

Gamification as a Customer Loyalty Tool. Evidence from the Italian Banking Industry

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Abstract

Over the last few years, gamification, that is the adoption of gaming techniques in non-gaming contexts, has proved to be a powerful tool for customer loyalty and involvement, in many sectors such as, for example: e-learning, tourism, marketing, eco-sustainability and medical health. The objective of this paper is to focus attention on the Italian banking industry in order to investigate the level of implementation of gamification mechanics within the offer of banking products and services. The use of gamification could represent a good opportunity for banks to strengthen the relationship with customers, making a particularly boring activity enjoyable, just by leveraging emotions and psychological factors (fun and motivation). However, from the analysis of the universe of Italian banks taken into consideration, emerges a sector still little inclined to the assimilation of this approach and in the few cases observed a situation of poor diversification between the techniques of gamification.

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1. Introduction

For some years now, the international banking industry has been involved in a long and demanding process of offering banking services via IT channels and has become the protagonist in the transition from typically traditional operations to digital ones. Digital banking is based on the provision of a series of banking services through the use of technology (online or mobile platforms), in order to allow banks and their clients to benefit from a series of advantages. On the one hand, banks can benefit from increased efficiency, reduced costs and greater competitiveness, while at the same time, customers benefit from easier and faster access to the banking products on offer, with a consequent reduction in costs (Tunde, 2014). Through a radical transformation of the business model, in which the smartphone becomes the pivotal tool, the bank/customer relationship has changed considerably. In particular, the new reference target of banks is made up of Millennials, represented by people born after 1980 and who are particularly practical in the use of cell phones, social media and digital technology in general. This has led the banking industry, in order to preserve an important slice of its clientele, to transform and improve its internal structure and to make considerable investments in technology to adapt its supply system. This in order to make interactions smoother, increase employee productivity and recover economic results weakened by the financial crisis.

The ongoing transition to the digital banking model has also been accelerated by the distancing measures that became necessary as a result of the health emergency caused by the Covid 19 pandemic. Social distancing and measures restricting individual mobility have led customers to perform many banking transactions online that were previously mostly done physically (Deloitte, 2020).

According to data gathered from the survey conducted by the Bank Administration Institute (2020), the transition to digital is not a transitory phenomenon but is only at the beginning of its journey. The survey showed that a high percentage of consumers (87%) intend to continue using digital services even when the current critical phase linked to the health emergency has passed, or rather when banks can restore their original physical contact with customers.

However, in the face of the optimism reposed in the digital phenomenon, there has been a contraction in customer confidence in banks and in the ability of the latter to take care of their financial well-being (Accenture, 2020). Therefore, it is necessary for banks to change their image in order to make it more attractive to customers. Among the possible ways forward, it is worth noting gamification, an expression that identifies the use of mechanics and dynamics of games in non-gaming contexts. It could represent a good opportunity for banks to recover and strengthen their relationship with clients. Gamification, by leveraging emotions and psychological factors (fun and motivation), would make even the most boring activity enjoyable and, consequently, increase involvement and participation in banking.

It should come as no surprise that, once its potential has been recognized, in addition to banks, more and more companies, of various kinds, have begun to consider gamification both as a tool to improve the customer experience (customer journey)

and as an aid to traditional staff training techniques, to improve performance. In Italy, banks have made great strides in the digital arena, albeit limiting the use of gamification principles mainly to staff training and selection (Russo, 2019). The potential of this approach positively influences motivation and learning and allows positive returns in terms of employee performance and return (Hamari, et al. 2014, Werbach and Hunter, 2012).

Having said that, the present work, through the in-depth study of the contribution of gamification to the improvement of bank-customer relationships, with a focus on the Italian banking industry, aims to try to fill the gap in the existing literature on the subject, which has turned out to be rather meager.

In particular, the work intends to analyze and describe the rate of adoption of gaming elements by Italian banks, both with regard to basic and investment services. An adequate application of gaming techniques to the banking offer could, on the one hand, encourage the online access of customers, through unique and interesting experiences, and on the other hand increase the economic performance of the banks involved.

This article first (section 2) focuses on the key concepts related to gamification, then (section 3), it examines the different sectors in which it is applied, with a focus on the characteristics of the phenomenon in the banking industry. Next (section 4), the methodology used to pursue the purpose of the research and to understand the degree of penetration of gamification techniques in the Italian banking industry is described. Section 5 comments on the results of the survey; section 6 concludes.

2. Gamification: definition and characteristic elements

Gamification represents a phenomenon of great actuality and in continuous evolution. It has its roots in the use of the dynamics of fun and games to motivate people and make work more enjoyable. It was first mentioned in 2008 by Bret Terrill, in a blog post, who defined it as: "taking game mechanics and applying them to other web properties to increase engagement".

Only later, since 2011, the expression gamification has gained popularity and has acquired an academic dimension.

The definition undoubtedly best known and cited is that of (Deterding, et al. 2011), according to which: "gamification is the use of game design elements in non-game contexts".

The authors state that, first of all it is necessary to distinguish between the terms "game" and "play". The term "play" is related to the idea of the game without rules, the free fun driven by improvisation, the word "game" refers to the system of rules and objectives that generate the structure of the game itself and that guide to specific behavioral choices, such as cooperation and/or competition among participants. Gamification, therefore, does not deal with the contents of the game, but with its structure, with what surrounds the content. It's the form, that is the set of techniques, rules, mechanics and dynamics of the game, to define the game itself and to promote, on one hand, the systematic involvement of players and, on the other hand, a process

of learning and production in every working environment.

Alongside the definition of Deterding et al. others have followed.

Zichermann and Cunningham (2011), argue that "gamifying is thinking, designing, and relocating game mechanics, dynamics, and elements into everyday systems or processes with the aim of orienting towards solving concrete problems or, in parallel, to motivate specific groups of users".

Werbach and Hunter (2019) confirm that gamification takes the form of "the use of game elements and game design within non-game contexts".

Burke (2014) considers it as "the use of game mechanics and experience design to digitally engage and motivate people to achieve their goals".

According to Huotari and Hamari (2012) it is possible to distinguish two components of gaming. A "systemic" one that indicates the structure of the game, the rules that are part of it, and the goals; and an "experiential" one that describes the emotional involvement of the player, leading him/her to a voluntary participation and acceptance of the characteristics of the game experience. Voluntary adherence to the game can stimulate participation in it by other players and ensure a unique and stimulating experience in a safe and pleasant environment (McGonigal, 2011).

Therefore, it could be argued that gamification aims to eliminate the difference between what individuals feel they have to do (work activity) and what they want and desire to do (Piave, 2019). The individual who is highly motivated will perform their activity with more passion and effectiveness. It follows that building and managing work activities that can draw on the experience of games, can be a key success factor underlying learning and production processes.

Gamification has characteristics borrowed from games and applied to non-gaming contexts, for purposes other than those of an entertainment product. The object is represented by activities that are placed in work contexts with the aim of improving the relationship with users, to retain them, precisely through engaging and effective experiences.

The entertainment assumes the only instrumental character to make the experience of players-customers more enjoyable and interesting (Deterding, et al. 2011).

When designed correctly, gamification has a substantial business impact and becomes an important tool for engaging customers (Burke, 2014).

For a gamification system to be considered effective, a winning combination of elements and features is required in order to also create a quality website.

Customers are not only looking for information, but also for an attractive and aesthetically pleasing web design (Cox and Dale, 2002).

The main elements of gamification can be analyzed starting from the one with higher perceptibility to the one with lower visibility (Hofacker, et al. 2016, Schell, 2015).

The user interface (aesthetics) is probably the most important element and coincides with the graphics. It is the latter that enables a more engaging user experience for effective learning. Unintuitive graphics, as well as slow software, penalize the user experience and risk making the learning process, mediated by these technologies,

ineffective.

Game mechanics such as challenges, feedback, virtual goods, point collection, prizes (rewards) and winnings, levels and rankings, virtual reality, simulations and progress bar represent the main elements of the gamification system and can be compared to the rules of the game.

The elements mentioned above guarantee interaction and competition among the participants, stimulate their motivation, adhesion and loyalty towards the games, and constitute the basic ludic infrastructure. These game mechanics underlie actions, behaviors, and control mechanisms that create, together with the game components, good game dynamics (Hunicke, et al. 2004, Werbach and Hunter, 2012, Yang, et al. 2017). In essence, each mechanic is closely related to and satisfies a particular game dynamic, i.e., the human needs and desires embedded in each.

It follows that from the mechanics just mentioned, game dynamics are activated. The latter are closely related to the psychology of the individual. For example, the satisfaction in receiving prizes or rewards (which are obtained after accumulating a certain number of points) leads the player to feel fulfilled on a personal level and therefore motivated to interact more and more with the game system. The dynamic of competition is activated by more than one dynamic, let's think to the accomplishment of challenges or missions or to the mechanics of levels and rankings. The segmentation of players into levels on the basis of achievements (often based on accumulated points that allow to level up) not only affects the status of the individual, compared to others belonging to the same community, but also puts them in competition with each other. Also the ranking tool, which ranks players according to their performance, inevitably affects the competition and the aspiration to climb the ranking, with the consequent increase of the time spent in the game.

Finally, technology is a key element, but for gamification to be efficient, it must be easy to use and allow all users to participate, without being excluded a priori. Technology, therefore, refers to the medium through which one participates in the "game". From this point of view, accessing an application through a computer or even more so from a smartphone allows this goal to be achieved, because these are tools that are easily accessible to anyone, allowing for a certain degree of interactivity and performance.

In summary, gamification leverages the emotional sphere of users and, therefore, has a strong impact on their motivation and stimulates their desire for fun, challenge, entertainment and involvement and does so, precisely, through the elements just listed (aesthetics, mechanics, dynamics and technology).

Motivation plays a fundamental role in the implementation of gamified systems. It should be noted that (Groh 2012, Ryan and Deci, 2000) motivation can be distinguished in intrinsic and extrinsic. Whoever is responsible for the construction of a game environment must consider that the user can be guided by intrinsic motivation. The latter originates in the individual who is going to perform a certain activity, for the sheer pleasure of doing so, and is activated by the key elements of the game (mechanics) which, as mentioned, act on the emotional sphere of the user and stimulate his or her interest in the product or service. All other tools, in the form

of any reward, such as points, titles, and prizes, foster extrinsic motivation, and induce engagement, i.e., involved in performing a certain activity exclusively to obtain rewards (Ryan and Deci, 2000). The extrinsic motivations represented by rewards, if they prevail over the intrinsic ones, can easily change the usefulness of gamification, leading the player to think that the only purpose of the game is to collect rewards (Werbach and Hunter, 2012). Therefore, it is important that companies, approaching to develop a gamification system, employ the game mechanics in the right way, in order to activate the right motivations, mainly the intrinsic ones, that drive the game experience and ensure full involvement in the activities and with others.

3. The use of gamification in the provision of banking services

Several studies in the literature show how gamification can manifest its full potential in different areas (health, sustainability, non-profit, transportation, tourism, business, etc.) (Wunderlich, et al.2020).

The e-learning domain is the one that perhaps lends itself most to gamification concepts (Bouchrika, et al. 2019, Saleem et al. 2020, Zaric, 2018), given the type of users and method of delivery. The digital platforms used for learning are structured to encourage user involvement and in order to encourage the achievement of results, they focus on offering rewards, which easily refer to the typical design of video games. It is precisely thanks to these rewards that, in a certain sense, "addiction" is generated, and users are more inclined to commit to achieving their goals.

The field of eco-sustainability has recently experienced numerous examples of gamification (Gatti, et al. 2019, Whittaker et al. 2021). The intent in this area is to stimulate people to change their behavior, towards a style more focused on sustainability and environmental protection.

Tourism (Abou-Shouk and Soliman 2021, Xu, et al. 2014), although recently, has also been affected by the process of gamification. The use of gaming methods to engage, digitally, consumers have increased the quality of the travel experience through interactive and more entertaining visits to tourist sites.

In the healthcare medical field, gamification has attracted great interest. Thanks to the digitization of personal care and well-being, the use of game schemes can contribute, to a greater user engagement, in the context of health services (rehabilitation, physical activity, mental health) (Cheng, et al. 2019) as well as a better personalization of health care (McCallum, 2012).

The different contributions to the study of gamification have shown that its positive effects also extend to the business world.

Some authors (Aziz, et al. 2017, Conaway and Garay 2014, Hamari, et al. 2014) have pointed out that numerous business entities use game mechanics to motivate their employees to improve their performance, make work and training more enjoyable and encourage cooperation among them. Other authors (Eisingerich, et al. 2019, Streukens, et al. 2019) have emphasized the usefulness of gamification in customer relationship management. For example, in the field of marketing,

gamification, can act on the emotionality and sociability of people and, therefore, generate interest in a particular brand, arouse interest in a particular product, with the possibility that the customer becomes a regular user of the product / service and recommend it to other potential consumers (brand loyalty and brand awareness) (Abou-Shouk and Soliman 2021, Conaway and Garay 2014, Yang, et al. 2017) .

In the economic-business field, the marketing sector is not the only one to have been touched by the gamification philosophy.

In the banking industry, gamification emerges as a new e-business strategy with innovative ways to improve consumer experiences and increase sales (Rodrigues, et al. 2013, 2016). However, it proves to be still an experimental strategy, as there is still no standard of the software elements to be used to design it in order to influence customer preferences and intensify e-banking (Calvillo, et al. 2010, Deterding, et al. 2011). In fact, banks should review their applications and websites in order to increase the use of online systems (PricewaterhouseCoopers, 2014).

With reference to the Italian banking industry, the prospects for the intensification of gamification implementation are promising. In recent years, the sector has been characterized by a real digital revolution, and has recorded, thanks to the use of mobile devices, an increase in online operations by Italian customers. In particular, customers between 35 and 54 years of age, who make constant use of their smartphones for all their transactions, have proved to be well versed in the universe of applications as well as particularly adept at navigating between the various digital platforms (Associazione Bancaria Italiana 2020, KPMG 2018). With reference precisely to this customer segment, which can count on high quality digital services in other areas as well, banks are reviewing, with the support of new technologies, their offer model to create new mechanisms of contact with users and enrich the offer of innovative services. The offer of digital banking services is very rich in the banking landscape. Internet banking and applications for smartphones are fully integrated into distribution models (Associazione Bancaria Italiana, 2020). For most banks, internet banking (both for low value-added operations and more sophisticated ones such as trading operations) is offered through a single website and is aimed at "mass" customers (Associazione Bancaria Italiana, 2020). Applications, on the other hand, are often structured to offer basic functionality and, sometimes, are enriched by an extended range of additional functionality, including primarily trading services, PFM (Personal Financial Management) and financial advice. Trading, P2P, Mobile POS are the areas that lend themselves most to having dedicated applications (Associazione Bancaria Italiana, 2020). Convenience and practicality are the main reasons for choosing an online bank, that is the model that is progressively gaining market share compared to the traditional one, which is still a reference point for more complex operations (KPMG 2018).

The current context in which banks operate is rapidly evolving. The use of the bank via the Internet (for information or transactions) continues to consolidate, the proportion of those using mobile banking is increasing rapidly and, overall, web-based operations are increasingly intense. This is due in part to the emergence of a digital culture among customers and the rapid spread of increasingly simple and

intuitive designs for websites and applications (Associazione Bancaria Italiana 2020). If banks want to remain competitive, they need to take advantage of this increased openness to digital and gamification could well address this need. In addition, it could be a viable solution for banks to offer more effective and faster, their products and services, better satisfy their customers as well as get more involvement and loyalty.

Many banks have focused on features that stimulate personalized customer experiences. Examples include BBVA, which has launched a game to encourage clients to use its digital platform; Atom, a British digital bank that involves its clients in the choice of features to personalize the application (logo, name, color); and Misys, which has integrated the possibility of making bets into its platform and, at the same time, has provided an education service, aimed particularly at millennials, for more responsible money management. Santander and Caixa Bank have also focused on financial education for millennials (Accenture, 2018).

From the above examples, it can be inferred that the benefits of gamification in banking are varied. They can be translated into the offer of an educational service, not only financial but also of a social or environmental nature, in the improvement of the marketing and brand of the bank through the increase in the rate of digital engagement.

However, the common denominator of these benefits is the customer, the customer's involvement and the bank's ability to retain the customer and communicate with them. Considering that "business processes can be usefully gamified" and that "by playing, financial issues are best communicated" (Gaudenzi, 2021) it may be interesting to see how Italian banks have oriented themselves in this sense.

4. Research method

In order to understand the level of gamification achieved by the Italian banking industry, 56³ banking groups were taken into consideration which are registered in the special Register kept by the Bank of Italy in accordance with art. 64 of Legislative Decree no. 385/93 (Consolidated Banking Law).

The rationale for considering banking groups lies in the fact that, overall, they can be considered representative of the entire banking scene. Banking activities are mainly carried out by subjects structured in the organisational form of a banking group. In Italy, at the end of 2020, the Italian banking industry consisted of 59 groups and only 90 individual banks - including 39 cooperative credit banks (BCC), 12 popular banks and 39 joint stock companies (Banca D'Italia, 2021) and had a

³ As at 24/09/2021, 461 banks and 56 banking groups were registered in the respective registers. Pursuant to art. 60 of the Consolidated Banking Act: "the banking group is composed alternatively of: a) the Italian parent bank and the banking, financial and instrumental companies controlled by it; b) the financial company or mixed financial holding company that is the Italian parent company and the banking, financial and instrumental companies controlled by it, when in the group of companies in which it holds a stake there is at least one Italian subsidiary bank and the shareholdings in banking and financial companies are of decisive importance, according to what is established by the Bank of Italy".

high degree of concentration, the top five banking groups held almost 57% of the market share (Comana, 2021).

Specifically, the total population of financial institutions considered is composed of the parent banks of the banking groups considered (which decreased from 59 at the beginning of 2020 to 56).

Of these institutions, we proceeded with the analysis of the website or mobile application, focusing on the retail sector (households/individuals). The research was conducted with the aim of identifying all possible gamification techniques experienced by the group.

5. Main Results

Table 1 summarizes the different techniques, among those listed in the first paragraph, adopted, for the retail segment (individuals and households), by the banks in the sample.

Table 1: Gamification techniques in the Italian banking industry

Gamification technique	Meaning of the technique	Sample banks employing the technique
Prizes and Rewards	Prizes and rewards, often part of sweepstakes, are able to motivate users and induce them to perform a certain action/mission. The prize gives satisfaction to the player.	5
Reward Points	Point collection is a powerful tool used by banks as part of loyalty programs to incentivize online transactions and increase loyalty and therefore participation of retail customers. The points can then be used to purchase real or virtual goods	24
Levels	Levels are steps that must be passed to achieve a goal; they help to rank users based on their score. Often associated with points since each level introduces a new goal to be achieved through the accumulation of points.	2
Badge (technique also identified with the term : medal, badge or challenge)	Each level reached is highlighted in the user profile in the form of a badge, medal or badge. As seen, they are awarded after a particular action performed by the player (e.g. when climbing a level, when completing certain steps in a game), therefore they are equivalent to an achievement. They motivate users to continue participating by providing them with a goal and are a social indicator of achievement or mastery of a skill and drive users to competition.	2

Progress bar	It gives feedback to the user on where they are at, while they are conducting a transaction with the bank, and how to achieve their goals.	1
Leaderboards	Leaderboards are created with the goal of incentivizing users to continue using a product or service by motivating them, highlighting how they are positioned relative to other users through the accumulation of points and passing levels. Being able to track progress and performance in a leaderboard helps participants monitor progress against their own goals and the performance of others. Rankings leverage people's natural competitiveness by encouraging them to do better, increasing repeat visits to the same place or to new and different places, motivated by a desire to improve their position.	2
Virtual reality/animated simulation	Virtual reality represents an excellent marketing technique for the sale of one's own products, especially the most expensive or risky ones. In this way the user can train himself by simulating his own strategy of purchase or investment.	3

Source: authors' elaboration.

Note: It should be noted that in the analysis carried out, attention was paid to the gamification techniques used. Therefore some banks, as from the values indicated in the third column on the right of the table, have been considered more than once as they used more than one technique.

Data show a banking system that is poorly trained in the simultaneous implementation of all gamification techniques. In fact, not all banks present, within their website or on the mobile application, mechanics and dynamics linked to the use of gamification.

Within the universe which, as mentioned, is composed of the 56 parent banks of banking groups registered with the Bank of Italy, only 30 banks (thus about 56% of the total) integrate their operations with gamification.

As can be seen, a large part of the financial institutions (24) make use of so-called loyalty programs to encourage online transactions, in which the accumulation of points is linked to the use of online credit cards, to the online opening of a current account, to the underwriting of mortgages, to the activation of mobile banking or to the granting of personal data such as email or cell phone, with the ultimate aim of increasing the loyalty of retail clients.

The points can be used to purchase real or virtual goods, obtain gift cards that can be used at affiliated commercial partners, enjoy discounts and offers (in some cases personalized, based on the profile of each user created by the bank, on the basis of the interests and passions, that the latter has manifested by interacting with the same) or to support projects related to environmental sustainability.

In five cases, banks have focused on prize competitions. This technique, useful for motivating users and making their experience with the bank less boring, also contemplates the possibility for individuals and families to win a final prize. There are various possibilities: participation, via web or mobile application, in training courses (financial education courses) aimed at discovering new products or digital services of the bank, or, as part of a system of personal finance management, try your hand at selecting a target and trying to win one of the dedicated prizes (with the possibility for digital bank clients to also win a super-prize).

In some circumstances, it is possible to participate in contests that award the prize with "instant win" mode: for each transaction, such as online transfer, digital payment (via Google pay, Apple pay or Samsung pay), opening a new current account, card transaction via POS or ATM, the client will receive codes with which to attempt the winnings consisting most often of shopping vouchers at Amazon or Ikea.

The mechanic of the levels is present, instead, in the system of two banks in the sample. This mechanic is based on the subdivision of users into hierarchically ordered classes which, often combined with points, allows the same users to observe the results obtained and motivates them to reach a certain goal. For each payment transaction, sending money, sharing on social networks or inviting a friend to become a customer, points can be accumulated, which allow access to certain levels and allow, through the instant win mode, to win prizes and live exclusive experiences.

Two other banks use the technique of badges (also indicated by the symbols of the medal or badge). In this case, they are icons that change when you move up a level. Customers are grouped into profile categories according to the products or services they choose and, as a result, will have access to different rewards or discounts so that everyone can be rewarded.

In only one instance in the sample can we observe the use of a progress or progress bar that delivers to the user an idea of where they stand with respect to achieving a particular goal. Typically, the progress bar advances as one levels up after completing missions or passing certain steps in the game path.

Rankings, observed in only two financial realities in the sample, showed that they help to motivate the user, incentivize him in the game and, therefore, in the increasingly repetitive use of a banking product or service, and allow him to know his position with respect to the community and, therefore, with respect to other users in the game.

Finally, virtual reality or animated simulation, often linked to financial education or environmental sustainability, was designed by three banks in the sample.

These are initiatives aimed above all young people, in which the use of virtual debit cards capable of calculating the CO2 impact of each daily transaction is foreseen.

In this way, environmental sustainability, individual wellbeing and social evolution are combined with an innovative and completely digital banking service. Another case inherent to the investment challenge whose participants, having a certain amount of virtual capital to allocate, are invited to make the best possible investment

choices in terms of sustainability. The final objective is twofold. On the one hand, to broaden general finance and investment skills as well as to deepen knowledge of ESG principles and, on the other, to access a final prize based on the ranking of the best profits obtained.

6. Conclusions

In recent years, gamification has become a topic of increasing study and has seen a growing application.

There are numerous examples of gamification found in everyday life, through applications on smartphones and websites, as well as numerous environments in which the mechanics and dynamics of gamification are applied for different purposes. In particular, the application of game dynamics in the business environment has made activities more interesting and less boring (one could say more like games) and has stimulated involvement and brought customers closer to the business, increasing the latter's revenue.

In the Italian banking system, this research shows limited interest in the logic of gamification.

In fact, the available data show that only 30 parent banks out of 56 have, in recent times, experimented with the implementation of gamification, with a particular predilection (24 cases) for the technique of accumulating points, typical of loyalty programs. In the remaining few cases, the other techniques listed are present. Notwithstanding, therefore, gamification makes available to us numerous possibilities of playful entertainment (game mechanics) for the client, so that the latter can feel enticed and entertained in his experience with the banks, the effort of the latter seems limited, not very diversified and, therefore, not very attentive to the benefits that could derive from it.

Considering the lack of literature on the subject, this work can be considered a first step to get an idea of how much the Italian banking system is interested in gamification and its benefits. Probably the only verification of websites or mobile applications of banks can represent a limit to a more comprehensive analysis on the subject. This certainly gives rise to future research ideas, since it would be conceivable to continue the investigation by examining balance sheets and annual reports, in order to better understand how much the gaming techniques adopted actually impact on the efficiency of banks, in terms of cost reduction, better economic-financial performance and greater competitiveness.

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