"Sustainable Wealth for Africa and Europe through Co-Creation"

A systemic research

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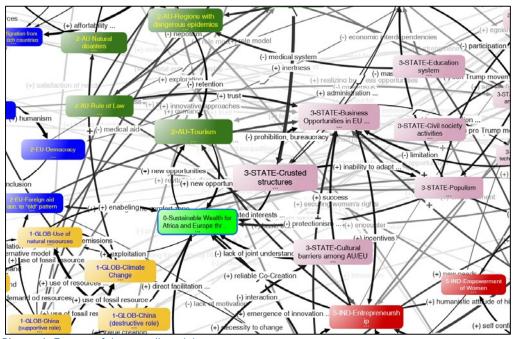
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1. Abstract

This research investigates supportive and hindering factors for Co-Creation between "poor" and "rich" countries, in this case between African and European countries. It starts with the underlying assumption that proper Co-Creation leads to sustainable wealth creation in the poor as well as in the rich country. Additional, in our understanding, it contributes to a globally peace- and fruitful development.

The team has worked for more than 18 months on this subject by creating a systemic model with a dynamic time line for the upcoming 20 years and beyond, by applying systematic management.



Picture 1: Excerpt of the overall model

Table 1 and table 2 provide an overview of the most important supportive and hindering factors for Co-Creation:

The six(6) most supportive factors for sustainable wealth through Co-Creation	Short term rank 1-5 years	Long term rank 13 – 20 years
Growing Middle Class	1	1
Digital platforms	2	3
Establishing and operation of attractive companies / institutes / associations	3	7
Entrepreneurship	4	5
Rule of Law	5	6
Market(value) creating innovation	6	4

Table 1: Six(6) most supportive factors and their dynamics

The six(6) most hindering factors for sustainable through wealth Co-Creation	Short term rank 1-5 years	Long term rank 13 – 20 years
Autocratic Governments	1	1
Crusted structures	2	2
China (destructive role) 1)	3	4
Populism	4	6
USA under Trump	5	24
Cultural barriers among AU/EU	6	3

Note 1): We look at Chinese activities in African countries twofold: a) Its supportive role by creating infrastructures and triggering economic growth, b) Its hindering role by providing a role model for autocratic governments and nourishing corruption.

Table 2: Six(6) most hindering causes and their dynamics

The results of this research are intended to be an input for discussions in relevant boards of political, non-governmental as well as private institutions and companies.

A "drill down" to root causes of action rounds off the work.

Stoisser - Sturany

2. The link to diversity

The MOMENTUM 2017 convention is titled "Diversity". Ten (10) tracks are discussing different questions concerning this topic. We have chosen to contribute to track #10 "Diversity – a value on its own?" The team of authors considers diversity as an inherent fact of the universe. As put forward in our approach, we think that African-European relations require making more use of diversity. In this sense, from our perspective diversity is "a value on its own".

3. Background

2015 Hans Stoisser published his book entitled "*Der schwarze Tiger – Was wir von Afrika lernen können*" Kösel Verlag, November 2015, ISBN 978-3-466-37125-9, based on his vast professional experience in foreign aid and management consultancy for and in African countries. This inspired the team of authors to investigate what could lead to sustainable and nourishing wealth in the two continents, the African Union (AU) and the European Union (EU).

The authors are aware that the objects of this research, "Africa" ("African Union") and Europe ("European Union"), imply a high level of abstraction and do not account for the high diversity of each of the continents. However, we are convinced that there are sufficient similarities within the respective country groups allowing drawing valid conclusions. A more detailed research containing the diversity of the various countries would be a new project which actually could be based on this work.

4. Purpose

Results of this research are intended to be an input for discussions in relevant boards in political, governmental and non-governmental institutions, as well as for private companies.

The methodology of this research shall encourage everybody to make use of systems thinking and modeling, specifically to trigger a more sustainable decision-making.

5. Approach

In 2015 and 2016 the migration issue has brought back a debate on African-European relations. While the public debate is focused on refugees and integration, it is challenging to look beyond and bring in the complex issue of **an ever more interlinked, networked and interdependent global society**. In the last decades, African countries have become an integral part of this complex global system, with access to global value chains and the global knowledge and communication society.

Examining new possibilities and their impacts brings up complex questions. Systemic thinking can help to cope with this complexity. This research has created **a qualitative systemic cause and effect model** to analyze impact chains and feedback loops.

Impact chains as well as feedback loops are the result of examining *direct* impacts among factors. A computerized model evaluates direct and indirect impacts, calculates their magnitudes and shows supportive and hindering triggers. Therewith, the model leads to a better understanding of inherent dynamics.

As system theories shows, organizations in an environment with proliferating complexity have to increase the variety (complexity) of their own structure in order secure their viability (Beer, Ashby's law)). As a means to increase the variety on individual, organizational, institutional or even global level, we have introduced the concept of Co-Creation.

"Co-Creation" is "the joint creation of value" (Prahalad) by bringing different stakeholders together, in this case people and organizations from African and European countries, in a setting making collaboration at eye-level possible. The relations of stakeholders lead to the emergence of an outcome, which by definition cannot be predefined and – if a favorable setting is achieved – is mutually valued.

As a favorable setting, we consider the existence of the following elements: 1. mutual values, 2. delighted partners, 3. nourishing communication at eye-level, 4. iterative proceeding, and 5. granting self-organization.

Co-Creation can materialize at all levels, from person-to-person, business-to-business, communities-to-communities, government-to-government to even highest and most abstract level of a collaboration between the central structures of the African Union and the European Union.

Overall, Co-Creation shall make it possible to benefit from the **diversity** that African and European countries offer. Thus, we look at diversity as an important source for creativity and innovation in order to resolve mankind's complex challenges in a fruitful and peaceful way.

Stoisser - Sturany

6. Six(6) research questions

- 6.1. "Which factors can lead to sustainable wealth for Africa and Europe through Co-Creation?"
- 6.2. "What are the connections among the ten(10) most supportive and the ten(10) most hindering factors?"
- 6.3. "How are the dynamics of the ten(10) most supportive and the ten(10) most hindering factors?"
- 6.4. "What is the 1st choice for the most effective activities?"
- 6.5. "What is the 2nd choice for the most effective activities?"
- 6.6. "What can Europe learn from Africa?"

7. Considerations for applying a qualitative cause effect model

- 7.1. Models which are projecting future possibilities, as our model does, cannot be verified with data, because they do not yet exist.
- 7.2. Future projecting models can only show possible developments based on today's assumptions and knowledge.
- 7.3. Assumptions in a model like this are present in both, the choice of factors included as well as in the connections between factors. These assumptions are based on several sources:
 - 7.3.1. The author's knowledge and experience
 - 7.3.2.Literature and researches
 - 7.3.3. Guesses by the team involved (guesses are indicated or varied)
- 7.4. In scientific research, factors like ours have been considered, but not their indirect effectivity by complex relationships among them. This shall be one of our scientific contributions.
- 7.5. A future oriented model can never be verified but falsified. The model is based on present circumstances and insofar only valid for the current presence and projections of the future based on it. If new circumstances (factors and/or connections) will appear the model has to be adapted and further developed. The same is necessary if new expertise is joining the team. New information / thoughts / facts can easily be integrated and the current model adapted. This keeps the model vital.
- 7.6. We think that forward oriented systemic (cybernetic) research does not have any alternative. Its purpose is not about forecasting the future but to create reflected thoughts on possible "futures". Of course, these thoughts themselves will contribute to and create future reality.
- 7.7. A systemic model can be an effective decision tool. Insofar it can create (future) reality.
- 7.8. Any systemic model shall be criticized in the way that assumptions on factors and / or connections are WRONG or factors and / or connections are MISSING, but not by complaining that assumptions are not verified. The model shall be falsified instead.

8. Systemic model structure

8.1. Levels

The model contains five(5) color coded levels:

- 1-GLOB global level
- 2-AU / EU Union level (Africa / Europe)
- 3-STATE Government / State level of a single state
- 4-SOC (Civil) Society level (i.e. parties, clubs, cultural societies, companies)
- 5-IND Individual human level

8.2. Factors

We have identified 54 factors with 174 <u>direct</u> connections related to the goal factor. This number of factors and direct connections seems to be manageable at the first glance. But as our research shows, it leads to an unmanageable amount of <u>indirect</u> connections forming over five million loops, either reinforcing(R) or balancing(B) outcomes and impacts. Our model uses twenty-one (21) iteration steps to calculate impacts.

Factors in alphabetical order:

(0) Overall Goal	(1) Global GLOB	(2) Union AU AU	(2) Union EU EU	(3) State STATE	(4) Society SOC	(5) Individual IND
Wealth for "POOR" (AU) and "RICH" (EU) Countries by means of Co-creation	1-GLOB-China (destructive role)	2-AU-Autocratic Governments	2-EU-Democracy	3-STATE-(Civil-) Wars and their victims	4-SOC-Corruption	5-IND-Education of people in AU
	1-GLOB-China (supportive role)	2-AU-Economic growth, personal wealth	2-EU-Europe, a cultural source	3-STATE-Business Opportunities in EU & AU	4-SOC-Cultural exchange	5-IND- Empowerment of Women
	1-GLOB-Climate Change	2-AU-Functioning social welfare systems in AU	2-EU-Foreclosure against migrants and refugees	3-STATE-Civil society activities	4-SOC-Development of new technologies	5-IND- Entrepreneurship
	1-GLOB-Digital platforms	2-AU-Inclusive Institutions	2-EU-Foreign aid acc. to "old" pattern	3-STATE-Crusted structures	4-SOC-Establishing and operation of attractive companies / institutes / associations	5-IND-Market(value) creating innovation
	1-GLOB-Global economy	2-AU-Natura l disasters	2-EU-Humanitarian crisis aid	3-STATE-cultural Barriers among AU/EU	4-SOC-Growing Middle Class	5-IND-Satisfaction of safety needs
	1-GLOB-Mobility and Communication (early stage)	2-AU-Reduction of poverty and social inclusion in poor countries	2-EU-Migration from poor to rich countries	3-STATE-Education system	4-SOC-Open, customer oriented and agile approach	
	1-GLOB-ROW (BRICS, AUS, etc.)	2-AU-Natural Resources Supplier	2-EU-Overleveraged finance economy	3-STATE-Missing technical Infrastructure		
	1-GLOB-Russia	2-AU-Push factors in poor countries	2-EU-Pull factors of rich countries	3-STATE-Populism		
	1-GLOB-USA as a global power (traditional view)	2-AU-Reduction of poverty and social inclusion in poor countries	2-EU-Refugee movements	3-STATE-USA under Trump		
	1-GLOB-Use of natural resources	2-AU-Regions with dangerous epidemics	2-EU-Rule of law			
		2-AU-Rule of Law	2-EU-Social welfare systems in EU			
		2-AU-Tourism	2-EU-Sovereign debts			
	10	12	12	9	6	5

Table 3: Overview of all factors

8.3. Time line

The overall time line considers twenty(20) years, from 2017 till 2037. Impact periods are:

- Short term 1 5 years
- Midterm 6 12 years
- Long term 13 20 years

8.4. Impact power

The impact power is rated as percentage from a factor to the connected factor. The total of all inputs cannot exceed 100%. There are three(3) options.

- a. The distribution of the input power is computed by the software itself, which makes sense in some cases,
- b. the distribution is done manually in the so-called "weighting matrix", or
- c. a combination of the both, automatic and manually, is possible.

8.5. Software

We've applied the software iMODELER professional, desktop version 8.0.0.

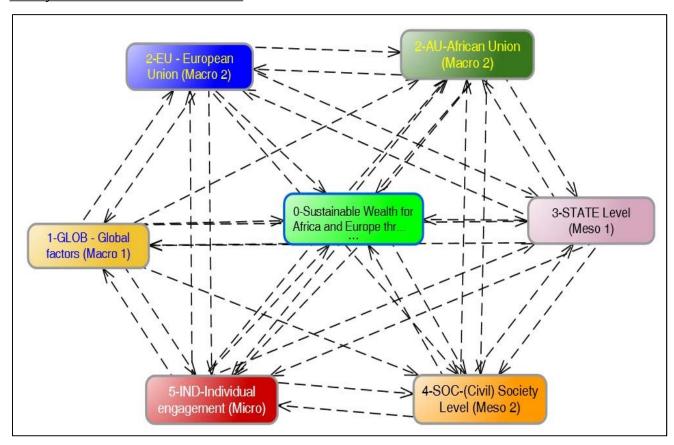
9. Systemic model development

The model has been developed by over twenty(20) joint sessions of the team of authors, searching for relevant factors and their <u>direct</u> connections. The authors used the so called "Know-Why" questioning technique (Neumann 2013). Picture 1 depicts an overview of connections between the aggregated groups of factors.

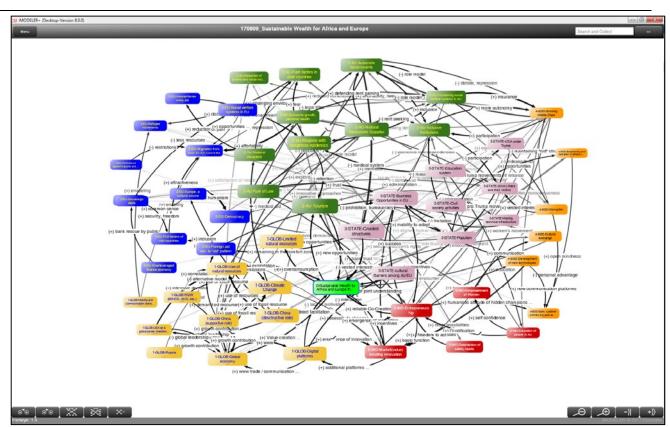
Based on these direct connections between factors the complex data model calculates logically valid indirect connections. It allows impacts to be viewed from each factor's perspective. So-called "insight matrixes" and "Tornado Charts" deliver a variety of information for many kinds of decision-taking and problem solving.

Efforts to improve the model's validity and practicability are ongoing.

10. The systemic cause - effect model



Picture 2: Screenshot from the aggregated model - overview (levels clockwise displayed)



Picture 3: Screenshot from the full model

11. Answers on the research questions posed

1. "Which factors can lead to sustainable wealth for Africa and Europe through Co-Creation?"

Most supportive factors for sustainable wealth through Co-Creation	Short term rank 1-5 years	Mid-term rank 6 – 12 years	Long term rank 13 – 20 years
4-SOC-Growing Middle Class	1	1	1
1-GLOB-Digital platforms	2	2	3
4-SOC-Establishing and operation of attractive companies / institutes / associations	3	7	7
5-IND-Entrepreneurship	4	6	5
2-AU-Rule of Law	5	5	6
5-IND-Market(value) creating innovation	6	4	4
1-GLOB-Global economy	7	8	8
2-EU-Europe, a cultural source	8	11	16
2-EU-Rule of law	9	12	14
2-AU-Tourism	10	9	9

Table 4: Most supportive factors for Co-Creation and their dynamics

Most hindering factors for sustainable wealth through Co-Creation	Short term rank 1-5 years	Mid-term rank 6 – 12 years	Long term rank 13 – 20 years
2-AU-Autocratic Governments	1	1	1
3-STATE-Crusted structures	2	2	2
1-GLOB-China (destructive role)	3	3	4
3-STATE-Populism	4	6	9
3-STATE-USA under Trump	5	7	24
3-STATE-Cultural barriers among AU/EU	6	4	3
4-SOC-Corruption	7	5	5
2-AU-Natural Resources Supplier	8	9	26
2-AU-Regions with dangerous epidemics	9	8	7
2-EU-Overleveraged finance economy	10	11	15

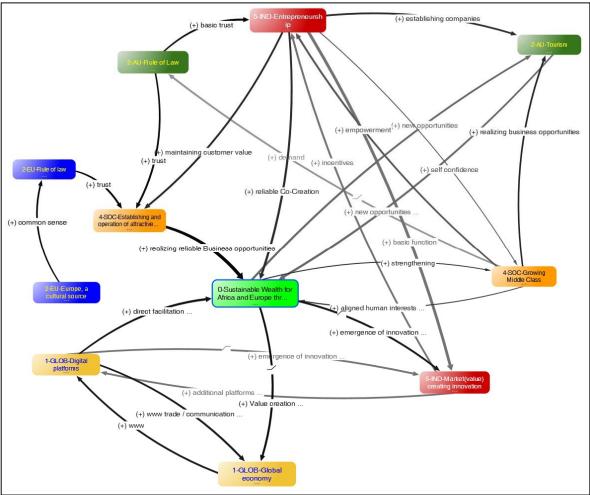
Table 5: Most hindering causes for Co-Creation and their dynamics

How is the rank computed?

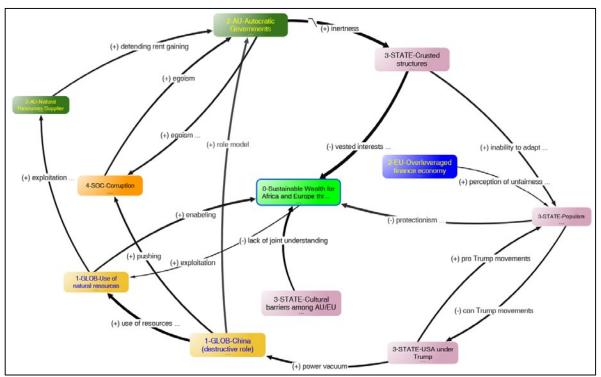
The input power of direct connections between factors has been defined during modelling. When assessing impacts on a certain factor an "Insight Matrix" is created. An impulse "X" is sent into the modelled structure and after between 7 and 21 iterations an X-value for each of the factors is calculated as the consequence of the sum of all the input powers or weights of the direct connections along the chains. A positive X-value shows the degree of supportive impact on the factor in consideration; a negative X-value shows the degree of hindering impact.

Table 4 and Table 5 show factors ranked in accordance to their degree of impact on the goal factor "Sustainable wealth for "POOR" (AU) and "RICH" (EU) Countries by means of Co-Creation".

2. "What are the connections among the ten(10) most supportive and the ten(10) most hindering factors?



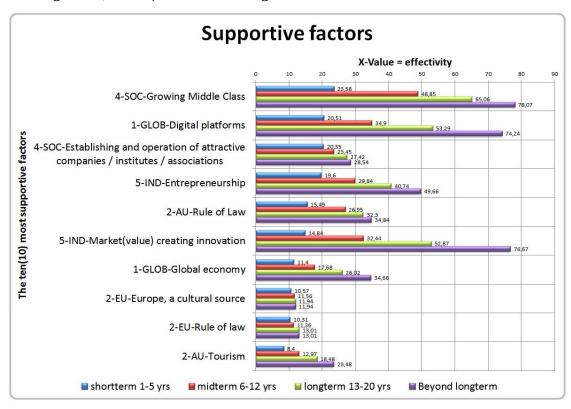
Picture 4: Most supportive factors on the overall goal factor from short term perspective



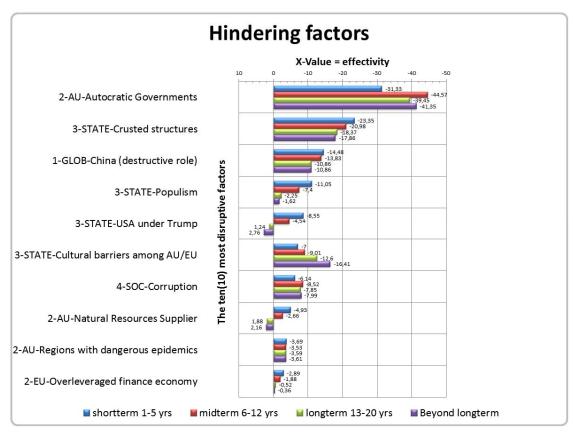
Picture 5: Hindering causes on the overall goal factor

3. "How are the dynamics of the ten(10) most supportive and the ten(10) most hindering factors?"

Picture 6 shows the most supportive factors for Co-Creation in their timely dynamics, Picture 7 shows the most hindering factors, both depicted in descending order on short term view.



Picture 6: Dynamic development over time for the ten(10) most supportive factors on the overall goal factor



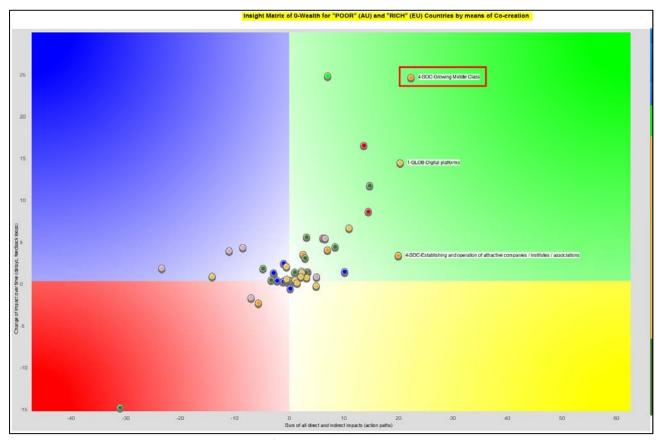
Picture 7: Dynamic development over time for the ten(10) most hindering causes on the overall goal factor

4. What is the 1st choice for the most effective activities?"

The so-called "drill down" is a methodology to identify effective activities to impact on the factor in focus. Depending on the level of detail, the result is a concrete action or an indication where to setup a project or deeper investigations.

Our factor in focus is "Sustainable Wealth for "POOR" (AU) and "RICH" (EU) Countries by means of Co-Creation". The most supportive factor in the short term for this factor is "Growing Middle Class". The "drill down" starts in looking for the most supportive factors for "Growing Middle Class", then for the most supportive factors of these most supportive factors, and so on, until loops have been closed.

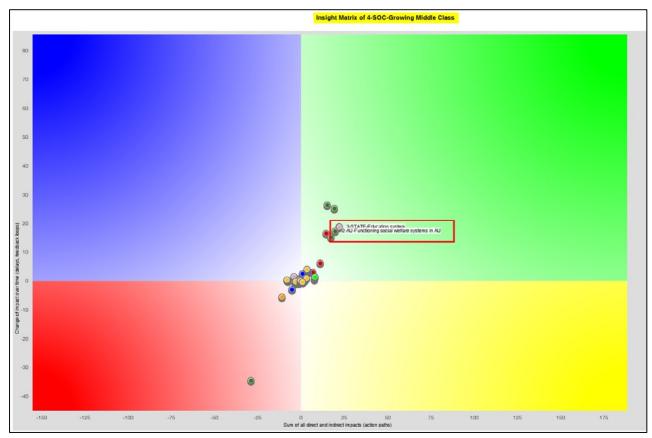
Picture 8 depicts the so called "Insight Matrix" for the goal factor in short term view (1-5 years):



Picture 8: Insight matrix (short-term view) for factor "Sustainable Wealth for "POOR" (AU) and "RICH" (EU) Countries by means of Co-Creation"

Supportive: Focus set on factor	These factors are most effective on the focus factor
O-Wealth for "POOR" (AU) and "RICH" (EU) Countries by means of Co-creation	4-SOC-Growing Middle Class
Countries by means of co-creation	1-GLOB-Digital platforms
	4-SOC-Establishing and operation of attractive companies / institutes / associations

The Insights Matrix for the factor "Growing Middle Class", the most supportive factor for the goal factor, is shown in Picture 9:



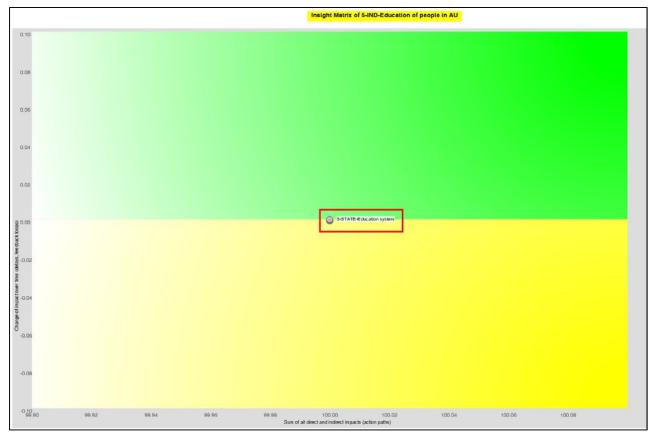
Picture 9: Insight matrix on the factor "4-SOC-Growing Middle Class"

Supportive: Focus set on factor	These factors are most effective on the focus factor
4-SOC-Growing Middle Class	3-STATE-Education system
	5-IND-Education of people in AU
	2-AU-Functioning social welfare systems in AU

The Insight Matrix is empty because the factor "State Education System" is an input factor.

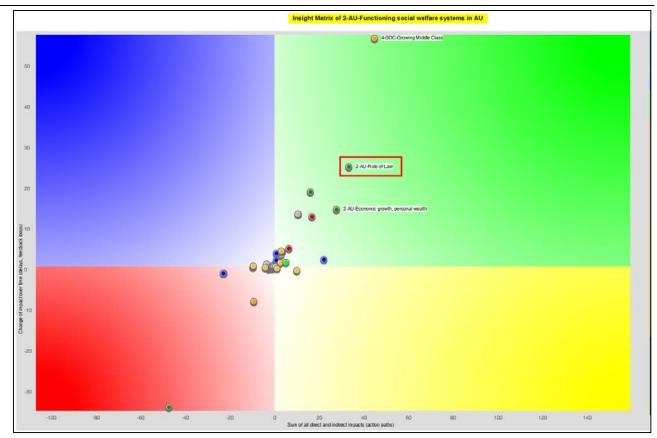
Supportive: Focus set on factor	These factors are most effective on the focus factor
3-STATE-Education system	void
	void
	void

Picture 10, Picture 11 and Picture 12 depict insight matrixes of supporting factor of supporting factors:



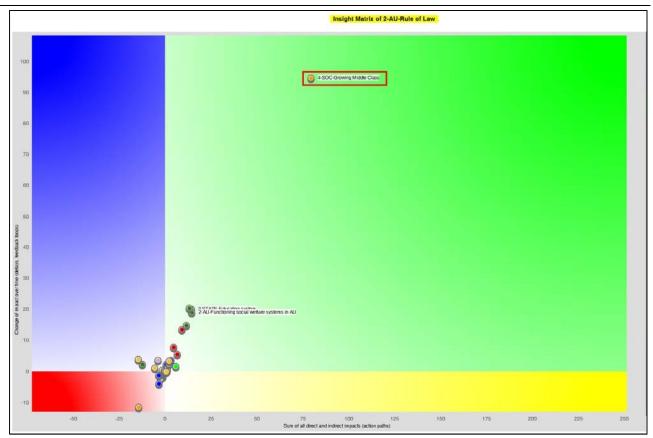
Picture 10: Insight matrix on the factor "5-IND-Education of people in AU"

Supportive: Focus set on factor	These factors are most effective on the focus factor
5-IND-Education of people in AU	3-STATE-Education system
	void
	void



Picture 11: Insight matrix on the factor "2-AU-Functioning social welfare systems in AU"

Supportive: Focus set on factor	These factors are most effective on the focus factor
2-AU-Functioning social welfare systems in	4-SOC-Growing Middle Class
AO.	2-AU-Rule of Law
	2-AU-Economic growth, personal wealth



Picture 12: Insight matrix on the factor "2-AU-Rule of Law

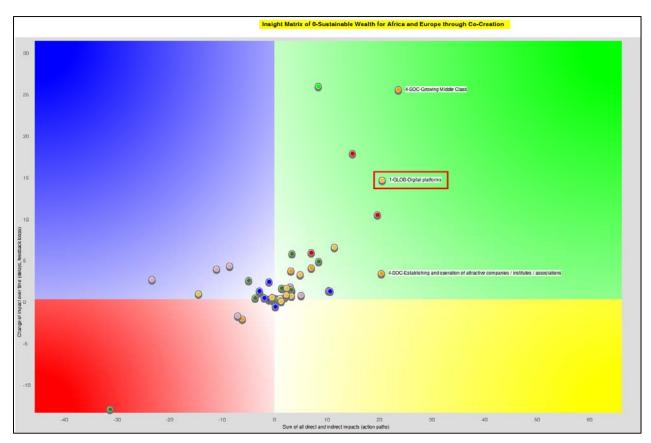
Supportive: Focus set on factor	These factors are most effective on the focus factor
2-AU-Rule of Law	4-SOC-Growing Middle Class
	2-AU-Functioning social welfare systems in AU
	3-STATE-Education system

For this "1st choice of factors" the rock bottom has been reached - loops have been closed. A Growing Middle Class as the most supportive factor for Co-Creation between Africa and Europe has been the starting point. After "drilling down" the following factors have been identified as 1st choice levers to support Co-Creation between Africa and Europe:

- 1. the Education System in African countries,
- 2. a functioning social welfare systems and
- 3. the creation of reliable rule of law

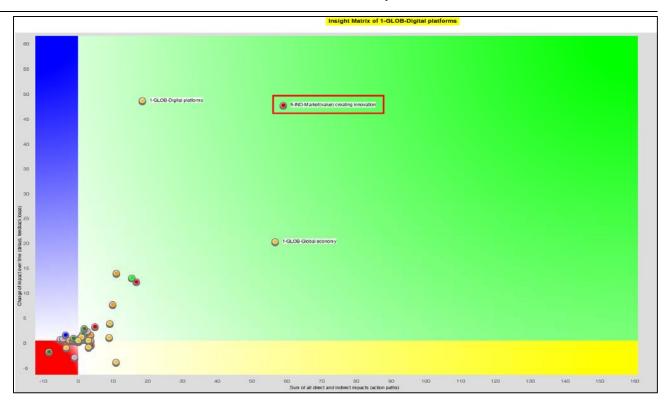
5. "What is the 2nd choice for the most effective activities?"

If the 1^{st} choice of activities has been realized or for whatever reason cannot anymore be implemented, a drill-down is done for a 2^{nd} choice of activities, depicted in Picture 13 to Picture 16.



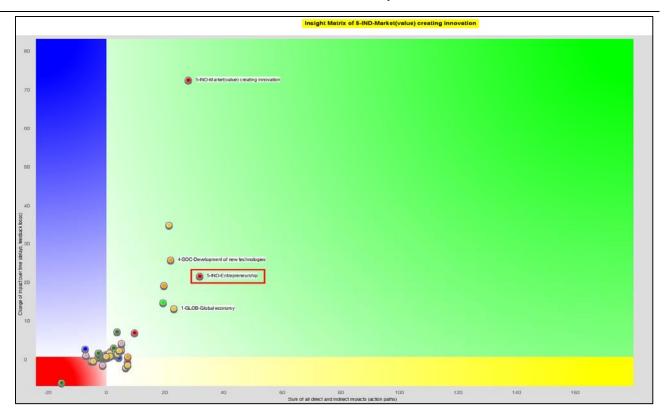
Picture 13: Insight matrix on the factor "O-Sustainable Wealth for Africa and Europe through Co-Creation"

Supportive: Focus set on factor	These factors are most effective on the focus factor	
O-Sustainable Wealth for Africa and Europe through Co-Creation	4-SOC-Growing Middle Class	
amough oo oreation	1-GLOB-Digital platforms	
	4-SOC-Establishing and operation of attractive companies / institutes / associations	



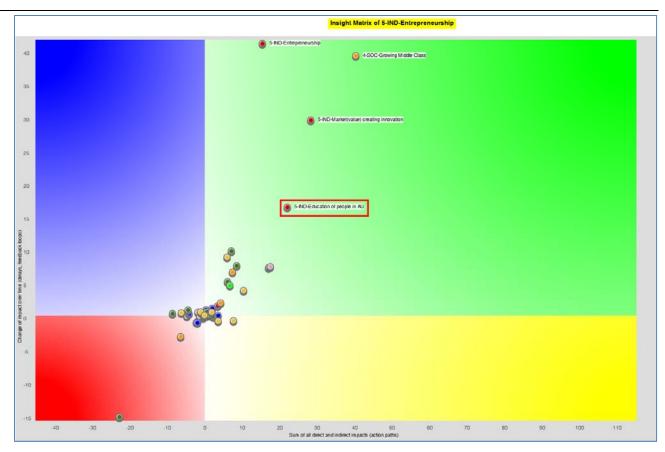
Picture 14: Insight matrix on the factor "1-GLOB-Digital platforms"

Supportive: Focus set on factor	These factors are most effective on the focus factor
1-GLOB-Digital platforms	4-SOC-Growing Middle Class
	5-IND-Market(value) creating innovation
	1-GLOB-Global economy



Picture 15: Insight matrix on the factor "5-IND-Market(value) creating innovation"

Supportive: Focus set on factor	These factors are most effective on the focus factor	
5-IND-Market(value) creating innovation	5-IND-Entrepreneurship	
	1-GLOB-Global economy	
	4-SOC-Development of new technologies	



Picture 16: Insight matrix on the factor "5-IND-Entrepreneurship"

Supportive: Focus set on factor These factors are most effective on the fo	
5-IND-Entrepreneurship	4-SOC-Growing Middle Class
	5-IND-Market(value) creating innovation
	5-IND-Education of people in AU

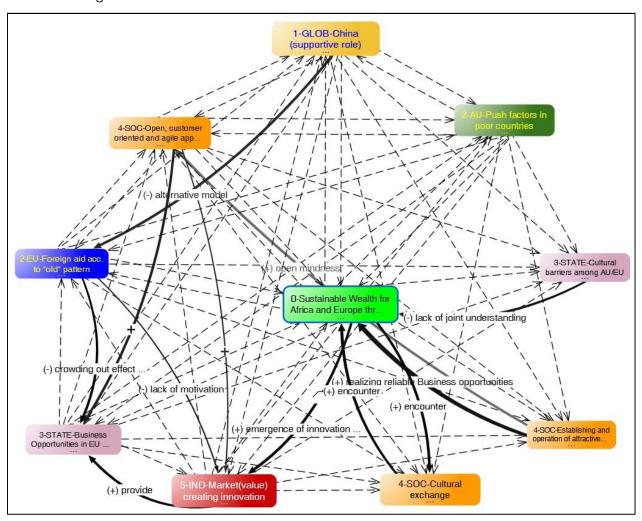
Supportive: Focus set on factor	These factors are most effective on the focus factor	
5-IND-Education of people in AU	3-STATE-Education system	
	void	
	void	

The "2nd choice of factors" starts with *Global Platforms* as the 2nd most supportive factor for Co-Creation between Africa and Europe. After "drilling down" and closing the loops the following factors have been identified as 2nd choice levers for activities:

- 1. Education System (also part of 1st choice),
- 2. Market-creating Innovations and
- 3. Entrepreneurship.

6. "What can Europe learn from Africa?"

Some basic things...



Picture 17: Connections among factors of "This is what Europe can learn from Africa"

Factor	possible Learnings
1-GLOB-China (supportive role)	Although Chinese ventures look very much for their own interests, they are good listeners, watch out for customers' needs and are action-driven. They have built important infrastructures with huge positive impacts. Although Europeans go for more humanistic values, they should try to learn from a Chinese concept of modernization.
2-AU-Push factors in poor countries	Push factors coming from wars, catastrophes and disasters are obvious and can be fought against by humanitarian aid and specific policies. Economic push factors (having to do with differences in wealth levels) are insidious as a first betterment in economic conditions will leverage the "push". They cannot be eradicated in the short or middle run.
3-STATE-Cultural barriers among AU/EU	Access of African middle class to global knowledge and communication society lower cultural barriers and has laid ground for new way of communicating and mutual understanding.
4-SOC-Establishing and operation of attractive companies / institutes / associations	Establishing "organizations" is a first step in distributing power from top (presidential palace)

Factor	possible Learnings
	to a broader range of actors. And is a pre- requisite for higher productivity and hence economic development.
4-SOC-Cultural exchange	Only increasing cultural exchange enable African organizations to contribute to the global society.
5-IND-Market(value) creating innovation	As modernity and pre-modernity live side by side and a much lower level of vested interests and old technologies exit, a different form of problem solving emerges. A much higher degree of innovations (mobile money, small off-grid solar power systems) are market-creating and not only targeted on better efficiency. We can learn how to apply digitization to the real needs of people.
3-STATE-Business Opportunities in EU & AU	As enabling conditions get better (rule of law, infrastructure) and economic development gets tractions new business opportunities arise. Key factors are entrepreneurship and customeroriented approaches.
2-EU-Foreign aid acc. to "old" pattern	In an interconnected global society, foreign aid has become dysfunctional: lack of ownership, crowding out of private solution seeking and business opportunities, centralizing state activities, increasing bureaucracies.
4-SOC-Open, customer oriented and agile approach	An entrepreneurship oriented on problem-solving for certain targeted groups is a key-contributor to development. Its crucial role in development has not been understood yet.

12. Outcomes - insights gained

In spring 2015 during the refugee's movement, we began with a lack of clarity and uncertainty about the sensitive question "How can we contribute to sustainable wealth for Africa and Europe?" Today we achieved a clear vision of what activities can help to make sustainable wealth become true. Sure, that is not an easy path and requires alliances of people with power, human attitude, a lot of good will and budgets. Next to this, top professional and modern management methodologies have to be applied to deliver effective results and to fight the outgrowth of hindering factors identified by convincing rather than by power.

The list of supportive and hindering factors and proposals for concrete is pretty clear. It shall be input for fruitful discussions on the path forward. We shall create a group of stakeholders who is willing to continue this work.

13. Conclusion

Systemic thinking by means of computerized modeling supports better reflected decision making in a complex environment and can overcome simple and old-fashioned monocausal thinking.

This is what we call "Managing Complexity".

14. Literature

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15. Brief CV's from the authors

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16. Attachments

Attachment 1: Comprehensive list of all factors

	Factor	Description	Level
0.	O-Sustainable Wealth for Africa and Europe through Co- Creation	This is the goal factor based on the assumption that C-Creation support the possibility of a WIN-WIN situation The intention is to find out what are attitudes and measures for an	O-Goal factor
		effective Co-Creation among the societies. The countries of the African Union (AU) are considered as POOR.	
		The countries of the European Union (EU) are considered as RICH.	
1.	1-GLOB-China (destructive role)	The egoistic role of China to secure limited resources for oneself to become a strong world leading economy	1-GLOB - Global factors (Macro 1) x-DES-1st choice
2.	1-GLOB-China (supportive role)	The role of China supporting development by infrastructure upgrading, boosting economic development and peoviding a second option for African countries	1-GLOB - Global factors (Macro 1) x-SUP-2nd choice
3.	1-GLOB-Climate Change	This factor describes on the highest possible level (without any details) the global change of climate	1-GLOB - Global factors (Macro 1)
4.	1-GLOB-Digital platforms	This factor means the global knowledge and communication, exchange of all kinds of information. Furthermore it means the www as a whole as well as the access to and the use of it. (Global Communication and Knowledge Society)	1-GLOB - Global factors (Macro 1) 2-EU - European Union (Macro 2) x-SUP-1st choice
5.	1-GLOB-Global economy	This describes the global network of adding value through local and global trade and international division of labor. Trade=Life!	1-GLOB - Global factors (Macro 1)
6.	1-GLOB-Mobility and Communication (early stage)	Characteristics of the networking of the global society creating more access and crosslinking	1-GLOB - Global factors (Macro 1)
7.	1-GLOB-ROW (BRICS, AUS, etc.)	This factor stands for the interests and the behavior of ROW (rest of the world)	1-GLOB - Global factors (Macro 1)
8.	1-GLOB-Russia	A summary of interests and behavior of Russia and its partner countries as a global power	1-GLOB - Global factors (Macro 1)
9.	1-GLOB-USA as a global power (traditional view)	Means the traditional interest and behavior of USA since 1945 till today before Trump.	1-GLOB - Global factors (Macro 1)
10.	1-GLOB-Use of natural resources	All natural soil bound resources are limited. Currently we overuse these resources. Source: http://www.zeit.de/2008/03/China-Afrika/komplettansicht?print	1-GLOB - Global factors (Macro 1) x-DES-1st choice
11.	2-AU-Autocratic Governments	Oligarchical structures prohibiting and hindering the development of Inclusive Institutions and social development by repressions and dictate. Example: http://www.spiegel.de/politik/ausland/ruanda-so-will-paul-kagame-die-praesidentschaftswahl-gewinnen-a-1161266-druck.html	2-AU-African Union (Macro 2) x-DES-1st choice
12.	2-AU-Economic growth, personal wealth	Economic success (growth) which is leading to a relative wealth which makes education possible.	2-AU-African Union (Macro 2) x-SUP-1st choice
13.	2-AU-Functioning social welfare systems in AU	existence and degree of effective welfare and social insurance systems (e.g. access to healthcare, insurance for unemployment, pension systems)	2-AU-African Union (Macro 2) x-SUP-1st choice
14.	2-AU-Inclusive Institutions	Developing democratic structures for the wealth of Inclusive Institutions for the society	2-AU-African Union (Macro 2)
15.	2-AU-Natural disasters	That means all kinds of natural disasters like: earthquakes, floods, drought, hurricanes, volcanic eruptions etc.	2-AU-African Union (Macro 2)
16.	2-AU-Natural Resources Supplier	Describes the African continent as supplier of numerous resources which are essential for survival. Since early times of colonialism these essential resources are exploited from many countries (i.e. China, EU) directly or by use of (African) oligarchs.	2-AU-African Union (Macro 2) x-DES-1st choice
17.	2-AU-Push factors in poor countries	Personal circumstances which promote escape and migration i.e. - political reprisal, - economic poverty, - demographic situation (unbalanced mix of generations) - Clear cuts and mono cultures of plants (China) - Environmental pollution i.e. by crude oil (Nigeria) - Droughts (Dürren)	2-AU-African Union (Macro 2) x-SUP-2nd choice

	Factor	Description	Level
18.	2-AU-Reduction of poverty and social inclusion in poor countries	This factor describes the development of descending absolute poverty in poor countries.	2-AU-African Union (Macro 2)
		(global: in 1990 two(2) billion people or 33% of mankind, and in 2015 700 million people or appr. 10% of mankind)	
19.	2-AU-Regions with dangerous epidemics	This stays for the fact that epidemics like HIV, Ebola, Black death, Cholera, Typhus, Influenza, SARS are vital in some of the African regions despite of medical aid. Source: https://de.wikipedia.org/wiki/Liste_von_Epidemien_und_Pandemien	2-AU-African Union (Macro 2) x-DES-1st choice
20.	2-AU-Rule of Law	This factor represents the rule of law in some of the AU countries. This is in most cases a precondition for investments and / or investors engagement.	2-AU-African Union (Macro 2)
21.	2-AU-Tourism	Touristic travel movement from EU to the attractive and safe countries of the AU. This is an expression of Co-Creation	2-AU-African Union (Macro 2)
22.	2-EU-Democracy	Inclusive institutions. Wide public participation to political decisions. Example: http://orf.at/stories/2401676	2-EU - European Union (Macro 2)
23.	2-EU-Europe, a cultural source	This describes EU role as a source of cultural traditions but not only "music". It includes an image of humanity as well as the creation of inclusive institutions	2-EU - European Union (Macro 2)
24.	2-EU-Foreclosure against migrants and refugees	Hindering immigration of refugees by walls, fences and checkpoints, driven by populistic governments (i.e. Hungary, Poland) and the denial of a fair distribution of migrants among EU.	2-EU - European Union (Macro 2)
25.	2-EU-Foreign aid acc. to "old" pattern	This means traditional foreign aid (money is a gift) mainly to fight poverty Paris convention? EU development fund?	2-EU - European Union (Macro 2) x-SUP-2nd choice
26.	2-EU-Humanitarian crisis aid	This factor describes the "classical humanitarian aid of EU and other countries which will be still necessary in regions which suffer from natural disasters and / or civil wars	2-EU - European Union (Macro 2)
27.	2-EU-Migration from poor to rich countries	Migration is the "Hope" driven journey while escape is the "fear" driven path to an expected freedom. Acc. to McKinsey appr. 120 Mio people (Stock) are migrants (hope) not refugees (fear).	2-EU - European Union (Macro 2)
28.	2-EU-Overleveraged finance economy	This factor describes: - Profit/profitability as purpose of financial economy Over-leveraged financial economy Disconnection of real economy (seeking for client value) Outsourcing of losses to public tax payers - Ruinous "World Monopoly" without adding value	2-EU - European Union (Macro 2) x-DES-1st choice
29.	2-EU-Pull factors of rich countries	Compared to AU conditions EU appears attractive and inviting for reasonable living conditions, income and glittering social systems. These impressions are transported by Internet and TV (Soap operas) as well as political statements ("Wir schaffen das" Angela Merkel 31.08.15) https://de.wikipedia.org/wiki/Wir_schaffen_das	2-EU - European Union (Macro 2)
30.	2-EU-Refugee movements	Movements of people caused by violence, wars, catastrophes Migration is the "Hope" driven journey while escape is the "fear" driven path to an expected freedom. Acc. to McKinsey appr. 120 Mio people (Stock) are migrants (hope) not refugees (fear).	2-EU - European Union (Macro 2)
31.	2-EU-Rule of law	Tis factor rule of law in EU describes the existence of objective and present rules and laws valid for all. Predictability	2-EU - European Union (Macro 2)
32.	2-EU-Social welfare systems in EU	EU social welfare system acting as role model and basis for improvements for African states	2-EU - European Union (Macro 2)
33.	2-EU-Sovereign debts	Debts of state governments	2-EU - European Union (Macro 2)
34.	3-STATE-(Civil-) Wars and their victims	Describes both the existence of (civil) wars between separatists as well as wars among regions / countries. All of them are causing victims and (local) refugees.	3-STATE Level (Meso 1)
35.	3-STATE-Business Opportunities in EU & AU	This factor describes the business opportunities which can arise from Co-Creation in both AU as well as EU for the sake of both of them	3-STATE Level (Meso 1) x-SUP-2nd choice
36.	3-STATE-Civil society activities	This factor is depicting societies / institutions that are supporting integrative cooperation and common activities with constructive critique	3-STATE Level (Meso 1)

	Factor	Description	Level
		Within the most countries of EU platforms like this can be founded on one's own initiative.	
37.	3-STATE-Crusted structures	Means the phenomenon that in matured societies vested interests are more introversive. This is some kind of blind spot of an society which becomes unable to behave more integrative.	3-STATE Level (Meso 1) x-DES-1st choice
38.	3-STATE-Cultural barriers among AU/EU	Cultural clashes appear when migrants "meet" locals caused by fear to lose something. On the other hand migrants are far not "prepared" how to behave in a foreign country. This can lead to isolation but not to integration.	3-STATE Level (Meso 1) x-DES-1st choice x-SUP-2nd choice
39.	3-STATE-Education system	Effective education and training system for all kind of individuals of a state	3-STATE Level (Meso 1) x-SUP-1st choice
40.	3-STATE-Missing technical Infrastructure	Technical Infrastructure are: Highways, roads, trains, flight connections etc. but also water supply, sewage treatment, garbage treatment, power grid etc.	3-STATE Level (Meso 1)
41.	3-STATE-Populism	Fear is created by right wing politicians by proclaiming an attitude "Wir sind das Volk - we are the people". This propaganda shall foster protectionism and re-nationalization for reinvigoration of right wing parties.	3-STATE Level (Meso 1) x-DES-1st choice
42.	3-STATE-USA under Trump	US in 2017 under Trump's "America first" politics. Foreclosure from the global markets and distributed value adding chains ("Border Adjustment Tax = BAT" (Source: SPIEGEL Online dated 16.02.17) instead of free trade.	3-STATE Level (Meso 1) x-DES-1st choice
43.	4-SOC-Corruption	Receptivity for means $/$ money for the own wealth instead of the public interest.	4-SOC-(Civil) Society Level (Meso 2) x-DES-1st choice
44.	4-SOC-Cultural exchange	- Emergent property as a result of individual being, individual behavior and societal structures (Integral approach by Ken Wilber, three level model by Edgar Schein, Philosopher)	4-SOC-(Civil) Society Level (Meso 2) x-SUP-2nd choice
		Practical outcomes (i.e.): - joint educations and studies - Co-Creation / Co-Operation on various levels - Events, concerts, theater performances - Chinese signs in African subways - Chinese became second foreign language in South Africa Source: http://www.bjrundschau.com/Kultur/201604/t20160425_80005528 5.html called: 02.08.2017 - McDonalds opened business in Maputo in Mozambique Example http://wien.afrika-tage.de/	
45.	4-SOC-Development of new technologies	This is the factor which describes the creation of new technologies like: - Digitalization - Communication - Fabrication (3D-printer) - etc.	4-SOC-(Civil) Society Level (Meso 2)
46.	4-SOC-Establishing and operation of attractive companies / institutes / associations	This factor means the foundation and operation of attractive companies / institutes / associations and civil societies	4-SOC-(Civil) Society Level (Meso 2) x-SUP-1st choice x-SUP-2nd choice
47.	4-SOC-Growing Middle Class	proportion of people with - middle income level - higher degree of education - more engagement on societal level - interest in entrepreneurship	4-SOC-(Civil) Society Level (Meso 2) x-SUP-1st choice
48.	4-SOC-Open, customer oriented and agile approach	This means: Companies and organizations have the customers need and satisfaction (Customer value) in focus and NOT (monetary) profit (which is a RESULT of client satisfaction).	4-SOC-(Civil) Society Level (Meso 2) x-SUP-2nd choice
49.	5-IND-Education of people in AU	current status of education on individual level	5-IND-Individual engagement (Micro) x-SUP-1st choice
50.	5-IND-Empowerment of Women	The role / power of women in Africa are still very low and very diverse. Frequently they are "reduced" to "birth machines". A strong women movement is still lacking. Empowering woman in a nourishing stile (not necessarily EU as a role model) creates vast resources of development.	5-IND-Individual engagement (Micro)
51.	5-IND-Entrepreneurship	This describes an attitude to act as an entrepreneur and not as an omissioner. Entrepreneurship reaches far over economic behavior and includes	5-IND-Individual engagement (Micro) x-SUP-1st choice

	Factor	Description	Level
		The entrepreneur has the client value in focus but not the share trader value. Client value includes also immaterial benefits.	
		(Monetary) income is a result but not a purpose!	
		"to create a customer" (Peter Drucker) Innovation Marketing Client value	
		Schumpeter: Creative Destruction	
52.	5-IND-Market(value) creating innovation	Hereunder we understand innovations which create new markets, new employment and growth (quantitative and qualitative) for the wealth of the society / country. It does not describe the horrible innovation of arms.	5-IND-Individual engagement (Micro) x-SUP-2nd choice
53.	5-IND-Satisfaction of safety needs	The subjective satisfaction (perception) of the basic need of "safety". Refer also to "Maslow's hierarchy of needs", level 2 https://en.wikipedia.org/wiki/Maslow%27s_hierarchy_of_needs	5-IND-Individual engagement (Micro)

Table 6: Comprehensive list of all factors