

The logo for CH & Co. is enclosed in a white square border. It features the letters 'CH' in a large, bold, serif font, with '& Co.' in a smaller, similar serif font directly below it.

CH  
& Co.

Bubble team

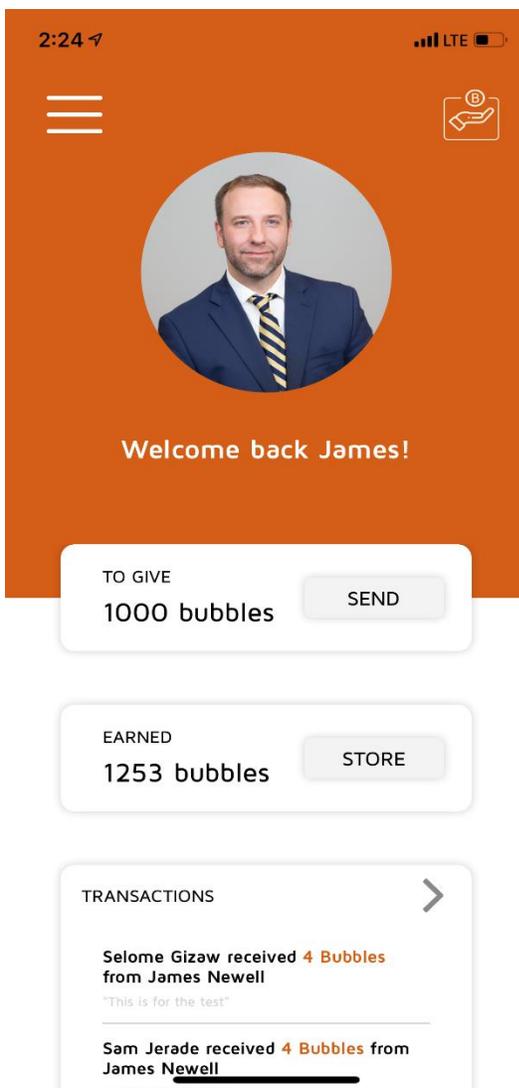
*Fostering a collaborative work environment through a  
reward-based peer-to-peer recognition program*

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## Abstract

Bubble team is a Chappuis Halder & Co. initiative designed to foster collaboration and create a spirit of comradery. Bubble takes a peer to peer approach to let colleagues and employees express gratitude one to another by allowing them to recognize talent, achievement, and contribution that occurs within a team-based environment. Senior Management may not always have the full picture of each team member's contribution even if an active approach is taken to ensure employees are rewarded through bonuses and promotions. That is, it lacks the critical peer-to-peer approach to acknowledging teamwork and contribution. Bubble is a disruptive program that highlights the often-overseen contributions of each CH&Co. consultant.



## Introduction

Bubble team isn't the first program of its kind, as there are currently a few programs on the market such as Bonusly<sup>1</sup> which offers mini bonuses, and Kazoo<sup>2</sup> which offers surveys and rewards. What differentiates Bubble, however, is its gamification and strategy aspect, as well as its universal iOS platform, which allows users to access the program seamlessly on their iPhones. Bubble relies on a proprietary protocol Proof of Gratitude (PoG), which is built on the Ethereum blockchain through Smart Contracts. Bubble has all the advantages of a blockchain: transparent, uncensored, and decentralized.

Whilst the protocol PoG focuses on transactions (Bubble transfer), the algorithm creates an incentive to participate through token scarcity. With the introduction of Bubble decay, users must choose between not only giving away their Bubbles and losing some of the Bubbles they have already received. Through disbursement bonuses, users are also incentivized to distribute their Bubbles across several different users. Our high-quality reward selection and pricing model will ensure that redemption items are both exciting and obtainable, making the users' efforts worthwhile. Offering some interesting lower level items will also ensure that casual players will have something to earn as well.

Bubbles will act as tokens of appreciation which are circulated amongst colleagues who have helped each other in some way. It can be for a specific reason, such as assistance with internal stream deliveries or performance when staffed on an engagement; or as a mechanism to recognize colleagues who have contributed to Chappuis Halder in a positive way. Bubbles received can be redeemed for a choice of any pre-selected prize item using the in-app redemption function.

<sup>1</sup> <https://bonus.ly/>

<sup>2</sup> <https://www.kazoohr.com/>

## How it Works

Tokens are a good way of circulating value because a token ecosystem can incentivize users to interact with others in whichever way most valuable to them, aside from the purely financial aspect. Token communities help build a group of people with stakes in the project and the benefit that they receive from the project in proportion to their effort they put in can be distributed in a way that everyone who wants to participate can do so.

We believe the value of the token must directly be linked to the activity and quality of the community. We want to foster the participation of members, and make sure that users can always participate but at the same time 'stake' their tokens to reward other users.

### The Bubble model

The objective of the model was to facilitate the giving and redeeming of Bubbles in the most expedient way possible. To do this we organized a system that handles both intuitively.

We manage 1 token (Bubble) through 2 types of wallets:

**Distributive:** This wallet manages a limited, fixed quantity of tokens, which are allocated to users to reward others. Users will prioritize to whom they want to give, and for how much. To ensure consistent participation, the number of the tokens in the distributive wallet will reset back to the initial number of tokens at the end of each period.

**Redeemable:** This wallet manages the tokens received from colleagues. The number of tokens in this wallet is variable and derived from the distributive amounts available to give. These tokens will also decay at a variable rate as detailed in the pricing section of this paper. These are the tokens that can be used to redeem rewards.

Redeemable Bubbles are a function of the number of Bubbles available to distribute, and have no intrinsic value in and of themselves, except as in-game currency. Distributive Bubbles do have intrinsic monetary value since these are the Bubbles that need to be purchased by an outside firm in order to participate in the game. Each Bubble will pass from person to person, transitioning from Distributive to Redeemable in the process. The number of distributive Bubbles circulating in the game is determined by the firm or purchaser.

As for the game itself, each player will start with the fixed number of 1000 Bubbles in their distributive wallets, which will reset each week. One full Cycle lasts 12 weeks, and each week is broken up into

weekly Periods that lead up to a lottery. For testing purposes, we have decided to reset the Distributive wallet balances after each weekly lottery to ensure that all users have enough Bubbles to give to their colleagues. After the trial period we will determine whether to continue resetting the balances. The 1000 Bubble balance was strategically chosen to optimize the ratio of distributive Bubbles and bonus Bubbles.

Figure 1. Distributive wallet Bubble balance over each period

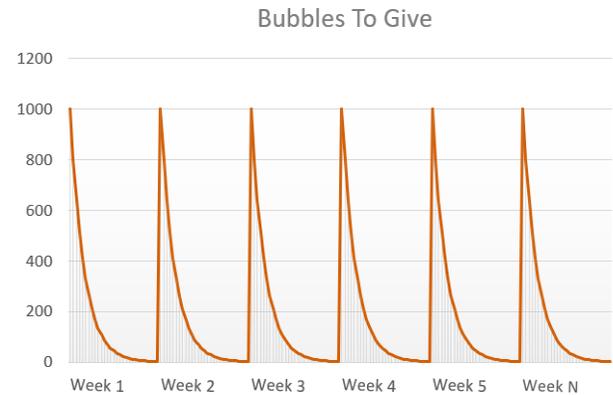


Figure 2. Redeemable wallet Bubble balance over each period



Each user will give the Bubbles in their Distribution wallet to other users for a variety of reasons. For example:

1. Express gratitude to a colleague for his or her participation in a training
2. Reward a colleague for assistance in completing a task
3. Encourage/cheer up a colleague who is having a difficult time at work

Each transaction is typically between two parties, by selecting the team member from the directory as seen here on the right. Once a selection is made, the

colleague will be taken to a transaction screen (below). Here they will input the number of Bubbles and the reason for the recognition. However, additional users can also add Bubbles to an existing transaction between two parties should he or she wish. The Bubbles distributed by a user will be deposited in the recipient's 'Earned' wallet where each user can then redeem the available Bubbles in his or her Earned wallet for rewards.

Figure 3. Adding recipients

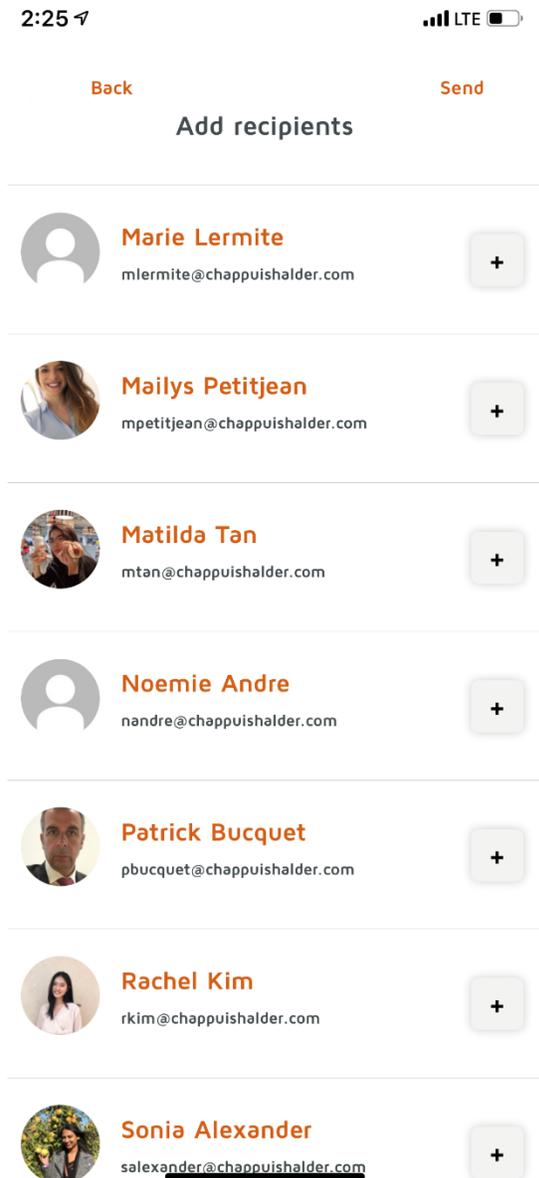
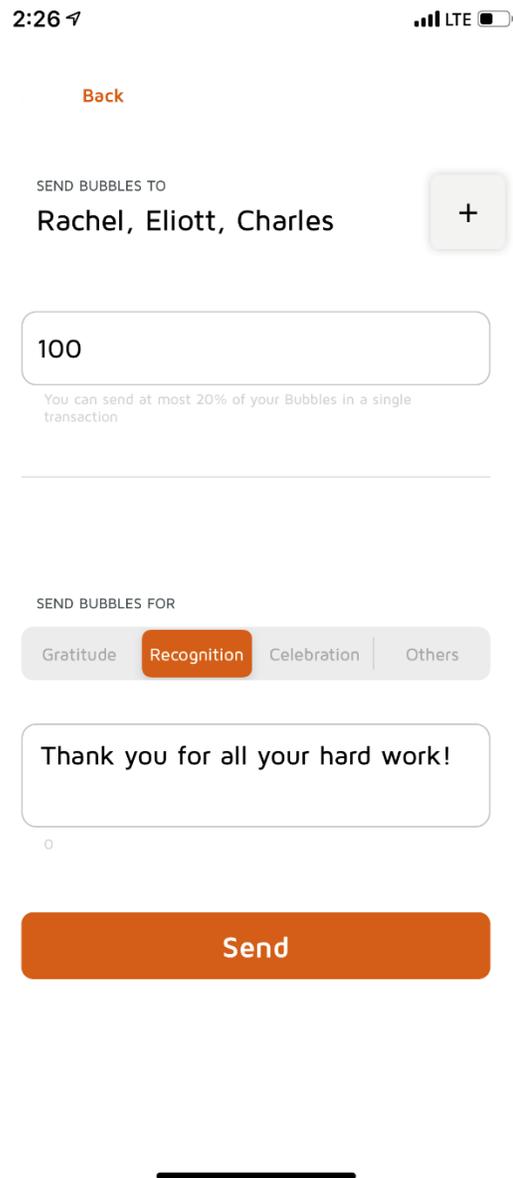


Figure 4. Transaction screen



There will also be some Bubbles set aside in the Company ('Treasury') account. These Bubbles will be used for engagement strategies to promote usage of the Bubble app within the firm. For instance, when a user opens the app 5 days in a row, he or she will receive 5 bonus Bubbles deposited into their Earned wallet, as well as a Bubble for each additional day that they keep their streak alive.

They will also receive bonus Bubbles if they spread out their Bubble gifts. They will receive 5 extra Bubbles when they give Bubbles to 5 individual colleagues. This allows for more disbursement of Bubbles and limits concentration of Bubbles to just a few people. In addition, there are other situations

where Bubbles are added or returned to the Treasury account:

1. When a user redeems his or her Bubbles for a prize, these Bubbles are returned to the Treasury account.
2. When Bubbles are forfeited by an employee no longer with the firm, these are also returned to the Treasury.
3. When a new person joins the firm and there aren't enough in the Treasury account, the difference between the available amount and the required starting amount will need to be added.

It is advised to maintain enough Bubbles in the Treasury to account for the points listed above. This will allow the game owner to keep track of all Bubbles at the start of the cycle, as opposed to issuing new Bubbles once the cycle has begun, and then adjusting the prices of the items in the on the Redemption Page.

#### Key drivers

Sending and receiving Bubbles is a very simple process: when a user sends Bubbles to another, Distribution Bubbles are sent, and Redeemable Bubbles are received/created as a function of that transaction. When such a transaction is done, other users can like it, which would also increase their Earned wallet by 1 additional Redeemable Bubble.

Every user can send Bubbles whenever he/she wants, for the reason of their choice and every user can receive Bubbles all the time. To counter possible acts of collusion, a user cannot send Bubbles to the same person twice within the same day. Also, if a user has more than 10 Bubbles in his Distribution wallet, he cannot send more than 20% of the remaining amount of these Bubbles. The point is to prevent users from laundering Bubbles and subverting the goal of the game, which is to reward colleagues, not to acquire rewards yourself.

We ensure that the entire community will have enough Bubbles to recognize colleagues, but they must be thoughtful of why they are giving Bubbles, and to whom they are giving them to. There are a fixed number of Bubbles to give, and even though that figure resets each week, there are a finite number of employees to recognize and as mentioned in the following section, giving Bubbles to one colleague means there are less Bubbles to give to other colleagues during the current cycle.

Another crucial object is to keep people interested by the app. The engagement strategy rules are dedicated to this task. As mentioned above, when a user gives Bubbles to 5 different users, they will earn 5 bonus Bubbles, or when a user opens the app 5

days in a row, they will also earn 5 bonus Bubbles, and then a bonus Bubble each day they keep their streak alive. Receiving these bonus Bubbles which can be redeemed will incentivize people to use the app and continue to be engaged.

#### The Bubble algorithm

We built an algorithm to manage the tokens in order to:

Incentivize users to give to others, with a lottery inspired by Prize Linked Savings Accounts, in which each user will stake his/her tokens to reward a colleague, and this will give him/her the right to participate to the lottery to win a percentage of the Bubbles given

Committing users when they give Bubbles, with a Proof of Stake approach, each user can assign a limited number of tokens to his/her colleagues

Incentivize users to return the rewards, to avoid people who would just receive and not participate in the community, with a negative interest rate on the Bubbles earned if the user is not giving back to others

Our proprietary algorithm is aimed at structuring and incentivizing the activity within the community.

## The Incentive to Give and Receive

### Benefits of giving bubbles

The giving of Bubbles is very similar to staking, which works very well when it comes to commitment for reputation for instance. When you give some of your Bubbles to a colleague, you are committing to that transaction, as you can only give each Bubble once and as you have a limited number of Bubbles to give. And there is a limit per transaction, 20% of the remaining balance, so users must prioritize their giving to the most worthwhile colleague.

When giving Bubbles to a colleague, users are staking part of their token to that transaction, as they will get the token back at the end of the period. When staking, users are playing for a lottery, which can make them earn more Bubbles.

Users must consider how many Bubbles to give, to whom, and if the gift meets the value of the act they are rewarding. So, when you decide to reward a colleague it is a big commitment because it means you will not have those Bubbles at later stages of the game to give to other colleagues. Users are encouraged to treat these transactions thoughtfully, but they are encouraged to give as the engagement strategy has been designed to reward users who do give their Bubbles in the form of bonus Bubbles from likes, and lottery winnings.

Early in the process we considered applying the Bubble decay rate to the Bubbles each user must distribute. We reconsidered this however after realizing that this unfairly penalizes players by limiting their ability to give and runs counterintuitive to the spirit of the Bubble program, which is to allow employees to recognize other employees.

In place of decaying the amounts of Bubbles you can give, we have decided to place the decay rate on the amount of Bubbles that you have already earned from your colleagues.

This motivates users to give Bubbles, while at the same time, not hindering their ability to do so. When a user gives Bubbles to another, they will increase their chances of receiving more, and receiving them much faster. By making more transactions, there will be more opportunities for this user to get likes, which will also provide him/her with bonus Bubbles. There is significant value to receiving those extra Bubbles because they get stored in the user's Earned Wallet, and will be redeemed by the user for the different available items in the store. Because of this, giving Bubbles will allow users to accumulate more Redeemable Bubbles faster, because colleagues

will feel more inclined to reciprocate. In other words, the more Bubbles you give, the better your reputation will be, the more Bubbles you will get. Give to receive at its peak, with the added value of creating additional bubbles by interacting with the community. This is very similar to the PoPP protocol for the crypto pay service Metal (MTL)<sup>3</sup>. There is a direct relationship between community involvement and amount of bonus created because of that involvement.

Furthermore, giving Bubbles to other users is supposed to recognize and thank them for their time and help. It shows the entire community that receivers have a specific skill or simply that they can collaborate with other people. The point is to increase collaboration within the community and giving Bubbles will allow a virtuous circle to appear, which will benefit all the employees of the company.

### Bubble scarcity

As mentioned above, each user is limited to only giving 20% of their remaining wallet per transaction. This was done as a way of limiting collusion, and with the Proof of Stake concept in mind. However, there is another force at work as well. Scarcity plays a major role in deciding size of each transaction.

As the starting amounts are fixed, and the refreshing amounts are relative to your giving amount, the result is a creation of a finite amount of Bubbles, and infinite demand for those Bubbles. In other words, Bubbles given today, means less available Bubbles to give tomorrow, and the possibility that you will not have enough Bubbles to reward a colleague properly when the situation arises.

This is another reason why users are encouraged to be thoughtful with their Bubble gifts, and to make sure that the gift aligns with the action it is rewarding.

### The lottery inspiration

One of the main ways we have decided to incentivize and encourage the giving of Bubbles amongst staff was to create a lottery system that benefits you for playing, but at the same time penalizes players who don't. The system is based on the model of the Prize Linked Savings Accounts offered around the world<sup>4</sup>, and Premium Bonds introduced by the U.K. in 1956<sup>5</sup>. The concept is very similar in nature in that it encourages participation, however in our model we have introduced what we call "Bubble Decay."

Since entries into this lottery are based on how many Bubbles you give to your colleagues during

<sup>3</sup> <https://www.metalpay.com/>

<sup>4</sup> <http://www.savetowin.org/>

<sup>5</sup> <https://www.nsandi.com/premium-bonds>

the lottery cycle, those who do not give, have a portion of their Earned Bubbles removed from their wallet at a higher percentage than those who have given much more. These Bubbles are then used to fund the bonus Bubbles given to the winner that can be redeemed on the Redemption page, thus reducing the amount of new Bubbles needed to be generated over the course of each cycle, to pay the winners.

During the testing phase, after each lottery cycle has completed, everyone who has been entered into the lottery will receive an amount equal to the amount they have given during the period. This will allow everyone to keep playing and recognizing their colleagues hard work, as opposed to having to wait until a new quarter begins. Once testing has been completed, we will make the determination to continue this practice based on analysis of the testing data.

The lottery algorithm

The lottery is designed to incentivize people to send Bubbles and penalize people who don't. The concept of the lottery is that each Bubble a user sends will become an entrant for the lottery automatically, and this potential gain will push all users to give.

The odds of winning are: Entrants / Total entrants' amount

The more Bubbles you send, the more chances you have to win, and the winner will receive a percentage of the total amount of sent Bubbles (10%) into their Earned Wallet. All the Bubbles sent during the period constitute the pot.

At the same time, people who don't play, i.e., people who don't send a lot of Bubbles will get penalized. You proportionally lose earned Bubbles relative to the amount of Bubbles that you have not sent compared to everyone else in the community.

For instance, if every user has sent 10 Bubbles, and you have only sent 5, you will lose twice as many Bubbles than everyone else (in percentage of your Earned Wallet). The less Bubbles you send, the more earned Bubbles you lose.

It works by first defining two rates:

- The lottery winning rate:  $r(w)$
- The earned Bubble decay rate:  $r(r)$

Let  $U_1$  be a Bubble user. Let  $D(u_1)$  be the number of Distributive Bubbles that the user had at the beginning of the lottery period, and  $S(u_1)$  the number of Distributive Bubbles that he has spent during that period. Let  $R(u_1)$  the number of Earned Bubbles that the user has at the end of the period.

The winner of the lottery wins a total amount of Earned Bubbles equal to the sum of all Distributive Bubbles spent by all users during that period times the lottery winning rate  $r(w)$ .

The negative interest rate of not giving & playing

Although players are incentivized to give to each other through our dynamic pricing model, Each user can lose a very small portion of his/her Earned Bubbles proportional to the amount of Distributed Bubbles that he/she did not give when compared to the total amount not given by all users. This way, the more a user has given, the less he loses. This prevents users from only accumulating Bubbles, while not rewarding anyone in return. The ratio can be tweaked based on performance and initially we have set the decay rate at 0%.

Here is how we calculate the new Earned Wallet of the user: if we call NP the total number of Distributed Bubbles not given by players during that period:

$$\text{New } R(u_1) = R(u_1) \times (1 - (D(u_1) - S(u_1)) / NP) \times r(r)$$

The Earned Bubbles decay rate  $r(r)$  is meant to reduce the decay, if needed. Each company can decide to change the different parameters,  $r(w)$  and  $r(r)$ .

## Pricing the items on the redemption page

Inspired by the Monetarist Theory ( $MV = PQ$ ), the Bubble pricing model is built with the core assumption that the total number of Bubbles in circulation at the end of the Bubble economic calendar should equal the total price of goods available in the Bubble market. This allows for more dynamic pricing and ensures that all Bubbles will eventually be redeemed. This model is also particularly effective in addressing the main goal of our pricing objectives, which is to retain maximum incentive to give among colleagues.

By pricing goods to be redeemable at the end of the full Bubble calendar and not easily obtainable prematurely, or unobtainable at all (as is the case in winner take all models) we will encourage users' maximum participation. This very proprietary incentive mechanism is what is unique to Bubble and differentiates it from the myriad of competition.

In execution, the model will calibrate the prices of items in the store to the circulation of bubbles in the economy on a weekly basis, to more accurately predict the expected rate of Bubbles in circulation for the full 12 weeks.

That is, if the average rate of Bubbles in circulation increase, increasing the average buying power of users, the prices of goods in the store will also increase to ensure items are not redeemable prematurely- incentivizing users to continue rewarding each other on the platform. On the other hand, if the expected rate of Bubbles in circulation by the full 12 weeks decreases, prices will also decrease to ensure store items are not unobtainable and can incentivize users to continue using the platform.

Simply put, the model will inflate prices of goods when there is a higher circulation of Bubbles in the economy and deflate when there is a lower circulation in order to act as an apt incentive mechanism.

It is each user's best interest to recognize their colleagues with Bubble gifts, because it better regulates prices, and in turn encourages those colleagues to recognize your hard work and achievements as well.

Figure 5. Assumptions of pricing outcomes

Summary Table									
Number of Users:	40								
Bubble To Give:	1000								
Cycle Weeks (t):	12								
Redemption Rate (a):	100%								
Number of Weeks (t)	% "To Give" Bubbles Sent*	ActualCumulative Total Number of Earned Bubbles	Bubbles for Full Redemption	Price of Each Quantity of Goods					
				P1	P2	P3	P4	P5	P6
1	0.5	20000	240000	12857	10714	8571	6429	4286	2143
2	0.5	40000	240000	12857	10714	8571	6429	4286	2143
3	0.5	60000	240000	12857	10714	8571	6429	4286	2143
4	0.7	88000	264000	14143	11786	9429	7071	4714	2357
5	0.3	100000	240000	12857	10714	8571	6429	4286	2143
6	0.5	120000	240000	12857	10714	8571	6429	4286	2143
7	0.5	140000	240000	12857	10714	8571	6429	4286	2143
8	0.5	160000	240000	12857	10714	8571	6429	4286	2143
9	0.5	180000	240000	12857	10714	8571	6429	4286	2143
10	0.5	200000	240000	12857	10714	8571	6429	4286	2143
11	0.5	220000	240000	12857	10714	8571	6429	4286	2143
12	0.5	240000	240000	12857	10714	8571	6429	4286	2143

\*Only for modelling purposes to see how % of bubbles circulated in any given week will impact adjustment of prices at end of week - not relevant in production  
Assumption: 40 members in Bubble economy

Figure 6. Visualization of Pricing

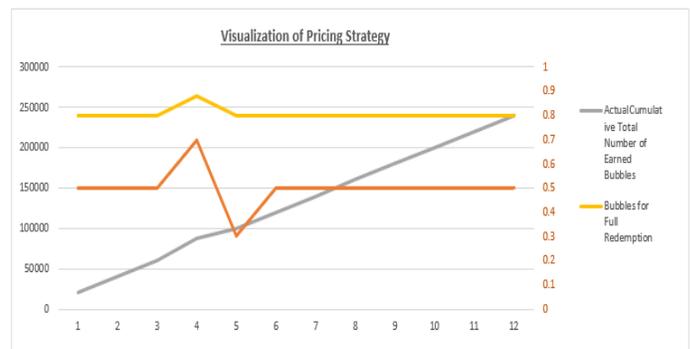


Figure 7. Pricing inputs formula

$t$  = Total number of weeks in a full Bubble Calendar  
 $a$  = Calibration variable to account for dormant Earned Bubbles  
 Price Ratio <sub>$i$</sub>  = Ratio of good <sub>$i$</sub>  to the total ratio of goods

$$\text{Price of Item}_i = \left( \frac{\text{Cumulative sum of all earned bubbles}}{\text{Current week}} * t * a \right) * \left( \frac{\text{Price Ratio } i}{\sum_{n=1}^6 (\text{Price Ratio } n * \text{Quantity}_n)} \right)$$

## Redeeming items on the redemption page

When users want to exchange their Bubbles for rewards, they must go to the Redemption page which will function as a store by using the side menu button. Once they are on the page, they will be able to redeem their Bubbles for the item of their choice. They will only be able to redeem the items with the Bubbles they have "Earned". The transaction of the redemption will appear on the Transaction page after the selection had been made. Once all the items of a certain kind have been redeemed, they will be marked as out of stock and not be redeemable.

There will be several options for the rewards and another custom option in which users can donate their earned bubbles to the charity of choice. For each 1000 Bubbles donated to the charity of choice, Chappuis Halder will make a 1\$ donation to that same chosen charity.

As outlined in the pricing section, the price of the items will be staggered. The goal is that everybody can have the opportunity to win something. If the rewards are too hard to obtain, or too easy to obtain, people will lose interest. The store is the very first part of the engagement strategy, so it is important to price the items accordingly. Having the chance to get amazing reward items will indeed serve as a big motivation for people to use the app and engage in the Bubble program.

Figure 8. Tracking of redemptions

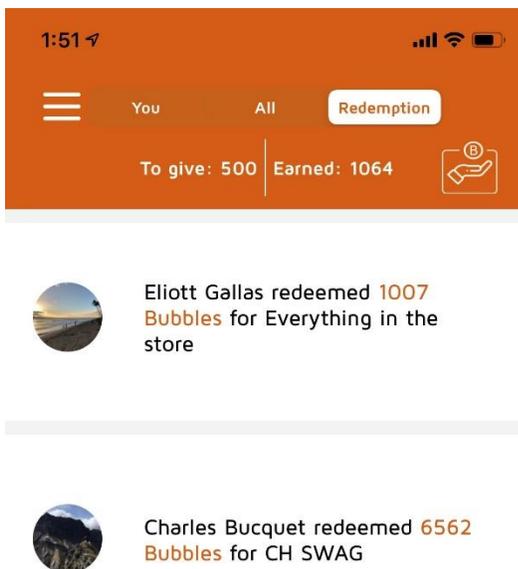
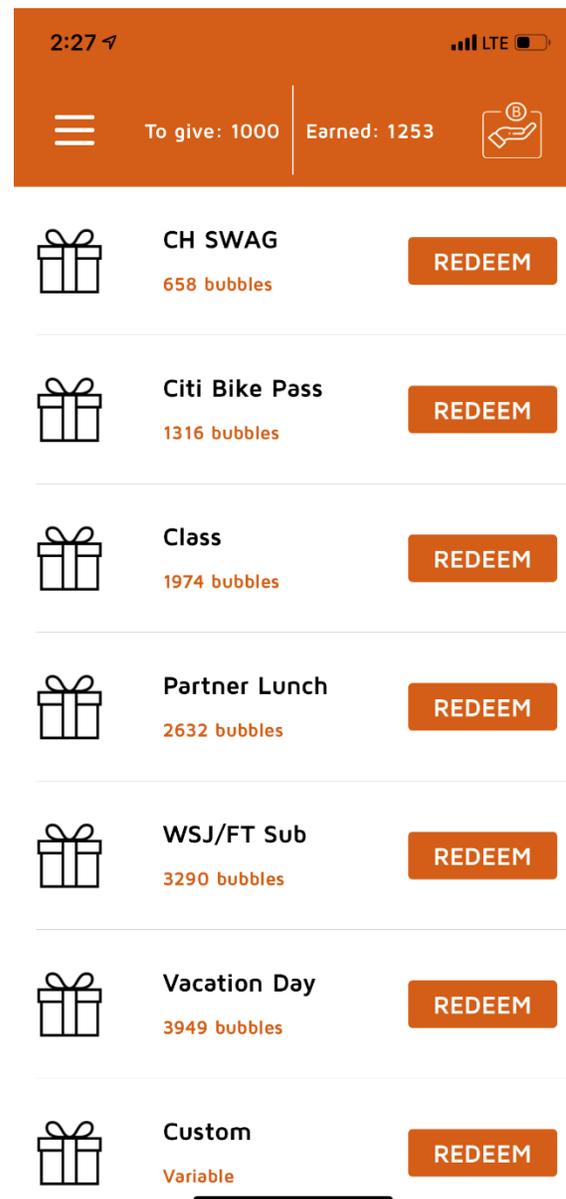


Figure 9. Redemption options



## Developing a Clear Engagement Strategy

### Categorizing the Engagement Types

In order to develop an effective engagement strategy, it is important to categorize the user activity into specific categories. For the purposes of Bubble, we have identified 3 key stages in the user 'life-cycle'. For each stage, a key component of the engagement strategy will consist of tasks or challenges the user will need to perform for some form of gratification (in the form of a Bubble, Badge, or public recognition). The 3 stages are:

#### Stage 1: Initial engagement with the app

**Objective:** Address the acclimatization of the user to the basic functionalities of the Bubble application and entice users to explore the application's capabilities.

**Examples:** Simple achievements meant to reward users for performing basic tasks such as uploading a profile picture, liking a transaction, or sending the first Bubbles.

#### Stage 2: Engagement with other users

**Objective:** Address the development of the peer-to-peer environment and entice users to pursue transactions, both from a distribution and a receipt of Bubbles perspective.

**Examples:** A tiered achievement structure meant to reward users for continuously engaging with their peers. Achievements may be straightforward such as participating in X transactions or liking X transactions. Additionally, they may be more complex, wherein the achievement requires sending Bubbles to X different users or liking X different users' transactions.

#### Stage 3: Continuous engagement with the app beyond Stage 1 (most difficult)

**Objective:** Address the retention of users beyond the initial 'honeymoon period'.

**Examples:** This is where creativity would be key. Challenges, such as sending Bubbles to users of various seniority level or receiving the most Bubbles in a single day, would continuously drive engagement as long as they provide sufficient enjoyment to the user to complete. If the challenges become too repetitive or boring, the effect of this engagement strategy would quickly dissipate.

## Structuring the Achievements

The following components would help provide a means of identifying and organizing the various achievements according to the intended purpose, objective, and complexity. As of now, the criteria under consideration is:

**Task Performed:** What action does the user need to take to achieve/accomplish the achievement?

- Example: Like Transactions

**Metric:** What will the achievement measure?

- Example: Number of liked transactions

**Tiers:** Can the same task have varying complexity? If so, a tiered structure can be devised to reward gradual progression

Example: Tier 1 (Easy) to Tier 3 (Most Complex)

**Receipt:** What does the user receive in return for accomplishing the achievement?

- Example: 5 Bubbles for liking 5 transactions

**Repetition:** Does it make sense for the task to be repeated multiple times?

- Example: Consecutive daily logins into the application can be reset after every missed day

**Complexity to Install:** What is the complexity to develop and track this achievement?

- Example: Some achievements, such as integrating seniority for each user, may be impossible to accomplish

## Additional Engagement Strategies

The achievement approach can be one stage of a multi-faceted engagement strategy. Existing strategies that are part of the underlying application can also be leveraged to increase engagement (i.e. lottery system, notifications).

Additional in-app engagement strategies that will need further exploration and may include items such as:

- Leaderboards highlighting the top performers across various categories
- Temporary (daily/weekly/monthly) challenges that require engagement in that time period
- Exclusive benefits for achieving certain stages

Subsequently, the firm can leverage mediums beyond the application itself. The firm can incorporate engagement with Bubble into its daily culture, developing a work environment that

revolves around the core functionalities and benefits of Bubble.

## How We Structured and Executed the Project

### Project ideation

Bubble started as an approach to solving the pain points of increasing staff happiness, strengthening employee retention, and adding another avenue for recognition outside of the traditional mid cycle and year-end bonus structure currently in place.

Over the course of several months we went through several iterations of adding and removing features. Ultimately, we decided to strip the app down to the main features, develop a proof of concept that can be used for testing, and then a second round of enhancements and fixes after receiving the feedback of our office colleagues.

### Development and rollout

The team consisted of 4 consultants, one intern, one developer executing this project using Agile Methodology. Functions of the app were broken into 'Sprints' which were developed and tested on a rolling cycle. After each Sprint was designed, the development of the screens and functionalities were developed. While new functionalities were being designed and developed, the other members of the Bubble team were busy testing out the new features, and logging bugs or potential enhancements. Items were tracked on a Kanban board using the 'To-Do,' 'Doing,' and 'Done' categories. We also captured a 'Backlog' category to allow us to include longer term tasks that needed to be accomplished but could not be started immediately.

Development took three weeks - utilizing the one experienced apple developer with the help of the intern and four Bubble team members serving as testers. Once the main functions of the app were developed, tested for stabilization, and published in the Apple App Store, we onboarded the rest of the New York staff as beta testers and proceeded to run a real world testing trial utilizing one full cycle of one calendar quarter.

### What's coming next

The Bubble does not have to just be a means of recognition for past actions. It can also be a marketplace for ideas and knowledge sharing, where people come together and offer their expertise and help on a variety of relevant topics.

We will offer a section for people to announce their abilities to give lectures or hold trainings, gauge the appetite of colleagues' willingness to attend events, or auction their availability to help with future tasks, all priced in Bubbles of course.

## Fundraising Through the Selling of Bubble Token

### Business model

Our ultimate goal with this project, in addition to increasing employee engagement within our own company, was to create a portable solution for our clients to use, as well as outside firms who don't have the appetite to create a program and accompanying application from scratch.

Each Bubble game will be structured individually per company and act as a closed economy per each user group. To extend the app for other firms, we will use a similar approach to the app Cosy.1 Each person will login with their company email address, and the password would be a company password, meaning everyone in the company would have the same one. This would allow us to sort users by company in the database. As a point of sale, clients will purchase access to the program by buying an allotment of Bubbles that they will distribute to each of their staff members acting as players in the game. As of the time of this paper, it will be used as an internal program, but there is the potential to combine games among firms to not only create comradery within each firm, but also to strengthen ties across partnership firms.

To create awareness, expand the app to a wider userbase and further develop the intended functionalities, we will be using an ICO to raise the requisite funds needed to make the project a success. We will issue tokens contracts that can be invested in through exchange of Ether tokens. Each token will be exchanged for access to the platform and an allotment of Distributive Bubbles that investors would issue to their players. Each client firm would be responsible for stocking the redemption items in their respective store.

There is no limit to the amount of Bubbles that we can create and sell to clients, however each amount purchased would be in increments of 1000 from us or through a preferred marketplace. Amounts will vary and be based on their company's needs. The amount of Distributive Bubbles will be fixed to the allotment they purchased initially, however the amount of Redeemable Bubbles will be based on the amount of Distributive Bubbles they own, and velocity of transactions their users engage in. The pricing in their respective stores will also be a function of their distributive allotment and velocity of transactions. This pricing is totally owned by the company itself, and as the Distributive Bubbles do not disappear, the Tokens the company buys stay forever, and the company only needs to buy new tokens to add new employees or create incentive program.

Chappuis Halder will be the creators of distributive Bubbles, however client firms and investors may

resell their previously purchased Bubbles through an exchange on the secondary market. This could prevent the unnecessary creation of Bubbles.

### Token issuance

Tokens will be managed as ERC20 token on Ethereum.

The Ethereum blockchain is currently the industry standard for issuing custom digital assets and smart contracts. The ERC20 token interface allows for the deployment of a standard token that is compatible with the existing infrastructure of the Ethereum ecosystem, such as development tools, wallets, and exchanges. Ethereum's ability to deploy Turing-complete trustless smart contracts enables complex issuance rules for cryptocurrencies, digital financial contracts, and automated incentive structures.

We will issue Distributive tokens to companies willing to use the service. The price is set to \$500 / employee per year, and tokens are 'rent' to companies, in order to also finance the maintenance, the platform.

### Use of blockchain

We have already seen the power of blockchain technology and cryptocurrency with the rise of Bitcoin. Blockchain allows for a public ledger that can be shared by users and is unchangeable. It allows for decentralization which can allow users to share virtually everything; content, connections, funding, staffing and more, the possibilities are virtually endless.

Given the sheer amount of transactions and redemptions that will be taking place with Bubble, we will require a public ledger to track all of them. We would like that tracking to be done automatically and autonomously. Ethereum utilizes public blockchain technology in a way that is the most relevant to us and our needs.

Ethereum will allow our developers to build and execute what are called decentralized applications or 'Dapps' using smart contracts. For the uninitiated, Dapps are fully autonomous, decentralized organizations with no single leader, run by programming code, on a collection of smart contracts written on the Ethereum blockchain.

This code will be designed to manage all transactions automatically, and in full transparency thanks to smart contracts, eliminating the need for people and centralized control. It will be available to everyone who purchases the Distributive tokens, but instead of each token equating to equity stake and position, the tokens act as contributions that give

people access to, and a stake in the Bubble program.

The use of the Distributive Bubble as a token creates a community for the Bubble program where everyone who holds a token is an owner, giving those owners a stake in the outcome of success. In other words, the more successful the program is, the more successful the owners of the tokens become.

## Conclusion

The Bubble mission is to foster a spirit of collaboration and comradery. We Provide users with an intuitive app through which they can use as an avenue to recognize and reward colleagues.

The act of sending Bubbles at its core, is a gesture of appreciation and acknowledgement that 'we are in this together,' and with just a little help from your friends & coworkers, we can accomplish more, create more value for the firm, and strengthen the bonds of team work. Our hope is that by leveraging the talents and abilities of colleagues, there is no limit to what can be achieved when we work together.

Bubble is a way to bridge the gap between staff and management with respect to recognizing the hard work and contribution that each employee makes. While each member's contribution to the team may not be visible by senior leadership, it is visible and counted on by the people with whom you stand shoulder to shoulder "in the trenches."