

# Tangible Fictional Entities

BDC, Organization 9

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## Abstract

This document proposes using Tangible Fictional Entities (TFE) as O9's organization goal; It explains why is it a good goal, the scope of its applications, and gives some examples on how to orchestrate the organization around this goal.

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## Tangible Fictional Entities

### Overview

A company as a unit of organization serves the function of organized production; The inherent value of the company is thus the value of the products it make. Both the organization, the produced contents, and the valuation of contents can take arbitrary forms - defined by its objective, be it for commercial, or non-commercial. The objective is thus the core that unites all aspects and the operation of the company as a whole.

The company (Organization 9) needs *a single common goal that's easily comprehensible by all employees* and can convey the cultural aspiration for the organization. Such a goal can serve as a direct reference under which all employees work upon to improve and thus improve the productivity of the company as a whole.

Nowadays in the corporate world the most common such goal is **profit**. Profit is a good measurement and goal for the company because it's very easily measurable - and since the accounting department

is doing fiscal measurements anyway, it can easily serve as a comprehensible goal to convey to everyone. What's more, money is both trust and fundamental goods of exchange[@sapiens] - with abundant money, the company can make investments in equipments, personnel and technologies to further aid in its production, or directly use the money to create production.

However, money is not the only objective worth considering, nor is it the only measurable goal that can be defined; The Board of Directors share very diverse goals when it comes to the outcome of Organization 9 - among which include *the reality of creation, fiscal goals, artistic value of production*, etc. As a media or content producer, Organization 9's products have the most dominant qualities similar to various entertainment industries - it is **audience facing**, and one of the core functions of such contents is **to entertainment**: be it to create fun directly, or invoke a sense of deeper appreciation. Ultimately, the monetary incomes will be used as reinvestments into the production, which in term creates more contents - as such it becomes apparent if we can *provide measurements directly based upon our contents*, it would more suitably represent our goal.

There are a few common ways to measure contents:

- 1) The volume and quantity;
- 2) The general reception and reach of audience;
- 3) The direct monetary investment into production;
- 4) Audience donation, community engagement, and derived work, especially if the content is educational.

Beyond those, there is another creative way to measure contents, inspired by Charles Zhang's emphasis on "reality of world building" - that is, *the direct measurement of the "size" of the fictional world itself*, through quantity of what's called "**Tangible Fictional Entities**".

## Criteria of a Good Goal

Organization 9 is has very limited resources and any rules and policies defined for it must have stringent consideration on how such limited resources will be allocated. A good goal is not only **measurable** (which is a basic requirement), it should also directly provide directions on how the goal can be **maximized**, and the goal and each increment of the goal should be **achievable** - with

“decent” amount of effort, we should be able to make progress easily, and thus the improvement is **visible** to the eyes.

## Potential Representation of The Measurement of the Reality of Fictional World

There are a few ways to measure the “size” of fictional world:

1. Quantity of texts describing and telling stories about the world;
2. Number of minutes of animation and film production about the world;
3. Number of media productions about the world.

Those issue with above measurements is that each of them will require significant investment (counted in hundreds of hours minimum) and thus rendering the goal less “achievable”. With very limited resources, we wish our goals (or the measurement of our goals) is visible every week or every few weeks - ideally even days. Among the above three goals, only *Quantity of texts describing and telling stories about the world* seems to satisfy this goal<sup>1</sup>.

Here we present another alternative, that is, **to measure the quantity of distinct things inside the world directly** through explicit manners. That is, if we understand the reality of the world we are creating as the reality of all the things inside the world, then the quantity of such things can provide a direct measurement of the reality of the world. To avoid counting the duplicates, we thus count the quantity of **distinct things** in the world.

This measurement makes sense in the following ways:

1. Once we have any instance of a unique object, we can easily “digitally duplicate” it to create many more instances;
2. The entirety of the world IS defined directly by the entirety of the things that populate this

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<sup>1</sup>It deserves a few more justifications why we don’t just take text descriptions as goal - after all, this seems reasonable, measurable, approachable/achievable, and has the capability of producing an equal amount of reality if done well. The tricky part with this is texts are too flexible and it’s really very difficult to “do well” - it can very easily have a scale that’s unmanagable due to this flexibility. What’s more, among the many focuses of Board of Directors and members of BDC, it seems that besides those who take no preferences, there is generally a stronger preference towards *using visuals as main representations versus using texts as main representation of our fictional world*. In other words, it’s more fun to *be able to see the results as images*.

world;

3. Any larger objects can be dissected to smaller objects, and any smaller objects should be easily producible and thus creating both measurable and approachable measurements;
4. Each and every distinct object on its own can create a reality and become a valuable production, giving self-contained units of work;
5. Such self-contained units of work are sharable and can be provided to entertain a broader audience directly - like collections of artifacts and arts.

## **Benefits of TFE**

... the added benefit that design/assembling of scenes is just an assembling of such TFEs - thus creating a unified consistent streamlined workflow for the production of the organization.

We also provide a general workflow/internal production process as inspired by TFEs...

## **Scopes of TFE**

Based on the specification of RTS (pending reference), any physical entities definable by RTS can be safely considered a TFE...

TFEs can also include characters...

TFEs can also include buildings...

TFEs can also include planets...

TFEs can also include shapes of clouds...

TFEs can also include lands, terrains, landscapes and real-estates...

## **Policies and Judgement Criteria**

What is not a TFE:

1. It might seem that if we are only after the thumbnails - if the thumbnail itself captures the "reality" of a given entity - we can generate such directly from Blender. However, if this is true, then TFE is nothing different from any digital asset easily purchased and downloaded

from the Internet. The main conceptual difference here between any downloaded digital asset (e.g. in the format of .png, .obj, or any other forms) and a TFE is that the latter is integrated into a larger context - namely, The Matrix framework; More technically and practically speaking, since we require a TFE being defined by RTS, that means the same entity can be referenced directly - without any form of modification - inside The Matrix environment, and also trivially by any other RTS scripts<sup>2</sup>.

## Organizational Structure Around TFE

Here we propose ways to organize the organization around the goal of TFE...

## Data Management Scheme and Entity Management for TFE

As a practical aspect, here we propose how to store, represent and management TFEs...

## TFE Data and The Matrix Data

Here we distinguish, or consolidate the similarities and differences of The Matrix class and game datas, versus P9 original RTS scripts (especially Procedural History) and the TFE entity data - specifically, we answer the question regarding “which one is the master copy of all”, especially since TFE data can also contain character definitions which sounds like an RTS/The Matrix side of authority...

Regarding the character definition aspect - since the direct measurement of TFE is the image preview output, we can understand it this way:

1. The raw source definitions of characters, character appearance, character history, and character behaviors still comes from RTS and The Matrix;

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<sup>2</sup>To illustrate this - any downloaded .obj and .FBX files can be in any coordinate frame, and have ranging frame stylized to realistic art styles and level of details; The mesh files may also not be clean and contain useless information. In either case, we must first clean up and “normalize” the contents, resave them, before we can use them in any application or project. What’s more, the *art style* issue is a big one - depending on the art style, we may not be able to utilize those assets at all in a given project. TFE, on the other hand, is already normalized in a predictable coordinate system since it’s referenced by RTS; It’s also physically based and object dimensions matches what they are trying to represent in real world because that’s assumed context for The Matrix; Lastly, the Renderer produces rendering serving purposes both for illustration and serving as 3D base, further defining the reality of such objects.

2. TFE RTS merely uses a reference to this data;
3. The rendering outputs of RTS gives reality of the TFE, but it doesn't causes any "duplicate of data" since the underlying TFE RTS references whatever source RTSs that constitute the rendering.
4. What's more, for specific cases like characters, a given TFE might only need to capture an "instant" of such a character, e.g. one particular appearance, and that's enough to declare the existence of the TFE; While the base sources files from RTS and The Matrix will involve many more variations and details (especially time-domain data), for instance the character can wear different clothes at different scenarios (which are described by its behaviors) - and such information is not relevant from TFE's perspective.

## **Summary**

All future work of O9 should evolve directly around the production of TFEs.