GAMIFICATION IN REPLY

An analysis of gamification techniques in Reply with Octalysis Framework
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PURPOSE - The aim of this document is to make an analysis of gamification techniques used in some of the numerous Reply events, activities and initiatives; the framework used is Octalysis, created by Yu-Kai Chou and worldwide recognized. The following paragraph contains a brief introduction to Octalysis but we strongly recommend to check out Yu-Kai Chou's work [1].

OCTALYSIS FRAMEWORK

Octalysis is a gamification framework that examines everything that triggers human will and pushes people towards an action. What Yu-Kai realized is that everything that pushes us towards something in life is based on one or (more likely) more of the 8 Core Drives within Octalysis.

As a result, if no Core Drive is activated, there is no motivation and no behaviour happens. Let us quickly examine the 8 Core Drives:

• **Core Drive 1: Epic Meaning & Calling** is the Core Drive that is in play when a person believes they are doing something greater than themselves and/or were chosen to take that action.

• **Core Drive 2: Development & Accomplishment** is based on our internal drive for making progress, developing skills, achieving mastery and overcoming challenges.

• **Core Drive 3: Empowerment of Creativity & Feedback** is expressed when users are engaged in a creative process where they repeatedly figure new things out and try different combinations.

• **Core Drive 4: Ownership & Possession** is in play when users are motivated because they feel like they own or control something.

• **Core Drive 5: Social Influence & Relatedness** incorporates all the social elements that motivate people: mentorship, social acceptance, social feedback, companionship.

• **Core Drive 6: Scarcity & Impatience** is the Core Drive of wanting something simply because it is extremely rare, exclusive, or immediately unattainable.

• **Core Drive 7: Unpredictability & Curiosity** is the Core Drive of constantly being engaged because of not knowing

what is going to happen next.

• **Core Drive 8: Loss & Avoidance** is the motivation to avoid something negative from happening.

Octalysis is shaped as an octagon where each side represents one of the Core Drives. The following image shows the basic structure of Octalysis and is taken from Yu-Kai Chou's website [2]:
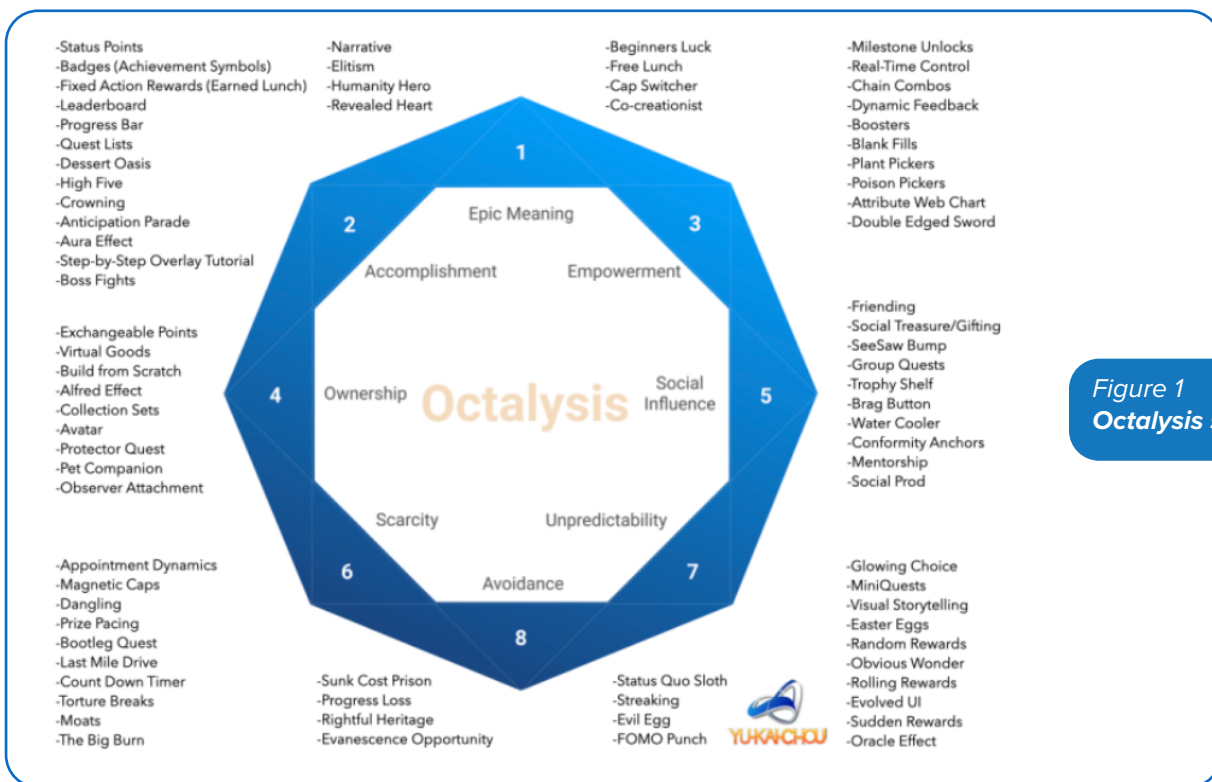

Figure 1
Octalysis structure

The position of each Core Drive is not casual; on the contrary they are carefully chosen according to the structure of Octalysis. There are, in fact, two grouping criteria for the Core Drives:

• **Left Brain/Right Brain:** the Core Drives on the right side of the octagon are more related to creativity, emotions, intuition and self-expression, while the Core Drives on the left side are more logical, analytical and connected to ownership.

• **White Hat/Black Hat:** the Core Drives on the top of the octagon stimulate positive emotions, while the Core Drives on the bottom are considered negative and addictive motivators.

ADVENT CALENDAR

Operating in a simple but endearing way, this particular themed event is held during the Christmas period, more precisely from 1 to 17 December. It offers the opportunity to have a fun confrontation with other Replyers, as well as to win fantastic Reply-themed prizes.

Starting December 1st:

1. A new game is released every day at midnight CET. Whenever you start a game, the faster and with fewer mistakes you can play, the more points you get. The points obtained are used to determine both rankings of the event: the one of the company, in which the scores obtained for the performance of the Replyers of the same company converge, and the main one, determined on the basis of the overall score of each Replyer.

2. By completing a game, you have the opportunity to participate in the daily prize draw: the daily winners of the exclusive gadgets up for grabs are randomly selected from all the players who have finished the daily game.

3. On December 17 th, the day that marks the conclusion of the event, the top 10 Replyers in the main leaderboard will be awarded additional special prizes: Reply-branded Snowboards.

By analysing these simple "rules" that characterize the event, it is possible to notice the influence of multiple Core Drives. The first, and perhaps the most evident, is undoubtedly the **Core Drive 5: Social Influence & Relatedness** since through these interactive and competitive games users are encouraged to connect

Figure 2
Advent Calendar's
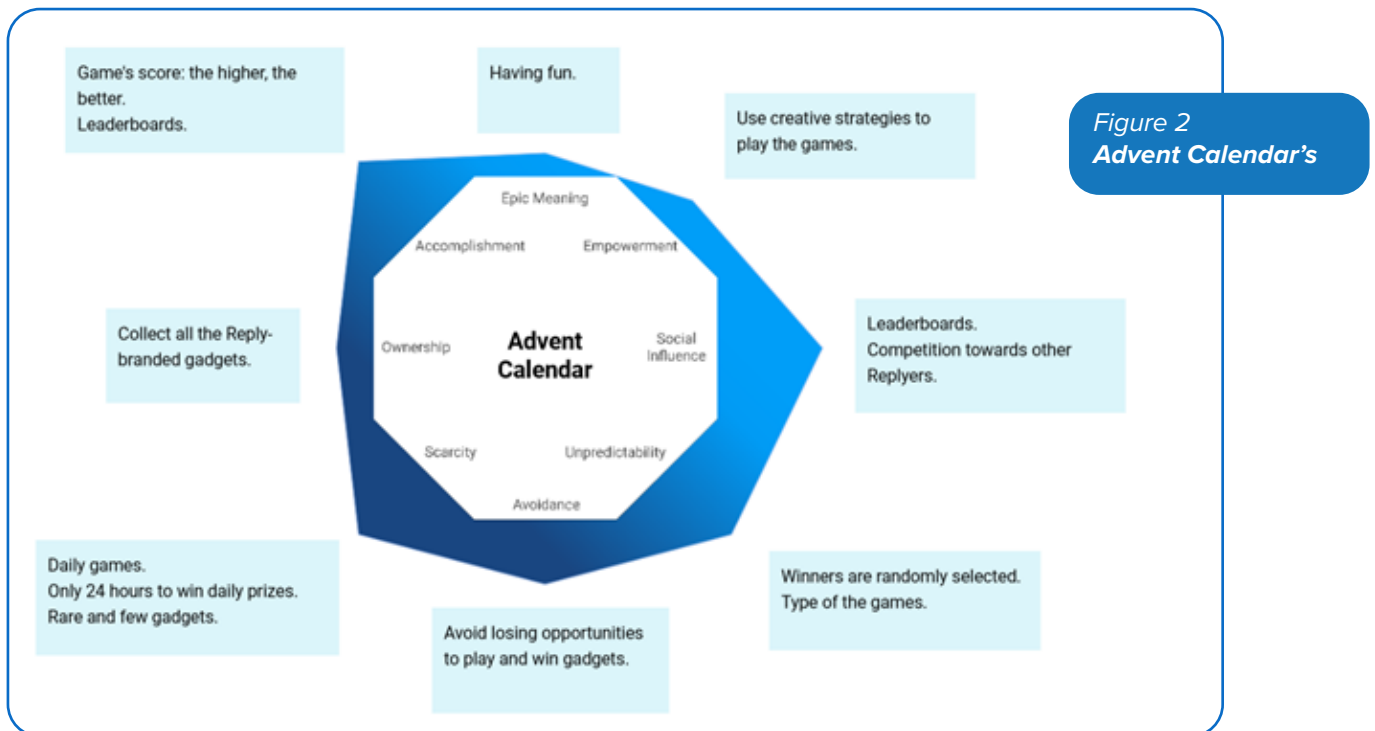
and compare with other Replyers with the aim of earning more points than colleagues to get a prize and climb the rankings.

Since individual games are released daily, an additional Core Drive that is activated is **Core Drive 7: Unpredictability & Curiosity.** In fact, not knowing what type of game will be made available and for which prize will compete, or the simple fact that the games of the following days are not known a priori generates curiosity in the user who will therefore be pushed to return back in the following days to discover the new game and the prize up for grabs. Another aspect inherent in the use of this core drive is linked to the randomness with

which the daily prizes are awarded since, as mentioned above, the winning Replyers are randomly selected from among all the players who, regardless of the score obtained, have finished the game of the day.

The score obtained for each individual game is, on the other hand, particularly relevant for the purposes of the ranking, the presence of which recalls in the user that feeling of growth and competition aimed at achieving a goal typical of **Core Drive 2: Development & Accomplishment.** In addition, since in this case there are even two, competition is more incentivized as there is a wider user pool with which to

compete and consequently the user feels even more involved and stimulated to do better.

Participating actively and daily turns out to be a very relevant and influential aspect also in the activation of **Core Drive 8: Loss & Avoidance.** The latter is triggered by the "fear" that failure to participate in the daily game will make you lose the opportunity to participate in the extraction of the relative prize which, being in turn in a limited quantity and not otherwise obtainable through other means, may favor the activation of two further Core Drives: the **Core Drive 6: Scarcity & Impatience,** as users will feel more motivated to participate in the game as it is the only way to try to get the object up for grabs and the **Core Drive 4: Ownership & Possession,** triggered by the motivation of wanting to win one or as many daily prizes as possible which, being Reply-branded, instill in the user that sense of belonging that pushes people to do better and better.

Based on what has been analysed, with a final score of **258** and as showed in the figure below created with the Octalysis Tool [3], the experience is fairly balanced in both White Hat and Black Hat Core Drives.

APPRAISAL

Let us consider the following game. Each player has a list of goals and needs to achieve as many of them as possibile in a limited time. At the starting point the players are given their personal list of goals and each goal is connected to a prize (points, coins, every possible prize in form of some currency). When the time runs out, some kind of judge checks which goals the players achieved and awards the prizes they deserve. It sounds like a typical game.

The game is actually our job. Every year all Replyers live the *appraisal experience* where they get evaluated for their performance at work. They receive a list of *goals*, each divided into *tasks* and for each achieved goal there's *money compensation.* After one year the responsible manager checks which goals they achieved, awards the related compensation and assigns new goals/tasks in a neverending cycle (until retirement or resignation do us part).

The underlying game pattern gives us a clear hint that there are some game

mechanisms in action. There are a few key concepts:

1. Goals setting in a context of *evaluation:* setting the goals in an official evaluation context makes them a clear measure of our job performance (we can sense some Core Drive 1 and Core Drive 4 in action). The money incentive activates Core Drive 4: Ownership & Possession.

2. Presence of different goals, each associated to a different prize: this construction creates a clear separation among the various goals and therefore makes them easier to tackle; when the employee achieves one of them they feel like they have accomplished one defined task (there is a strong sense

of accomplishment also related to a defined compensation). The goal is also often divided into smaller tasks to further stimulate this sense of accomplishment. Moreover, the association of a prize to each goal gives the employee a clear feeling of which tasks are more important. These mechanisms are extremely basic in human motivation and are stimulated by **Core Drive 2: Development & Accomplishment.**

3. A precise time limit to accomplish the tasks activates **Core Drive 6: Scarcity & Impatience.**

Our estimation of Octalysis for Appraisal is the following and has a score of **168:**

Figure 3
Appraisal's Octalysis
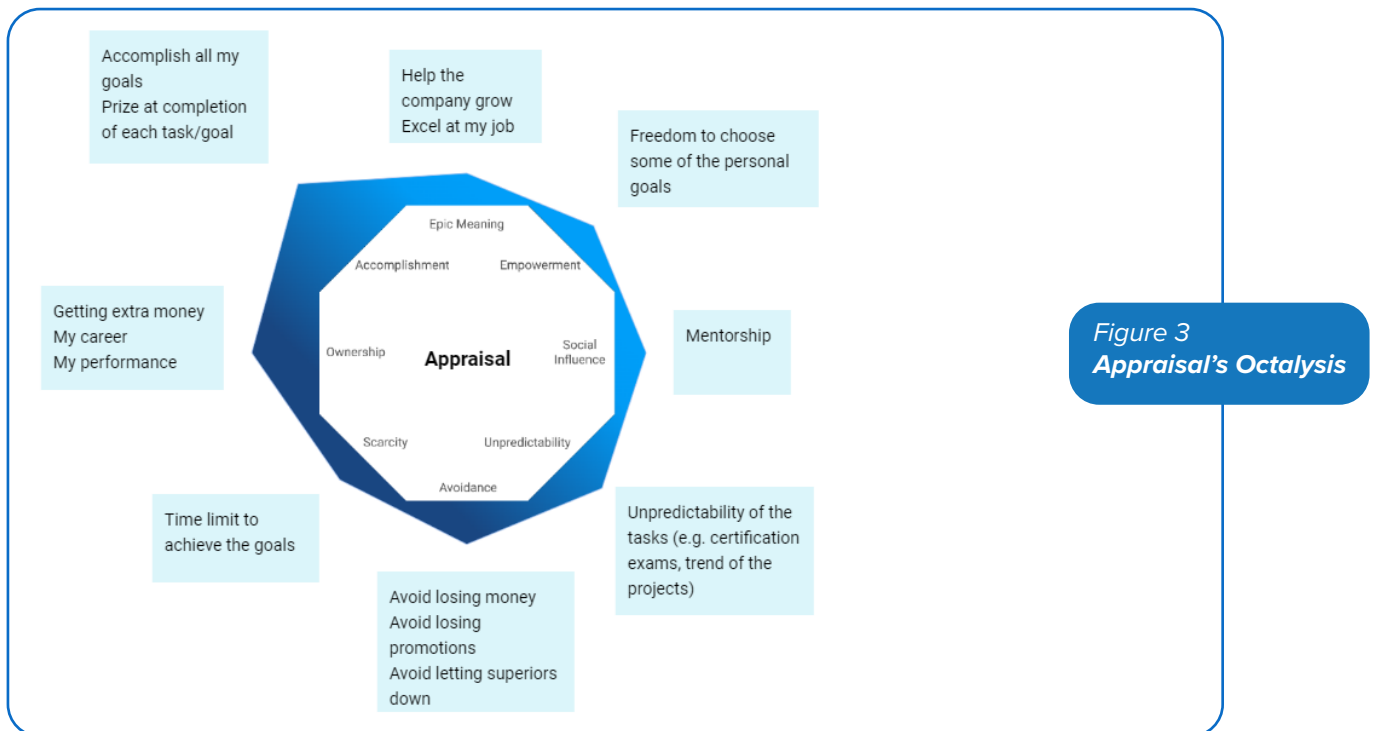
WHITEHALL INNOVATION LABS

For a few years now Whitehall Reply [4] has given its employees the chance to take part to its *Innovation Labs.* Their goal is **to gain knowledge and experience** in a certain field and then use them to upgrade the offer to their clients. Each lab has one or two leaders who guide the group.

For each deliverable that they produce (POCs, content, papers) they gain a specific amount of **points.** Other than the general goal (gain knowledge and experience), all Labs have a very practical

goal: *gain 1000 points by the end of the year.*

There are many gamification techniques in action in this process. The first and more obvious is the point system that gives a clear sense of advancement and accomplishment (**Core Drive 2: Development & Accomplishment**) and stimulate competition among all the Labs. In addition to Core Drive 2, there are a few other Core Drives in action. For example, the goal of gaining 1000 points in one year gives a time limit that activates **Core**

Drive 6: Scarcity & Impatience. It is quite obvious that there is a strong presence of **Core Drive 5: Social Influence & Relatedness**, since the social component is dominant in this context. Most projects are tackled as a group, which encourages the employees to bond; the presence of a mentor (the Lab Leader) helps the members to become more attached to the Lab and to the Lab topic.

The presence of a consolidated group opposed to others inspires a sense of competition among Labs but also of belonging to the group. This sense of belonging is activated through **Core Drive 4: Ownership and Possession**; the Lab member cares about the success of the Lab and tries to produce deliverables and gain as much points as they can for the group. The sense of ownership reaches its peak in the Lab Leaders: they feel responsible for the Lab and perceive it as their own project and are therefore motivated to make it move forward and push the members to study and produce deliverables.

Another important Core Drive in action is **Core Drive 3: Creativity & Feedback**. Employees are given space to express their creativity in personal projects, with the only limit of the general topic.

Last but not least, there's a use of **Core Drive 1: Epic Meaning & Calling.** In Yu-Kai Chou's work there's a reference to a Game Technique called Elitism (Game Technique #26) described as follows:

"Allowing your users or customers to form a prideful group based on ethnicity, beliefs, or common interests makes them feel like they are part of a larger cause. Elitism instills group pride, which means each member tries to secure the pride of the group by taking specific actions. The group also attempts to frustrate its rivals, which can lead both groups upping

their actions to beat the competition." [1]

This explains perfectly the dynamic in action in the Labs context. Feeling part of a group with a common interest that is competing with other groups leads to higher productivity.

Our estimation of Octalysis for Whitehall Innovation Labs is the following and has a score of **261**:
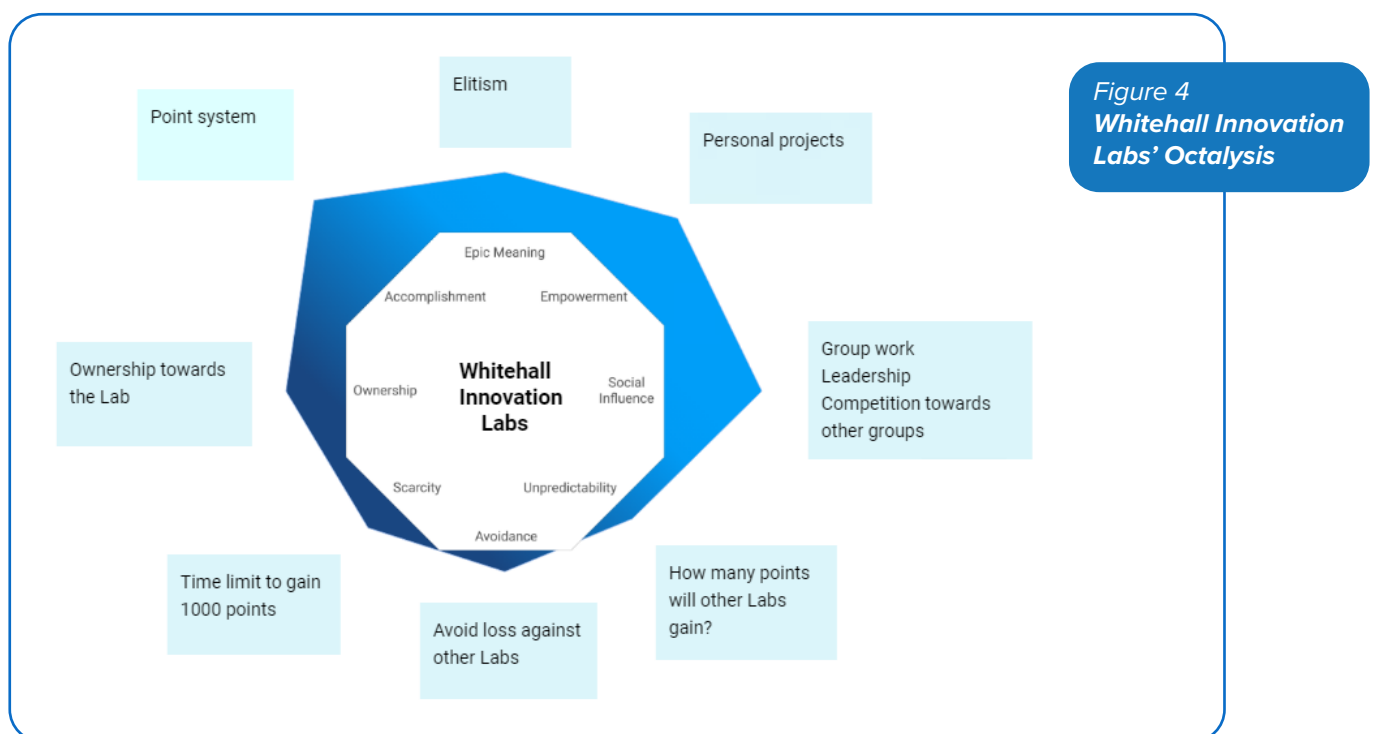

Figure 4
Whitehall Innovation Labs' Octalysis

TAMTAMY SWAT

According to official guidelines, the **TamTamy SWAT** is a team of Reply influencers who entertain the community with interesting content and initiatives, shaped to engage Replyers on TamTamy and Chick Norris TV. In addition, SWAT can help other users have a better experience on Reply social network **TamTamy:** in fact they're always available if they have questions about the platform.

Achieving this status activates several core drives. Let's dive in:

First of all, the **Core Drive 1: Epic Meaning & Calling** drives these influencers to spend a lot of their time in order to create things for the entire community and help other users. This means that the TamTamy Influencers are motivated because they

believe they are engaged in something that is bigger than themselves, such as growing and supporting the community.

Furthermore, this status of "TamTamy Influencer", is updated every year. Actually, The TamTamy Chart, the special leaderboard that ranks all TamTamy users according to their participation online and offline, is updated every year counting all previous activities. So, if the users want to reach the status of SWAT they have to be part of the top 100 users in the leaderboard and join (or continue to be part of) this exclusive community. This is based on **Core Drive 2: Development & Accomplishment** – that is the internal drive of making progress, developing skills, and eventually overcoming challenges. The word "challenge" here is very

important, as a badge or trophy without a challenge is not meaningful at all.

In addition, like other social networks, TamTamy gives tools to its Influencers in order to create their posts and contents. Moreover the SWATs can measure community engagement based on likes, comments, interactions and so on. This aspect refers to **Core Drive 3: Empowerment of Creativity & Feedback**, that is when users are engaged in a creative process where they have to repeatedly figure things out and try different combinations, in this case in order to receive positive feedbacks.

The TamTamy SWAT badge may be very challenging to achieve, so after achieving this status, the influencer may be motivated to improve and protect it as something personal. This is the main aspect of **Core Drive 4: Ownership and Possession**, so people who have invested a lot of time to learn or customize something will generally start to feel more ownership towards it.
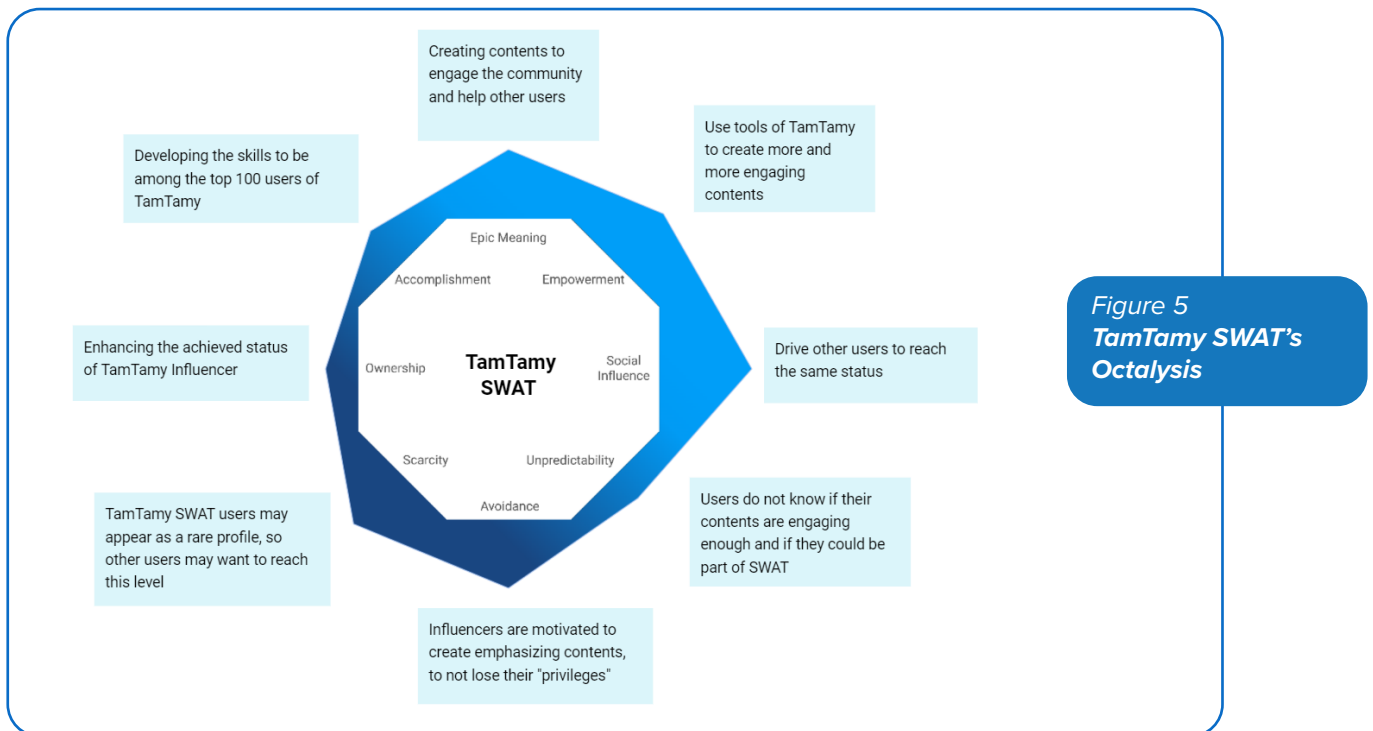
The TamTamy SWAT concept is certainly based on **Core Drive 5: Social Influence & Relatedness.** In fact, when you see a friend that is amazing at some skill or owns something extraordinary, you become driven to reach the same level.

In other words, the community of TamTamy Influencers can be also viewed ad an exclusive group of users, and this "rare profile" could encourage others to use the platform in order to achieve this status. This refers to **Core Drive 6: Scarcity & Impatience,** the drive of wanting something because you can not have it or because it is challenging obtaining it.

Users do not know if their contents could be engaging enough and if they will receive positive or negative feedback about it and be part of Top 100 users of TamTamy. This aspect is based on **Core Drive 7: Unpredictability & Curiosity** – that is the main force behind our infatuation with experiences that are uncertain and involve chance.

Lastly, the membership of this exclusive community leads the SWATs to activate **Core Drive 8: Loss & Avoidance.** In fact, since the leaderboard is updated every year, the influencers can lose their status just because they have not been able to create quite engaging contents. In this case, influencers are motivated to create engaging content, in order not to lose their "privileges".

Our estimation of Octalysis for TamTamy SWAT is the following and has a score of **242**:

Creating contents to engage the community and help other users

Developing the skills to be among the top 100 users of TamTamy

Use tools of TamTamy to create more and more engaging contents

Enhancing the achieved status of TamTamy Influencer

Drive other users to reach the same status

TamTamy SWAT users may appear as a rare profile, so other users may want to reach this level

Users do not know if their contents are engaging enough and if they could be part of SWAT

Influencers are motivated to create emphasizing contents, to not lose their "privileges"

Epic Meaning
Accomplishment — Empowerment
Ownership — **TamTamy SWAT** — Social Influence
Scarcity — Unpredictability
Avoidance

Figure 5
TamTamy SWAT's Octalysis

CHICK NORRIS TV

Video learning platform on which it is possible to find lessons / webinars made by the Replyers of all the companies of the group. A first basic analysis of what this platform offers shows a massive use of both **Core Drive 1: Epic Meaning & Calling** and **Core Drive 3: Empowerment of Creativity & Feedback.**

In fact, Replyers find motivation in the creation of content driven by the desire to share their knowledge   because doing so, they feel like they are protecting

knowledge itself, i.e. something greater than themselves. Similarly, triggered by **Core Drive 2: Development & Accomplishment,** Replyers find motivation in using the contents created by their colleagues to acquire new knowledge and skills and to deepen those already possessed.

The creation of the contents requires a considerable amount of creativity which promotes the activation of Core Drive 3 mentioned above. This turns out to be an
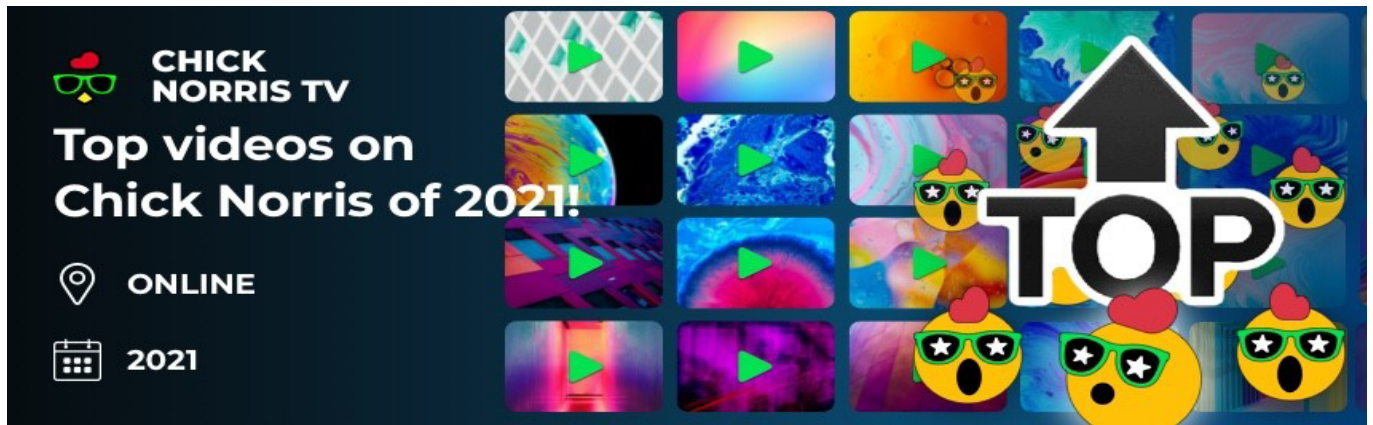
important aspect since both being creative and a clear and simple dissemination method promote constant entertainment by the user who watches the webinar. Furthermore, the content itself, or perhaps a series of more content created by a Replyer, can trigger in the latter the activation of **Core Drive 4: Ownership & Possession,** as it feels particularly linked to what it has created.

Regarding each available video on ChickNorris TV, **autoplay** functionaliy is an intriguing aspect included in this platform. In fact, at the end of a piece of content, ChickNorris defaults to automatically playing the next video unless the user opts out. This means the user has to overcome both inertia (**Core Drive 8: Loss and Avoidance**) and their innate motivation to be curious (**Core Drive 7: Unpredictability and Curiosity**) to stop the experience.

It is interesting to drive a more in-depth

analysis regarding the recently introduced quiz section. As a matter of fact, from 11th April 2022 onwards on CNTV, a user can watch videos and learn something new by taking part in the brand-new quizzes created by the Lean Share & Remix Trainers.

Therefore, this section offers various quizzes based on different topics. Each quiz has its own category, such as Metaverse, AI & Machine Learning, Code & Cloud etc., and consists of a variable number of questions.

These questions are formulated on the topics covered in the various lectures and in the various webinars of the belonging category. Then, through the "use" of a quiz, users are asked questions based on what they have seen before (on topics that have been covered). In this way, if the user does not correctly answer all the questions in the quiz, the next time he may be more
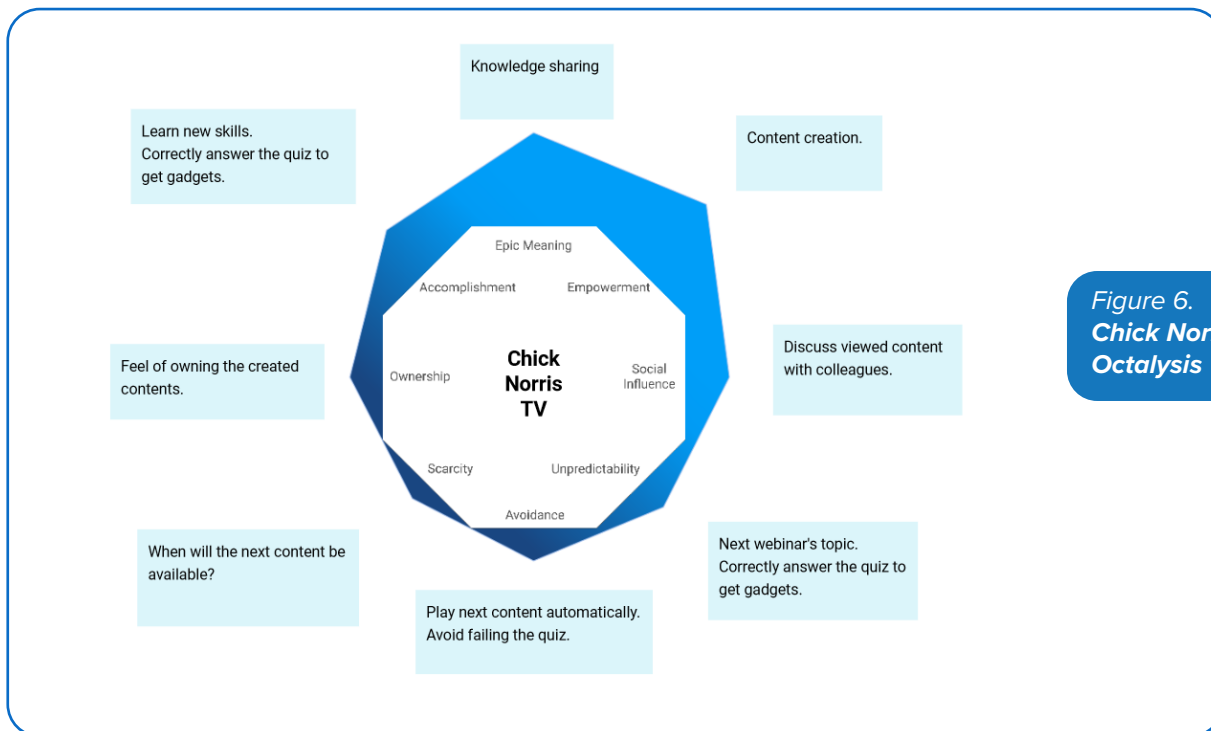
Figure 6.
Chick Norris TV's Octalysis

motivated to pay more attention, which means that he will be prompted to review the reference content (webinar / lesson).

Furthermore, to further encourage the users to take quiz, at the end of the first week of this initiative the winners among all users who answered all the quizzes correctly were drawn, rewarding them with some amazing goodies (**Core Drive 7: Unpredictability & Curiosity**).

As done for the previous activities, what has been analysed is reflected in the Octalysis structure shown below, in which to each Core Drive has been assigned a score based on its possible degree of

influence that is perceived by using the platform.

The final score is **200** and, as evidenced by the showed Octalysis, the experience is heavily focused on White Hat Core Drives, which means users feel great and empowered. The drawback is that users do not have a sense of urgency to commit the desired actions. Also, there be a great balance between Left Brain and Right Brain Core Drives, which means you likely have a good balance between Intrinsic and Extrinsic Motivation.

BIBLIOGRAPHY & SITOGRAPHY

[1] Y. Chou, Actionable Gamification : Beyond points, Badges, and Leaderboards, Createspace Independent Publishing Platform, 2015.

[2] Y.-K. Chou, «Yu-kai Chou: Gamification & Behavioral Design,» [Online]. Available: https://yukaichou.com/.

[3] Y.-K. Chou, «Octalysis Tool,» [Online]. Available: https://yukaichou.com/octalysis-tool/.

[4] «Reply Whitehall,» [Online]. Available: https://www.reply.com/whitehall-reply/it/.