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# Badges in Social Media: A Social Psychological Perspective

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**Abstract**

Representing achievements as badges or trophies is a standard practice in online gaming. Awarding badges has also become a key ingredient in “gamifying” online social media experiences. Social systems such as Foursquare, StackOverflow, and Wikipedia have popularized badges as a way of engaging and motivating users. In this paper we deconstruct badges and present five social psychological functions for badges in social media contexts: goal setting, instruction, reputation, status/affirmation, and group identification. We argue that future research should further explore these five functions and their application in specific contexts.

**Keywords**

Badges, achievements, rewards, motivation, social psychology, social media, gamification

**ACM Classification Keywords**

H.5.m Information interfaces and presentation (e.g. HCI):Miscellaneous

**General Terms**

Human Factors

**Introduction**

In the context of online social media, badges are “virtual goods” – digital artifacts that have some visual representation – which are awarded to users who

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1.



**CHI Stars**

You cited a big-wig from the CHI community!

2.



**Very Verbal**

That's quite a vocabulary you've got there!

complete specific activities. Badges have been closely associated with online gaming but also have a long history outside of gaming. In ancient Rome, military heroes were honored with medals adorned with the face of Caesar. Closer to home, the Boy Scouts of America's iconic merit badges promote the acquisition of specific skill-sets as diverse as nuclear science and basketry.

One of the first large-scale implementations of badges in online games began in 2002 with Microsoft's Xbox Live service. Since that time, badges have become a fixture in many games. Notable implementations of badges in social media include Wikipedia's "Barnstars" which allow users to award each other for doing valued work [8], Q & A site StackOverflow's system of badges to encourage productive participation, and FourSquare's implementation of badges to promote location-sharing via "check-ins."

**The Social Psychology of Badges**

Although badges are in widespread use in social media, relatively little research has been devoted to understanding how or why they are valuable and useful. While badges can be fun and interesting, these qualities do not inherently produce social engagement or enhance motivation. We argue that badges can serve several individual and social functions depending on the nature of the activities that a badge rewards and the application of badges in particular contexts. In the tradition of combining HCI and psychology [11], we present five primary functions for achievements and give examples of each.<sup>1</sup>

*Goal Setting*

Perhaps the most obvious function of badges is as a goal-setting device. Badges challenge users to meet the

mark that is set for them. Goal setting is known to be an effective motivator, and experimental studies have illustrated that the most motivating goals are those that are just out of comfortable reach [9]. Research also suggests that individuals sometimes "consume" goals and the experience of striving for them, even at the expense of consuming physical goods. This phenomenon, which Ariely and Norton call "conceptual consumption" [1], means that the fun and interest of goal seeking is often the primary reward itself. The notion of conceptual consumption is essential to understanding badges because, of course, ultimately the user is left with no physical goods, only the experience and memory which is embodied by a badge.

Two additional aspects of goal setting are also essential to mention. First, the goals presented in a badge are not always explicit, either because system designers choose only to adumbrate<sup>2</sup> how to earn a badge or because the necessary activities are subjective or imprecisely defined. Secondly, goal setting is most effective when users can see their progress towards the goal. Without signposts to mark the way, there is little or no feedback to keep users moving in the right direction. Furthermore, people often escalate their efforts when they know they are near their goal [5].

*Instruction*

Badges can provide instruction about what types of activity are possible within a given system [10]. This function is useful for indoctrinating new users, but also for helping silo'd users diversify their participation. Badges often embody the social norms of a system by exemplifying the types of activities and interactions that are highly valued [8], and in so doing provide a kind of social shaping of user activities. Through their

3.

**Bullseye**

No beating around the bush here – you got right to the point!

4.

**Speed Reader**

The 1<sup>st</sup> sentence of each paragraph is good enough for you!

instructive function, badges can benefit the system even if users never actually earn the badges. By viewing a list of possible badges, users come to understand individual valued activities and can also gain a Gestalt understanding of the community of users.

*Reputation*

Badges provide information on the basis of which reputation assessments can be made. Badges are a valuable encapsulation of a user's interests, expertise and past interactions, and can thus substitute for direct experience [7]. Badges assist reputation assessments at several levels. At a general level, examining another user's badges can provide a summary of interests and engagement levels, for example by indicating whether a user is a casual or fanatical community member. Like Boy Scout merit badges, in social media contexts badges can also provide information about a user's skill-set and expertise. By providing an encapsulated assessment of engagement, experience, and expertise, badges can be an invaluable tool for determining the trustworthiness of other people or the reliability of content.

*Status / Affirmation*

Badges can be motivating as status symbols. Badges advertise one's achievements and communicate one's past accomplishments without explicit bragging. Notably, the power of status rewards derives from the *expectation* that others will look more favorably upon someone who has undertaken the activity represented by a badge [2]. More difficult achievements may be assumed to lead to greater status.

Badges also provide personal affirmation in that they serve as reminders of past achievements much like trophies on a mantelpiece. They mark significant milestones and provide evidence of past successes.<sup>3</sup> The interplay between status and affirmation is important because it highlights how badges can be engaging from both an individual and a group point of view. Some users are likely to attend more to the individual benefits of badges while others are more likely to attend to the social ones. For example, our in-progress research on FourSquare suggests that self-interested individuals are more interested in the status rewards of badges than pro-social individuals.

*Group Identification*

Badges communicate a set of shared activities that bind a group of users together around shared experience.<sup>4</sup> Achieving badges can provide a sense of solidarity and increase positive group identification through the perception of similarity between an individual and the group. This type of group identification is valuable in social media because increased group identification promotes increased cooperation in collaborative situations [3].

**Future Work and Conclusion**

We do not suggest the functions we have discussed represent an exhaustive list. However, there is ample evidence in the social psychological literature to support our typology, and we believe it is a useful lens. Much work remains in order to empirically vet the five functions, and to investigate the individual and social dynamics of badges in social media contexts.

We must begin by examining the premise that badging systems are engaging and motivational for all. Evidence

5.



**The Finish Line**

Congratulations, you made it to the end of the paper!

suggests that badges are not universally appreciated, understood, or attended to. For example, Montola and colleagues implemented badges in a photo sharing service and found that many users did not appreciate them and were worried that badges would create counterproductive usage patterns [10]. Our own in-progress research on FourSquare indicates that most users find only some types of badges interesting or motivational. Furthermore, just as some have questioned whether badges are actually counterproductive as game mechanics [6], the “corruption effects of extrinsic incentives” [4] could make some badges harmful to intrinsic motivation.

Together, these findings demand a program of systematic research into the dynamics of badges in social media systems. In addition to exploring the above typology, our future research will focus on understanding their positive and negative influences, as well as the social aspects of giving and receiving badges awarded by system designers (e.g. FourSquare) versus other users (e.g. Wikipedia).<sup>5</sup>

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