *redefining productivity in the value chain*. This approach is complex since the productivity can be achieved different ways throughout the value chain.

Porter and Kramer identifies six main areas when this objective is reachable. (2a) In terms of *energy use and logistics* the SCM aspect is relevant, especially for the logistic areas. Cutting down on shipping can not only lower the energy costs, but also leads to time gains, moreover lessens complexity, inventory, and management costs.

(2b) *Resource use* is relevant for the environmental aspect of sustainability and value creation. BOP locations often make the most on their natural resources exploited by firms. In the SCM of this locations CSV is possible when new approaches of utilising raw materials, water and packaging are applied.

To create shared value organisations must recognise that marginalised suppliers at the BOP can neither remain productive nor improve their quality. In the (2c) *procurement* phase BOP operations need to get access to inputs, technology, and financial assets thus they would improve quality and productivity, then become more cost-efficient and growing in volume. When buying locally, transaction costs get lower, cycle time reduces, flexibility increases, knowledge and innovation take root, therefore shared value is created at the BOP SC.

Concerning (2d) *distribution* both SCM and BOP are relevant since BOP 1.0 targets the customers in the emerging markets. Since they often reside in remote places, hard-to-reach or isolated locations, SCM has a remarkable role to deliver the life-altering products and services for them thereby CSV.

(2e) *Employee productivity* needs to embed the CSV mindset. Many MNEs exploit the BOP markets due to their cheapness and discard further investments. However, it is considered that investing in employee safety, wellness and training increases productivity, strengthens the suppliers at the BOP and improves sustainability along the SC.

(2f) *Location* can either serve or ignore BOP; when plants are relocated near to the Western target markets, BOP societies lose employment opportunities. Therefore, CSV is possible when the BOP enables organisations to keep the plants in their lands and remains productive, moreover when BOP markets themselves are treated as the target market. The location variable is relevant for SCM anyways, since shipping, inventory and management costs play a role.

The third way to CSV is (3) *enabling local cluster development,* which is based on the premise that no organisation is self-contained, so they are affected by other organisations and infrastructure around them. This approach considers companies at the BOP in an ultimate SC, where they interact with product supplier, service providers, the local environment (infrastructure, human resources, etc.) and non-profit organisations. If the local cluster works appropriately, they drive productivity, innovation, and competitiveness. When a cluster at the BOP is built, it has a multiplier effect, which gives opportunity to the appearance of new, relatable businesses, creates jobs, and develops workforce and provides spill-overs to the local economy. Shared value is created when the gaps and deficiencies are identified in these markets, then initiatives try to improve the weaknesses that constrain companies. According to Porter and Kramer *“the most successful cluster development programs are the ones that involve collaboration within the private sector, as well as trade associations, government agencies and NGOs (p. 15).”*

Levels of CSV (restructured)

1. Reconceiving products and markets	a. products
	b. markets
2. Redefining productivity in the value chain	a. energy use and logistics
	b. resource use
	c. procurement
	d. distribution
	e. employee productivity
	f. location
3. Enabling local cluster development	

Table 9 – Levels of CSV by Porter & Kramer (2011)

5. Research stage 2 – qualitative analysis

To answer SQ1 and SQ3 the two frameworks apply based on the existing literature, guide the collection of primary data and predefine the template analysis procedure.

5.1. Question formulation based on the frameworks

The semi-structured interview is built up by five different sections. The first (1) *organisational* questions are related to the interviewee’s experience, the market and industry they have relevant knowledge about, the purpose of the different organisation they work with and basically it tests whether they meet the inclusion criteria.

The second part of the conversation tests the (2) *stakeholders* at the BOP SC, the organisations these experts collaborate with along the SC. These questions address to reveal the role of non-profit and for-profit enterprises, NGOs, both local and foreign governments and any other sort of organisations that intervene in the value creation in the BOP SC.

In the third section questions about (3) *value creation* are asked, but only in case when these are not directly mentioned by the interviewee. On the one hand, concepts like sustainability, stakeholder management, CSV, CSR, and blended value are looked for, on the other, the social, economic and environmental components of TBL are asked about in aim to discover what kind of sustainability challenges each market has to face and organisations try to mitigate.

The fourth set of questions represents the highest volume of the structured conversation, and it asks systematically about the components of Bendul et al.'s (4) *BOP SC model*. The guidelines follow a logic by a revisited SCOR model, starting with questions related to (4.1) *planning and sourcing*, which asks in depth about the upstream SC, continued with questions about (4.2) *making*, so everything related to the production or assembly at the BOP, then finalising with (4.3) *delivering and returning* processes, which covered marketing, customer service, distribution and reverse logistics as well.

Finally, the guidelines leave room for some (5) *unstructured section* where the interviewees are asked to share any other knowledge, they consider relevant related to the RQ, which would detail the biggest challenges, solutions, best practices, any interesting cases, irregularities, differences according to their experience (appendix III.).

The semi-structured style of the interview and the different cultural and professional background of the interviewees and their organisations make every conversation slightly different. Components have unequal relevance, since not every interviewee owns experience about all the analysed concepts. Moreover, some of them sometimes tend to focus on one single case more in detail, meanwhile others rather opt for generalisation. Additionally, some reformulations and active improvisation is required by the interpretivist researchers, because in each situation it is fundamental to catch the conversation flow, avoid redundancy, get acquainted with the context and in vivo terms used by the interviewee, thus guide the interview structure accordingly. To avoid interviewer bias, information that is not mentioned, gets questioned only once, without forcing further. Correspondingly, unexpected important details were asked for clarification.

5.2. Interview transcript

After the conduct of the interviews, each of them gets transcribed, focusing on the originality, including all the details that the interviewees mention, unless the ones that are specifically asked not the be included due to their sensitivity. After the transcriptions, each document is reread, some hesitations, grammatical errors, which disturbed the clear understanding are corrected and the interviewees are reached out for confirmation about the unclear sentences, or details that need more specification. The transcripts are then individually saved and uploaded to NVivo software awaiting their coding and analysis (appendix IV.).

5.3. Template analysis coding

During the coding phase each recoding is listened to the third time and simultaneously the raw qualitative data is coded into categories. To the (1) *organisational* questions no exact code belongs as they only serve to test whether the inclusion criteria is met.

The (2) *stakeholder* questions receive the main code **SC SCOPE** and the subcodes get grouped together: on the one hand according to the types of organisations that exist in the BOP SC, and on the other, the scope of the BOP SCs, whether they are generic, extended or an ultimate network as per the interviewee's observations (referring to Mentzer et al.'s categorisation). These main codes relate to SQ1.

The (3) *value creation* questions receive the main code **CONCEPT**, and the pieces of information are sub-coded on the one hand based on how they describe any social, economic, or environmental issues at the BOP or if they implement any managerial philosophy solutions (sustainability-focus, stakeholder management, CSR, CSV, blended value) to address these problems. This main code relates to SQ2.

The predominant extent of the qualitative data analysis belongs to the (4) *BOP SC model*, thus these bring about the framework-related subcategories. On the one hand, the revisited **SCOR** model of Bendul at el. is implemented and *Plan & Source*, *Make* and *Deliver & Return* subcategories, further split into inferior subcodes, which are generated taking a step forward from the framework description. Pieces of information about the revisited SCOR components are coded under the corresponding categories based on the a priori keyworks that they are expected to contain. Additional in vivo keywords are used as well in case of pieces of information that does not exactly contain any previously expected keywords, but something similar, relatable, thus the added keywords help the researched to assign categories to each piece of information.

Besides to assign each SCOR-related piece of data to a subcode, simultaneously the same information is also assigned a subcode in relation to Porter and Kramer's three **CSV** levels. Whether the information mentioned refers to BOP *products and markets*, the BOP *value chain* processes or abstract *cluster development* for the poor, the same piece of data receives its second code, therefore all the framework-related answers of the interviewees are at least double-coded according to their BOP SCOR and CSV relevance.

BOP SC model subcode	**Bendul et al.'s framework description**	**A priori keywords**	**In vivo keywords**
FUINCTIONALITIES	Focus on basic functionalities	focus, functionality, basic	segmentation
DESIGN	Customer-centric design	customer-centric, design	needs assessment, supply market analysis, procurement plan, value for money
INVESTMENT	Low initial investment costs	investment, cost, price	
QUALITY	Low initial maintenance and lifecycle costs	maintenance, lifecycle, quality	price-quality ratio
TEAMS	Local development teams	development, team	
SUPPLIERS	Local suppliers	local sourcing, global sourcing	local buying
RELATIONSHIP	Early supplier involvement and supplier relationship	supplier involvement, supplier relationship, selection	tenders, quotation, competition, multiple sourcing
ENGAGEMENT	Early direct customer engagement	engagement	shops
VARIETY	Low variance of basic products	variance, broad, narrow	variety, diversity
LABOUR	Labour-intensive assembly method	labour, qualification, education, training	
MODULAR	Modular design	modularity, complexity	simplicity, generic
PACKAGING	Reduced and less appealing packaging	packaging, bulk, product size, product shape	acceptance, perception
OUTSOURCING	Outsourced assembly method to final customer or distribution	outsourcing, final product	
MARKETING	Tailored marketing	marketing, demand forecast	brand, trust
CUSTOMER SERVICE	Special focus on customer service	customer service, after sale, reverse logistics, return	
DISTRIBUTION	Locally embedded distribution channels insuring the reach to remote locations	distribution, remote	
MAINTENANCE	Service and maintenance outsourced to local shops and entrepreneurs	maintenance, local entrepreneurs	loyalty

Table 10 – BOP SC coding based on Bendul et al. (2017), (developed by the author)

Occasionally some pieces of information are assigned more than one subcode within one main code, because the information they contain refers to multiple subcode topics and splitting it into pieces would hurt the grammatical coherence and understandability of the sentence.

Finally, the (5) *unstructured questions*, free speech of the interviewees about their BOP SC experience is coded in a separate **IMPLICATIONS** category, to where the BOP managerial challenges and solutions belong. During the whole coding procedure, hand-written *self-memos* are created about each interview, which comment the initial observations of the researcher about potential relationships, areas that needed more clarification and eventually some doubts about 'under which subcode one in vivo keyword should be properly coded?'

CSV level subcode	Porter and Kramer's framework description	A priori keywords	In vivo keywords
PRODUCTS	Reconcieving products and markets	products, markets, unexplored, underserved, reposition, redesign	package, access, proximity, marketing, tailor, basic needs
VALUE CHAIN	Redifining productivity in the value chain	energy, logistics, shipping, inventory management, hard-to-reach, remote, offshore, cost, time gains, alternative resources, cycle time reduction, increased flexibility, fast learning, innovation, productivity, distant procurement, less transportation, plants closer to market, synergies, safety, wellness, training	local networks, flexibilty, controlling
CLUSTER	Enabling cluster development	capable suppliers, transparency, spill-overs	guidelines, capacity-building, peer-to-peer,

Table 11 – CSV coding based on Porter and Kramer (2011), (developed by the author)

6. Findings

In this chapter the findings of the analysis are introduced to the reader, presenting the profile of the interviewees (6.1.), the frequency of sustainability concepts (6.2.) and remarks about the SC scope and the stakeholders (6.3.). Then it is shown how frequent the use of certain concepts is among the transcribed interviews (6.4.) and which are the points where the two main concepts overlap (6.5.).

6.1. Profile of interviewees

The inclusion criteria delimit the interviewee profile to a niche segment in terms of professional expertise but leaves room for diversity in terms of other factors such as geographic locations, organisation profile, industry, or project length. As the RQ does not focus specifically on any exact industries or organisational forms, the interviewees come from a diverse set of profiles. In terms of time-orientation, some interviewees shared their experience about BOP SCs based on short-term projects. At the same time, others gained knowledge working for organisations which propose value providing one standardised product or service at the BOP. These latter ones are predominantly enterprises, which tend to focus on one country or region and one industry, meanwhile the project orientation is more characteristic in case of NGOs and agencies, covering a diversity of geographic and industrial scope.

As BOP societies can be found around the world irrespective form any country, the interviews covered a broad range of nations from Latin America to Southeast Asia, however the biggest concentration of these markets were found in the African continent. As table 12 suggests, some interviewees share experience about one single market, meanwhile others talk about projects and products or services, which are deployed or launched in multiple markets. India and Kenya are the most mentioned nations in the examples during the data collection.

		Geographic focus	
		One country	**Multinational**
Time orientation	**Short-term projects**	07-EY	01-ACTED 02-MÖS 06-AESA 05-GDC 12-GCERF 13-IFC
	Business continuity	03-CdA 04-Nepal 08-DIAK 09-Venezuela	10-M-PESA 11-BOPINC

Table 12 – Time and geographic orientation of the interviews (developed by the author)

Each organisation has a different level of engagement with the locals, therefore the SCM processes are not equally relevant in all cases – meanwhile some have more a sourcing focus towards the BOP, others address them as customers; some organisations keep all their value chain at the BOP, some integrate them to a global SC; some organisations have more a non-profit purpose where customers does not have a say, while others tend to engage end-customers from the beginning as their purpose is generating profit; some have their HQs in BOP locations, others try to manage the processes for the northern hemisphere and base in developed countries (Belgium, France, Hungary, Netherlands, Portugal, Switzerland, UK, USA).

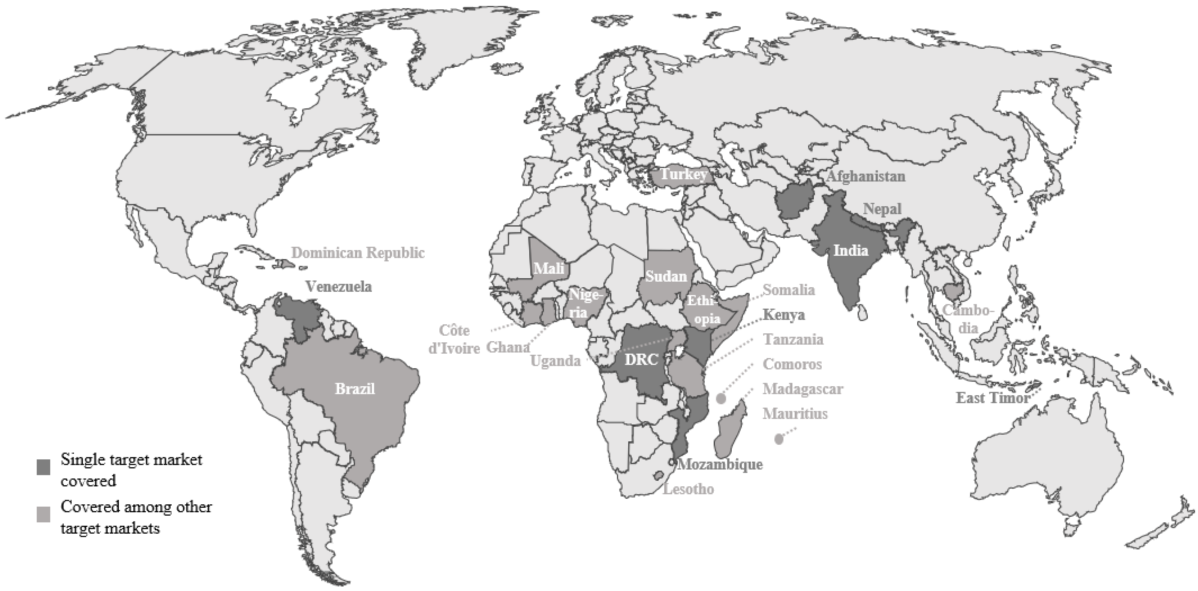

Figure 13 – Geographic diversity of the interviews (developed by the author)

Agriculture may seem as a bias in the research, however within the geoeconomic circumstances of these regions, the primary sector is traditionally predominant in the economic structure as well as the BOP society profile, therefore it is not considered as a bias.

6.2. Conceptual findings

Based on the literature review about CSV and its criticism, some managerial philosophies about sustainability are considered. The purpose of this categorisation is to examine that – despite, Prahalad’s BOP concept and Porter and Kramer’s CSV concepts are used by this research separately – criticism about the approaches exists and organisations may not use them in line with the theoretical background, eventually mix them or choose to adopt other concepts.

According to the explanations and references of the interviewees, below table 14 shows that the concepts the most subjects talk about are BOP and sustainability – probably both thanks to the geographic and social inclusion criteria. Stakeholder management also prevails, which in this case means coordinator tasks between businesses or donors and beneficiaries along the BOP SC. CSR and CSV are rarely mentioned as such, however some interviewees explicitly allude remarks relatable to CSR or value creation, meanwhile blended value is not referred by anybody. It is also found that NGO project managers and local SME owners are the less likely to mention any of these managerial concepts.

	BOP	CSR	CSV	Stakeholder Management	Sustainability	Blended Value
01-ACTED				X		
02-MÖS				X		
03-CdA	X		X		X	
04-Nepal		X				
05-GDC	X				X	
06-AESA				X	X	
07-EY	X	X			X	
08-DIAK	X	X	X		X	
09-Venezuela						
10-M-PESA	X	X		X	X	
11-BOPINC	X		X	X	X	
12-GCERF	X	X	X	X		
13-IFC	X		X	X	X	

Table 14 – Concepts referred by the interviews (developed by the author, based on NVivo software)

To understand the nature of the challenges BOP population face, problems that interviewees mentioned are sub-coded under the TBL components. Table 15 shows that the most relevant problems these societies encounter concern the social pillar, to which the economic hardships strongly relate. Despite mentioning some environmental issues, the BOP population primarily still worries about their day-to-day survival, in alignment with existing literature that states creation of social value is a condition for economic value (Zhao et al., 2018).

	Social	Economic	Environmental
01-ACTED	displaced people, armed conflicts	unemployment	
02-MÖS	mass-poverty, armed conflicts, criminality, illiteracy, overpopulation, IDPs[2], xenophobia		floods, earthquakes
03-CdA	poverty, lack of education, armed conflicts		
04-Nepal		corruption, exodus of professionals, indebtment	earthquakes
05-GDC		geographic isolation	air pollution, deforestation
06-AESA			air pollution, climate change
07-EY			recycling, waste management

[2] Internally Displaced Persons

08-DIAK	female discrimination	national economy dependent on oil	
09-Venezuela	dictatorship	hyperinflation, exodus of professionals, legal instability, recession	
10-M-PESA	diseases, no healthcare, overpopulation	unemployment, corruption	
11-BOPINC		unqualified labour	waste management
12-GCERF	violent extremism, terrorism	economic marginalisation	
13-IFC	lack of education, female discrimination	unethical traders	

Figure 15 – Problems at the BOP mentioned by the interviewees (developed by the author)

6.3. SC scope

Based on the literature review, approaches to the SC scope are considered. The interviewees are questioned about how they observe the SCs at the BOP and according to how they depict the relationships. Each case is assigned a scope model based on Mentzer et al. (2001). Below table summarises that most of the subjects talk about ultimate SCs, which are more network-shaped including multiple stakeholders, who non-linearly connect to the entire chain – described as the most common at the BOP (Carmagnac, 2021). Few subjects do not refer to SCs as a network, but rather talk about and extended design including multiple up- and downstream tiers of suppliers and customers, meanwhile there is only one single case where the organisation addresses to have only generic SC focus.

Interview	SC scope	Interview	SC scope
01-ACTED	Ultimate	08-DIAK	Ultimate
02-MÖS	Ultimate	09-Venezuela	Extended
03-CdA	Ultimate	10-M-PESA	Extended
04-Nepal	Ultimate	11-BOPINC	Generic
05-GDC	Extended	12-GCERF	Ultimate
06-AESA	Ultimate	13-IFC	Extended
07-EY	Ultimate		

Table 16 – SC scopes referred in the interviews (developed by the author, based on NVivo software)

Among the stakeholders in the BOP SCs, the local governments are mentioned in all cases, but the presence of local SMEs, foreign MNEs and the civil society i.e., NGOs also prevails. Foreign governments or donor agencies are less frequent, but occasionally other special stakeholders are mentioned as national or international military groups, religious communities, or educational institutes, etc. Overall, a heterogeneity of organisations is found present at the

BOP, with both agency- and corporate-driven relationships (Zhao et al., 2018; Brix-Asala & Seuring, 2020).

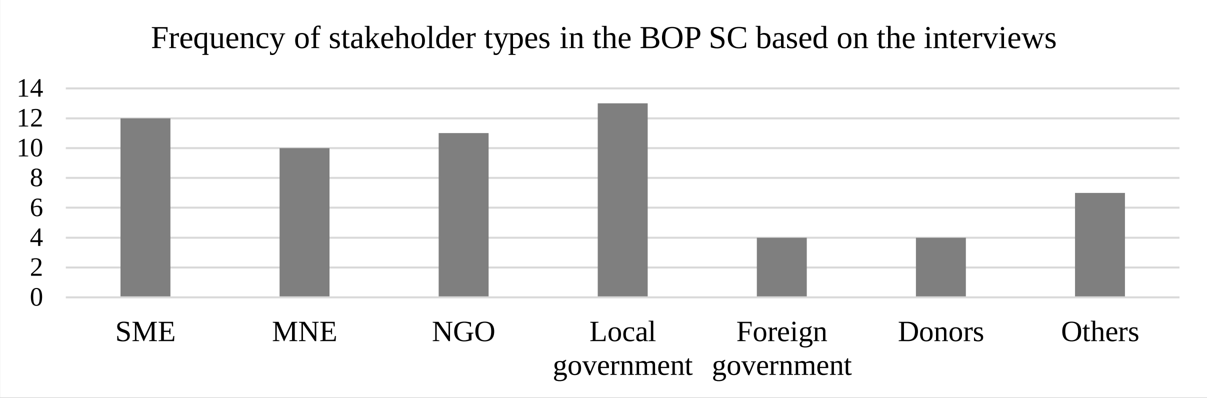

Figure 17 – Stakeholder types (developed by the author, based on NVivo software)

6.4. Intra-conceptual findings

	CSV levels (100%)			**BOP SCOR** (100%)		
	Products and Markets	Value Chain	Cluster Development	Plan & Source	Make	Deliver & Return
01-ACTED	1.5%	1.6%	1.9%	3.1%	1.1%	1.4%
02-MÖS	4.3%	0.8%	2.6%	3.2%	2.2%	1.8%
03-CdA	3.8%	3.2%	0.7%	2.6%	2.0%	2.4%
04-Nepal	1.5%	2.3%	0.6%	1.2%	1.6%	1.1%
05-GDC	3.0%	3.1%	1.3%	2.1%	2.3%	2.9%
06-AESA	0.2%	2.6%	4.3%	2.3%	2.4%	1.8%
07-EY	3.8%	4.3%	1.0%	3.2%	2.2%	3.2%
08-DIAK	2.7%	2.4%	1.8%	2.7%	2.0%	2.2%
09-Venezuela	2.1%	2.7%	1.9%	2.9%	2.9%	0.6%
10-M-PESA	4.3%	6.8%	2.4%	7.8%	1.6%	3.9%
11-BOPINC	4.8%	4.1%	2.8%	6.7%	2.7%	4.5%
12-GCERF	2.0%	1.8%	3.5%	2.1%	2.2%	2.2%
13-IFC	0.7%	2.1%	2.4%	5.4%	1.3%	0.1%

Table 18 – Distribution of interview data (words) collected by interview & CSV (100%) and BOP SCOR (100%) framework components (developed by the author, based on NVivo software)

Once each piece of information is at least double-coded, the findings show how the wight of certain content is distributed within the interviews. The number of references made for each concept in each interview would show an inaccurate picture, because of the nature of the interviews i.e., some subjects speak longer about the same topic which counts like only one reference, meanwhile other subjects share their thought about the same issue in different points of the conversation, which would count for more individual references at NVivo. Thus, all the words are count which got coded to the framework concepts, and the proportional distribution of the data volume is shown per each framework.[3]

This finding demonstrates which interviews were the most content-rich and shows how the weight of each conversation inclines towards one specific framework component subcode. Moreover, it is pointed at by the table, which interviews are the most relevant concerning one specific subcode of the main codes.

6.5. Cross-conceptual findings

			CSV levels					
			Reconceiving Products and Markets		**Redefining Productivity at the Value Chain**		**Enable Local Cluster Development**	
			%	**Nr.**	**%**	**Nr.**	**%**	**Nr.**
BOP SCOR	**PLAN & SOURCE**	FUNCTIONALITIES	**100.0%**	9	0.0%	0	0.0%	0
		DESIGN	**53.2%**	11	38.5%	4	8.3%	2
		INVESTMENT	39.9%	8	**50.3%**	9	9.8%	2
		QUALITY	35.2%	5	**64.8%**	6	0.0%	0
		TEAMS	4.4%	1	24.6%	4	**71.0%**	11
		SUPPLIERS	9.0%	2	34.1%	7	**57.0%**	10
		RELATIONSHIP	2.8%	1	48.0%	7	49.2%	9
		ENGAGEMENT	**85.0%**	7	2.8%	1	12.2%	2
	MAKE	VARIETY	**79.1%**	9	20.9%	2	0.0%	0
		LABOUR	3.7%	2	**53.5%**	11	42.8%	9
		MODULARITY	**66.9%**	8	33.1%	1	0.0%	0
		PACKAGING	**61.1%**	8	38.9%	4	0.0%	0
		OUTSOURCING	8.7%	1	**74.2%**	8	17.2%	2
	DELIER & RETURN	MARKETING	**85.2%**	11	10.4%	1	4.4%	1
		CUSTOMER SERVICE	31.6%	6	**54.1%**	8	14.3%	2
		DISTRIBUTION	32.4%	8	38.3%	10	29.3%	7
		LOCAL SHOPS	28.4%	4	22.3%	5	49.3%	8

Table 19 – Distribution (%) and frequency (nr.) of interview data (words) collected by BOP SCOR subcode and CSV level (developed by the author, based on NVivo software)

The RQ is going to be answered searching for the relationships between CSV and BOP SCs. This requires a cross-conceptual analysis of the double-coded data. Without going more into depth, the best way to illustrate how the pieces of information relate is via a table, which summarises how the primary BOP SCOR framework subcodes relate to the secondary framework CSV level subcodes. These row percentages help the researcher to discover where

[3] Despite double-coding, the sum of the words coded to CSV levels and BOP SCOR components is unequal, because there were few occasions when some data got triple-coded

the conceptual overlaps may exist. In some cases, connections show a clear occurrence or non-occurrence, meanwhile some BOP SCOR subcodes are not evidently connected to the CSV levels based on the 13 interviews. The numbers of the interviews, in which the subcodes appeared provide further details about how frequent each relationship is.

7. Analysis

The analysis of the data starts with brief summaries about the main challenges the interviewees mentioned concerning the BOP environment (7.1.), then the template analysis is implemented following Bendul et al.'s BOP SCOR model (7.2–4.). After that main relationships and trends are summarised (7.5.), which relate to answering the SQs and RQ later in the discussion.

7.1. Within-case analysis

In the following section the 13 interviews are going to be briefly evaluated upon the top challenges that the BOP environment causes along their SCs, in other words, introducing the collected data and drive the research towards an answer to the RQ. The most significant takeaways drawn from each interview are indicated **bold**. Sometimes the expression is not literally the one used by the interviewee; there are cases when the speaker overexplains details, uses non-verbal commination tools, talks about non-related topics, or deliberately stresses certain phenomena, therefore the role of the interpretivist researcher is to put the data into context in the next chapter.

7.1.1. 01-ACTED

Agency for Technical Cooperation and Development (ACTED) is a French NGO whose interviewee shared his experience about the humanitarian SCs in the DRC[4]. Although non-profit organisations have a different purpose while operating in these markets, from the challenges they face some generalisations can be drawn. NGOs evaluate their performance not based on the economic profitability but on the impact they make. In their BOP SC the top challenges in case of ACTED are relatable to external factors. On the one hand, the **geography** and climate of the region complicate the processes, on the other, the state as stakeholder does not provide the proper **infrastructure**, namely roads, bridges, utilities, legal framework to run the operations smoothly, therefore disruptions and long lead times are frequent along the SC. Additionally, the other economic barriers further impede serving the BOP i.e., **importation tariffs** or quotas, and the whole customs procedure disables global sourcing, hereby

[4] Democratic Republic of the Congo

competitivity and affordable prices at the BOP, but it does not appear successful to strengthen the local suppliers either, rather just delimit the BOP’s access to product variety.

7.1.2. 02-MÖS

MÖS[5] is the Hungarian Interchurch Aid Agency, which does missions (emergency interventions or reconstruction) in regions of armed conflicts – in this specific case, in Afghanistan. Along their BOP SC it is extremely easy to make mistakes, because of the location-specific variables that are not similarly present at the TOP. The hierarchy of the society strongly limits the relationship management circumstances and culture plays an important role. **Human factors** like language, tribe, religion, gender, seniority, or education influence the negotiation position and bargaining power of the partners among them. Towards foreigners, signals of xenophobia, **discrimination** according to nationality based on stereotypes is common and culturally embedded. Therefore, sourcing and distribution must be always **locally adapted**, moreover sticking to the reality, the sustainability focus does not properly concern the locals. The only practical way described to empower local businessmen is via grouping them in **corporations**[6] and then use these local corporations as suppliers for upcoming projects.

7.1.3. 03-CdA

Casa do Agricultor[7] (CdA) is private agricultural company, a sustainable business focusing on the market of Mozambique. Their challenges derive from the lack of **economies of scale**, lack of education and technology, political instability, and armed conflicts. Enterprises in the local market, who seek to take advantage of the support of international donors and build their strategies to seem attractive to these funds, will remain unsustainable. Managing the value chain requires a lot of **collaboration** with non-profit actors like NGOs, who have knowledge about the local circumstances, but sustainable business model cannot be based singularly on local suppliers. In-country SME partners are not competitive enough, they are hard to get into long-term partnerships. Mistrust and reliability issues appear, and the low **willingness of sharing margins** complicates profitability at the BOP. The customer side can be targeted with a **mission**, ‘a story behind’ but they are people with a limited purchase power. Western-style consultants struggle with target them and managers must be **flexible** about the randomness, irrationality, and unpredictability of this market. Ruptures along the SC are common, and the

[5] translated from Hungarian – Magyar Ökumenikus Segélyszervezet
[6] translated from Hungarian – termelő szövetkezetek
[7] original in Portuguese – The Farmers’s House

local bureaucratic environment often makes neighbouring economies more competitive, therefore focusing on one single market might bring about **risk** on the long run.

7.1.4. 04-Nepal

In this interview a local SME and start-up owner summarises the challenges in the Nepalese market. Geographically the nation suffers from a handicap being **landlocked**, hereby infrastructurally less attractive than the neighbours, which are the two biggest countries by population in the world, therefore perform better both in terms of economies of scale and market attractiveness. The institutional voids of the Nepalese government further discourage SC managers to get involved in domestic operations, because of the lack of **rule of law**, lack of subsidies for job creation, too high customs duties, and the **corrupt** and fraudulent business environment appear everything but not attractive. Therefore, it is a society where distrust plays a key role and the low level of professionalism due to the lack of education and high **exodus** rate of the workforce multiplies the obstacles. Local SMEs prevail in Nepal; however, they struggle to partner in win-win relationships neither with MNEs nor with foreign aid donors. The **mistrust** escalates with MNEs that instead of enabling the locals, opt for their exploitation and does not acknowledge that **payment on time** is a requisite along the BOP SC since actors live day by day struggling to satisfy their physiological needs.

7.1.5. 05-GDC

The Global Distributors Collective (GDC) groups over 200 last-mile distribution companies and serves last-mile populations in over 55 countries with products, which fundamentally improve their life. The primary observation about the challenges at the BOP is that despite these populations show similarities in terms of their problems and needs, the applicable solutions vary a lot according to a number of factors, therefore **segmentation** is very important form the management side. **Inverse proportionality** is observed, when a mission-driven organisation the most deliberately wants to reach the remotest customers at the BOP, the less profitable it can be. Trade-offs appear because these people might get severed somehow, but not with quality products. Often when there is profitability at the BOP, there is no sustainability, since the **non-Western-style MNEs** (mainly Chinese) acknowledge the 'fortune at the BOP' but they are not powered by sustainability philosophies. Hence, these SCs may frequently suffer from disruptions, there is a supply insecurity, and the locals have problems not only with **affordability** but also **access** to the products, therefore trends about doing business processes locally are predicted to become widespread.

7.1.6. 06-AESA

Agriconsulting Europe (AESA) does institutional consulting around the world, especially for emerging markets, primarily focusing on rural development but also incorporating operations around renewable energy, climate change, finance etc. At the BOP the hardest challenges are the **trade-offs** between local sourcing and global sourcing. Although the local SMEs have advantages due to their embeddedness, specialised focus, familiarity with the bureaucratic environment, it takes a huge **transaction cost** to integrate and keep them as vendors. For this kind of for-profit organisations, it is also a challenge to have a full BOP focus since the stakeholder relationship scheme is complex. The local beneficiaries who will enjoy the results of a successful project are not the customers, so the **KPIs** that an organisation like AESA must meet are set by the donor agencies. Same applies for the sustainability philosophy that the organisation, herby SCM follows: if any aid or donor agency launches a tender, which considers CSR, CSV or any other approach to sustainability, then a consulting firm like AESA must target the bid without sticking to one fix concept but consequently swapping to the appropriate sustainability philosophy. According to their observations about BOP SCs, unless the project requirement does not deliberately oblige them to use local suppliers, often the global ones are more competitive in meeting the quality and **standard requirements** that the donors expect.

7.1.7. 07-EY

Interviewee with professional experience in sustainable SCs gained at McKinsey & Company, and Ernst & Young (EY), specialised in the market of India shares thought about BOP business, where the government is strongly involved. Although the **governmental initiatives** can be promising for the BOP actors in the SC, there are still voids concerning guidelines or **agenda-setting** by the authorities. Their role would be to build and guarantee trust for the stakeholders along the SC and achieve 'market readiness', however the environment is often too unorganised. Because of obvious reasons the **original equipment manufacturers** have the highest customer engagement, therefore potential the develop the local cluster. Traditionally **global suppliers** are associated with better quality and reliability, but a higher level of **localisation** could improve the quality and empower the BOP by spillovers. The **labour** is a huge potential in the Indian market thanks to being cheap, but the interviewee predicts trends about changes, so handling the human resources as a liability, investing in improvement and focus on **risk management** while sourcing is strongly emphasised.

7.1.8. 08-DIAK

Empreza DIAK is an East Timorese non-profit social enterprise that empowers business to fight poverty through women’s economic empowerment and bringing low-income segments into the formal economy, supporting product research and product development, access to the market, training, and capacity building. There are different realities in terms of state-building around the world – argues the founder – so the capacity of the states to deliver services varies. Enterprises at the BOP must cover additional functions, namely education of the end-customer. In the example of products such as medicine, fertiliser, pesticide the **inappropriate utilisation** might lead to waste of investment, therefore organisations must have a special focus on the **communication** at the distributions side of the value chain. Organisations with sustainability focus can understand the BOP environment by hiring employees from the BOP and testing whether something works. If certain initiatives do not work as a **management philosophy in-house**, these may also fail when it comes to stakeholder relationship. To cope with remote locations **‘distribution together’** may seem a solution, but adaptation of the local conditions via intensive networking and **bottom-up demand forecast** is essential.

7.1.9. 09-Venezuela

In this interview a local SME owner summarises the challenges in the Venezuelan market – an enterprise that would qualify as small in European terms but with its 10-12 employees ranks as a relatively big one in current Venezuelan perspective. In this country the vast majority did not traditionally belong to the BOP but the participation of the state in economic affairs, **undemocratic political and instable legal environment** discouraged foreign businesses to remain in Venezuela and deters new ones from entering. The state intervenes ineffectively in the management of the local supply chains and tries to control every business with bureaucratic coordination mechanism, but this least to the appearance of parallel business realities where **violent coordination mechanisms** prevail, namely smuggling, piracy or illegal trade. Hyperinflation and state-managed **‘bonifications’**[8] supplementing the wages converging to zero value, created an environment of extreme unemployment, exodus of intelligentsia, lack of supply, deterioration of quality of products and services. The perspective how a local business owner observes threats in almost all the macro environment PESTEL components, images a blurry frontier of SCM and **social sciences**.

[8] translated from Spanish – bonificación

7.1.10. 10-M-PESA

M-PESA is an African multinational joint venture operating in a several countries across the continent, mainly in East Africa but projecting a continuous expansion. Due to its geographical focus, BOP populations are important in their business. Since these are people who struggle to satisfy even their most **basic needs**, MNEs must assure that they provide **value for money**, and win the trust of the influenceable local customers who mainly base their opinions on **rumours** and lag giving their acceptance to something new. Especially in Kenya, even though some enterprises could take advantage of the growing number of educated labour, **overqualified individuals** are still and unexploited resource. **Information flow** within enterprises is a huge challenge, as sometimes few data is available about this market segment, therefore a proper **documentation** policy within organisations is extremely important.

7.1.11. 11-BOPINC

Bopinc is a Netherlands-based company supporting sustainable businesses. This interview primarily focuses on Kenya, Uganda, and Ethiopia. **Pricing** is the main challenge when serving the BOP, because the poorest may look for something that fits their budget, but their purchase power is underestimated: they also ‘have aspirations’ and seek some **‘luxuries’** within their reality. Their knowledge is not diverse enough and sometimes **monoculture** in the primary sector often leads to labour exploitation, especially in locations where the state is not strong enough and cannot guarantee a minimum wage requirement. **Investment in skilling** could enhance knowledge level and productivity.

7.1.12. 12-GCERF

The Global Community Engagement and Resilience Fund (GCERF) was established with the mandate of providing grants for local civil society organisations to prevent violent extremism and terrorism and works with close collaboration with the government of both donor and beneficiary countries. Despite it has clear and strong social mission it **struggles to engage** with the private sector because ‘antiterrorism’ is not a fashionable business buzzword MNEs would gladly associate themselves with, however in the long term, regional stability is beneficious for all value chains and especially for the BOP population. **Hyper-localisation** of the remotest areas craves for the intervention of international products and services, hereby the empowerment of both local customers and suppliers. **Time perception** of these communities is highlighted as another difficulty organisations at the BOP must cope with, however it is proven that there is no breakthrough success without **decolonisation** and adaption to the local traditions, despite problems of similar nature can appear in different geographic locations.

7.1.13. 13-IFC

International Finance Corporation (IFC) is a sister organisation of the World Bank and its sustainable SC expert dealt with BOP markets across the globe with a special focus on cocoa, coffee, and cotton SCs. A remarkable challenge in mapping the SCs is that they **differ** within a country or even within the same commodity. Unethical business practices are hard to be controlled since **certifications** or international sustainability **standards** do not function in the BOP SC reality as they are addressed to work in theory. Financial gains are not **fairly shared** along the chain and **subcontractors** are hard to be properly audited. BOP famers have little **bargaining power** and even though a state acknowledges the existence of the unethical SC practices, they might **overlook** them, because with eventually disrupting a value chain, they would even expose the national economy to a massive risk.

7.2. Theme 1 – Plan & Source

In the following 8 subchapters the qualitative data is analysed based on the **revisited BOP SCOR recommendations of Bendul at al. (2017),** determined from the **SUBCODES** assigned to each piece of information and connecting the results to the <u>3 levels of CSV by Porter and Kramer</u>. This subchapter looks for an answer to SQ3 and discusses the *Plan & Source* processes of SCs – find relatable semi-structured interview questions in appendix III.!

7.2.1. FUNCTIONALITY

When sourcing at the BOP, Bendul at al.'s first managerial recommendation is to **focus on basic functionalities.** This statement is also strengthened by Prahalad (2005), who assigns key importance to the deep understanding of functionalities. Food, household materials and hygienic kits were mentioned as the most basic needs at the BOP and mainly NGO and SME representative interviewees had the most zoomed description about what a person at the BOP has priority to acquire.

> "Here is completely normal nowadays that […] a shoe shop tomorrow will become a grocery shop, then will change the profile again. This is due to the Venezuelan economy being wasted and everybody noticed that the Venezuelan clients primarily try to buy food before other products (09-Venezuela)."

In terms of products internationally widespread cascading down to the BOP segment, indeed there is a market, but the products must be reconceived. If an enterprise cleanses the core functionality of a products sold at the TOP, and only transfers the basic features to the BOP, there is a demand for that.

> "[…] let's take the example of phones, whereby in a developed country an iPhone is a standard phone that more people use, in these kind of countries people just want a smartphone, a basic smartphone that can just get into the internet and access to few sites. So, we try to identify these products, we try to market what is the core functionality and providing that, and then leaving the innovation and the additional features out. (10-M-PESA)."

More ambitious approaches see the opportunity in innovation and providing new offering to the less skilled or less wealthy people, even if these may seem unattractive in the beginning (Castillo et al., 2012). The analysis finds that segmentation of the BOP expands the focus on the basic functionalities. If an enterprise considers the focus relative to the income but still staying at the BOP, new doors open for market innovation based on the customer behaviour.

> "People normally underestimate the potential of the BOP. If you statistically look at someone living for less than a dollar a day that is really the extreme end, but someone living between $1 and $8-10 a day, that is still considered a low market income segment. And they have aspirations, mostly they will look at products that meet their basic needs in terms of 'I am looking for food or something like that'. But these people have aspirational goals in terms of 'luxuries' (11-BOPINC)."

100% of the information sub-coded under **FUNCTIONALITY** was also sub-coded under <u>reconceiving products and markets</u>. Based on all interviews, this subcode was the least mentioned but definitely not because all interviewees were in complete agreement.

7.2.2. DESIGN

Goods and services must have a **customer-centric design** at the BOP in aim to the best satisfy the needs of this market segment (Bendul et al., 2017). A strong managerial focus on what these people need, can enhance customer-centric sustainability, decrease global overconsumption or waste (Sheth et al., 2011), moreover prototyping can foment new market-based product development (Viswanathan & Sridharan, 2012). Shared value is created via <u>reconceiving the products</u> and tailor it to local requirements. E.g., M-PESA designs its device top-up processes via selling airtime access of only few minutes – the way how the poor segment can afford it – or Bopinc enhances the implementation of machines that are the most compliant with the customer preference.

> "[...] within Kenya right now if you move around you will see a lot of milk machines, before this was not the case, they used to buy milk in bottles and small 500 millilitre packages, so right now there are these machines, which are able to displace as low as a 100 millilitre if you want to. So, you find that they are innovating because there is a lot of demand for good-quality products, affordable and within price ranges to make it easy for them to access (11-BOPINC)."

How to focus on the customer brings about practices, which are relatable to **PACKAGING**. Many times, there is a similar need at the BOP to the TOP, but the difference is that the same product needs to be targeted to the customers considering their BOP user habits.

> "One thing, as people usually don't have a lot of money, they tend to buy really small packages. E.g. if you have to spray 3 times a moths, they prefer to buy the chemicals for one spray and in days, they buy another one instead of buying for the whole month, because they don't have money and they live day by day (03-CdA)."

Flexibility or continuous adapting as a solution was mentioned by multiple interviewees, and the customer-centric **DESIGN** both relates to the <u>reconceived products</u> and <u>redefined value chain</u> when it comes to CSV.

7.2.3. INVESTMENT

Data coded under **low initial investment cost** is found in all interviews, shows similar patterns but does not phrase the exact same opinion. The NGO SC experts at the BOP put emphasis on the impact to the beneficiaries and maximum value not necessarily at the least price, when they are asked about the investment costs. Almost every for-profit organisation stress that the BOP market is extremely cost- or price-sensitive, however they suggest the lowest price is needed but not at the expense of the quality, since these two move together. Inputs form a local SME owner in the Venezuelan BOP environment even take a step forward and affirm that within crisis circumstances price is ahead of quality. Overall, for for-profit organisations it is indeed the best strategy to keep their costs as low as possible when they target the BOP, meanwhile non-profits care about the impact (Alfaiate, 2021).

> "Our market is price-sensitive, extremely price-sensitive. Even a small increasing cost could cause and uprise, or even that drop of the product. Extremely price sensitive. Even though you are bundling your offers, you introduce new tariffs the ways you are introducing competitive product or substitute product, it has to be extremely sensitive to the fact that your target market is extremely sensitive to price, sometimes over value (10-M-PESA)."

In contrary, examples exist when the lowest investment costs are not the best solution. This is a link between **INVESTMENT** costs and lifecycle costs – indirectly **QUALITY**.

> "[...] in the country [India], in the manufacturing industry quite a few incidents and fires have happened, which burnt down an entire plant. Because there is high volume – because of the population in the country, because of the high-volume requirement – you cannot afford to have your plant shut down for even a night (07-EY)."

The SCOR BP subcode is primarily related to the <u>redefined value chain</u> CSV level, since businesses must remain competitive with foreign products and use technological solutions to improve efficiency and keep the low prices. Simultaneously, some products and services shall be reconceived but ideally without sacrificing quality over price at the BOP.

7.2.4. QUALITY

Low initial maintenance and lifecycle costs are covered under the subcode **QUALITY**, since most of the interviewees associate the concept with this keyword. Additionally, it is a subcode related to the low **INVESTMENT** costs as well, so these two cannot be completely separated, but the quality-related questions highlighted some important complementary remarks.

> "Most people think about consumers at the BOP, they don't deserve quality. It has been an outdated standard. The biggest challenge is really to get your price point right and ensure it is something that fits within their budgets, it is of quality because they have aspirations, and you have to find that. You as a company can look at your cost centres and how economical you can be, how efficient you can be ensuring that at the end of the day you are able to have a margin, be profitable and deliver a product that is good quality for the BOP market at an affordable price (11-BOPINC)."

After the price, the role of quality is especially important in societies where a product is perceived by the comments that the consumers share among each other i.e., 'word of mouth'. It is a specificity of the BOP and actors in these markets must reflect on that.

> "[…] for these companies the entire business model depends on positive word of mouth, to be able to sell effectively because they sell through local networks. So, if a product breaks down, it is not good quality, then the word is going to spread, and they are not going to sell to anyone. Quality, warranties, all that is incredibly important and of course the number one is price and what people can afford in the first place […] (05-GDC)."

But it is not only a goal for for-profit actors, but also the job of the NGO SC project managers is evaluated upon the quality of their outcome.

> "[…] one focus on reconstruction activities with Hungarian Interchurch Aid Agency is, if I come back in 5 years will it be there or not? It has to be there! So, the materials, the equipment, whatever we put in it, must be durable, it cannot be necessarily the cheapest one. That is not a focus (02-MÖS)."

Some criticism against CSV states that it lacks 'laws and standards' and less powerful stakeholders are not properly considered (Waxenberger & Spence, 2003). When SME-sized actors try to comply with the standard and apply for certifications that would endorse their quality and boost higher income, they face hardships due to high costs and poor infrastructure (Pattberg, 2006). This challenge was also feedbacked by the interviews, and unfortunately cluster development of CSV does not seem linked to the quality theme.

> "Coming from the West certifications were a silver bullet: 'this going to sort everything out' – but it really does not. When you certify a product, you need to pay for that certification and the people who pays for the certification are the smallholder farmers. And then they pay for it in the

> hope to produce a better product that carries a premium and sold for a higher price, but sometimes the additional yields and premium does not come all the ways back down to them. […] With the certification the beans [cocoa beans i.e., the product] are sold with a premium in the West, the additional premium did not cascade back as the global brands wanted to keep more, traders wanted to keep a larger percentage and when it comes to back to the farmer it is almost nothing (13-IFC)."

Therefore, among the CSV levels, the **QUALITY –** related to the maintenance and lifecycle of the products – shows links with the <u>productivity in the value chain</u> because of the possible quality control concerns, moreover warranties come together with <u>a reconceived product</u>.

7.2.5. TEAMS

Who sources at the BOP? "*Most SC players don't ask that question because they don't care (13-IFC)*." However, in the interviews, it is found that the **local development TEAMS** play a crucial role when it comes to sourcing, especially when organisations try to integrate the BOP suppliers into their value chains. Almost every interviewee emphasised the critical role that culture plays at the BOP, therefore local knowledge is indispensable to build trust, cope with the linguistic barriers, move relatively familiarly around the bureaucratic environment and remain acquainted with the market specificities, latest trends. Non-profit organisations have it easier as integrating the locals is part of their operations. On the one hand when it is rapid response there is no time to deploy foreign suppliers when not necessary, on the other, the expatriate workforce is too expensive, so locals are preferred.

> "You always have local staff; local personnel and the European expatriates only supervise the activities. So, it is always the local staff who makes the procurement. We supervise it we watch the quotations, verify if it is OK or not, but it is always their local responsibility to treat with local people. European do not treat with local Afghan businessmen or things like that (02-MÖS)."

> "It is an East Timorese organisation; it is not an international organisation. You couldn't have there just internationals, it wouldn't make sense. None would be able to pay the salaries or expats (08-DIAK)."

Sometimes it depends on the project whether the for-profit BOP intervention requires to have a local team, or the processes can be coordinated from the Western headquarters of the organisation.

> "If it is a big project and the project requires to open an office in the country, we do open an office in the country. But not in all cases. If the project itself or the tender requirements do not require an office, we will not have anyone locally, but the experts and local partners […]. So, it really depends on our project profile (06-AESA)."

But the <u>local cluster development</u> level of CSV is enhanced the most when the organisations have policies to integrate as many local suppliers into their value chain as possible.

> "Our priority would be local suppliers. Because we want to see how inclusive the SCs are, so we create opportunities where for example small farmers can actively engage in the SCs, so providing raw materials to the SCs, and follow the process all the way up to distribute to retail and end up at the consumer level. So, we promote local value chains, local SCs to make sure that there are accommodative with the low-income market segments, because that is where we feel added value, in terms of really helping companies to already see the potential of working with low-income market segments as customers, as labourers, as agents. But these people at the BOP can also get involved strongly into the SC. We also have global chains that we are working with, but that is not a very strong component in our hands (11-BOPINC)."

> "[…] when we started, we had a very high percentage of international suppliers in our ecosystem, so yet to put intentional initiatives that 'I am going to support the act of taking local resources, local contractors.' Currently we have 40% of local suppliers and we still do the initiatives. So, we are doing things like mandatory inclusion of special interest policies in our policy […]. Intentional policies, procurement manual to include some of these local vendors. We have things like – instead of doing a one-to-one vendor, I will split the scope into various categories to buy and I am able to buy form different people, so that would enable to me to use international vendors and local vendors. […] One initiative requires the international vendors to partner with the local vendors for services that require local resourcing like deployment and support. […] Then we have initiatives like invoice discounting whereby e.g., our payment terms are 60 days maybe but then you state in your invoice that you have local suppliers, so we kind-of pay you in advance, so that you are able to pay your resources (10-M-PESA)."

Examples of the government being the most significant engine of the managing the supply are observed in case of 09-Venezuela, hence having a significant impact on the national value chains, however this is depicted by the interviewee as a non-idealistic situation for the competing players in the local market.

7.2.6. SUPPLIERS

Under this subcode the use of **local SUPPLEIRS** is evaluated i.e., whether organisations opt for local sourcing or prioritise global sourcing. Besides the <u>local cluster development</u>, working with local suppliers has additional benefits, such as cost-effectiveness, profound knowledge, shorter lead-time, or reduced bureaucracy. Even when it is not the primary goal of the organisation to source locally, it can be financially beneficious for the business. Secondarily, the **SUPPLIER** subcode links to the <u>redefined value chain</u> level of CSV via keywords like logistics and shipping practices.

> "They are only local suppliers; we do not have global suppliers. […] we used to work with international service providers that are based in the UK or in France, and our experience was that yes, they are very smart people and yes, they are very good at analysis, but they are still very disattached from the local realities. Even though they subcontract a local entity, this is not the same if GCERF contacts a local entity directly. And yes, the quality of the data will not as 100% prefect if it comes from a local entity that as it was if it came from London-based shiny institutions, but the authenticity of the data and originality is much much better than any of the international source providers. (12-GCERF)."

> "The very specific local services we do locally, so we don't involve internationals, if we don't have to. […] E.g., if we work in Africa, they like it least and least that always European experts,

> European companies are involved. […] there is a trend now that they prefer to have African experts, they prefer to have African companies, think-thanks to be involved […]. Now there is a big focus on – mostly for African clients – to e.g., hire local experts, local service providers and so on, because they are much more aware of the context and of course there are high-quality experts and services in Africa too, so we don’t have to import always European or American or whatever service providers (06-AESA).”

Some interviewees see an increasing trend in local sourcing from in-country manufacturers but sometimes the government is the actor who puts obstacles in front of businesses which is ‘ironic’ since the job creation of these enterprises could generate positive spillovers for the local economy. It is also observed that some markets with significant BOP population struggle to strengthen their industry without a properly targeted governmental support, thus MNEs will choose global sourcing as no domestic supply is available. As stated in the literature as well, is it not uncommon for the BOP markets, that due to institutional voids partnership with other actors are required (Van den Waeyenberg & Hens, 2012; Matsuura & Isada, 2017; Brix-Asala & Seuring, 2020). To tackle these kind of SC voids, NGOs play an important role integrating the local suppliers into the BOP SCs (Perez-Aleman & Sandilands, 2008; Carmagnac, 2021).

> “The main suppliers are actually local enterprises. […] Every penny financed by the project must remain in the DRC [Democratic Republic of the Congo] and used by the local community, e.g. when you access the vulnerable and we try to buy anything, we have to go to Congolese enterprises (01-ACTED).”

> “Always from locals, that is also for to help, reinforce, strengthen the local economy. If there is local production, we will go for that, if there is no local production, we at least buy from a local supplier (02-MÖS).”

7.2.7. RELATIONSHIP

Once the organisation already decides whether it prefers local or global sourcing, the **RELATIONSHIP** subcode groups the qualitative data about how the relationship should be established, how partners will be tracked, and their performance evaluated. This argues for the consideration of stakeholder management when examining CSV practices (Daood & Menghwar, 2017). Different **early supplier involvement and supplier relationship** strategies have been mentioned about how to kick off relationship management at the BOP, as it depends on multiple factors, but the most common ones are either asking for quotations from the suppliers or invite tendering. In some cases, organisations must look for the suppliers, in other occasions enterprises are approached by the suppliers themselves (03-CdA). Depending on the purpose of the organisation, in some cases they try to engage as many suppliers as they can (01-ACTED; 08-DIAK), meanwhile in other occasions they prefer sticking to one limited group of trusted suppliers, as there is no financial interest to change and create transaction costs (02-

MÖS). Hence, one of the key factors is trust or reliability, which relates to cluster development. There can be obstacles from both small and big supplier side diminishing trust level.

> "Sometimes we don't have competition buying locally because Mozambican market people are very sceptical to partnerships, they want to own like 'I am the distributor, I don't share the distribution with anyone!' (03-CdA)."

> "We have a lot of reports of our members who have relationships with suppliers, who have fallen through warranties, who deliver containers and half of the products in the container are not functioning and the supplier refuses to do anything about it. Probably there is a lot of the companies we work with, small distributors, they are small. So, they lack sort of negotiating power and it is now kind of worth the time of some of these big suppliers to provide them the best quality service […] (05-GDC)."

There are approaches that claim the best way to integrate the impoverished suppliers of the BOP is via understanding their reality, building trust and sharing knowledge in order to establish and maintain a fruitful relationship.

> "When you want to start integrating the farmers – thus agriculture is the best industry to talk about integration because the upstream tend to be smallholder famers – the only way to do that is by working directly with them. You need to engage civil society, bring attention to the fact that we are talking about families that need help. In lot of cases the people who work at the farms don't have the knowledge, don't know about farm managing practices, don't know about funding, they don't know that they can get to the bank and ask for a loan (13-IFC)."

Meanwhile, other opinions depreciate the role of multinational for-profit organisations in the development of the BOP supplier cluster.

> "If you pay for a service, why should you train the staff of a specific service provider? If it is about training and capacity-building within the project, yes, we do training and we do capacity-building with the stakeholders, so they'll have knowledge and this kind of things, but if we work with local service providers…you pay for a service, so why should it be you who trains the staff (06-AESA)?"

Besides trust, the information flow along the SC is mentioned, which relates to the redefinition of the value chain, hereby creating shared value based on communication; otherwise, information gaps would be extremely hard to tackle at the BOP.

> "The engagement, the conversation, because a lot of organisations and holdings maintain relationship with the supplier, that is always highly localised, […] and it is a very confidential relationship between the two. They are not very open to sharing information about the products or about the cost at which the product has been acquired (07-EY)."

> "Overcommunicate what you are doing, […] overcommunicate with the suppliers that understands your pain points, so that you are also able to create a win-win relationship with your suppliers, and you would win their trust, because even when you do, they are also offering you proposals that improve what you currently have! They give you guidance, they identify your weak spots, and able to address that, so overcommunication works for me because it really rolls out any black spots that you might have in terms of miscommunication (10-M-PESA)."

7.2.8. ENGAGEMENT

When there is no enough data available about the BOP markets, **early direct customer ENGAGEMENT** is crucial to get to know what are the needs of the locals and how value creation can manifest (Rohatynskyj, 2011; Sinkovics et al., 2014). The interest of a non-profit organisation about how engaged beneficiaries they need, depends on the purpose of the project: it is rather an emergency intervention with international products or co-creation of something meaningful and durable with locals (01-ACTED, 02-MÖS). There are more efficient and less efficient strategies, but the general observation is that engaging the costumers demands the organisation to reconceive the product and markets via other stakeholders – mainly local distributors – who are familiar with the end-customer profile.

> "When they [the distributors] decide to start selling a certain product category, they will do a lot of research talk to a lot of different suppliers and test kind of a shortlist of products in the field to end-consumer feedback. And ultimately, they going to sell what the end-consumers tell them they want to buy. Each distribution company will have its own criteria for what to sell based on what they know about the customer base (05-GDC)."

> "[…] that approach generally involves having more design-side intervention for customers, having customer-engagement, trying to make products that will benefit them, because they'll be paying for it, and it has to be value for money since it is a cost-sensitive market. That is the understanding from the manager's perspective (07-EY)."

Part of the strategy is to test the goods with the customer, so get a clear picture how the market works, what the needs are and how can the partnership become valuable for both.

> "[…] Then you have to prototype, and you have to spend time and test it with people that are on the ground and with the consumer and just test it. There is no other way than to be there and prototype and test; experiment or either do a solution mapping about what you think would be the trend and then go and test it because it changes. So that's the way to get there, rather than to do the product development or service development (08-DIAK)."

7.3. Theme 2 – Make

In the following 5 subchapters the qualitative data is analysed based on the **revisited BOP SCOR recommendations of Bendul at al. (2017),** determined from the **SUBCODES** assigned to each piece of information and connecting the results to the 3 levels of CSV by Porter and Kramer. This subchapter looks for an answer to SQ3 and discusses the *Make* process of SCs – find relatable semi-structured interview questions in appendix III.!

7.3.1. VARIETY

Only a **low variance of basic products** ought to be produced to serve the BOP customer according to Bendul et al. (2017), however it is conflicting with the shared value creation, because the poor might get positively impacted by a broader **VRIETY** of products and services.

> “That is conflicting. For you as the donor agency the lass variable, the better. But for the beneficiaries. the more variable the better. So, you have to find a compromise, this is why we try to standardise. The least possible [variety] is the better (02-MÖS).”

Variety appeared to be expendable for the sake of **QUALITY**, therefore a relationship can be detected between the subcodes.

> “[…] you rather go for less with a good quality than a lot of bad quality (12-GCERF).”

Most of the interviewees however contradict to the low variance concept for two main reasons. On the one hand, diversity seems to be part of the strategy at the BOP since the more diversity is offered, the most social impact can be achieved. On the other hand, organisations must think ahead and diversify their portfolio in aim to survive and remain sustainable when any unforeseeable events occur, e.g., the government or other stakeholders start addressing the same customer need that was in the focus of their BOP business model.

> “I have always been a fan of diversifying […], it can be socially more impactful by meeting a variety of goods. In a company for example we have been working in urban slum communities and there was a risk that any time the government could turn around and somehow decide that they are going to electrify all the slum communities, which would have been a very positive outcome but also put us completely out of business (05-GDC).”

> “[…] the market is small we also try to diversify, and to diversify is to try to sell products that are not traditionally from our line of products. And for those products we usually try to approach different suppliers – I am speaking about that recently we started to introduce nets for fishing. Sometimes we look and we identify a special need (03-CdA).”

Therefore, **VARIETY** has its pros and cons at the BOP, but all relate to <u>receiving products and markets</u>. Perhaps a plethora of products to be provided is unsustainable, but a sufficient variety to make the SC resistible for external shocks, a responsible model for newly discovered market needs generates more impact, hereby creates more value for the customer.

7.3.2. LABOUR

LBAOUR-intensive assembly method is recommended at the BOP SC, however for a meaningful value creation, the development of the BOP workforce is mentioned as an ideal tool by most of the interviewees, referred as capacity-building. Besides the advantage of using local labour due to its low price, more valuable synergies can be internalised when taking advantage of the language knowledge or cultural affiliation in the micro level and more localised job-creatin on the macro level (01-ACTED; 02-MÖS; 03-CdA; 05-GDC). Downsides of the labour are the unsatisfactory quality, especially in the roles that require professional expertise or meeting certain curricular criteria (06-AESA; 08-DIAK; 09-Venezuela; 10-M-PESA). Overall, organisations must deal with a paradox: labour loses its attractiveness when it requires too much investment and more competitive salaries, so there must be financial gains by efficiency and by rising the purchasing power of local communities.

One solution proposed by organisations may affect either the redefined value chain via trainings, or certain perks provided from the management, acknowledging the bargaining power of the workforce.

> "Companies now have been treating their employees really good because they know that if their employees and their staff and their teams are efficient and effective, it is going to help their company. As Nepal has a lot of demand, companies should be kept running. So, yes, companies are giving provident funds to the workers, which are a saving for the company […] in case, if [the company] needs a production tonight, if their labour is not happy, it is not going to do it tonight. […] The company owners are very scared that they might get into losses as they have no production. That is a reason why they are dependent and looking forward to helping the labourers (04-Nepal)."

> "A lot of organisations are now investing in growth and career cycles, so they [the employees] can actually grow and have better lives. To answer your question, there is a large potential to improvement in the quality of their lives and obviously their earning capability (07-EY)."

With a deeper sustainability focus, organisations may enable cluster development via capacity-building at the BOP. The foreign organisation must take a facilitator role in this process (06-AESA; 08-DIAK; 12-GCERF; 13-IFC; Hahn & Gold, 2014).

> "They are being trained in terms of modern practices and culture, spacing, disease management, hygiene, to ensure them to become more efficient when it comes to production [in the agriculture sector] (11-BOPINC)."

> "These guys [the BOP] don't know how to write a report or communicate their results and it doesn't mean that the work they are doing is not an amazing work. So, our objective is (and that's why we heavily invest in capacity enhancement, capacity development of our partners) to bring them to a level where other external entities or organisations also find them attractive to engage with. […] So, from our perspective in the 21st century you cannot conduct a business neither in private sector nor in the public sector without meaningfully engaging with the local colleagues in a true sense of partnership and not the colonial, sense of partnership. […] At the same time, you want to use this platform for capacity-building, so there is really this aspect of peer-to-peer capacity-building. So, it is not some organisations trying to tell them what is cool and what is not cool, but it is really them […] (12-GCERF)."

7.3.3. MODULARITY

In terms of **MODULAR design** interviewees agree on reconceiving the products, thus reducing the complexity and serve the BOP customer with as simplistic products as possible. Occasionally, projects may provide complex items, but in these cases the purpose is to allocate the fund of a donor for a certain purpose rather than to reach economies of scale or business continuity (02-MÖS; 06-AESA).

> "Very modular, very simplistic, as simple as possible. Compliant level of quality, not going one step beyond that because they have to be priced also at the BOP. That is the focus (07-EY)."

> “It has to be modular. Because the more complex a product is, the more expensive it is, right? […] if a product is complex, not only they don’t have the goodwill to figure it out whether it works, but it becomes inaccessible. And what happens when you provide a complex product is that your competitors will provide a more basic or modular product, which for you might see a bit too primitive, but people would buy because well, it is accessible. It is easy, it is cheaper (10-M-PESA).”

> “Not too complex, because you don’t want things, which are too challenging for them to use. So, you are looking at simplicity, that is important, innovation that meets their needs, that is important (11-BOPINC).”

7.3.4. PACKAGING

Reduced and less appealing PACKAGING by Bendul et al. (2017) was not criticised by the interviewees, but specified with details, namely highlighting the extraordinary role of package size (03-CdA; 10-M-PESA; 11-BOPINC), moreover the practical role that the package plays, therefore the subcode seemed relatable to both **FUNCTIONLITY** and **MARKETING**, bringing about recommendations for <u>reconceiving products</u>.

> “In the farming industry e.g. you must make sure that it [packaging] is not easy to open, take the seeds out and put fake seeds inside, close it again and sell it like that because it happens a lot (08-DIAK).”

> “If it [packaging] is perceived that something that is imposed, that is coming from outside, the buyers will be zero. People will not care, the local people, who we are trying to sell the products to. If you manage to have your package in the way that it is adapted to the local context, half of the success is already there. So, it is super important how it is packaged from our perspective (12-GCERF).”

It has been commented that unfortunately packaging does not receive as much sustainability focus as it should (04-Nepal; 07-EY; 13-IFC), however there are some initiatives, which would <u>redesign the value chain</u> and introduce an eco-friendlier way of packaging at the BOP too.

> “There is a big shift towards biodegradable packaging, those that do not pollute the environment, very big push right now in terms of accommodation, how companies can think through packaging that is more environment-friendly, so you can find biodegradable products. And small quantities. […] So, packaging has to be simple, has to be something that does not cause harm to the environment and has to be designed as it is adaptive to the market, and it is something that can be reused (11-BOPOINC).”

7.3.5. OUTSOURCING

Outsourced assembly method to final customer or distribution is not stressed by the interview subjects and even if it is, **OUTSOURCING** appeared in the form of certain operations managed by third parties (often financial, legal or distribution), but always in line with the <u>productivity in the value chain</u>. An optimal way to outsource assembly method to the final customer is to integrate them into the co-creation along the chain, which could be observed in humanitarian cases under the 'work for food' slogan, when the locals are responsible for the final 'product' construction (i.e., policlinic or school construction at the BOP [02-MÖS]).

> "Increasingly there is a move towards specialisations, so used to be like these companies were coming in and doing everything itself and offered like a manufacturing, software, after sales, finance, distribution…very different lot of functions, but […], increasingly we are saying that – what they call – unbundling of this space and specialisation of the space and our members are outsourcing software […] and generally distributors must do it themselves, which is very difficult and makes managing and working capital a real challenge (05-GDC)."

> "Assembling would not be outsourced. Most of who in the country [India] would like to assemble, they outsource the remaining operations, all the subassemblies and everything. All the tier-2, tier-3 parts are outsourced, but the end assembly is generally not performed at the customers' end. There are few start-ups that are now kind of coming out with business models that gives them a possibility. But then again, it is all limited to the urban youth population and relevant to the BOP (07-EY)."

Assembly methods at the BOP face challenges not only because of the poor quality of human resources but because of the unsatisfactory infrastructure as well.

> "You can do the production in these markets, but you don't have infrastructure in place, on the other side, there is no high market pull as consumers (13-IFC)."

7.4. Theme 3 – Deliver & Return

In the following 4 subchapters the qualitative data is analysed based on the **revisited BOP SCOR recommendations of Bendul at al. (2017),** determined from the **SUBCODES** assigned to each piece of information and connecting the results to the <u>3 levels of CSV by Porter and Kramer</u>. This subchapter looks for an answer to SQ3 and discusses the *Deliver & Return* processes of SCs – find relatable semi-structured interview questions in appendix III.!

7.4.1. MARKETING

Since at the BOP the people are non-consumers and the market is often labelled as latent, the marketing, the creation of demand is a fundamental task (Prahalad, 2005). A **tailored MARKETING** is essential to lay the foundations of the demand, create brand-awareness, build trust towards the product and successfully target the right segment, hereby <u>reconceiving the products and markets</u>. In the SCM perspective, forecasting the BOP demand is indeed a challenge and goes hand in hand with the marketing (05-GDC). Organisations play a critical role in generating this demand, creating awareness and acceptability (Anderson & Billou, 2007).

> "It is incredibly difficult because like often demand doesn't exist at all, and part of the role is to go and crate demand where there was none, which is why organisations are quite important in this phase because often what they will do is that they will spend a lot of time, generating that demand by showing people these products and how they work and demonstrating how it does

> improve their lives and then once there is demand, then bigger established organisation will come in an exploit that and you know sometimes drive this organisations to our business, and that can include suppliers themselves (05-GDC).”

Some interviewees point out the importance of the BOP demand forecast– similarly to the TOP markets – as the customer behaviour and market trends are dynamic and SCM must be up to date in the latest changes to serve properly these consumers. Either a special focus on the regional markets or benchmarking with other BOP societies can be a workable strategy when there is only limited information available about a certain country.

> “You have to do your research, because market trends, market shifts, consumer needs are always changing, and you have to be on the top of that. So, it is required to market research on a regular basis, and get as much information as you can, in terms of price for commodities, how integrated the prices are across different markets, regional markets, local markets, domestic markets. So, you have to make sure that you get as much information as you can in terms of pricing, commodity products, alternative product (11-BNOPINC).”

> “You can always benchmark with countries that are slightly more advanced and see how they progress and see whether there is a potential here and you can work on the potentials and there is enough data for you to know more or less what the purchase power for a number of people is and where they are aggregated. […] Non-consumers always live below $3 per day or $10 per day, roughly, and their behaviour and the needs they have, the things they want to buy, it is very similar, or there are a lot of similarities regardless of if they love in China or the US (08-DIAK).”

As there is sometimes no access to information at the BOP, customers get to know about products via ‘word of mouth’ or ‘hearsay’, therefore the role of **MARKETING** is critical, when any organisations want to position the right product, at the right place for the right price.

> “If your product is not well-positioned, it doesn’t meet the needs of the users, it they might not even embrace it. When if it is the most convenient for them to use. It is a very thin line, because partnering with the right marketing agencies is almost mandatory. […] since we have a challenge around communication and passing of information because of technology challenges, then that means that even though we have a good product, communicating the value of this product is a challenge itself. So, you have to build trust communicating in line with the marketing teams to win the trust with the product that you are trying to deliver (10-M-PESA).”

7.4.2. CUSTOMER SERVICE

Organisations must have a **special focus on CUSTOMER SERVICE** even at the BOP. Interviewees are asked about both the intangible flow of feedback and information, moreover about the physical reverse flows of products when covering customer service. Different approaches and strategies have been shared, which are linked with all three levels of CSV. Some subjects emphasise the hardships about customers service at the BOP and point out some room for improvement (02-MÖS; 03-CdA; 04-Nepal).

In relation to the <u>reconceived products</u> the **QUALITY** subcode seems to be linked because warranties are mentioned as parts of the products. Additionally, customer service may get shape in form of an intangible call centre, or BOP organisations must ensure that physical ways of reverse logistics solution are provided backwards on the value chain, however here it is unclear who the responsible for the return should be.

> "Devices, we also sell devices with a warranty. If you buy a device from us, we have a warranty for one year, withing which if your device has an issue you can return, there is a return policy, which is a couple for weeks, we fix it for you, and you come back and pick your device (10-M-PESA)."

> "[You] cannot sell products without providing customer service, because their business models are so dependent on trust and word of mouth, so good customer service is essential to the success of these companies. I'd say most of them provide warranties and after sales services, therefore you have to have a model for reverse logistics. It is generally the same as the model for logistics. It is the sales agents, the entrepreneurs or the retailers, who are delivering the products to the consumer, and they will maintain regular contact with those customers and will help them to take the product back to customer service for the organisation for repair or return (05-GDC)."

> "Most of the customers talk to the online customer service always. In that case that does not matter if someone is calling from a remote part of the country or from a very urban capital city. […] But when you talk about products that require regular maintenance and customisation, these people – the customers – have to travel either to a tier-2 or tier-1[9] city to access the service and that is a challenge. If I were in their shoes, I wouldn't buy a product for which I have to go to another city for service or maintenance. That's the reality (07-EY)."

Enabling local cluster development throughout **CUSTOMER SERVICE** is viable. If an organisation has little capacity to take care about repairs in-house, some support to the customer education can enable the BOP customer to make the repairs and both would save transaction costs of reverse logistics.

> "Customer service is important, so it could be education e.g. someone giving you tips on how to repair a product, tips about nutrition, tips around use of a product, in other cases you find loyalties, promotions of buy one get one, they find a lot who are trying to capture markets through customer service (11-BOPINC)."

7.4.3. DISTRIBUTION

Reaching the last mile at the BOP SC is indeed a challenge for all organisations, but the concept of **locally embedded DISTRIBUTION channels ensuring the reach to remote locations** is confirmed by all interviewees. The distribution routes and means are diverse, and the spectrum is broad, but the example of direct distribution site (01-ACTED) is rarer than the techniques basing on outsourcing or pick-ups.

> "Where you don't have roads, so you have to go through helicopter, you have to go through boats in order to deliver the product, so I would say it really depends. But mostly behind the rapid response activity it will vary between 1 to 10 days to manage (01-ACTED)."

> "An NGO is not able to rent helicopters or means of extreme transport to bring food or other supply to remote areas. We have to make sure that the people are able to come down from the

[9] categorisation of the cities of India from tier-1–3, being tier-1 the most developed and populated urban areas

> mountains to pick up their bag of food or bag of fertiliser e.g. in the case of an agricultural help (02-MÖS)."

Integrating the remotest BOP customers into the SC shows overlaps with the reconceived markets, thus it broadens the scope for organisations and considers even the isolated communities as customers, however these initiatives seem unsuccessful and unprofitable.

> "There are some very distant locations in the northeast of India, so now they are actually focusing on making forums there […]. They [businesses] are trying to reach them in order to explore newer markets but as a focus area I wouldn't say that this is how they are heading on. So, it is not a focus area, they rather not care about that (07-EY)."

When it comes to the redefined value chains, additional tiers of distributors are needed to reach the remotest areas at the BOP. They are referred by the interviewees with a concepts like agro-dealer, doo-to-door agent, franchisee, or ambassador. This stage of the value chain may be optimised using the digiteal solutions, online catalogues, e-commerce or even reconsidering the whole distribution strategy.

> "[…] you have to see, 'OK, I need to have a truck full. This channel is going to take a while to be fully profitable, because you take time to product to consumers to pick up, so what else do these people need? Is it cement, corn, whatever? I am just going to send these products besides my products to make sure it is available there and keep pushing it in that market, but I am going to finance or subsidise my transportation costs by loading the truck with stuff that I know people want. And my margins are minimal, so I would be able to pay the transportation cost' (08-DIAK)."

> "If you are an international entity, it very helps to partner with local organisations. One because of language barrier – remember not everyone is an English-speaking person – so partnering with the local suppliers really helps. Direct selling is not really successful. You need to partner with retailers, who are able to redistribute and go into the very local areas to target your market (10-M-PESA)."

> "Right now, there is a lot of initiative around last-mile distribution. Using the BOP themselves as agents at the last mile. We are also seeing a lot of e-commerce platforms coming in because right now we see penetration of mobile phones, everybody has a smartphone, so people are looking smart ways to put products into these markets (11-BOPINC)."

Local cluster development seemed like a solution to improve the local distribution techniques, moreover, to reach the remote areas. If an organisations is unable to manage it internally, they can still make an impact through partnerships.

> "Some distributors finally also work through partners through schools and health clinics and NGOs or whatever. And it can by quite effective because you align partner organisations to hold those relationships, so do some of the marketing and sales and they work for you, so that really depends on how much you trust how competent that partner is (05-GDC)."

> "[…] you find most people, get ambassadors form that market, from that segment, so you get people who live and stay in those areas as agents, because they trust him, becomes their ambassador, they can easily convince their peers to buy the product and it is always good to rely on these relationships (11-BOPINC)."

7.4.4. LOCAL SHOPS

At the BOP organisations do not tend to have capacities to do follow-ups, therefore **service and maintenance outsourced to LOCAL SHOPS and entrepreneurs** is essential. On the one hand, if trade opportunities are not developed enough, locals must take this role, on the other, if the management of repairs is impossible by the focal organisations, the local entrepreneurs should perform it.

> "Earlier if something did not work, you bought a new one, now there is a need to repair everything, because there are no new products (09-Venezuela)."
>
> "Most machines I see there [at the BOP], are very basic machines, very simple, and there is usually someone who can fix it, but obviously don't have it on hand nearby, you have to go and find someone else (08-DIAK)."

It is not clear along the value chain who should oversee the maintenance of the products at the BOP, bit it is generally accepted that in the remotest places the locals indeed have a huge responsibility in this processes, therefore it could be the most successfully tackled by <u>cluster development</u>.

> "The distributor would argue that it should be the supplier, the supplier would argue that it should be the distributor. It depends to what makes sense and what it requires. Some maintenance the distributors can do themselves, quite basic maintenance. On the supply, suppliers tend to provide training to the distributors about how to do that but of course if it is like complex maintenance and parts need to be replaced and repaired, then the supplier needs to take that on and take back within the warranty period. But this a kind of source of fraction between distributors and suppliers because they both believe the other should be playing a bigger role (05-GDC)."

7.5. Results of the analyses

The template analysis of the data leads the researcher to the identification of relationships within and across the main concepts (7.5.1. and 7.5.2.), moreover shows some common trends (7.5.3.) repeatedly mentioned by the interviewees.

7.5.1. Within-code relationships

During the template analysis of the qualitative data, it has been observed that some pieces of information cannot be evidently coded to one single BOP SC subcode because some themes relate to each other. These relationships between codes can occur within one main code or across two main codes (appendix V.). Table 19 collects all the relationships discovered during the coding procedure.

Relatable subcodes	Justification of the relationship
SUPPLIERS–RELATIONSHIP–TEAMS	One piece of data referring to the establishment and maintenance of relationship with local suppliers can be related (1) to the importance of integrating local suppliers, (2) to the ways how the relationship management with them should happen and (3) to the local development team (11-BOPINC).
DESIGN–PACKAGING–MARKETING	If a products has a customer-centric design at the BOP, which often means that must physically appear appealing i.e., having a small package with clear BOP-compatible communications on it (less text, more images), it can be adequate for the best marketing communication purpose (11-BOPINC).
INVESTEMNT-QUALTIY	Both consider costs: initial investment costs, moreover initial maintenance and lifecycle costs. It was found that sometimes these two go together and cannot be separated (12-GCERF).
FUNCTIONALITIES-VARIETY	When the BOP is only served by products with basic functionalities, these products ought to show low variance. Vice versa, when the SC managers suggest considering products with beyond-basic functionalities, they consider a broader variety (08-EY).
INVESTMNET–MODULARITY	The less complex the product and assembly are, it is observed to bring about lower investment costs (10-M-PESA).
DESIGN–CUSTOMER SERVICE	The customer-centric design of the product in the beginning can reduce the costs related to customer service (03-CdA).
ENGAGEMENT–MARKETING	The more the customers are engaged already in the souring process, the more success can be predicted once the products are launched to the market (11-BOPINC).
QUALITY–CUSTOMER SERVICE	Better quality products require less maintenance, hereby customer service (09-Venezuela).
MARKETING–DISTRIBUTION	The local distributors reaching to the remotest areas can help to advertise the product for the population living there (05-GDC).
DISTRIBUTION–LOCAL SHOPS	Local shop owners can be in charge of the distribution to remote areas, and vice versa, distributors can provide maintenance services for local shops (10-M-PESA).

Table 20 – Relationships identified between BOP SCOR model subcodes (developed by the author)

7.5.2. Cross-code relationships

As result of the qualitative template analysis, overlaps have been found where the BOP SC model components appear related to the CSV. In table 20 those cases are collected where the is a recommended best practice based on the interviewees, which can be applied for creating share value at the BOP SC. Since every piece of data was at least double coded according to the keywords it contained, every row must contain at least one intersection with a column. Intersections without an overlap of subcodes or without a solid argumentation regarding that overlap, are excluded from the summery table, thus more investigation is needed. Some BOP SCOR components were found relatable with 2 or even 3 CSV levels. In these cases, the relationships were not ranked, but all intersections got filled by the relevant observation.

The analysis found that shared value at the BOP SC can be created via reconceiving products and markets if the focal organisation does not only concentrate on providing the most basic products but takes a step forward an investigates to include a broader variety but sticking to modularity. Hence it must understand the local customers’ habits, first prototyping, then design the packaging and the marketing strategy in alignment with the cultural preferences. Better quality products can be provided – eventually with a warranty as part of the product – hereby lowering the maintenance and after sales costs.

Along the redefined value chain innovation, quality measurement, stakeholder management and information management can enable the focal organisation in the long run to lower costs and internalise synergies from the relationships. Training of the staff, capacity-building increases efficiency. Minimised sustainable packaging saves waste and affects positively the environment. The routes of delivery might be optimised taking advantage of some digital solutions to order online and utilising the local distributors’ network to extend the value chain until the remotest places.

For the cluster development the enablement of the local stakeholders is crucial since they comply with the local administrative requirements and have the closest connection to the people at the BOP. The empowerment of the local distributors is very important because they are the most aware about the distribution routes, acquainted with the demand and familiar with the customer behaviour. Local suppliers can be strengthened via building trust, guaranteeing long-term partnerships, however they still need a fair payment to improve in quality and efficiency. The integration of the human resources into the BOP value chains via trainings, ethical wages and capacity-building can generate a lot of spillovers for the BOP society, hereby broadening the purchasing power of the latent yet potential customers.

Some aspects about SCM are not included in Bendul et al.’s model, so in vivo codes have been added during the analytical phase. Below table 21 summarises how **CONTRACTING**[10], **INNOVATION**[11], **FORECAST**[12] and **RETURN**[13] in vivo codes relate to the CSV levels based on the authors self-memos. The recommendations are not assigned to any BOP SC main codes, as more investigation would be needed how they would theoretically belong.

[10]Initially coded under RELATIONSHIP
[11] Initially coded under QUALITY
[12] Initially coded under MARKETING
[13] Initially coded under LOCAL SHOPS

		Reconceiving Products and Markets	Redefining Productivity at the Value Chain	Enable Local Cluster Development
BOP SCOR	PLAN & SOURCE			
	FUNCTIONALITIES	Explore a step forward from basic functionalities	-	-
	DESIGN	Understand the habits how the customer uses the product	Adapt the processes to a BOP-tailored production	-
	INVESTMENT	Lower price but not at the expense of quality	Remain competitive and innovative to keep the prices low	-
	QUALITY	Incorporate warranties as part of the product insuring quality	Implement quality control into the BOP processes	-
	TEAMS	-	-	Introduce policies and practices for local supplier inclusion
	SUPPLIERS	-	Utilise the cost, knowledge, and time synergies of local suppliers	Foment the integration of local suppliers in the VC
	RELATIONSHIP	-	Ensure the flow of valuable information via communication	Build trust with the suppliers
	ENGAGEMENT	Prototype the product at the BOP	-	-
	MAKE			
	VARIETY	Optimise the portfolio to have an impact and resist shocks	-	-
	LABOUR	-	Train the labour to improve efficiency and quality	Invest in capacity-building
	MODULARITY	Avoid complexity	-	-
	PACKAGING	Use the packaging to improve functionality and marketing	Use sustainable packaging techniques	-
	OUTSOURCING	-	Investigate infrastructure-building capacities	-
	DELIVER & RETURN			
	MARKETING	Exploit the latent with the 4 Ps and 4 As[14]	-	-
	CUSTOMER SERVICE	After sale services as part of the product	Online and offline customer service routes	Proper materials and explanation about the product
	DISTRIBUTION	Recognise the remote populations as customers	Integrate the BOP agents into the value chain	Empower local distributors
	LOCAL SHOPS	-	-	Teach local entrepreneurs to do maintenance

Table 21 – Practical recommendations for CSV at the BOP SC based on the analysis (developed by the author)

[14] Extend the TOP marketing mix (product, price, promotion, place) with BOP-tailored awareness, acceptability, affordability and availability constraints (Anderson & Billou, 2007).

		Reconceiving Products and Markets	Redefining Productivity at the Value Chain	Enable Local Cluster Development
BOP SCOR	CONTRACTING	Use the power of contract to dissolve mistrust	Manage supplier performance and risk	-
	INNOVATION	E-commerce helps exploring remote markets	Digitisation of processes reduces fix costs	-
	FORECAST	Benchmark with similar markets to accurately estimate the demand	-	-
	RETURN	-	-	Integrate the local distributors into the reverse logistic channels

Table 22 – Possible enlargement of the CSV at the BOP recommendations with in vivo codes, based on the interviews (developed by the author)

Finally, despite starting the template analysis at NVivo with a set of a priori keywords, some of these were not even mentioned or just extremely rarely by the interviewees. Among the main codes **QUALITY** and <u>cluster development</u> were not mentioned as relatable by anyone, hereby no data was gathered about rewarding local entrepreneur efforts for better quality. Moreover, energy, alternative resources, inventory management a prior keywords showed no occurrence.

7.5.3. Solutions trends

The **cultural aspect**, in other words, the human factor is the most frequently repeated variable by all interviewees on the way to find solutions. Relationship management is important when holding meetings, getting feedbacks, sharing information, managing end-to-end procurement, auditing, executing a thorough interview process, establishing cooperatives, implementing ethical procurement policy, or guaranteeing active listening to the BOP partners. Besides that, the BOP environment requires SC managers to handle a high level of randomness along value chain, sometimes irrational customer behaviour, the dependence on luck and take some ‘gut decisions’ due to the lack of information. This is a reason why it is extremely important to focus on **stakeholder management**, because – in alignment with Bendul el al. (2017) – the roles of BOP population are limited, they struggle to get involved in the value chains and multiorganisational initiatives are needed. Progress requires the inclusion of the NGOs along the value chain, acknowledging the importance of word of mouth when it comes to advertising certain goods and setting up the local development teams for R&D purposes to harmonise SCM with the BOP environment.

> “Trying to see things from where people are coming from (10-M-PESA).”

> "If we don't engage with local communities, everything that we are doing is going to an end (12-GCERF)."

Segmentation of the BOP population is another solution frequently pointed out, in alignment with affordability in terms of price and availability in terms of access – already emphasised by the academic literature about innovation at the BOP (Anderson & Billou, 2007). Moreover, segmentation of the BOP assists SC managers to decouple the heterogeneity of this market segment and tries to provide better estimations about the exact number, power and behaviour of the impoverished (Webb et al., 2010; Alvaredo et al., 2018). Segmentation is required according to several variables, not uniquely by country profile, BOP income level, social layer. In the SCM perspective, there same BOP customer segment signify different challenges whether it finds in an urban slum or in a remote rural settlement.

> "We must make sure that is available, that is affordable and that you the communication is quite clear, you don't use words, […] you have to tailor it to the needs, to the preferences of that segment of non-consumers or BOP (08-DIAK)."

Among the solutions the **market scale** is another frequent mention. BOP is often looked at as a limited market segment, however they might become economically empowered by local cluster development.

> "At the moment you improve their quality of life, then they become consumers (13-IFC)."

Finally, the use of the most recent **technologies** is often claimed as the biggest opportunity in the doorstep to successfully manage SCs at the BOP.

> "We are seeing real opportunities for e-commerce to reach the last mile, which is going to really transform what last-mile distribution looks like and how the BOP access for products and services. […] We are kind of waiting to see if an 'Amazon for the poor' is going to emerge – I am not just joking, I am realistic that it will (05-GDC)."

Among the slight disagreements with the primary framework of Bendul et al., the focus on basic functionalities, customer-centric design, and outsourcing are not straightforwardly stated by the interviewees, so no generalisations are drawn. Similarly, initiatives for serving the remotest populations still lack practical solutions, and the making processes of the BOP SC neither mentioned e.g., the sale of a wider range of accessories combined with the low variance of products nor the easy reconfiguration for the products for other market to exploit modularity.

8. Discussion

This research aims to discover *how does the bottom-of-pyramid environment affect the creation of shared value in the supply chain?* First it recognises that at the BOP there are multiple different stakeholders intervening along the SCs. Second, it identifies theoretical ways about the BOP SC models as primary framework (Bendul et al., 2017), and decuples the CSV philosophy as secondary framework (Porter & Kramer, 2011) to contrast with the primary one. Then applying a qualitative research method, 13 SCM experts are asked via semi-structured interviews from different markets, industries, and organisation types to share their profound practical thoughts about the creation of shared value in the BOP SC.

The key findings show that the BOP environment affects the SCs and interrelate with the shared value creation, in the way that SC managers must consider BOP-specific strategies when they want to manage successfully the sustainable SCs with the inclusion of the impoverished. All the planning & sourcing, making and delivery & return components of the SCs reveal overlaps with the reconceived products & markets, redefined value chain and local cluster enablement levels of CSV. BOP SCs are interpreted as complex networks, with the active participation of stakeholders with or without a profit focus, independent or government-related.

8.1. Analysis results

The analysis of the 13 interviews with SCM experts shows that challenges affecting BOP SCs primarily relate to the social bottom line, then these derive to some economic problems, meanwhile the environmental challenges seem subordinated. Interviewees demonstrate that the theoretic framework concepts – or how they call the sustainability approach of the organisation – are insignificant, compared to the practical real-life solutions that they implement to tackle challenges along the BOP SC.

Answering SQ1, actors of the BOP SCs include both local SMEs and MNEs, both having pros and cons. SMEs prevail in these markets but struggle to become long-term suppliers for multinationals because of low competitiveness, trust issues and transaction costs (time, negotiation, quality, etc.). MNEs would own the assets and power to increment progress at the BOP, but they tend to source globally, and are less motivated to empower local communities. NGOs play therefore a crucial role connecting the actors, enjoying the trust of the locals, and possessing knowledge about the markets. The role of the local governmental actors is variable: sometimes it is enabling, other times it is a bureaucratic obstacle. Additionally, aid agencies, foreign governments, military alliances as well as religious or tribal communities may affect SCs.

To answer SQ2, the theoretical approach of Bendul et al. (2017) about BOP SCOR model was chosen as primary model with a secondary framework about the CSV levels of Porter and

Kramer (2011). The BOP SCOR model seemed valid for the data collection, however interviewees doubted the relevance of some components, namely the focus on basic functionalities, customer-centric design, or outsourced assembly method to final customer. Additional themes came up enriching this theoretical conceptualisation: contracting, innovation, forecasting and return policies were the most relevant inputs during the data collection. Concerning CSV – despite there were no direct questions – the data could be coded using keywords, but it was observed that mixed sustainability approaches are followed by BOP SCM experts.

To answer SQ3, some testable practical solutions have been proposed in table 21., completed with the suggested categories in table 22.

Reflecting on the RQ, the results show that SC experts at the BOP must focus on managing a culturally and stakeholder-wise very diverse environment, where the adequate segmentation and technological innovation are key tools to reach progress and market scale.

8.2. Academic implications

The research finds a gap in the real-life application of the concepts, moreover, identifies overlaps between existing theories, namely within the subcode themes assigned to the qualitative data collected. It finds that BOP SC models can be rateable to CSV levels and points out the opportunities when it is feasible to integrate these two together. Additionally, it finds for further consideration extra themes that did not appear sufficiently focused on by the existing literature, but were consequently mentioned during the qualitative data analysis, hereby establishing a solid ground for future research.

The RQ puts the BOP market segment into the focus, but it was found that the use of this concept in practice is not widespread. By definition, all the 13 interviewed organisations have connections to the BOP but only few consider their suppliers, customers, beneficiaries or labour as literally part of the BOP. A possible reason for that can be that linguistically referring to someone as ‘the bottom’ like phrased by Prahalad in the early 2000s is not politically correct enough in the 2020s, hence alternatives such as inclusive markets or vulnerable have been used, eventually definitions about these population were skipped.

Thanks to the actuality and significant relevance of the sustainability topic, in the academic literature lots of different approaches can be found and interviewees are aware of several concepts. This is perhaps the reason why CSV was not deliberately mentioned the same way as

Porter and Kramer coined the phrase, however references for creating value at the BOP appeared in all interviews and observations relatable to the CSV levels were talked about. This meets the expectations based on the literature review, since the use of the concept was criticised, several overlaps are pointed out by authors and a plethora of sustainability concepts and strategies are offered.

Despite being a SC focus research, the low frequency of value-chain-related data, coded according to the CSV levels, did not support the assumptions. Although there were no direct CSV questions in the collection phase, pieces of information were coded according to the keywords they contained and, in this perspective, the value chain focus underperformed. Improvements along the BOP SC are achievable via capacity-building, which is relatable to the value chain because of its training and educational nature, as well as to the local cluster development because of its empowerment feature.

What innovation at the BOP must be built around is the so-called 4 A’s – namely awareness, acceptability, affordability, and availability – and valid observations and components of it are reflected on the interviews (Anderson & Billou, 2007).

The proposed framework synthetises jointly the finding of the double-coded qualitative data, deepens the existing knowledge about the BOP SC models, and adds some valuable practices tailored to CSV purposes. Deeper specifications from these recommendations cannot be drawn since the diversity of the interviewee profiles delimit the extent of the overall generalisations about the BOP SCs. It was also found that all a priori subcodes supported by the framework are unable to cover all relevant details. Therefore, the research suggests broadening the model of BOP SC scope with components such as contracting, innovation, forecast and return, which basically reflects on processes covered by a distinct SC conceptualisation, namely Cooper et al. (1997). Additionally, in disagreement with Bendul et al. (2017), the focus on basic functionalities, low variance of basic products and outsourced assembly method to final customer or distributor were not considered appropriate indications by the interviewees.

Conflicting comments by the interviewees on the one hand raise complexity, variety and quality as potential fields for improvement, yet the BOP market is extremely sensitive, and customers cannot afford to pay for this progress. Investing in capacity-building as a theoretical solution may link either to CSV via cluster development or redefined productivity, however investment in infrastructure improvement may not be followed the intellectual progress, because the political insecurity at the BOP is still unable to insure these investments.

The active participation of NGOs along the BOP SC met the prior expectations, in contrary, the role and added value of national governments and local authorities remained unclear and varies a lot according to markets – whether they are integrated part of the SCs as customers or facilitators, or just ‘invisible actors’ creating institutional voids, bureaucratic obstacles or unnecessarily protectionist foreign trade policies. The stakeholder who determines the organisational goals and enjoys the impact may lead to a customer–beneficiary conflict of interest, when the end-user in the SC is not identical with the stakeholder who actually pays for the product or the service. Moreover, despite some scholars ranked organisations at the BOP along an axis, arguing that non-profit actors are able to have the biggest impact (Alfaiate, 2021), this research also suggest that teaming up with for-profit actors might be similarly beneficious (Kramer & Pfitzer, 2016).

The theory applied in this research was the relational view. It was strengthened all along the data collection and analysis that the competitive advantage at the BOP is based on the inter-organisational relationships (Dyer & Singh, 1998). The joint use of resources leads the organisations to internalise synergies. Collaboration, partnership, inclusive business, capacity-building are only some of the keywords that stressed that relationships play an essential role. Many interviewees highlighted that progress is only achievable with the inclusion of those at the BOP, the locals (08-DIAK; 12-GCERF). Others strongly focused on the building and preservation of relationships (01-ACTED; 05-GDC), meanwhile others claimed the importance of the representation of the locals and the augmentation of their negotiation power along the SC, by grouping them into cooperatives (02-MÖS; 13-IFC).

The interrelated analytical subcodes of SUPPLIERS–RELATIONSHIP–TEAMS have a deep connection with the relational view, and among the CSV codes the local cluster development is the one that the most adequately represents the role of relationships as source of competitive advantage.

Finally, as Porter and Kramer (2011) pointed out, this research also confirms that the BOP environment is dynamic. Impediments embedded in the BOP context have a changing nature and enterprise strategies must by dynamic to successfully minimise the negative impact (Chikweche, 2013).

8.3. Managerial implications

This research contributes to the practical field by specifying already investigated BOP SC strategies with their relationship to shared value creation. Therefore, it suggests feasible recommendations to consider for SC managers facing challenges at the BOP, based on the result of 13 qualitative interviews focusing purely on BOP SCs, applicable regardless of market, industry, or type of the organisation.

The research shows that supply chain managers must reflect on the areas, which are traditionally out of their scope, namely social sciences. It was concluded from the examples that the BOP SCs are strongly affected by local politics, social structure, or demographic trends such as overpopulation or migration. When considering partnerships with local stakeholders, it is extremely important to always be acquainted with the local cultural environment to establish long-term win-win relationships. Whilst in developed countries and TOP SCs diversity is appreciated nowadays, the BOP is different. Examples of language barriers, different time perceptions or discrimination because of belonging to certain demographic group, etc. still prevail and have an impact on the relationships along the value chain.

The qualitative data demonstrated that BOP markets are highly heterogenous, therefore SC manages need to consider segmentation when picking their customers and reaching out to them with an accurately priced, positioned and communicated product or service, which may significantly improve their quality of life and ideally ensure economic sustainability to the SC actors via market scale and use of the technology.

8.4. Limitations

The research is strongly based on primary qualitative data, but simultaneously, a systematic literature review including all relevant peer-reviewed English language academic papers that contain the RQ keywords could make the results even more accurate and valid.

The geographic, industrial, and organisational diversity enable the research to have an unbiased look at all the diversity of SCs existing at the BOP, however the heterogeneity of the data sources delimits the drawable conclusions. The organisations chosen – despite all being focal points of their own SCs – have different purposes, financial models, KPIs, management structures and time-orientations, therefore some motivations behind their SCM practices were not equally comparable. Moreover, the role of the stakeholders depending on the geographic location varies, as the macro environment in all BOP locations differs, hence a PESTEL analyses tailored to each market could show some patters and trends influencing SCs.

Finally, concerning the concepts, choosing CSV may not have represented the most appropriate philosophy to conduct the data collection, so it was degraded as the secondary framework; therefore, the more general concept of sustainability or questioning about the TBL components in the interviews led to more valuable data without forcing the CSV.

8.5. Future research

Derived from the limitations, the propositions stated in table 21 about the cross-code relationships (i.e., how BOP SCs and CSV relate to each other) are generalised deductions from the collected primary data, but they have not been tested so far, which grounds for a further research opportunity.

Based on the sound result of this investigation, additional research opportunities can be considered. One way could be a single **industry focus**, deepening the scope and concentrating either on one single supply chain (network) involving all actors but having the geographic locations as variables. Another way is **market focus**, investigating SCs within one country and examining all the possible stakeholders who manage SC in that emerging market with significant BOP population. **Organisation focus** could concentrate on only SMEs, MNEs or NGOs and their BOP SC purpose, however this could lead to the least profound results because the other market and industry variables would still impede the researcher to draw universal conclusions. Following the examples applied by Bendul et al., ethnographic research or routine conversations can be an ideal method to dig deeper into one BOP SC.

Other way to proceed to further analysis is via contrasting TOP SC concepts to the BOP qualitative data sources. Themes and keywords generated from the TOP models could investigate in what extent these are applicable at the BOP and show if there are any trend of progress or convergence.

Finally, it has been highlighted by some interviewees that the Covid-19 pandemic had an impact on the BOP customer behaviour and there are some shifts towards innovation, digital solutions, e-commerce, which is also mentioned as a solution by many interviewees. Therefore, it is an area, which might be recommendable for investigation purposes form today on.

9. Conclusion

The BOP environment affects the creation of shared value in the SC raising challenges around how to plan, source, make, distribute, and return the products irrespective from geographical location, industry, or the type of organisation. A broad set of stakeholders from for-profit to non-profit, domestic or international, independent or government-related face together the complexities of these markets and make efforts to empower the poorest layer of the world’s society.

The collections of in-depth qualitative data seemed the most appropriate way to engross the reality how these market environments work, how experts cope with the challenges in their everyday job, how empirical evidence aligns with existing literature, which are the generalizable characteristics, and which are their strongly case-specific experiences. The result shows that regardless of the purpose of the organisations, SC managers have an opportunity to create shared value at each stage of their SC processes, regardless of how they call the exact sustainability philosophy applied. SCM must engage with social sciences to understand the whole picture, but the methodology also raises questions about how the proposed recommendations could be implemented in more detail in the so heterogenous and dynamically altering global BOP segment.

Besides the applied theoretic SCM approach, additional strategies about how to contract, innovate, forecast, and manage return flows at the BOP shall be further considered. Furthermore, practitioners should prioritise focusing on the segmentation of the BOP market, on the achievement of market scale and on the implementation of digital technology to optimise operation in these complex environments. Above all, the deep understanding, acceptance, and respect of the local culture at the BOP is the starting point to every fruitful partnership and value-crating SC strategy.

Figures and tables

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Appendix

I. Interaction of concepts about CSV (Daood & Menghwar, 2017)

Theory	Author	Premiss
Stakeholder theory	(Beschorner, 2013; Freeman, 1984; Freeman et al., 2007)	*P1: CSV is a stakeholder management practice, although opportunities to create shared value are not bound by the stakeholders considered as such by the firm.* *P2: Through the pursuit of CSV as strategy, managers can attend their fiduciary obligation to shareholders while creating societal value, not necessarily provoking misfit across the various stakeholder interests, corporate values, and societal issues perceived as important by the firm*
Sustainability	(Hart, 1997)	*P3: CSV is not per se sustainable.* *P4: To create shared value, a firm does not have to have a social mission as its core objective* *P5: CSV occurs within the continuum between commercial and social entrepreneurship.*
Blended Value	(Emerson, 2003a, 2003b)	*P6: CSV is integral to blended value, the latter being a broader concept focusing on the blended (i.e. financial, economic and social) returns and nature of capital.* *P7: CSV is integral to total value maximisation, whereas total value consists of economic, social, and environmental value (i.e. blended value).*
Bottom of the Pyramid	(Prahalad & Hammond, 2002)	*P8: CSV is an extension of BoP, the latter focusing on the bottom of the economic pyramid while the former targeting whole economic pyramid.*
Corporate Social Responsibility	(Baron, 2001; Dahlsrud, 2008; Porter & Kramer, 2006)	*P9: The motives whereby firms engage in CSV initiatives, which by definition result in the creation of both economic value for them and societal value, will not be relevant if the conditions for Pareto improvements hold.* *P10: CSV opportunities are those opportunities wherein CSR is certainly positively related to financial returns.* *P11: From the economic point of view, CSV is an economically efficient way for firms to put CSR into practice.* *P12: The success of CSV could be partially ascribed to its "detachment" from social responsibility.* *P13: CSV does not supersede CSR, whereas the latter is inclusive of, but not limited to, the former.* *P14: Extra-CSR initiatives which create shared value may give rise to new social responsibilities for the firm initiating them.*

II. Interview invitation template email

Dear *name of interviewee*,

My name is Péter Wrhovina and I am writing my master thesis about **creating shared value at the bottom-of-pyramid supply chain** at Copenhagen Business School (Supply Chain Management MSc). I received your contact from a very good friend from another organisation in the field you work with / I found your contact in the internet while searching for the most relevant organisations for my research.

I am in a very difficult phase of my research because I need some **qualitative interviews** to enrich my master thesis, but it is a very specific scope and I know very few experts. I would like to emphasise that I am very motivated about the topic, but I sincerely need these insights form professionals form the field to finish my investigation. The name of ***name of the organisation*** has been already recommended to me several times, this is why I found it very valuable to get in touch with your organisation.

I would like to ask you whether you would be open for a semi-structured interview about the topic? From experience, it lasts 45-60 minutes and happens via Microsoft Teams this week or next, but I am flexible.

Since your organisation seems very relevant for my research, if you do not have the time for me, please recommended someone who may guide me with his/her insights towards my graduation. Thank you in advance and I hope you are open to share some knowledge.

Best regards,

Péter Wrhovina

P.s.: Please find attached a sample of the questions I am looking the answers for. (The final version has already been shortened.)

III. Interview questionnaire sample

Master Thesis Interview Questions (sample)

The following questionnaire sample is related to the Master Thesis of Péter Wrhovina, Supply Chain Management master's student at **Copenhagen Business School** (Denmark) and International Management master's student at CEMS, **NOVA SBE** (Portugal).

Title: Creating Shared Value in the Bottom of Pyramid Supply Chain

Research question: How does the bottom-of-pyramid environment affect the creation of shared value in the supply chain?

The aim of this master thesis is to understand how the characteristics of the BOP locations affect the value creation in the supply chain. This study is to prove whether there are any features, which make this BOP supply chain unique or different from the supply chains in the developed countries – the most of business school lectures talk about. Since different kinds of organisations operate and intend to create value in these markets, and all off them own up- and/or downstream supply chains, this master thesis reveals the kins of specialties the organisations encounter because of the unusual business circumstances at the BOP.

BOP: 2.2 billion people either near or living in multidimensional poverty at the base or bottom of the income pyramid (UNDP, 2014).

Interview design: One-hour recorded interview with stakeholders from the field in a semi-structured way: both open-end questions (see the sample below) and closed questions (not included in the sample). The final questionnaire content may slightly differ from the sample!

QUESTIONNAIRE (sample)
The following questions are related to your organisation
What is the name of the organisations you have experience with?
What is the form of the organisation you have experience with?
What is the sise of your organisation?
Which are the target markets of your organisation?
Could you please present the main activities your organisation does at the BOP?
Could you please present the industry/area where your organisation operates at the BOP?
The following questions are related to the theoretical concepts about the BOP
Could you name any major **social** problems in your target market?
Could you name any major **environmental** problems in your target market?
Could you name any major **economic** problems in your target market?
The following questions are related to the stakeholder relationships at the BOP
Do you observe supply chains to be linear (**generic**)?
Do you observe supply chains to be extended linear (**extended**)?
Do you observe supply chains to be a complex network (**ultimate**)?
What kind of organisations do you work with?
The following questions are related to supply chain strategies at the BOP **The first supply chain activity to talk about is SOURCING**
What should be **focused** on when sourcing at the BOP?
How do you **design** your souring strategy?
How do you perceive **investment costs** when buying at the BOP?
How do you perceive **product lifecycle** when buying at the BOP?
How do you perceive **(product) maintenance** costs when buying at the BOP?
Who sources at the BOP?
Who do you **source from** at the BOP? Who are the suppliers?
How do you establish **relationship** with your suppliers?
The second supply chain activity to talk about is PRODUCTION
What **variety** of products is required at the BOP?
What are the characteristics of **labour** at the BOP?
What do you think about **complexity** and **modularity** at the BOP?
What do you think about **packaging** at the BOP?
Should the organisation already provide the **final product**?
Should some processes be **outsourced** to customers?

The third supply chain activity to talk about is DELIVERY
How should the **marketing** be targeted to the BOP customer?
How should organisations focus on **customer service** at the BOP?
What kind of **distribution channels** should organisations build at the BOP?
How should organisations treat the **remote locations**?
Who should be in charge of **delivery** in the products/services?
Who should be in charge of **maintenance**?
What is the role of **local entrepreneurs** in delivery?

IV. Template coding hierarchy

Theme		Main code		Subcode	
1.	CONCEPT	a)	TBL	i.	Economic
				ii.	Environmental
				iii.	Social
		b)	Theory	i.	Blended value
				ii.	BOP
				iii.	CSR
				iv.	CSV
				v.	Stakeholder management
				vi.	Sustainability
2.	SC SCOPE	a)	Map	i.	generic
				ii.	extended
				iii.	ultimate
		b)	Stakeholders	i.	SMEs
				ii.	MNEs
				iii.	NGOs
				iv.	donors
				v.	national governments
				vi.	foreign governments
				vii.	others
3.	CSV			i.	Products and Markets
				ii.	Value Chain
				iv.	Cluster Development
4.	SCOR	a)	Plan & Source	i.	FUNCTIONALITY
				ii.	DESIGN
				iii.	INVESTMENT
				iv.	QUALITY
				v.	TEAMS
				vi.	SUPPLIERS
				vii.	RELATIONSHIP
				viii.	ENGAGEMENT
		b)	Make	i.	VARIETY
				ii.	LABOUR
				iii.	MODULARITY
				iv.	PACKAGING
				v.	OUTSOURCING
		c)	Deliver & Return	i.	MARKETING
				ii.	CUSTOMER SERVICE
				iii.	DISTRIBUTION
				iv.	LOCAL SHOPS
5.	IMPLICATIONS			i.	CHALLANGES
				ii.	SOLUTIONS

V. Relationship of BOP SC subcodes within main codes

	PLAN & SOURCE	MAKE	DELVIER & RETURN
PLAN & SOURCE	INVESTMENT–QUALITY SUPPLIERS–RELATIONSHIP–TEAMS	DESIGN–PACKAGING FUNCTIONALITIES–VARIETY INVESTMNET–MODULARITY	DESIGN–MARKETING DESIGN–CUSTOMER SERVICE ENGAGEMENT–MARKETING QUALITY–CUSTOMER SERVICE
MAKE			PACKAGING–MARKETING
DELVIER & RETURN			MARKETING–DISTRIBUTION DISTRIBUTION–LOCAL SHOPS