Startup
Survival & Growth

simple planning and recording

Contents

- These slides provide an overview of a simple tool to support assessment and improvement of startup performance in changing environments.
- The slides begin with an introduction to **fundamental principles of adaptability / stability** for survival and growth in changing environments.
- Then, these principles are related to **business model formulation**.
- Next, they are related to **assessing and improving performance**.
- Subsequently, an overview is provided of **how to use the simple tool**.

Contents

	To Grow	To Survive	Expected	Expected Survival Balance ESB	Expected Growth Balance EGB
Customer Base	4	3	4	1	0
Product Sales	4	3	3	0	-1
Customer Satisfaction	4	3	2	-1	-2
Cash Flow	4	3	2	-1	-2
Month 1				-1	-5

Score Calculator				
Actual Amount Needed to Survive e.g. number of customers; value of cash flow in currency	1	2	3	4
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

DIGILOGIC

EU AFRICA DIGILOGIC

THE FIRST PAN EU-AFRICA SUSTAINABLE NETWORK OF DIGITAL INNOVATION HUBS (DIHS) FOCUSSING ON SMART LOGISTIC

Fundamental Principles of
Adaptability / Stability Dynamics

Fundamental Principles of Adaptability / Stability Dynamics

Funded by the EU's Horizon2020
programme under agreement n° 101016583

Adaptability / Stability Dynamics

- To survive, startups need to adapt with changing environments and at the same time need to maintain internal stability.

- This is because too little adaptation can undermine resilience to changes in the environment but too much adaptation can undermine internal stability.

- Balancing adaptability and stability requires having multifunctional capabilities that can evolve to perform new activities as environments change, and some spare capabilities to compensate for capabilities that can be lost because of environmental change.

- Adapting with changing environments enables startup's activities to have intended effects, while maintaining internal stability enables startups to be efficient in their activities.

Adaptability / Stability Dynamics

- **Adapting with changing environments involves learning:**
  - to compete better with other organizations,
  - to cooperate better with other organizations,
  - and/or how to construct changes to the environment better.

- **Maintaining internal stability involves minimizing uncertainty about:**
  - boundaries between startup and environment,
  - about business parameters,
  - about the organization of business activities.

DIGILOGIC

EU AFRICA DIGILOGIC

THE FIRST PAN EU-AFRICA SUSTAINABLE NETWORK OF DIGITAL INNOVATION HUBS (DIHS) FOCUSSING ON SMART LOGISTIC

Business Model Formulation

Funded by the EU's Horizon2020
programme under agreement n° 101016583

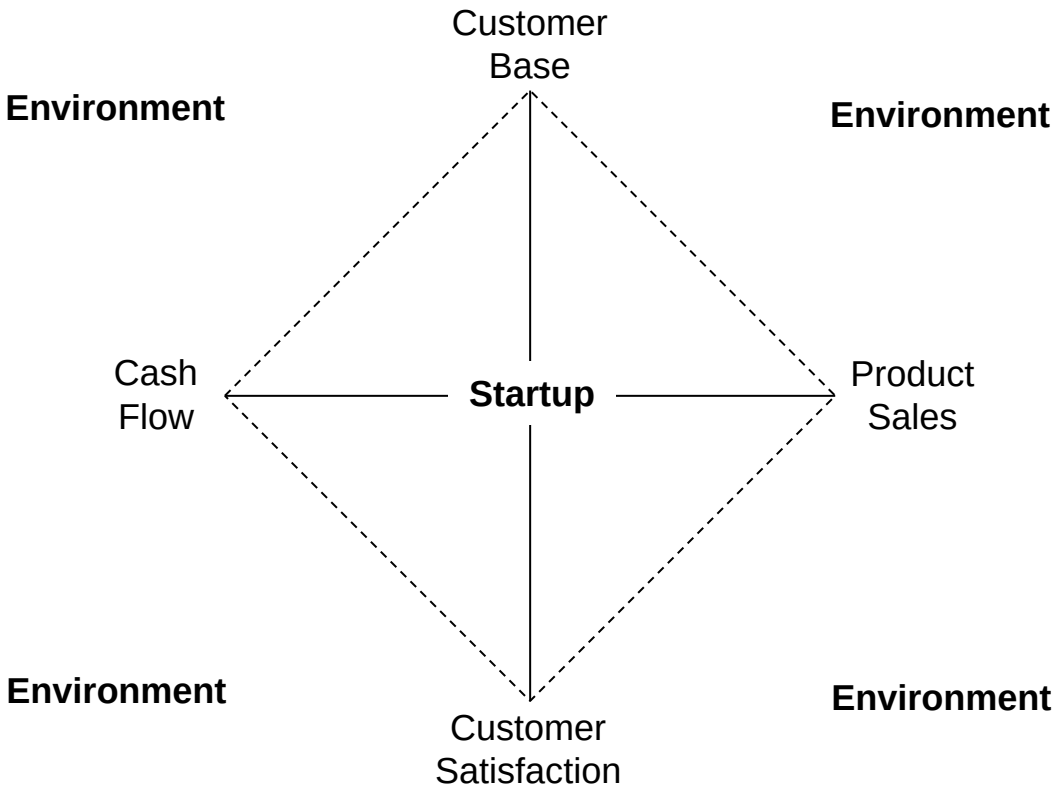
Business Model Formulation

- **Business Model comprises open boundaries and survival parameters**

- **Open Boundaries:**
  - open to exchanges of information, matter, and energy with the environment
  - determine what the startup will bring inside from the environment
  - determine what the startup will send outside into the environment
  - differentiate startup from other organizations in the environment

- **Survival Parameters**
  - several parameters for startup survival
  - one parameter can be most important
  - examples of parameters that can be essential for survival: customer base, product sales, user experience, cash flow
  - example of most important parameter: cash flow
  - all activities arranged to fulfil survival parameters in changing environments

Business Model Formulation



DIGILOGIC

EU AFRICA DIGILOGIC

THE FIRST PAN EU-AFRICA SUSTAINABLE NETWORK OF DIGITAL INNOVATION HUBS (DIHS) FOCUSSING ON SMART LOGISTIC

Assessing and Improving Performance

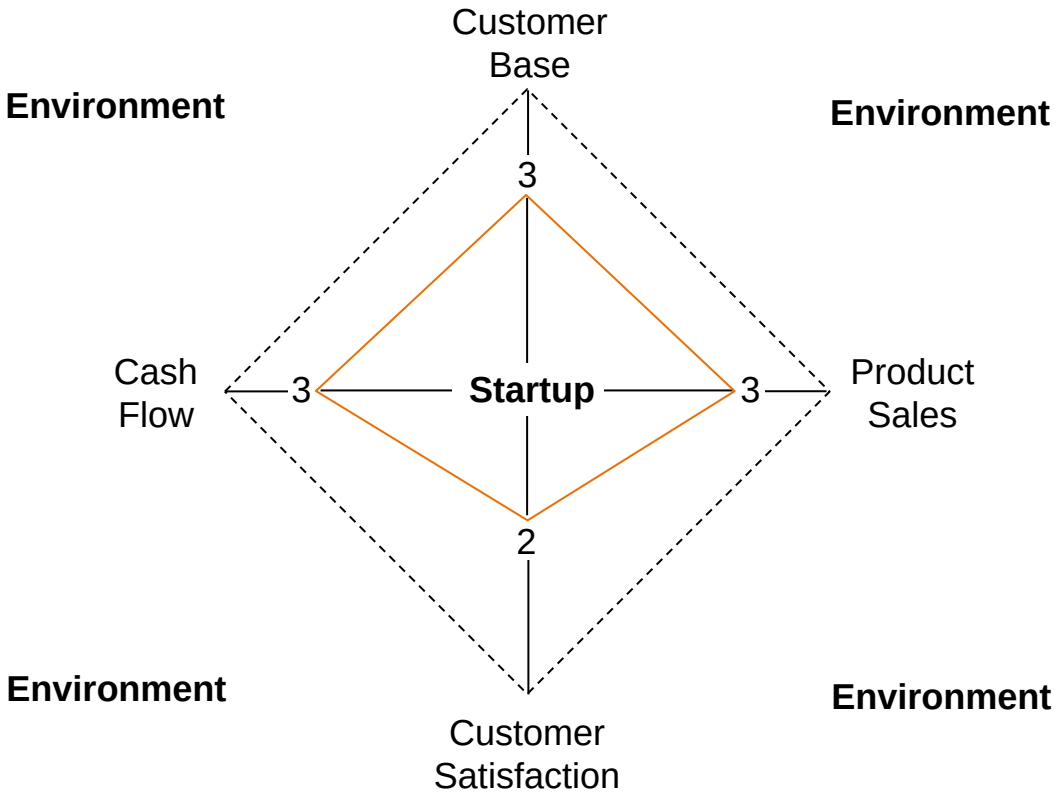
Funded by the EU's Horizon2020
programme under agreement n° 101016583

Assessing and Improving Performance

EU AFRICA DIGILOGIC

- Performance on survival parameters can be assessed in terms of 1, 2, 3, 4.
- 4 represents sufficient for growth, 3 represents sufficient for survival, 2 represents insufficient for survival over more than one prediction period, and 1 represents insufficient for survival within one prediction period.
- For example, if cash flow of 80 thousand is needed for growth that month, four represents 80 thousand, three represents 60 thousand, two represents 40 thousand, one represents 20 thousands.
- 1, 2, 3, 4, can be applied to all survival parameters. For example, customer base can be number of customers divided by four, product sales can be number of sales divided by four, user-experience can be a four level experience rating.
- Survival depends on performance on each survival parameter being at least three.

Measuring Performance



Improving Performance

Performance of less than 3 indicates performance must be improved. Performance can be improved through the three types of actions listed below.

Update Business Model

- For example, expand or reduce the scope of the business model in terms of survival parameters for customer base, product sales, customer satisfaction, and cash flow.

Shift Focus

- For example, shift focus to pay more attention to those existing customers from who sales are low or to pay more attention to a new market segment of customers.

Change Method of Work

- For example, improve delivery procedures to improve customer satisfaction and/or improve invoicing procedures in order to improve cash flow.

Improving Performance

Update Business Model

- Updating the business model should not lead to there being too few or too many survival parameters.

Shift Focus

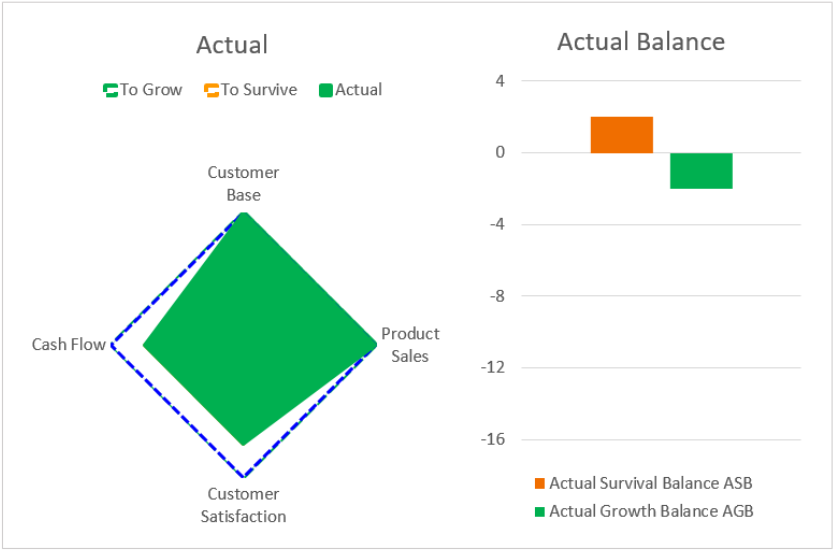
- Focus should always be on alignment with the current environment not on the business' past boundaries, past survival parameters, and/or past activities.

Change Method of Work

- Changing methods should not lead to there being too few or too many activities involved in work to achieve performance on survival parameters.

Improving performance

	To Grow	To Survive	Actual	Actual Survival Balance ASB	Actual Growth Balance AGB
Customer Base	4	3	4	1	0
Product Sales	4	3	4	1	0
Customer Satisfaction	4	3	3	0	-1
Cash Flow	4	3	3	0	-1
Month 1				2	-2



DIGILOGIC

EU AFRICA DIGILOGIC

THE FIRST PAN EU-AFRICA SUSTAINABLE NETWORK OF DIGITAL INNOVATION HUBS (DIHS) FOCUSSING ON SMART LOGISTIC

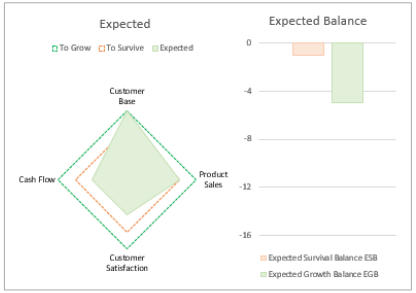
How to Use Startup Survival Tool

Funded by the EU's Horizon2020
programme under agreement n° 101016583

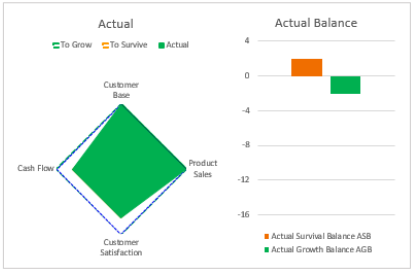
How to use the Tool

	To Grow	To Survive	Expected	Expected Survival Balance ESB	Expected Growth Balance
Customer Base	4	3	4	1	0
Product Sales	4	3	3	0	-1
Customer Satisfactio	4	3	2	-1	-2
Cash Flow	4	3	2	-1	-2
Month 1				-1	-5

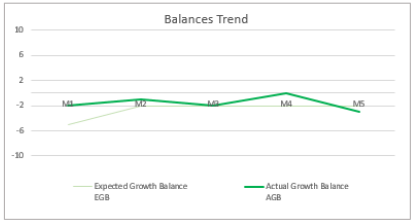
Score Calculator				
Actual Amount Needed to Survive e.g. number of customers;	1	2	3	4
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0



	To Grow	To Survive	Actual	Actual Survival Balance ASB	Actual Growth Balance AGB
Customer Base	4	3	4	1	0
Product Sales	4	3	4	1	0
Customer Satisfactio	4	3	3	0	-1
Cash Flow	4	3	3	0	-1
Month 1				2	-2



	Expected Growth Balance EGB	Actual Growth Balance AGB
M1	-5	-2
M2	-2	-1
M3	-2	-2
M4	-2	0
M5	-2	-3
M6	2	5



- The tool is in Excel.
- Records are made by entering numbers into tables from which balances are calculated automatically and charts are generated automatically.
- There are four categories to enter numbers for: increased customers, number of sales, customer satisfaction, and cash flow.
- For each category, each individual startup can rate expected performance and actual performance in the categories by entering a number 1 or 2 or 3 or 4.

How to use the Tool

4	Enough for growth
3	Enough for survival
2	Not enough for survival
1	Not enough for survival

For example, if cash flow of 60 thousand is needed for survival that month

- Entering 4 indicates 80 thousand
- Entering 3 indicates 60 thousand
- Entering 2 indicates 40 thousand
- Entering 1 indicates 20 thousand.

This is a simple illustration of one way that quartile representations can be applied.

How to use the Tool

Enter amount needed for survival into the left column of the Score Calculator and 1, 2, 3, and 4 are worked out automatically

Score Calculator				
Actual Amount Needed to Survive e.g. number of customers; value of cash flow in currency	1	2	3	4
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

How to use the Tool

	To Grow	To Survive	Expected	Expected Survival Balance ESB	Expected Growth Balance EGB
Customer Base	4	4	2	-2	-2
Product Sales	4	3	3	0	-1
Customer Satisfaction	4	4	2	-2	-2
Cash Flow	4	3	2	-1	-2
Month 1				-5	-7

Type in 1, 2, 3 or 4 into the empty column

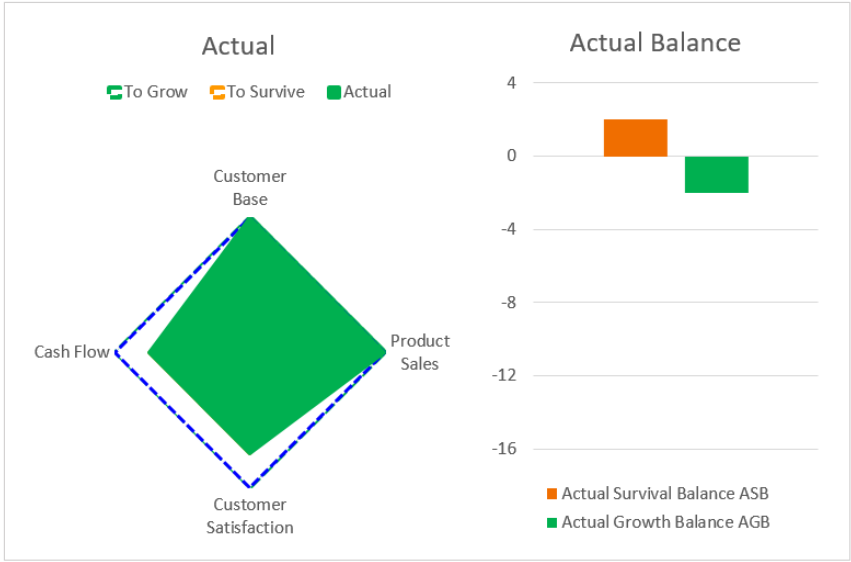
	To Grow	To Survive	Expected	Expected Survival Balance ESB	Expected Growth Balance EGB
Customer Base	4	4	2	-2	-2
Product Sales	4	3	3	0	-1
Customer Satisfaction	4	4	2	-2	-2
Cash Flow	4	3	2	-1	-2
Month 1				-5	-7

Expected Survival Balance (ESB) and Expected Growth Balance EGB) are calculated automatically

How to use the Tool

	To Grow	To Survive	Actual	Actual Survival Balance ASB	Actual Growth Balance AGB
Customer Base	4	3	4	1	0
Product Sales	4	3	4	1	0
Customer Satisfaction	4	3	3	0	-1
Cash Flow	4	3	3	0	-1
Month 1				2	-2

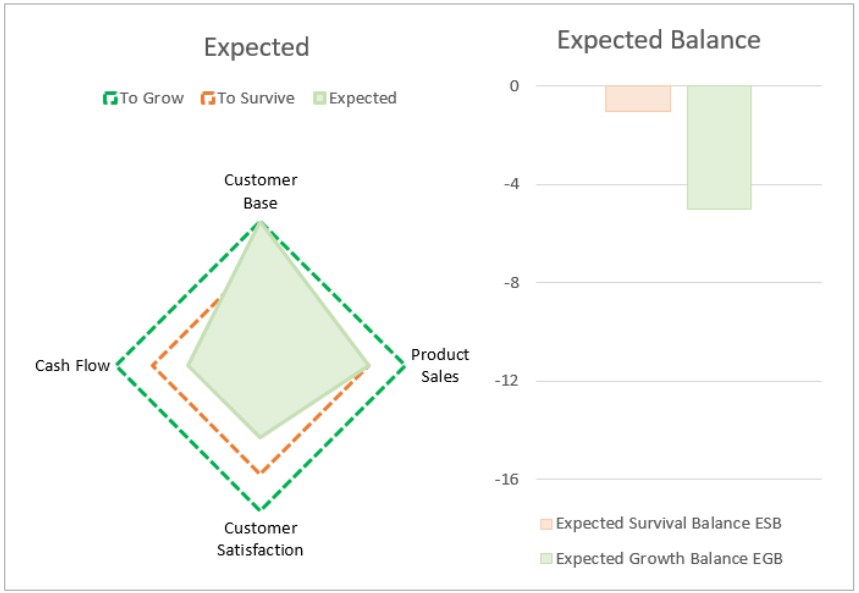
Actual Survival Balance (ASB) and Actual Growth Balance (AGB) are calculated automatically.

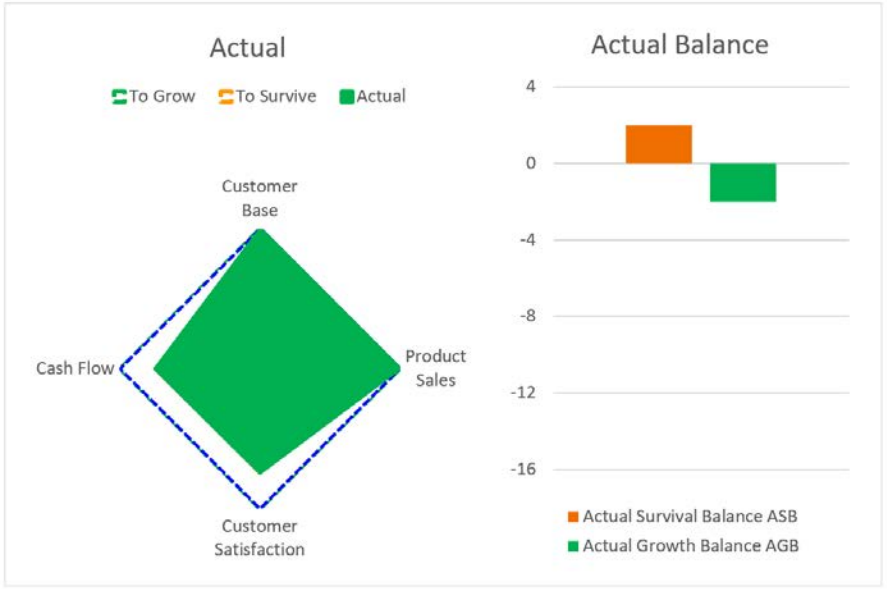


Radar Chart and Bar Chart for ASB and AGB are generated automatically

How to use the Tool

The different charts for expected performance and actual performance should be compared to see where performance improvements are needed.

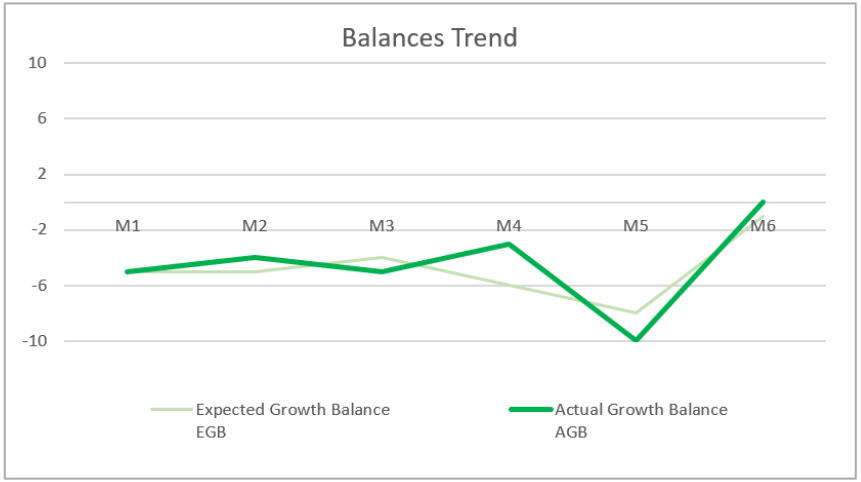




How to use the Tool

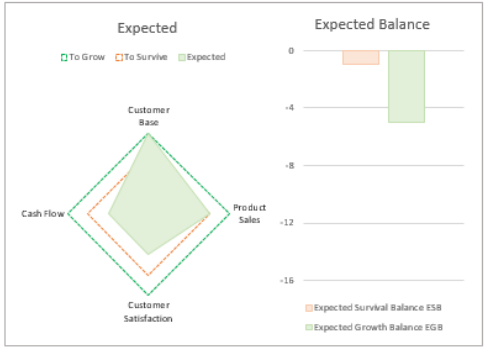
Trend chart should show a positive growth balance with minimum differences between expected performance and actual performance

	Expected Growth Balance EGB	Actual Growth Balance AGB
M1	-5	-5
M2	-5	-4
M3	-4	-5
M4	-6	-3
M5	-8	-10
M6	-1	0



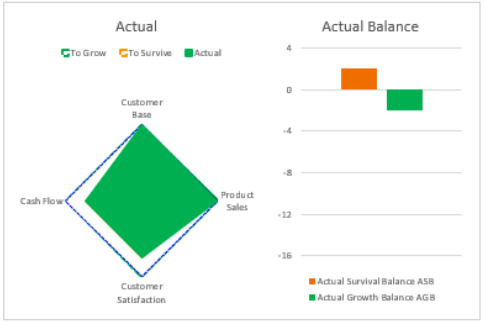
	To Grow	To Survive	Expected	Expected Survival Balance ESB	Expected Growth Balance EGB
Customer Base	4	3	4	1	0
Product Sales	4	3	3	0	-1
Customer Satisfaction	4	3	2	-1	-2
Cash Flow	4	3	2	-1	-2
Month 1				-1	-5

Score Calculator				
Actual Amount Needed to Survive e.g. number of customers; value of cash flow in currency	1	2	3	4
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0



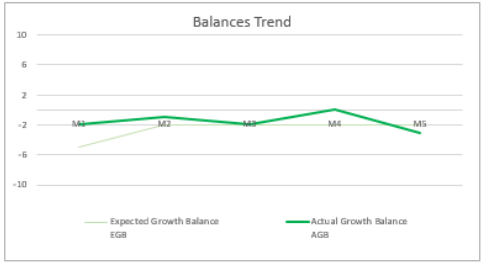
If you expect any scores to be less than 4, you need to plan to improve actions and record the planned actions below.	From	To
Update Business Model		
Shift Focus		
Change Work Method		

	To Grow	To Survive	Actual	Actual Survival Balance ASB	Actual Growth Balance AGB
Customer Base	4	3	4	1	0
Product Sales	4	3	4	1	0
Customer Satisfaction	4	3	3	0	-1
Cash Flow	4	3	3	0	-1
Month 1				2	-2



If any scores are below 4, take action to improve performance and record below.	From	To
Update Business model		
Shift Focus		
Change Work Method		

	Expected Growth Balance EGB	Actual Growth Balance AGB
M1	-5	-2
M2	-2	-1
M3	-2	-2
M4	-2	0
M5	-2	-3
M6	2	5



How to use

Actions to improve performance can be recorded on the same spreadsheet page as the tables and charts.

How to use the Tool

Actions to improve performance can be recorded when predicting Expected Balances and when planning how to improve on Actual Balances.

If you expect any scores to be less than 4, you need to plan to improve actions and record the planned actions below.		
	From	To
Update Business Model		
Shift Focus		
Change Work Method		

If any scores are below 4, take action to improve performance and record below.		
	From	To
Update Business Model		
Shift Focus		
Change Work Method		

References

Fox, S. and Vahala, P. (2022) Start-ups as adaptable stable systems based on synchronous business models. *Systems*, 10(3), 81. https://doi.org/10.3390/systems10030081

Fox, S. (2021) Accessing active inference theory through its implicit and deliberative practice in human organizations. *Entropy*, 23(11), 1521. https://doi.org/10.3390/e23111521