

Ideology-free toolkit for

DIGITAL ECOSYSTEM DESIGN

V0.1 (Jan 2020)



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The toolkit is largely based on and inspired by
Simone Cicero's Platform Design Toolkit* (CC 4.0 BY-SA).

Changes and additions to Cicero's work:

- Canvas 1: Simplifications and generalizations
- Canvas 2: New contribution inspired by Cicero
- Canvas 3: Simplifications and generalizations
- Canvas 4: New contribution

**Want to do ecosystem design without
being dictated by Silicon Valley people or
blockchain enthusiasts?
Here is a toolkit for you!**

This toolkit enables you to design your ecosystem with an open mind. It does not force you to follow "Silicon Valley mantras" or "ideologically inclined decentralization paths". Also, using the tool may reveal that you don't need an ecosystem approach at all in your case! The toolkit keeps your head cool in the ecosystem/platform/DLT bingo!

The kit is based on the following principles:

- Ecosystem designer designs for **orchestrating collective action**.
- Ecosystem **allows new solutions to emerge through the reallocation of existing resources and capabilities in a business network**.
- Ecosystem designer must identify how **ecosystem interactions can be facilitated and steered to desirable directions**.

The toolkit focuses specifically on

- 1) mapping the ecosystem's members and roles,
- 2) creating the ecosystem's member profiles,
- 3) identifying the members' motivations to collaborate, and
- 4) defining the ecosystem's governance model.

Originally, the toolkit was made to support blockchain (and other DLT-based) projects. Among crypto-enthusiasts, there were a lot of ideological debates on how the next-level digital economy should be organized. While I found such ideological debates extremely interesting, I did not want people's opinions to dictate my ecosystem designs in uncontrolled ways. I wanted to stay unbiased when designing, at least when it comes to the tools I use. So I took Simone Cicero's wonderful Platform Development Toolkit, simplified it a bit, and edited it to have a bit more general approach. I also added special components related to ecosystem governance design. And what is the best part? All this is tried and tested in dozens of projects!

CANVAS 1

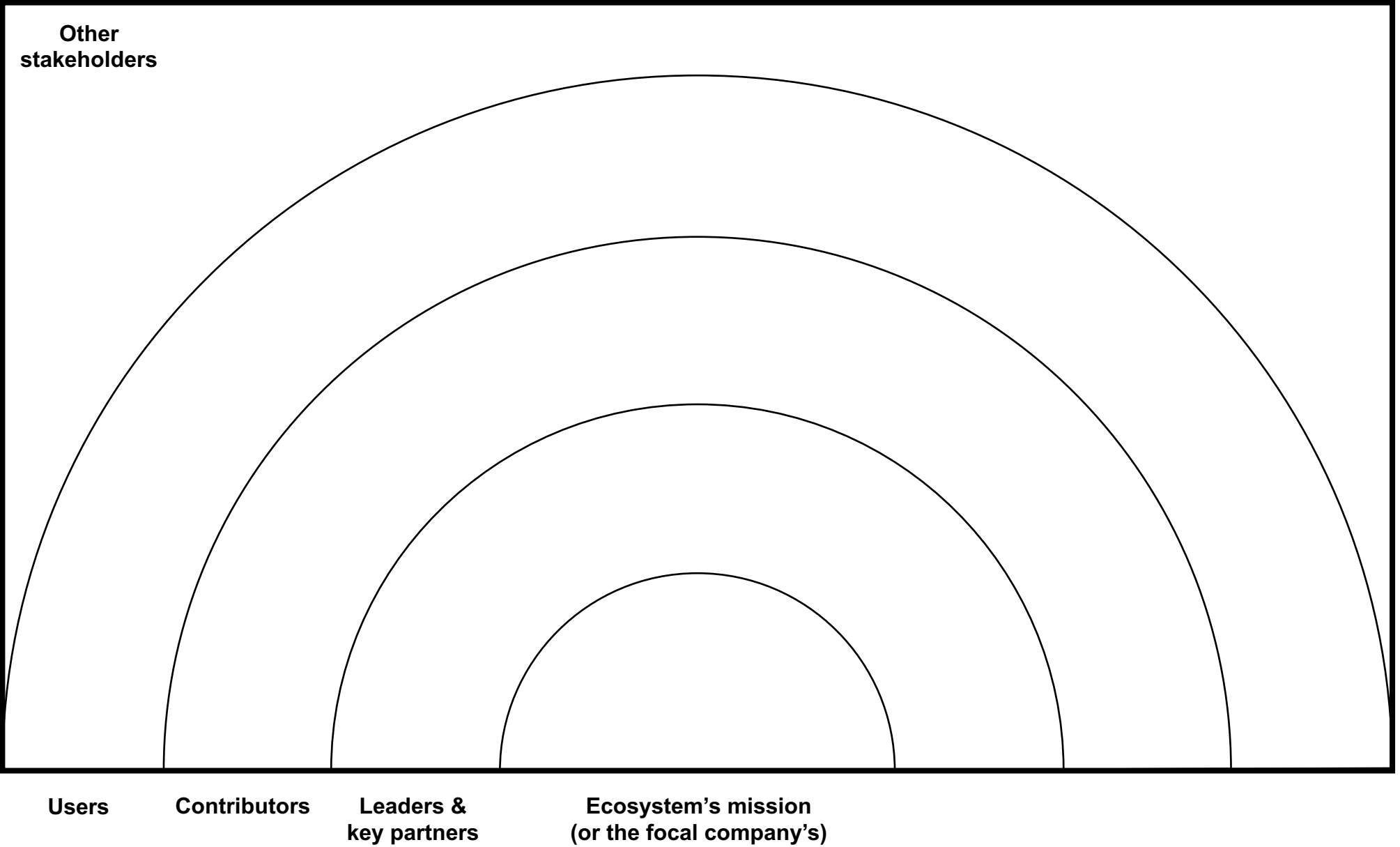
ECOSYSTEM MEMBERS

ADAPTED FROM SIMONE CICERO'S PLATFORM DESIGN TOOLKIT

To expand our focus beyond our direct customers, we need to map the space we operate in.

"Ecosystem Members" Canvas (Canvas 1) is used to map the members in the ecosystem you are working with. Fill the canvas using your case data.

1. **Write the ecosystem's mission to the center of the canvas**, if you are working with an ecosystem without strong a focal company. **Or** if you have a focal company-centric ecosystem case (like e.g., Uber), write here the **focal company's name** (and mission, if you know it)
2. **Identify the members of the ecosystem**: leaders & partners, contributors (members who provide something to the ecosystem), users (members who just use the services of the ecosystem), and other stakeholders (parties which have an interest to the success of the ecosystem, but are not directly involved in it). Limit the number of members to 9.
3. *OPTIONAL: If you want to increase your challenge level, you can create many versions of this canvas: one for the initial stages of the ecosystem, one for the upscaling stage, and one for the mature ecosystem.*



CANVAS 2

ECOSYSTEM MEMBER PROFILES

Our ecosystem – it is our warehouse and our supply chain.

By using many copies of "The Ecosystem's Member Profile" (Canvas 2), you will explore all the members in detail, and identify the potential (valuable assets and capabilities) they provide to your ecosystem.

1. **Illustrate each identified ecosystem member with some details** (e.g., personal details, and the reasons why they would participate in the ecosystem). This helps you to understand the member's characteristics better.
2. For each member, **identify which assets** (e.g., cars, houses, other tangibles) and **capabilities** (e.g., skills, knowledge, other intangibles) the member has, which could be usable with regards to the ecosystem's (or focal company's) mission.

ECOSYSTEM MEMBER PROFILE

Case

Member name	
Characteristics	
Valuable assets	Valuable capabilities



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Inspired by of Simone Cicero (PDT)

CANVAS 3

ECOSYSTEM MOTIVATION MATRIX

ADAPTED FROM SIMONE CICERO'S PLATFORM DESIGN TOOLKIT

You cannot force anyone to cooperate with each other. You can only create attractors.

By using "The Ecosystem's Motivation Matrix" (Canvas 3), you will identify, what each member has potentially to give to the other entities.

1. **List the ecosystem members** to the **rows and columns** of the matrix (so that both row and column headings have the same entries in the same order).
2. For all cells of the matrix (all the connections between members) – identify what is the **potential value** the member can give to another member (if there is something). Remember, money is also valuable.
3. *OPTIONAL: In a similar way as with the ecosystem member canvas (1), if you want to increase your challenge level, you can create many versions of this matrix: one for the initial stages of the ecosystem, one for upscaling stage, and one for the mature ecosystem.*

ADAPTED FROM SIMONE CICERO'S PLATFORM DESIGN TOOLKIT

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[illegible]

CANVAS 4

ECOSYSTEM GOVERNANCE IDEOLOGY-FREE TOOLKIT FOR DIGITAL ECOSYSTEM DESIGN 0.1

Considering decentralized governance?

This step is for ecosystems that want to explore non-centralized governance models. And it is a good extra exercise for all cases - you can see whether the ecosystem needs a strong central coordinator, or whether more decentralized ways of organizing could be possible.

1. Answer the questions of the first column and write them to the second column. The shaded texts provide you inspiration and help.
2. Compare your answers in column two and the theory in column three*. Is your answer aligned with the theory? If it is, your case has the potential to maintain decentralized governance. If not, then your case most likely needs a centralized coordinator.

* Theory is based on Elinor Ostrom’s work on commons-based governance. Ostrom identified eight conditions that must be met to commons-based governance to work. Check the references for more information.

Question	Your ecosystem	<i>Theory-based check: Decentralized governance is possible it...</i>
How (precisely) it is defined who is ecosystem's member and who is not?	<i>Relatively vs. strictly? How, why?</i>	<i>Group boundaries are clearly defined.</i>
How generic or localized / customized are the rules governing the actions in the ecosystem?	<i>Very customized vs. very generic? How? Why?</i>	<i>Rules governing the use of community resources are matched to local needs and conditions.</i>
Who can participate in modifying the rules?	<i>Only one member vs. all members? Who? How?</i>	<i>It is ensured that those affected by the rules can participate in modifying the rules.</i>
What is the ecosystems legitimacy / authority toward external stakeholders/regulators?	<i>Not respected vs. very respected? By whom, how, why?</i>	<i>It can be made sure that the rule-making rights of community members are respected by outside authorities.</i>
How ecosystem member behavior and rule compliance is monitored?	<i>By whom? How?</i>	<i>Community members can sustain a system for monitoring member's behavior.</i>
How are member misbehaviors sanctioned?	<i>By whom? How?</i>	<i>There are graduated sanctions for rule violators</i>
How are disputes (misbehaviors, sanctions) resolved in the ecosystem?	<i>By whom? How?</i>	<i>There are low-cost means for dispute resolution.</i>
What kind of (community resource) governance layers there are in the ecosystem?	<i>Who are operating in which layers? Why? what is the interplay of the layers?</i>	<i>The ecosystem can maintain responsibilities for governing common resources in nested tiers from the lowest level up the entire interconnected system.</i>

REFERENCES

Toolkits which have inspired this work:

<https://platformdesigntoolkit.com>

<https://www.strategyzer.com/canvas/business-model-canvas>

Theory and concepts:

Adner, R. (2017). Ecosystem as structure: an actionable construct for strategy. *Journal of Management*, 43(1), 39-58.

Ostrom, E. (2009). *Understanding institutional diversity*. Princeton university press.

Van Alstyne, M. W., Parker, G. G., & Choudary, S. P. (2016). Pipelines, platforms, and the new rules of strategy. *Harvard business review*, 94(4), 54-62.