

## Report about the Gamification Research with LINE@ during INNGAMES 2015



### 1. Executive Summary

This is a report on the gamified action through LINE@ platform during INNGAMES event on April 23rd, 2015. This report introduces the event concept as well as the LINE@ application functionalities chosen to drive the gamification. On the other hand the report describes the objectives to achieve by the means of gamification as well as other aspects related to the project execution.

Finally the report presents the quantitative results and conclusions resulting from the interpretation of the data gathered during the activity.

### 2. Introduction

During the holding of INNGAMES videogame event, organized by [INJUVE](#), BluePad, Málaga Town Hall and the UTad University, an educational gamification research was executed through a well-known digital communication platform named LINE. Thanks to a new corporative communication product by LINE Corp., which name is LINE@, it was possible to generate an interactive proposal shaped as a challenge to the attendees of one of the learning conferences of the event.

LINE is an instant messenger and social network platform with more than 500 million registered users<sup>1</sup> around the world and revenues more than \$600 million. The platform has a special impact in Japan, Thailand and Taiwan<sup>2</sup> as well as strong investments in LATAM and Europe<sup>3</sup>, in particular towards the type of user profile of INNGAMES (young and adolescent)

<sup>1</sup> <http://techcrunch.com/2014/10/29/chat-app-lines-revenue-doubles-year-on-year-to-reach-192-million-in-q3-2014/>

<sup>2</sup> <https://www.techinasia.com/line-reports-2014-revenues-of-656m-reaches-181m-monthly-active-users/>

<sup>3</sup> <http://thenextweb.com/asia/2013/11/25/fast-growing-chat-app-line-leaves-the-us-until-last-as-it-passes-300-million-registered-users/>

### **3. Gamification Objectives**

The main objectives are the information retention by the attendees at the learning conferences at INNGAMES as well as the minimization of the dropout rate of attendees. Furthermore we also want to stimulate the active participation in a type of experience that usually is unidirectional.

With the gamification we also want to attract new active users for a potential LINE@ channel at INJUVE, opening this was a new way to communicate and interact with users thanks to the gamification possibilities provides by the tool itself.

### **4. Research Objectives**

The specific objective of research was to test the effectiveness of the playful participation tools of the new corporate communication platform LINE@ in the context of formative/cultural events with secondary school profiles (between 12 and 15 years old).

It is necessary to answer questions such as the penetration degree if these tools in those user profiles, the degree of participation in actions with some playful components and the interest shown for a digital communication platform in an almost analogic context.

### **5. Project**

#### **a. Gamification Design**

The gamification design is limited by the characteristics of the technologic platform used, in this regard and because the marked objectives (information retention and participation) a basic ludo-pedagogical model of user-platform interaction is generated.

Based on the information provided by Francisco Javier Soler Fas (UTad professor and main speaker at the target activity), a total of 16 questions were selected to be sent out during the presentation and had to be correctly answered by the public. There are instantaneous rewards for the first participants who answer correctly to each question, and also a big price awarded by a draw to one of the 16 finalists (from a total of 700 approximately).

Participants, or players, had to register to the INNGAMES channel in LINE created for this occasion, answer the questions correctly, activate the coupon before any other participant and validate it in person with some organization's staff.

### **b. Production**

The benefit of using an already developed tool to gamify an event attendance experience is precisely the savings achieved by not developing a tool from scratch. Another benefit is to use the user base already existing in the platform, among other preset functional characteristics.



Image 1. From left to right: Price Coupon design, InnGames Channel icon, InnGames Channel background

The production of this experience involved the gamification design, the training time cost to handle the management and administration platform and, finally, the design of the channel images and prizes coupons.



Image 2 Picture taken during the event where a lot of mobile devices can be seen participating in the activity

**c. Technological Platform**

For the correct execution of the experience it was necessary to accomplish certain technical requirements, otherwise success would have been impacted.



Image 3. Home of INNGAMES in LINE@

### **For the user:**

Internet connectivity. In the first place the event space would need a minimum degree of internet connectivity or, on the other hand each participant would need to have his own mobile data account. For those participants that already had the LINE application installed it would not suppose any inconvenience, having in mind that receiving and answering a few questions would barely consume some bytes, however for those that did not have it installed (be already registered users or new users) downloading the app (23,44MB) could be problematic in terms of data charge. Fortunately during the experience we have an internet connection with enough quality to download and interact smoothly with the app.

LINE app penetration. In the second place the obstacle was the platform penetration itself, meaning, the number of installs and the usage of it. The knowledge about the app existence, about its user-friendliness and security was also decisive for the execution of the experience.

### **For the organization**

Initial setup. Before the activity execution it was necessary to carry on some initial setup like activating the LINE@ account in the mobile device (tablet) and fill in all the corporative information of LINE@ channel (user icon, channel home, contact data, etc.). Among these initial setup there was also the generation of price coupons associated and activated by correct answers (keywords). The platform allows for the configuration of various answers or keywords to trigger specific events (in this case the awarding of coupons).

Coupons have different types of configuration, so one coupon can have one or more winners or be linked to a draw (e.g. from 5 players who get the same coupon, only one is awarded the price through a draw). In our case we used one coupon for each question and the winner was the fastest to answer it correctly.

A fair number of keywords and key expressions were used to allow users to validate their answers in a diverse way, given the platform does not have a semantic recognition module. For example, to approve the answer “july 1st, 1998” as valid it was necessary to include correct key expressions such as: “1/7/98”, “01/07/1998”, “1 Jul 98”, etc.

On-site management. The platform features a notification and messaging system which can include text, attractive graphical codes (stickers), photos and direct couponing pages. Notifications allow us to send out questions and even some clues for the more complex questions or those that needed more data. Although answers cannot be individually visualized, coupons panel do show how many people have obtained a coupon (and therefore how many of them have answered correctly). On

the other hand the platform does not record incorrect answers neither the number of users who participated in the activity, that is how many unique users out of the total subscribed to the channel answered these questions.

In these cases where questions did not have any valid answer, messaging service was used to send out clues to increase participation and therefore to claim the price.

#### **d. Execution**

The activity execution took place according to the requisites shown in the previous section (Technological Platform). The procedure was as follows:

- i. Initial setup of INNGAMES Line@ channel
  1. Home setup
  2. Wall setup
  3. Auto-reply by friendship setup
  4. Auto-reply by wrong answer setup
- ii. Setup of coupons for correct answer (only for channel friends)
- iii. Presentation of success conditions during the event
- iv. Send out questions coordinated with the conference (only for channel friends)
- v. Monitor answers per question
- vi. Send out clues for the more complex questions
- vii. In person redeeming of winning coupons (up to a total of 16)

#### **e. Analysis**

Due being a third party platform, analysis elements come from its own statistical registry. The platform provides the number of users subscribed to the channel and their historic for each day. It also provides the number of correct answers to questions in relation to each coupon and the number of winners. Unfortunately it does not provide statistics on incorrect answers or the timing of redeeming (the time between the question and the answers), neither it provides statistics on users who participated in answering to the questions, so it's impossible to determine the total of subscribed users to the channel or the total of unique users who got involved in the action.

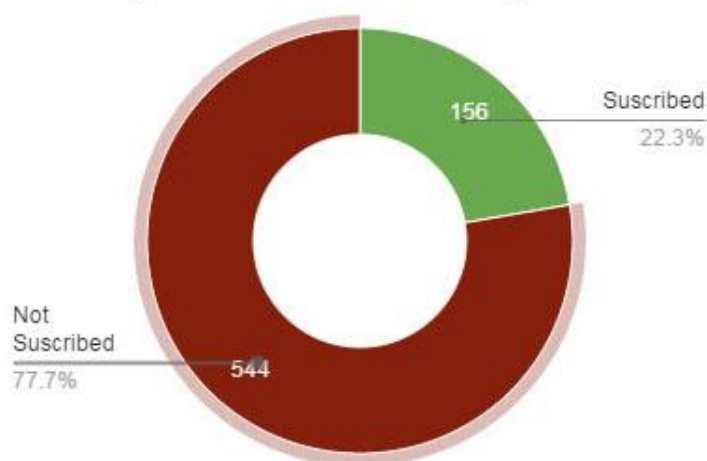
Another analysis element was the observation during the execution of the educational conference, so we could establish patterns related to face-to-face observed events.

## 6. Results

As an immediate result we highlight the capability to generate a direct communication channel between attendees and an activity which, in general, is usually unidirectional: Issuer > Receiver, also we highlight the platform as a way to track and quantify the generated interaction. In other words, Line@ tool allows us to setup gamified participatory experiences where these did not exist before.

Of the estimated total (according to the organization there were 700 students approximately), about 156 attendees subscribed to INNGAMES channel after the Gamification presentation and before the educational speech, this represents 22.3% of the total registered attendees. LINE@ statistics allows us to know the day these attendees registered but unfortunately we cannot get the time, meaning we do not know how many were registered during the first session and how many during the second.

**Porcentaje de Gamification's Participants**



**Imagen 3 Proportion and number of attendees subscribed to INNGAMES LINE@ channel**

Of the 16 total questions sent out, 335 correct answers were received, that is, an average of 21 correct answers for each question. Unfortunately, we ignore the number of incorrect answers due the platform does not track them. Neither we know how many unique users answered the questions due LINE@ neither keeps them tracked. Doing an arithmetic average we could say that each user registered to the channel answered correctly at least two times during the whole event.

### Answered Questions

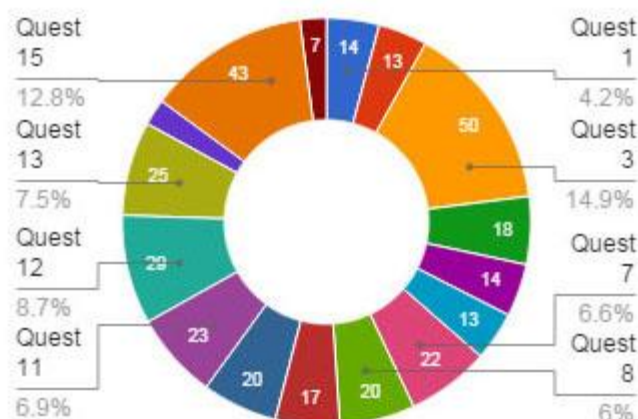


Image 4 Distribution of correctly answered questions

On top of correct answers, 15 coupons were activated by the winners and just one was not redeemed in-person (nevertheless it counts as a winner). This means the winner did not want or was not able to redeem it or one of the winners got some coupons and did not redeem them all, perhaps because a face-to-face logistic matter.

Questions	Nº Correct answers	Nº of clues	Difficulty
Q1	14		Low
Q2	13		High
Q3	50	2	High
Q4	18		Medium
Q5	14		Medium
Q6	13		High
Q7	22		Low
Q8	20		Medium
Q9	17		Medium
Q10	20		Medium
Q11	23	1	Medium
Q12	29		Low
Q13	25	1	Medium
Q14	7		Medium
Q15	43	1	High
Q16	7		Low



With the exception of one question which refers to a star in the world of video games (Q12), the remaining questions with more correct answers were those that had help or assistance (clues), meaning participants were attentive to the communication through the platform and responded to it. Those questions with a high level of difficulty that received clues were by far the most answered.

It should be noted that during the first session there were no dropouts from the learning presentation's room. The gamification activity took place smoothly and questions were sent every 3-4 minutes in synchronization with the content of the conference. However, during the second session (shorter than the first) due to a technical problem the questions were not sent until after the first half, and during that time there were 15 dropouts. We cannot be sure this problem was the reason (having no interaction) which led some participants to drop out, but during the first session nobody left.

## **7. Conclusions**

We understand that a 22.3% of user retention is substantial, especially considering that LINE is not the most used communication app in Spain. Note that during the event some participants explained they'd downloaded the app in-situ and registered or reactivated their account thanks to the activity.

On the other hand the number of answers is very high, thus we could say the number of correct answers represents the 50% of total attendance, if we consider that each of these responses corresponds to a unique user. Remember that incorrect answers were not counted, which would probably raise that figure much higher.

Communication was followed by the attendees, proven by the fact that the most answered questions are those for which clues were given through the channel. In two of the four cases in which clues were given, the correct answers were twice in number than those who had no clues at all.

All coupons except one were redeemed, leading us to believe that tangible rewards were a powerful attraction to participate in the activity, otherwise it is very likely the participation would have been much less representative.

Regarding the use of LINE @ application or any other communication app with gamification options we can say that these are used transparently during the execution of the educational event, that is, the app was consulted and used during an activity in which any other use of the mobile phone could distract attention, but by both the number of responses received and the

participation we could suggest that the gamified use of LINE@ helped the attention and retention of the exposed content (specifically professional and senior) during the conference.

Another plausible conclusion of this activity is related to cost savings. In this regard, having executed a gamified experience through an app developed expressly for the occasion would have skyrocketed production costs, and on the other hand we would have the handicap of attendee acceptance of such app. By using LINE@ we achieved two objectives thanks to a single tool that already has a base number or critical mass of users corresponding to the event's target profile, as well as internal tools for the execution of actions more or less gamified. In addition, the culture of interaction between users of apps such as LINE (reception and sending of messages) made unnecessary any kind of additional formation or tutorial in order to participate in the experience.

Without diminishing the potential of LINE@ tool, we have to point out that it has some technical shortcomings that could have undermined the effectivity of the experience. We identified the following:

- Communication delay. Due the necessity of coordinating questions with feedback information it was necessary the former be shown in the chat almost instantaneous, however in some cases delay between sending and reception went up to several minutes, so some questions and feedback information overlapped, adding confusion to the process of answering.
- Subscribed users. The number of users subscribed to the channel is slowly updated in the platform, if we add the fact that it does not exist an statistical control of hourly registrations, it's difficult to know the exact number of participants in the activity at any time and in real time.
- Statistics. Statistic information is often the most relevant in the case of corporative communication and interaction. LINE@ application offers a very basic analysis layer, missing data such as channel subscription timestamp, the number of answers or registered messages in the channel (even with automatic answer activated) and how many unique users have answered to coupons or discount vouchers.
- Channels. Corporate channels in LINE@ are always tied to personal accounts in standard LINE, this adds confusion to some functionalities between one and the other. E.g. invites cannot be directly sent from a LINE@ account, but have to go through LINE. If an individual uses a personal account to activate LINE@ accounts, these invites will not be made from corporate accounts but personal. Moreover the list of subscribers to a LINE@ channel or account does not show up in the friends list, meaning from the 156 users subscribed to INNGAMES LINE@ using a link or a QR code, none of them shows up as a friend of LINE@, perhaps due confusion between both accounts.