Status and incentives: A critical survey

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Status and Incentives: A Critical Survey

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Abstract:

This paper aims to provide a survey on the studies on incentive, especially non-monetary incentive like status. We intend to summarize the different studies in a concise manner and comment on the divergent views on valuation for status, relation between monetary and status incentives, the technique of modeling status and on the cost of introducing status. We also underline the some probable adverse consequences associated with the use of status incentive. In this paper it also highlights the problem associated with asymmetric information in the labour market, specifically, the (post contractual) moral hazard problem.

Keywords: Status, incentives, principal–agent problem, moral hazard
1. Introduction:

The well-being of an economy is measured by the growth in production. Production means efficient transformation of input into outputs. The primary inputs used in production process are capital and labour. Though the productivity of the physical capital is generally comprehensible but labour’s effort put into the production process is often dependent on various behavioural issues other than the skill or aptitude of the labour. The human abilities are heterogeneous and hence it is difficult to judge the exact amount of output which one unit of labour can generate. At the same time human beings are opportunists by nature (Williamson, 1973). Strategic disclosure of asymmetrically distributed information by individuals to their advantage breaks in the problem of opportunism. Thus, one of the major concerns in dealing with labour productivity is informational asymmetry. When information asymmetry is difficult to overcome with a small amount of cost then the problem aggravates further. These behavioural issues affecting the labour productivity has been widely studied in social science, especially in economics. Examples of this problem of opportunism are adverse selection, moral hazard and information monopoly. In this paper we mainly focus on moral hazard problem and how incentive works in mitigating this problem. Specifically, the aim of this study is to summarize the different views in existing literature on use of status as a non-monetary incentive in the eliciting desirable effort from the workers.

Williamson (1973) in his pioneering work has explained how these set of human behavioural attributes together with the non-technological factors induce a shift of transactions from market to organization. In market transactions the relationship established between parties (i.e., the seller and buyer of labour/service) is short lived and hence the problem of opportunism is not grave. But this short run feature of market transactions induces high transaction cost. For clarity of notion, consider a director of an educational institute trying to run the institute with visiting faculty only. It is evident that it is a tasking job to find new faculty after a frequent interval from the market, as it involves high search cost and negotiation on terms of contract is also a time consuming affair (also referred as contracting cost), inducing a high opportunity cost. This generates the need for involving into a long term relation between the employer and employee. This is one of the primary reasons which marks the emergence of organizations. Within an organization cost of transaction is low as the

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1 In this context, by opportunism we mean that individuals realize that they can gain simply by being dishonest or from lack of candour in a transaction.

2 Rational individuals continue to search for a better product or service until the marginal cost of searching exceeds the marginal benefit.
parties enjoy a long term relationship. But, it brings in the problem of opportunism. As workers are aware that market transactions are associated with high transaction cost, they enjoy a minimum security from the job and hence are inclined towards shirking when unmonitored. These problems associated with asymmetry of information and its economic significance has gained importance in organizational theory for quite some time.

Existence of asymmetric information in the labour market invites problems related to labour management issues, which has a wide variety of implications for both firms and workers. The informational asymmetry between the employer (principal) and employee (agent) creates difficulties in motivating one party (agent) to act in the best interest of another (principal) rather than her own interest and this creates agency problem. For example, consider a patient (the principal) wondering whether her doctor (the agent) is recommending expensive diagnostic test because it is truly necessary for her treatment, or because it will generate an additional commission from the diagnostic centre for the doctor. In fact this problem of opportunism potentially arises in almost any context where one party is being paid by another to do something, whether in formal employment setup or in any informal negotiated deal. Thus, it is often observed that the interest of the agent and the principal are not aligned. Indeed, when the deal is such that it is in the best interest of both the parties then also a suboptimal outcome is reached. This deviation from the principal's interest by the agent is called principal-agent problem (this problem is also referred as agency cost.) Moral hazard, which is a special case of asymmetric information, arises in a principal-agent problem because agent usually has more information about her actions or intentions than the principal does and it is impossible for the principal to perfectly monitor the agent. According to contract theorists, since perfect monitoring is almost impossible, therefore to address the problem on moral hazard, the principal needs to structure and offer the agent with such an incentive that motivates the agents to work appropriately and outweighs the incentive of the agent to shirk. Thus, proper utilization of human capital requires an efficient structure of managerial strategies within an organization. The necessity to have a right organizational design and incentive structure has been discussed by Athey and Robert (2001). In recent decades, there have been advances in the study of information asymmetries to understand the

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3 As they realize that, given their level of skill, finding a new replacement for the employer is costly. This feeling partially reduces the probability of losing job.

4 The development in information economics, which is a branch of microeconomic theory, studies how information influences many decisions and complicates many standard economic theories.
role of incentives in moral hazard problem and their implications in theory of contracts. In this context, worth mentioning is the seminal work of Holmstorm (1979) where how imperfect information can be utilized to improve the incentive structure in a principal-agent relationship subject to moral hazard has been analyzed.

The study of incentive structures is central to the analysis of all economic activities. Specially, in contract theory, the optimal structure of incentives under different circumstance has been analyzed widely. Together with financial incentives, role of non-financial incentives in evoking correct level of effort has also gained importance in recent studies in economics. It is well established by social psychologist Leon Festinger (1954) that relative position in the wage ladder does matter to human beings as they make social comparison. Exploiting this fact, organizations also uses a range of non-pecuniary incentives, one of which is status incentives. For instance, it is a common practice to award top sales people with medals, rings, sculptures, and so on, at grand ceremonies organized by firms (see Nelson, 2012). Instead of offering pecuniary payments, organizations like military, make extensive use of medals which conveys status to the recipients. When organizations use monetary incentive to generate extrinsic motivation\(^5\) among the agents, then the firm has to bear with the financial cost associated with it. But creating status is almost costless and yet it influences agents to take correct effort. Thus, the benefit from the use of status is more compared to its costs. Hence, for the principal, creating motivation through status incentive is economically more meaningful than use of monetary incentive. Yet again, status incentive is not as powerful instrument as monetary payoffs. Sole use of status does not work as a proper incentive in eliciting desirable effort. The emergence of an influential literature captures the different aspects of status as a non-monetary incentive and its significance in human resource management. Our paper intends to summarize these different studies in a concise manner and comment on the divergent views on valuation of status, relation between monetary and status incentives, the technique of modeling status and on the cost of introducing status. We also underline the some probable adverse consequences associated with the use of status incentive.

The rest of the paper is arranged in the following manner: Section 2 discusses how incentive works in generating motivation among the employees and eliminating the problem of moral hazard. In section 3 the detailed survey of literature on status incentive explaining

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\(^5\) See Bénabou and Tirole (2003) for an elaborated description of difference between intrinsic and extrinsic motivation.
the different aspects associated with the use of status as an incentive has been discussed. Finally, in Section 4 concluding remarks are made and some light is thrown on possible future research works.

2. Incentives: Driver of motivation:

“The contributions of personal efforts which constitute the energies of organizations are yielded by individuals because of incentives.”

Chester Barnard (1938, p. 139).

Conventionally, a contract is offered to the agents, which constitute of incentive measures, such as salaries, secondary benefits, bonus and sanctions, to motivate agents to increase their performance. In traditional agency theory a contract is defined to be efficient only when it maximizes the net expected economic value of the principal after transaction costs (such as contracting costs) and payments to employees. An equivalent way of saying this is an efficient contract minimizes agency costs. Standard economic models consider that an individual’s preference depends only on pecuniary variables. There exists an evoking literature studying the role of monetary incentive. Though research in this area has been highly interdisciplinary, yet most of the studies are applications of agency theory. In accountancy, for example, how accounting-based bonuses indulge managers to manipulate earnings has been studied. The relative capacities of accounting-based and stock-based performance measures have also been analyzed. The association between executive compensation and corporate performance, investment decisions, capital structure, dividend policies, mergers, and diversification has gained importance in financial economics. Industrial organization economists have examined the game-theoretic effects of strategic interactions on compensation policy and have documented the effects of regulation and deregulation on executive compensation. Sociologists and organizational behaviorists have examined issues such as social comparisons and the behavioral effects of wage dispersion.
Contributing to wealth of literature studying the role of monetary incentives in accentuating motivation of the agents, Winter (2004) has derived an optimal allocation of incentives in the presence of asymmetric information among agent and show that when the mechanism aims at inducing all agents to exert effort under such situations differential rewards may be unavoidable even when all the agents possess ex-ante identical attributes. Offering discriminatory contracts to identical agents has also been asserted as a meaningful economic activity by Dhillon and Herzog-Stein (2009) when agents are conscious about their rank in the wage ladder. But to construct an optimal contract the best way to measure performance of an agent is relative performance measure. Grossman and Hart (1983) have explored the use of relative performance in construction of optimal incentive contract in single agent framework and Mookherjee (1984) has extended that in multiple agent framework.

2.1: Classification of incentives:

Though, a common taxonomy divides incentives into three broad classes: remunerative incentives or financial incentives, moral incentives, coercive incentives, however, in economics the prime attention is given to remunerative incentives rather than moral or coercive incentives. The reason being – remunerative incentives are the main form of incentives used in organizations, whereas moral and coercive incentives are more characteristic of the sorts of decisions studied by political science and sociology. The organizational theory has emphasized typically on two types of incentives, monetary (pecuniary) and non-monetary (non-pecuniary), for generating motivation among the agents. Clark and Wilson (1961), however, have identified three varieties of incentives and have discussed how the composition of incentive structure changes with the change in organizational character and purpose. They have classified the firms according to the types of incentive offered by them, viz. material, solidary and purposive incentives. But, these incentives can also be broadly brought under the main to categories of incentive, i.e., pecuniary and non-pecuniary. Though non-pecuniary incentives are not perfect substitutes

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for monetary incentives, yet it is often observed that agents' self-image as jobholders, coupled with their ideal about how their job should be done, can be a major source of work incentive.

2.2: Importance of Non-Financial Incentives:

During the last two decades economists have made much progress in understanding incentives, contracts and organizations. But the change in human behavior captured through desire to reciprocate or the desire to avoid social disapproval has been neglected meanwhile. Fehr and Falk (2002) have shown that monetary incentives may backfire and reduce the performance of agents. In addition to that they have also suggested that these human motives may, by themselves, be utilized as powerful incentives. Prado (2005) studies the effort put in by the physician in public facilities and find that some physicians who work for long hours for little financial rewards, whereas, there are others physicians who does not provide required effort and/or time in their works. This heterogeneity among the physicians accounts from their diverse degree of motivation. Besley and Ghatak (2005) define the workers as typically motivated agents when they perceive intrinsic benefits from by associating themselves with the job. Using a combination of basic Shapiro-Stiglitz a shirking model and the theory of social custom, Prado (20005) shows that punitive monitoring system may persuade to improve the effort of the shirking physicians but may create an adverse effect on the morale of the motivated physicians. But this deleterious effect can be eased off if non-monetary rewards or recognitions are conferred to the motivated agents. Their finding suggests the one of the importance reasons for the use of non-pecuniary incentives. Alcázar et al. (2006) through a field experiment in Peru on teachers’ attendance at public primary schools reveal that teachers high attendance rates in weakly related with strong financial incentives. This indicates that non-pecuniary incentives are the important determinants of teacher performance. Since public primary schools are mission-oriented sector, hence the teachers do not work there solely for the monetary payments. To drive their motivation further non-financial incentives works more efficiently. There has been quite an extensive research to explore these non-pecuniary sources of worker motivation like status\(^{(10)}\) (see, for instance, Frank (1984), Fershtman, Hvide and Weiss (2006), Auriol and Renault (2008) and Besley and Ghatak (2008)), morale (see, for instance, Bewley (1999)), team spirit( see, for instance, Kandel and Lazear (1992)), preferences for cooperation (see, Rob and Zemsky, 2002) or fairness (see, for instance, Akerlof and Yellen (1990), Fehr and Schmidt (2003)).

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\(^{(10)}\) A detailed literature review on status is given in later section.
There also exists a strand of literature in behavioural economics studying how incentives work as a motivating factor to an agent under different circumstances. For instance, Al-Ubaydli et al. (2008) with the help of a natural field experiment show that in response to positive non-pecuniary gifts workers increase their observable effort at the expense of decreased unobservable effort, yet they reduce both dimensions of effort in response to negative non-pecuniary rewards. Bolton and Ockenfels (2000) through experiments have demonstrated how pecuniary incentives and their relative pecuniary payoff standing motivate an agent to take up the desirable effort.

3. Status Incentive: A critical review:

Economists have generated a substantial amount of research in organization theory which have identified and studied the role of monetary incentives in eliciting desirable effort by economic agents. Though monetary payment is considered to be the key component of the actual incentive package often organizations use a range of non-pecuniary incentives, like status incentives. The significant role of status as a non-pecuniary incentive to elicit the desired outcome has gained importance in recent studies. It can be traced back in Frank (1984) that individuals value status and an implicit market for within-firm status is shown to produce welfare gains. It was primarily been brought forth by Frank (1985) that individual’s concern about status permeates and largely affects a broad range of human behaviour. He also points out the flaws associated with economic analysis when these fundamental elements of human nature affecting their economic choices are neglected. Incorporating the fact that humans care for status Dubey and Geanakoplos (2004) has derived that students perform better in presence of optimal grading system as compared to exact numerical scoring system. The grading system works by creating small elite class (the students achieving grade ‘A’) among the students. Fershtman, Hvide and Weiss (2006) identifies that the degree of status consciousness varies across cultures and different individuals’ perception. In their study they conclude that a diverse (in respect of their perception about status) workforce helps in increasing the output of the economy. Assuming that agents in a contest care about their relative position Moldovanu et al. (2007) studies the optimal design of organizations. Brown et al. (2007) is one recent exemplary work which has shown that importance of rank within organizations with empirical as well as experimental support. Also, there is some experimental evidence, both in psychology (Jemmott and Gonzalez (1989)) and economics demonstrating the importance given by individuals to status and how it affects behaviour in
negotiations (Ball and Eckel (1996)), markets (Ball and Eckel (1998), Ball et al. (2001)), coordination games (Eckel and Wilson (2007)), and organizations either in cooperative settings (Kumru and Vesterlund (2008), Eckel et al. (2009)) or in competitive settings (Huberman et al. (2004), Rustichini and Vostroknutov (2008)). Hence, there are various aspects associated with the use of status incentives. Quite an extensive research explores these various aspects and has expressed divergent views. We intend to summarize these views in the next few sub-sections.

3.1 Value for status:

Incentives are, by definition, scarce\(^{11}\) (Clark and Wilson, 1961). Together with this scarcity value, status owes a trophy value, which reminds the recipient of her past glory. Wood (1998) quotes Will Haffer, vice president of sales with Bowne Publishing, reminiscing about winning a large-screen TV: “Actually the main reason I wanted it was that it was the top prize. I could afford to buy a big screen but it was not the same as winning it.” According to sociologists, status captures individuals’ need for social recognition. There are neurophysiological evidences, in the area of neuroeconomics, where it has been shown with the help of brain activity that human beings make social comparison while assessing the value of their remuneration (Fleissbach et al. (2007)). In economics, social comparisons have been shown to influence both behavior (see for instance Glaeser et al. (1996) on criminal activity, Duflo and Saez (2002) on investment plans, Guth et al. (2001), Charness and Kuhn (2007), Gächter and Thöni (2009) and Clark et al. (2010) on effort in employer-employee relationships) and subjective well-being (Clark and Oswald (1996), Clark et al. (2008), Brown et al. (2008) Ferrer-i-Carbonell (2005), Luttmer (2005) Azmat and Iriberri (2010)). The social comparison theory state that individuals make comparison to evaluate their own opinions and desires with respect to others. A pioneering work by Easterlin (1974) in the studies of subjective happiness has shown empirically a paradoxical situation, where most people want more income and yet when societies become richer they do not become happier. Easterlin paradox has been explained by Clark and Oswald (1996), McBride (2001), Hopkins and Kornienko(2004), Luttmer (2005), Clark et al(2008) by incorporating relative income in individual’s utility function. They have provided empirical evidence in support of the hypothesis that relative-income does matter in individual assessments of subjective well-being. But, one should note that status is often multi-dimensional and the value of status does

\(^{11}\) Unless a commodity, a status, or an activity is relatively rare, it provides no inducement to anyone.
not only account from the order of realized wages (see Shubik(1971)). We can explain another dimension of status with the help of the following example. Suppose, there is a society consisting of four castes: priest, warriors, traders and peasants, ranked in that order. It may be possible that the trader earns more than the warriors. In spite of that fact, the trader holds a lower position in the society. Thus, the wage rank is not the only factor which injects the feeling of status among the agents. Status, itself, provides an additional utility to the agent. Similarly, within an organization, especially in banking sector, it can be often noticed that sales executives (holding lower rank/status) creating more business for her organization earns higher income (as a commission) than their administrative head (person holding higher status). This is common knowledge within the firm. But, it does not de-motivate the administrative head, as her lower income is compensated by her utility from higher position. This unique feature of status motivates organizations in introducing status as an incentive.

3.2 Status: ‘Costless’ or ‘Costly’:

Often, it is observed that status conferred are created by offering a mere job title, (example, “performer of the week”, “senior executive”, etc.) or a paltry certificate of appreciation, which are costless from the part of the employer. Yet it generates value to the employees, as people exhibit strong concerns about their relative position within their reference group (Charness, Masclet, Villeval (2010)). Thus, status works as an incentive by stressing differences among the employees. According to Adams’s ‘equity’ theory (1965), people lower their effort when they realize that their return is insufficient relative to others around them. It is enjoyed only by those with high status, whereas, disliked by those with the low status. Weber (1922) defines social status as “an effective claim to social esteem in terms of negative or positive privileges.” Hence, recognition (conferred through status) should not be viewed as a cheap substitute for money. It has a cost because it is valued in relative terms. This feature of status has also been highlighted, as an alternative specification, in Besley and Ghatak (2008), by assigning positive utility from status and disutility from not achieving it. The positive utility from status accrues from its trophy value and a disutility arises out of agent’s disgrace from her inability of achieving it. If the disutility of low status exactly offsets the utility of gaining status, then introducing a status reward does not help in increasing the motivation of agents. This cost of status differentiation basically accounts as a short-term result and it is one of the major issues which have been stigmatized in human resource management literature. In order to introduce benefits from status differentiation,
Auriol and Renault (2008) have adopted a long-term perspective and consider an organization composed of overlapping generations of agents.

### 3.3 Relation between status and monetary incentive:

The above stated example helps us to conclude that status takes care of the lower money payments. Through a psychological experiment, Huberman et al. (2004) have also shown that individuals are willing to trade off some material gain to obtain status. Besley and Ghatak (2008) has asserted by providing a micro-theoretic explanation that to expend effort status incentive works as partial substitute of monetary incentive. Dhillon and Herzog-Stein (2009) also assumes a convexity in preference\(^{12}\) on status to show that it is optimal for the firm to offer ex-ante identical agents with discriminatory wage contract when agents are concerned about the rank of their wages. The basic intuition behind their result is that firms can exploit incentives from status to reduce its total wage cost. But sociologists enunciate that agents exhibit a taste for status congruence. It has also been empirically validated that there is a strong positive correlation between social status and material well-being (see Perrot (1999)). Belliveau, O'Reilly and Wade (1996) study how CEO compensation is affected by the CEO's status relative to that of the compensation committee chair. They find that high-status CEOs matched with low-status compensation chairs are significantly better paid than low-status CEOs matched with high-status compensation chairs. This complementarity between status and monetary incentive has been captured by Auriol and Renault (2008) indicating high-status agents are willing to exert more effort in exchange for additional income, whereas better-paid agents are willing to exert more effort in exchange for improved status. Specifically, they find that young agents' motivation are mainly driven by their zeal for building prospects for future promotion and hence it is optimal for the principal to offer the lowest possible status with zero monetary incentives. Promotions, which constitutes of a prestigious position and monetary payoff which is above their marginal productivity, are given out only to those agents whose past performance was good. This opportunity of achieving the promotion itself works as an incentive for the young workers. It is required to offer a combination of both status and money incentive only to the older generation. In this way, organization can exploits their complementarity between symbolic and material rewards, which is there in individuals' preference function, to reduce the total wage bill.

\(^{12}\) Convexity on preference indicates that an individual's ordering of various commodities is such that she would prefer choosing the averages (or combination of the commodities) rather than the extremes. In this context, it implies that agents' prefer to a combination of status and monetary incentive.
Banerjee and Dey (2011) has reconciled the two different views on the relationship between status and monetary incentive (discussed above) while addressing how the optimal structure of monetary incentives in an organization changes with varying differences in employee status. It is shown that there exists a substitution between status and monetary reward for agents with low outside option and for agents withholding very high status in the hierarchical (given) structure of the organization, whereas, status and incentive pay exhibits complementarities for agents with higher outside option.

3.4 Status: Ways to model:

Though, there is not much debate over the fact that individuals care about status however, there exists a discussion among the economists on the proper modelling strategy which should be adopted to analyse the effect of status. Introducing social status into the utility function as an argument is defined as the ‘direct’ approach by Postlewaite (1998). The basis of introducing status as an independent argument in the preference function has been identified way back in Frank (1984). It has also found its most compelling support in the evolutionary argument developed by Fershtman and Weiss (1998). The proponents of an alternative ‘instrumental’ approach (see Cole et al. (1992)) states this approach helps in understanding the interaction between social concerns (like status) with the economic market. Specifically, individuals concern for relative standing accounts from the fact that relative standing is instrumental in determining the ultimate consumption level. Put differently, status indirectly affects an individual’s consumption level. But direct approach is not robust and the results predicted are sensitive to specification of preference function (see Postlewaite, 1998). Yet, in the most of the studies on contracts, status is modelled by incorporating it directly into the preference function. This is, in a way, sensible as in contract theory the basic concern is to understand the effect of status on the utility of the agents and, in turn, on the utility of the principal. In Auriol and Renault (2008) agent’s preferences depends directly on her status as well as on income and effort. Similarly, Dhillon and Herzog-Stein (2009) has captured the status consciousness of the agents in their preference function in the form of rank-dependent utility. Besley and Ghata (2008) has considered that status generates an utility to the agent, but the utility falls with the increase number of agents achieving the status, i.e., there is a crowding out effect, which drives down the value for status accruing from scarcity value.
3.5  *Status: Source of favouritism:*

A different angle of use of status incentive has been highlighted by Charness, Masclet, Villeval (2010). It has been investigated with the help of an experiment that people invests in status seeking activities even in an environment where there is no expected monetary return from such activity. They care so much about their relative position/recognition that they pay both to sabotage others’ output and to artificially increase their own relative performance. This indicates the use of status as an incentive also brings in the evil consequences of bias or prejudice. Though, favouritism or preferential bias persists even while offering materialistic rewards, yet status being costless to the principal offers a wider opportunity for the principal to indulge in favouritism. With the help of a theoretical model it has been highlighted by Dey and Banerjee (2013) that the principal’s gain from using status incentive increases with the degree of favouritism. Thus, the use of status is not caveat free.

4. **Conclusion:**

In this paper we highlight the problem associated with asymmetric information in the labour market, specifically, the (post contractual) moral hazard problem. The paper aims to summarize the studies on incentive, especially non-monetary incentive like status. Organizations often use a range of incentives to create extrinsic motivation among the agents. As human beings care about their relative position status emerges as a convenient and cheap instrument to elicit effort. Creating status by given out mere titles like “employee of the week” or conferring a certificate of appreciation gives the required impetus to the deserving agent and at the same time generates motivation among the other workers (one who failed to achieve the status) to put in more effort (so that they can achieve the status in future). A strand of literature explains that status works by creating divisions among the workers. Thus, the agents who fail to achieve status may feel de-motivated and status may emerge as a costly instrument, by large.

To analyze the effect of status, it has been modelled differently in different studies. There exists a conflict on how status affects the utility of the agents and what is the ideal way of modelling it. The main point of debate is around the relation between the monetary and status incentive. Agents prefers status and monetary rewards in a combination, yet economists find that material and symbolic rewards may exhibit positive or negative correlation. Thus, we conclude that the relation for preference of status and pecuniary payoff is ambiguous and situational. The paper also bring into notice that use of status as an
incentive may bring in the evils of favouritism. Concisely, we intend to summarize and comment on the aspects associated with the use of status incentive. In this connection, we intend to throw light on possible future research on addressing how status should be used optimally and judiciously, given its ambiguity in labour management theory.
Reference:


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