


Article

Rewards and Innovation Performance in Manufacturing Small and Medium Enterprises (SMEs)

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Abstract: The study investigated types of rewards SMEs offered to intrapreneurs and how these (rewards) contribute to innovation performance (IP). A questionnaire was administered to a sample of 300 SME owner-managers from the industrial spatial distribution areas of Kwa-Zulu Natal province in South Africa. Results show that besides a regular salary offered by 99.5% of the SMEs, fewer than 37.1% of them paid other forms of rewards. The empirical findings show that rewards had an influence on innovation performance. From the 17 rewards awarded to intrapreneurs by SMEs, only “promotion within organisation” and “monetary bonus rewards” had a positive and significant influence on innovation performance. Four other rewards had a significant but negative influence on IP. Rewards are an important tool to encourage crowdsourcing intrapreneurial contribution to IP. Rewards should therefore be strategically selected given the limited financial resources in SMEs. The importance of this study is its focus on SMEs, which are characterised by limited information on the effect of rewards on innovation performance, as well as the efficiency driven economic setting, normally not characterised by “innovation performance”. The study also shows how IP can be crowdsourced through appropriate rewards.

Keywords: innovation performance; rewards; intrapreneurs; small and medium enterprises; crowdsourcing; sustainability



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1. Introduction

Small and medium enterprises (SMEs) need to have a reward system that supports innovation. Knowledgeable intrapreneurs are important for this cause, though they are likely to put pressure on limited resources of SMEs. In this context, Jarboe and Alliance; Attar, Kang and Sohaib [1,2] confirm that when employees move, formal or informal knowledge becomes mobile and immobile at the same time. Closely related to this, Lewis [3] reiterates that entrepreneurs need creativity and updated skills to improve performance. According to Nikolov and Urban [4], the decisions of employees to participate in corporate entrepreneurship initiatives is associated with a variety of available rewards, such as opportunities for future growth, financial incentives, sense of achievement from completing challenging and interesting work as well as participation or autonomy in decision-making.

The SME sector has become an essential instrument that economies of the developed, developing and underdeveloped countries use to address socio-economic policies as well as industrial activities [5]. However, generating employment, contributing to innovation and promoting inclusive growth vary widely across firms, countries and sectors. For example, in USA and Japan (developed countries), SMEs are seen as an industrial base and backbone of the service sector supporting manufacturing activities. Similarly, in India and Indonesia (developing countries), SMEs contribute to social and economic development such as employment creation [5]. In the context of South Africa, a developing

economy, which the Global Entrepreneurship Monitor South Africa Report [6] refers to as “an efficiency-driven economy rather than an innovation-driven economy”, the sector addresses inequality, unemployment and poverty. SMEs contribute approximately 35% to the country’s gross domestic product (GDP) [7]. The small business sector continued to show a positive employment growth in the past decade in contrast to the job losses in large and public enterprise sectors [8]. The SME sector therefore, plays a major role in the growth and competitiveness of the South African economy [9], as in other developing economies. However, being an “efficiency driven” economy poses a threat to innovation performance of SMEs because such an economy is “resource process driven” as opposed to being “innovation driven”. It therefore becomes more difficult to realize “innovation performance” in the former economic archetype. In an innovation-driven economy, most organisations produce products with well-designed processes and launch them as new to the market. Mohanty [10] points to the challenges of inadequate resources and lack of reward to crowdsource intrapreneurial initiatives to facilitate innovation processes and improve performance of firms. Although resource constraints and the need for innovation characterise the SMEs sector, Azami [11] indicates that firms’ innovativeness is likely to be influenced by organisational resources that are mostly linked to its size. Aply, it remains complex for resource constrained SMEs to reward employees to enhance innovation, especially in a resource driven economy as South Africa. Fini, Grimaldi, Marzocchi, and Sobrero [12] reiterate the complexity of resource constrained environments for the application of corporate entrepreneurship principles to SMEs. Although rewards seem to enhance employees’ propensity to take risk associated with intrapreneurship [4], it is not evident whether the way employees are rewarded makes a difference in innovation performance of SMEs. Thus, it is critical for SMEs in the context of the current high competitiveness and the challenges posed by the fourth industrial revolution to prioritise innovation. The question becomes, how significant is the influence of rewards on the innovation performance of manufacturing SMEs in South Africa?

SMEs need to acquire knowledgeable employees to access critical knowledge, and to be able to absorb capacity [13]. This paper investigates the types of available rewards in SMEs and establishes whether rewarding intrapreneurs is a catalyst for innovation performance of these firms. Previous studies on the effects of rewards on innovation, for example, in the South African context, indicate that it is critical for businesses to nurture intrapreneurship [4,14,15]. These studies did not focus on small businesses, which this study does. In the same context, studies in India and Turkey (other emerging economies) show that intrapreneurial behaviour in SMEs improves when employees receive institutional rewards [16,17]. In a European context, Matzler, Schwarz, Deutinger and Harms [18] indicate that, in the context of innovation management, rewarding intellectual curiosity and taking chances, may be more effective than an inflexible reward scheme. According to the Global Competitiveness Report, India is a “factor driven economy” while Turkey is classified as a country in “transition” to innovation-based economy [19–21]. The above-mentioned studies do not look at how the different types of rewards individually influence the innovation performance of SMEs. In addition, previous studies essentially direct their focus on large organisations especially as a reward is seen as a corporate entrepreneurship factor [22]. This study seeks to establish the influence of various types of rewards on innovation performance in the context of a resource constrained environment of SMEs. The other importance of this study is that it is carried out in the backdrop of an “efficiency driven” economy in which “innovation performance” is least expected.

The next sections review relevant literature on innovation performance and rewards in the SME context, and then the research method used is justified before presenting the study results and discussion. Conclusions and recommendations are provided last.

2. Literature Review

The reviewed literature on rewards and innovation performance factors uses the model of entrepreneurial behaviour as a basis. It includes a review of prior studies, which were mainly in big businesses.

2.1. Rewards in Small and Medium Enterprises

Appropriate performance-based extrinsic and intrinsic rewards have to be offered by firms to motivate employee entrepreneurial activities [23]. For example, rewards range from a regular pay, profit share bonuses, equity or share in the organisation, job security, promotion, research money, public or private recognition, trips to conferences or exhibitions and free time to work on pet projects [24], and opportunities for upward mobility [25]. Good working conditions were in general a reward for employee efforts [26]. In the same context, Nacinovic, Galetic and Cavlek [27] indicated that a reward system was a crucial ingredient in dealing with innovation in firms and could take different forms such as performance-based pay, merit-based bonus, short or long awards, contribution-based rewards, team-based rewards, to name a few. Before delving into the relationship between the two variables, an analysis of innovation performance is presented.

2.2. Innovation Performance (IP)

Innovation performance is identified in different areas of a firm's performance, such as developing new products/services, new production methods, identifying new supplies and markets, and developing new organisational strategies [28]. The forms of innovation might be reduced to the acronym "4 Ps of innovation"; product, process, position and paradigm [29,30]. According to Atkinson [31], innovativeness was usually incorrectly equated with productivity; still others believed that innovation was only linked to research and development (R&D) activity at corporations, national laboratories and universities. Instead, innovation should be observed in product, process, position and paradigm (business models) of an organisation [32]. Innovation performance manifests itself in new products/services, efficiencies [33] and the successful commercial performance of an organisation [34]. Each of the IPs are briefly discussed:

- Product innovation

Product innovation refers to changes in products an organisation offers for a sustainable business performance. According to Radas and Bozic [35], the market scope was vital for SMEs because of its effect on innovation, especially the product and process innovation. Furthermore, Kraus, Poh-jola, and Koponen [36] stated that the main core of innovation literature has been the relationship between firm success and product innovativeness.

- Process innovation

The process innovation focuses on improvements in product and service creation and delivery. According to Kirchmer [37], process innovation has to be made part of an innovation and business processes synergy.

- Position innovation

Position innovation is the context services and products are introduced and the acknowledgement with regard to market variation and changes in consumer behaviour. According to [36], an entrepreneurial firm was likely to engage in product-market innovation in response to competitors' threats.

- Paradigm innovation

Lowe and Marriott [29] referred to changes in the underlying mental models that frame what an organisation does as paradigm innovation. This is likely to lead to a reformulation of an organisation's strategy and structure. In the same context, Ehlers and Lazenby [38] confirm that paradigm is what the organisation is about in terms of strategy, goals, activities, mission, and values. In addition, paradigm innovation entailed tenacity and the resilience of entrepreneurial managers, especially in the context of SMEs [29].

The next section will analyse the differences that rewards make in innovation performance of SMEs.

2.3. Differences in Innovation Performance and Rewards in SMEs

The reason why few firms recorded innovation performance was that the recognition of success is very rare [39]. Firms did not usually provide payment in advance for what an intrapreneur might accomplish, yet expected employees to get involved and assume their risk [11]. In cases where motivated employees have success, they are only rewarded a small bonus that could be perceived as less valued in relation to their effort and achievement [40]. The other reason for low innovation performance was that entrepreneurial orientation within an organisation is usually associated with the owner-manager and this did not promote employee intrapreneurial commitment to undertake innovative opportunities outside their prescribed or traditional role in an organisation [41].

A model of motivation for entrepreneurial behaviour emphasised the critical role of reward systems of an organisation to unleash the entrepreneurial drive of employees [24]. This model reiterates that employees were likely to accept work to achieve rewards. Furthermore, although rewards could take different forms, such as status, financial, personal development or power, the question was whether the employee could be motivated toward specific behaviours. This model further stated that for individual motivation to be entrepreneurial, an anticipation that effort spent on entrepreneurial activity would lead to a fair performance evaluation and the achievement of a proportional reward should exist. In summary, Rigtering and Weitzel [42] stated that although entrepreneurial employees (intrapreneurs) were considered to be important drivers for innovations and strategic renewal in organisations, the question remained; how could organisations stimulate members through rewards to support entrepreneurial orientation and firm innovation performance? However, research has shown that employee rewards made a difference in firm innovation performance [43–46]. In summary, innovation performance is a result of intrapreneurship and intrapreneurship is a result of an appropriate reward system used by SMEs.

Intrapreneurship occurs at both the individual and organisation level [47]. The importance of top management involvement, in terms of rewarding and trusting individuals within the firm to detect opportunities should underline the innovation objectives of firms [48]. Moreover, as stated by Hisrich and Kearney; Rayner and Morgan [28,49] proper motivation of employees led to the adoption of creative approaches and increased innovation and responsiveness to customers and markets, consequently enhancing the innovation performance and competitiveness of the organisation. Closely related to this, Rigtering and Weitzel [42] acknowledge that intrapreneurial employees are those involved in bottom-up entrepreneurial activities in an organisation and it is these activities that usually result in innovations. Contrasted with similar management concepts such as a diversification strategy, organisational innovation and learning, Gapp and Fisher [50] and Antoncic and Hisrich [51] reiterate that intrapreneurship was primarily focused on individual activity to drive the process of innovation “within a joyful environment”. Such an environment has to be watered by rewards for it to thrive [29].

In this context, reward was proven to motivate intrapreneurial behaviour [49,52,53]. For example, giving appropriate rewards might enhance the employees’ willingness to assume intrapreneurial risk [4]. The organisation had to instill extrinsic rewards for innovation [54]. If the employees perceived the reward system as trustworthy and that it created benefits to all, the higher would be the tendency to commit to innovative activities and assume risk related with entrepreneurial work performance [44,55]. Monsen, et al., [45] see reward as a trigger for intrapreneurial behaviour, motivating employees to become innovative, proactive and moderate risk-takers. Bjerndell and Severin [46] confirmed that reward systems were strategically designed to link individual activities and effort. Research has proven that employees may become motivated by the rewards given, which leads to innovations in firms [56].

The implementation of an effective reward system had to take into account, result-based incentives, feedback and emphasise individual responsibility with regard to innovation objectives [17]. In addition, Özutkua [57] stated that an effective reward design should be linked to work outcomes that support and foster the achievement of strategic goals. As such, any organisation's innovation strategy should not neglect people to avoid rigidity. Consequently, rigidity was likely to arise if a reward system was not aligned with its innovation objectives [58]. It has to be indicated that "without rewarding the employee" (intrapreneur), the 4Ps are unlikely to be realised. Intrapreneurship has to be encouraged through rewards [59]. In this context, to sustain innovation, firms had to infuse appropriate individual incentives, and align with practices that were likely to nurture team spirit [4,55]. The development of organisational innovative ability and performance cannot be fully realised without rewarding the employees who drive it [60]. If intrapreneurial activities are not incentivised through rewards, innovation performance may not be realized [61,62]. The question becomes; how significant is the influence of rewards on the innovation performance of manufacturing SMEs in South Africa?

Based on the above literature review, the study hypothesises that: Rewards significantly influence the innovation performance of SMEs (HO). Innovation performance is measured by, (a) Product innovation (HO₁), (b) Position innovation (HO₂), (c) Process Innovation (HO₃) and (d) Paradigm innovation (HO₄).

2.4. Crowd Sourcing and Sustainability

Crowd sourcing of information is critical in knowledge generation and innovation performance [2]. Knowledge sharing is inherently necessary for organisational success and long-term sustainability [63,64]. The generation and sharing of knowledge occur only when individuals cooperate [63] and this can be done by motivating employees (intrapreneurs) through appropriate incentives [65]. Today's challenge is to bring enough business innovation to kick-start a transformation system that will ensure social and environmental sustainability [66]. Advancing the Innovation Nexus (also used by organisations such as the World Economic Forum), KPMG [66] advocate that knowledge crowd sourcing is the possible solution (together with the Footprint Nexus and Erosion Nexus) to ensure organisations cope with the new world order in a sustainable manner. It also has to be noted that sustainability challenges bring both risks and opportunities. Innovation performance capabilities will enable firms to mitigate the risks or exploit the opportunities that arise.

2.5. Overview of Rewards and Innovation Performance in Big Businesses (Prior Studies)

The findings observed in the above discussion relate mainly to big businesses and not SMEs. South African studies, [4,14,15], all emphasize the importance of rewards systems to innovation performance. In the same context, the Indian, Turkish and European studies earlier referred to in the introduction show that intrapreneurial behaviour in big enterprises improves when employees receive institutional rewards. The above-mentioned studies do not look at how the different types of rewards individually influence the innovation performance of SMEs. In addition, previous studies essentially direct their focus on large organisations especially as pointed out by James et al., [22], that a reward is seen as corporate entrepreneurship (big business) factor. Knowledge sharing enhance IP.

The study's methodology is discussed next.

3. Materials and Methods

A cross sectional survey design was adopted for the study.

3.1. Data Collection Method and Participants

According to the Kwa-Zulu Natal provincial SMEs database, financial year 2017–2018 [67] the population of manufacturing SMEs located in the province is estimated to be 1255. Seven sub-sectors including food and beverages; clothing and textile; paper, printing and allied products; chemical, petroleum, rubber, plastics; metal fabrication; motor and vehicle

components, and other, (in case one did not fit in any of the above), were identifiable in this population. A structured questionnaire was distributed to owner-managers of all firms in the database through e-mail. All the sub sectors were therefore selected. A total of 300 SMEs responses (from the provincial population of 1255) were received and all (300) were found to be usable for the study.

3.2. Survey Questions

The questionnaire included firstly, the questions on the types of reward offered by SMEs and secondly, questions that measured the innovation performance of SMEs. Participants were asked to choose the rewards paid to employees by their organisations among a list provided. We compiled the list from multiple sources that included [17,23,24,26,27,68]. Furthermore, the innovation performance (IP) of SMEs was measured through the four components of innovation: product, process, position and paradigm (4Ps, based on the work by [29,30,32,38]).

Based on these sources, 21 items were used to measure the 4Ps in SMEs (Table 1). Firstly, the product innovation items included, new products and sales, expenditure on research and development (R&D), ideas generated and converted into new products, resultant increased cash flow and profit in SMEs. Secondly, process innovation items addressed the novelty, speed, flexibility and adaptability of the processes used in the SMEs. In addition, position innovation items measured the development of the market, reputation and attractiveness of products offered and loyalty of customers towards SMEs' products. Finally, paradigm innovation items addressed the alignment of the strategies, skills commitment of employees and consideration of R&D with the innovation goals of SMEs.

Table 1. Innovation Performance Items (Measures).

	Innovation Performance Items	Reliability Cronbach's Alpha Test
N	Product Innovation	0.846
1	New products have resulted in increased sales	
2	New products from this firm are produced by other firms on patent (license)	
3	With the introduction of new products the sales of existing products have improved	
4	Interest in the new products has been sustained	
5	In this firm, money spent on research & development (R&D) is rewarded by successful new products	
6	The new products have increased the profits realised by this firm	
7	New products have increased the daily cash flow of the firm	
8	At least ten per cent of ideas generated by the firm have been used in new products	
	Process Innovation	0.864
1	The firm has developed new and improved processes	
2	The firm uses new processes that produce products faster than competitors	
3	The firm's production processes are adaptable and can accommodate changes when necessary	
4	Our firm's product development cycle is shorter than that of our competitors	
5	The firm's new production process has reduced the cost of production	
	Position Innovation	0.717
1	The sale of new products has improved the loyalty of the customers	
2	The firm has succeeded in exploiting other markets with its new products	
3	The new products have attracted new customers to the firm	
4	The new products have improved the reputation of the firm	

Table 1. Cont.

	Innovation Performance Items	Reliability Cronbach's Alpha Test
	Paradigm Innovation	0.763
1	Many employees have acquired new skills in order to improve innovation	
2	The firm alters its strategies, if necessary, to meet its innovation goals	
3	The firm and its employees do not give up on innovations and work on them until the product goal is achieved.	
4	The firm has increased its funds in research and development (R&D)	
21	Innovation Performance (IP)	0.921

SMEs were specifically asked to indicate their level of agreement to statements that reflected the offering or availability of each reward and how it (reward) contributed to innovation performance. This was measured on a Likert 5 interval scale of 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree. Single items measured the rewards. An item analysis was carried out to confirm reliability, and all the items used in the study scored above 60%. Elements of each of the 4 Ps is shown in Table 1. The reliability tests of the innovation types is shown in Table 1. All the innovation types are reliable and the combined alpha coefficient very high at 0.92%.

4. Results

It was crucial to investigate the small medium enterprises' capacity to pay a variety of rewards and to test how various rewards contribute to innovation performance. The study first sought to establish/confirm the incentives offered by SMEs as well as their distribution. Figure 1 shows the percentages of firms that offer a particular incentive.

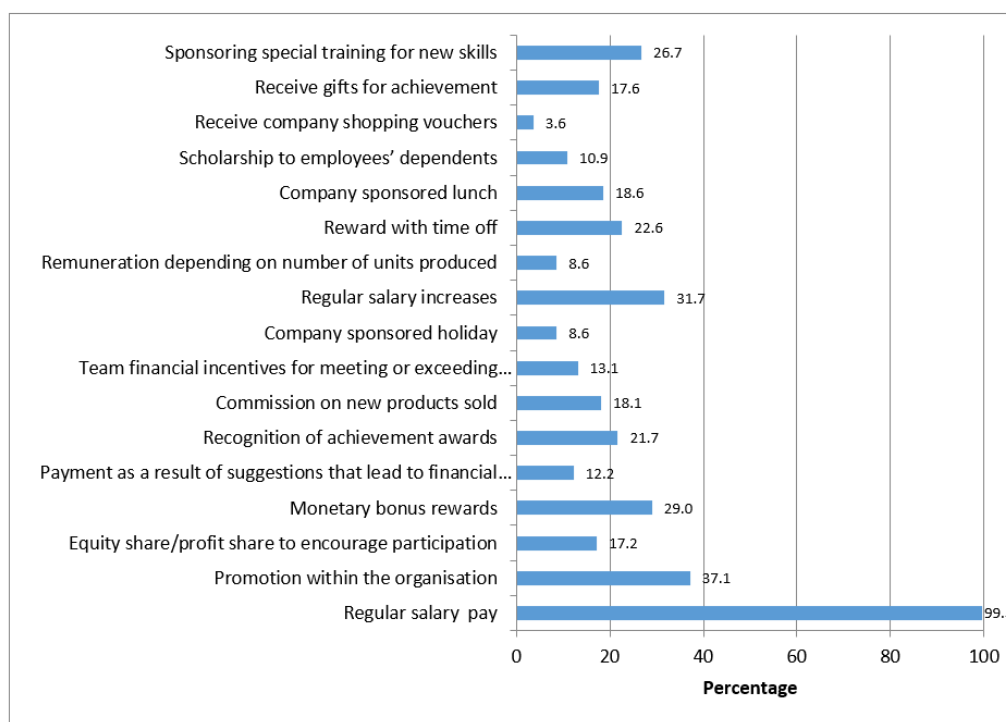


Figure 1. Available Rewards in manufacturing SMEs.

Besides a regular salary that was awarded by 99.5% of SMEs, the top five other types of rewards paid by SMEs are, promotion within the organisation (37.1%), regular salary increases (31.7%), monetary bonus (29%), sponsoring special training for new skills (26.7%)

and reward with time off (22.6%). It can be seen that these percentages are very low. Some rewards are paid by as low as less than 10% of SMEs. Overall performance such as growth, profitability and competitiveness is likely to be negatively affected if certain incentives are not paid to employees for them to be innovative. The results indicate that about 27% of SMEs sponsor employees for a special training to learn new skills as a reward mechanism. This shows the lack of opportunity for development of employees in SMEs, although this reward constitutes an investment in the sense that skills learned are likely to be used to improve innovation performance. This is because Lewis [3] points out that the entrepreneur needs creativity and updated skills to improve business performance. Furthermore, promotion and possible salary increases are found to be implemented by less than 40% of SMEs, which is relatively low. Another important reward that is paid by only 11% of SMEs is scholarship to employees' dependents. This social intervention might allow skilled personnel to strengthen their attachment to SMEs and compensate for the lack of salary increases and promotion. The influence of available rewards on innovation performance of SMEs was tested using regression analysis. Each reward was tested against the IP elements; product (HO₁), process (HO₂), position (HO₃) and paradigm (HO₄). The results are shown in Tables 2–9.

Table 2. Rewards and Product Innovation Model Summary and ANOVA.

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig.	F Change
1	0.493 ^a	0.243	0.179	4.39348	0.243	3.825	17	203		0.000
ANOVA ^a										
Model	Sum of Squares			Df	Mean Square	F	Sig.			
1	Regression			17	73.830	3.825	0.000 ^b			
	Residual			203	19.303					
	Total			220						

^a Dependent Variable: Product Innovation. ^b Predictors: (Constant), X.17 Sponsoring special training for new skills, X.12 Reward with time off, X.1 Regular salary pay, X.6 Recognition of achievement awards, X.13 Company sponsored lunch, X.15 Receive company shopping vouchers, X.11 Remuneration depending on number of units produced, X.5 Payment as a result of suggestions that lead to financial benefits from innovations, X.2 Promotion within the organisation, X.7 Commission on new products sold, X.8 Team financial incentives for meeting or exceeding innovation objectives, X.14 Scholarship to employees' dependents, X.16 Receive gifts for achievement, X.10 Regular salary increases, X.4 Monetary bonus rewards, X.3 Equity share/profit share to encourage participation, X.9 Company sponsored holiday.

Table 3. Rewards and Product Innovation.

Coefficients ^a										
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Collinearity Statistics		
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF	
	(Constant)	45.989	6.324		7.272	0.000	33.519	58.459		
	X.1 Regular salary pay	−0.499	4.925	−0.007	−0.101	0.919	−10.209	9.211	0.800	1.251
	X.2 Promotion within the organisation	1.667	0.781	0.166	2.135	0.034	0.128	3.207	0.614	1.629
	X.3 Equity share/profit share to encourage participation	−2.171	1.217	−0.169	−1.785	0.076	−4.570	0.228	0.414	2.413
1	X.4 Monetary bonus rewards	0.713	0.974	0.067	0.733	0.465	−1.206	2.633	0.448	2.233
	X.5 Payment as a result of suggestions that lead to financial benefits from innovations	−3.794	1.111	−0.257	−3.415	0.001	−5.984	−1.603	0.660	1.515
	X.6 Recognition of achievement awards	1.486	0.985	0.127	1.508	0.133	−0.457	3.428	0.530	1.889
	X.7 Commission on new products sold	−0.241	1.140	−0.019	−0.211	0.833	−2.488	2.007	0.453	2.205

Table 3. Cont.

Model	Coefficients ^a								T	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	Unstandardized Coefficients		Standardized Coefficients	Lower Bound	Upper Bound	Tolerance	VIF							
	B	Std. Error	Beta											
X.8 Team financial incentives for meeting or exceeding innovation objectives	−2.073	1.238	−0.145	−1.675	0.096	−4.513	0.368	0.500	1.999					
X.9 Company sponsored holiday	−0.955	1.653	−0.055	−0.578	0.564	−4.215	2.305	0.407	2.459					
X.10 Regular salary increases	−0.118	0.896	−0.011	−0.132	0.895	−1.885	1.649	0.503	1.990					
X.11 Remuneration depending on number of units produced	0.595	1.268	0.034	0.469	0.639	−1.904	3.095	0.692	1.446					
X.12 Reward with time off	0.629	0.807	0.054	0.779	0.437	−0.962	2.220	0.766	1.305					
X.13 Company sponsored lunch	1.614	0.937	0.130	1.722	0.087	−0.234	3.462	0.658	1.520					
X.14 Scholarship to employees' dependents	−2.442	1.283	−0.157	−1.903	0.058	−4.973	0.088	0.548	1.826					
X.15 Receive company shopping vouchers	−0.980	2.060	−0.038	−0.476	0.635	−5.041	3.082	0.590	1.695					
X.16 Receive gifts for achievement	−0.900	1.097	−0.071	−0.821	0.413	−3.063	1.263	0.499	2.002					
X.17 Sponsoring special training for new skills	−1.328	1.044	−0.121	−1.272	0.205	−3.385	0.730	0.410	2.441					

^a Dependent Variable: Product Innovation.

Table 4. Rewards and Process Innovation Model Summary and ANOVA.

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. F Change	
1	0.510 ^a	0.260	0.198	2.91317	0.260	4.202	17	203	0.000	
ANOVA ^a										
Model	Sum of Squares		Df	Mean Square	F	Sig.				
1	Regression	606.274	17	35.663	4.202	0.000 ^b				
	Residual	1722.767	203	8.487						
	Total	2329.041	220							

^a Predictors: (Constant), same as in Table 4.

Table 5. Rewards and Process Innovation.

Model	Coefficients ^a								T	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	Unstandardized Coefficients		Standardized Coefficients	Lower Bound	Upper Bound	Tolerance	VIF							
	B	Std. Error	Beta											
(Constant)	29.383	4.194		7.007	0.000	21.114	37.651							
X.1 Regular salary pay	−1.070	3.265	−0.022	−0.328	0.743	−7.509	5.368	0.800	1.251					
X.2 Promotion within the organisation	−0.099	0.518	−0.015	−0.191	0.849	−1.120	0.922	0.614	1.629					
X.3 Equity share/profit share to encourage participation	−0.799	0.807	−0.093	−0.991	0.323	−2.390	0.791	0.414	2.413					
X.4 Monetary bonus rewards	0.070	0.646	0.010	0.108	0.914	−1.203	1.343	0.448	2.233					
X.5 Payment as a result of suggestions that lead to financial benefits from innovations	−1.068	0.737	−0.108	−1.450	0.149	−2.520	0.385	0.660	1.515					
X.6 Recognition of achievement awards	0.875	0.653	0.111	1.339	0.182	−0.413	2.162	0.530	1.889					
X.7 Commission on new products sold	−1.457	0.756	−0.173	−1.927	0.055	−2.947	0.034	0.453	2.205					
X.8 Team financial incentives for meeting or exceeding innovation objectives	−1.244	0.821	−0.129	−1.516	0.131	−2.862	0.374	0.500	1.999					
X.9 Company sponsored holiday	−0.767	1.096	−0.066	−0.699	0.485	−2.928	1.395	0.407	2.459					
X.10 Regular salary increases	−0.798	0.594	−0.114	−1.343	0.181	−1.969	0.374	0.503	1.990					

Table 5. Cont.

Model	Coefficients ^a								
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
X.11 Remuneration depending on number of units produced	-0.438	0.841	-0.038	-0.521	0.603	-2.095	1.220	0.692	1.446
X.12 Reward with time off	0.134	0.535	0.017	0.250	0.803	-0.921	1.189	0.766	1.305
X.13 Company sponsored lunch	1.214	0.621	0.145	1.954	0.052	-0.011	2.440	0.658	1.520
X.14 Scholarship to employees' dependents	-2.243	0.851	-0.215	-2.636	0.009	-3.921	-0.565	0.548	1.826
X.15 Receive company shopping vouchers	2.037	1.366	0.117	1.491	0.137	-0.656	4.730	0.590	1.695
X.16 Receive gifts for achievement	-0.645	0.727	-0.076	-0.887	0.376	-2.080	0.789	0.499	2.002
X.17 Sponsoring special training for new skills	-0.025	0.692	-0.003	-0.036	0.971	-1.390	1.340	0.410	2.441

^a Dependent Variable: Process Innovation.

Table 6. Rewards and Position Innovation Model Summary and ANOVA.

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. F Change	
1	0.483 ^a	0.233	0.169	1.99216	0.233	3.636	17	203	0.000	
ANOVA ^a										
	Model		Sum of Squares		Df	Mean Square	F		Sig.	
1	Regression		245.297		17	14.429	3.63		0.000 ^b	
	Residual		805.644		203	3.969				
	Total		1050.941		220					

^a Dependent Variable: Position Innovation. ^b Predictors: (Constant), same predictors as in Table 2.

Table 7. Rewards and Position Innovation Performance.

Model	Coefficients ^a								
	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
(Constant)	21.100	2.868		7.358	0.000	15.445	26.754		
X.1 Regular salary pay	1.132	2.233	0.035	0.507	0.613	-3.270	5.535	0.800	1.251
X.2 Promotion within the organisation	0.553	0.354	0.123	1.562	0.120	-0.145	1.251	0.614	1.629
X.3 Equity share/profit share to encourage participation	-0.820	0.552	-0.142	-1.487	0.139	-1.908	0.267	0.414	2.413
X.4 Monetary bonus rewards	1.256	0.441	0.261	2.844	0.005	0.385	2.126	.448	2.233
X.5 Payment as a result of suggestions that lead to financial benefits from innovations	-0.713	0.504	-0.107	-1.415	0.158	-1.706	0.280	0.660	1.515
X.6 Recognition of achievement awards	0.050	0.447	0.009	0.112	0.911	-0.831	0.931	0.530	1.889
X.7 Commission on new products sold	-0.526	0.517	-0.093	-1.018	0.310	-1.545	0.493	0.453	2.205
X.8 Team financial incentives for meeting or exceeding innovation objectives	-1.925	0.561	-0.298	-3.431	0.001	-3.032	-0.819	0.500	1.999
X.9 Company sponsored holiday	-1.197	0.750	-0.154	-1.596	0.112	-2.675	0.281	0.407	2.459
X.10 Regular salary increases	-0.636	0.406	-0.136	-1.566	0.119	-1.437	0.165	0.503	1.990
X.11 Remuneration depending on number of units produced	-0.944	0.575	-0.121	-1.643	0.102	-2.078	0.189	0.692	1.446
X.12 Reward with time off	0.538	0.366	0.103	1.471	0.143	-0.183	1.260	0.766	1.305
X.13 Company sponsored lunch	0.586	0.425	0.104	1.378	0.170	-0.252	1.424	0.658	1.520
X.14 Scholarship to employees' dependents	0.306	0.582	0.044	0.525	0.600	-0.842	1.453	0.548	1.826
X.15 Receive company shopping vouchers	0.326	0.934	0.028	0.349	0.728	-1.516	2.167	0.590	1.695
X.16 Receive gifts for achievement	-0.074	0.497	-0.013	-0.149	0.882	-1.055	0.907	0.499	2.002
X.17 Sponsoring special training for new skills	-0.018	0.473	-0.004	-0.037	0.970	-0.951	0.916	0.410	2.441

^a Dependent Variable: Position Innovation.

Table 8. Rewards and Paradigm Innovation Model Summary and ANOVA.

Model Summary											
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics						
					R Square Change	F Change	df1	df2	Sig.	F Change	
1	0.627 ^a	0.394	0.343	2.12655	0.394	7.755	17	203	0.000		
ANOVA ^a											
Model	Sum of Squares			Df	Mean Square	F	Sig.				
1	Regression	596.157			17	35.068	7.75	0.000 ^b			
	Residual	918.006			203	4.522					
	Total	1514.163			220						

^a Dependent Variable: Paradigm Innovation. ^b Predictors: (Constant), Same as in Table 2.

Table 9. Rewards and Paradigm Innovation Performance.

Coefficients ^a										
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics		
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF	
	(Constant)	20.599	3.061		6.729	0.000	14.563	26.634		
	X.1 Regular salary pay	4.605	2.384	0.118	1.932	0.055	−0.095	9.304	0.800	1.251
	X.2 Promotion within the organisation	0.785	0.378	0.145	2.077	0.039	0.040	1.530	0.614	1.629
	X.3 Equity share/profit share to encourage participation	−0.226	0.589	−0.033	−0.383	0.702	−1.387	0.935	0.414	2.413
	X.4 Monetary bonus rewards	−0.332	0.471	−0.058	−0.705	0.481	−1.262	0.597	0.448	2.233
	X.5 Payment as a result of suggestions that lead to financial benefits from innovations	−2.146	0.538	−0.268	−3.990	0.000	−3.206	−1.085	0.660	1.515
	X.6 Recognition of achievement awards	0.540	0.477	0.085	1.133	0.258	−0.400	1.480	0.530	1.889
	X.7 Commission on new products sold	−2.010	0.552	−0.296	−3.643	0.000	−3.098	−0.922	0.453	2.205
1	X.8 Team financial incentives for meeting or exceeding innovation objectives	−1.180	0.599	−0.152	−1.970	0.050	−2.361	0.001	0.500	1.999
	X.9 Company sponsored holiday	0.822	0.800	0.088	1.027	0.306	−0.756	2.400	0.407	2.459
	X.10 Regular salary increases	0.126	0.434	0.022	0.290	0.772	−0.729	0.981	0.503	1.990
	X.11 Remuneration depending on number of units produced	0.557	0.614	0.060	0.907	0.365	−0.653	1.767	0.692	1.446
	X.12 Reward with time off	0.022	0.391	0.004	0.056	0.955	−0.748	0.792	0.766	1.305
	X.13 Company sponsored lunch	0.417	0.454	0.062	0.919	0.359	−0.477	1.312	0.658	1.520
	X.14 Scholarship to employees' dependents	−0.665	0.621	−0.079	−1.070	0.286	−1.889	0.560	0.548	1.826
	X.15 Receive company shopping vouchers	−0.788	0.997	−0.056	−0.790	0.430	−2.754	1.178	0.590	1.695
	X.16 Receive gifts for achievement	−0.742	0.531	−0.108	−1.398	0.164	−1.789	0.305	0.499	2.002
	X.17 Sponsoring special training for new skills	−0.873	0.505	−0.147	−1.727	0.086	−1.869	0.123	0.410	2.441

^a Dependent Variable: Paradigm Innovation.

Results from Table 2 show that Product Innovation performance is predicted by R-square of 0.243. This means that a one-unit increase in rewards predicts a 0.243% of product innovation. This can be in any of the reward elements mentioned. It can therefore be concluded that Rewards significantly influence Product Innovation performance. Hypothesis HO₁ is therefore accepted.

The ANOVA analysis (Table 2) shows that there is a significant difference between the rewards and product innovation performance as shown by an alpha value of 0.00. To show which reward element have a significant influence on product innovation, coefficient results are shown in Table 3.

The influence of rewards on product innovation performance was evaluated against the predictors using multiple linear regression analysis. The model is best summarised by the following equation:

$$\begin{aligned}
 Y &= a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \beta_{11} X_{11} \\
 &\quad + \beta_{12} X_{12} + \beta_{13} X_{13} + \beta_{14} X_{14} + \beta_{15} X_{15} + \beta_{16} X_{16} + \beta_{17} X_{17} + \epsilon \\
 &= -0.007 + 0.166 - 0.169 + 0.067 - 0.257 + 0.127 - 0.019 - 0.145 - 0.055 - 0.011 + 0.034 \\
 &\quad + 0.054 + 0.130 - 0.157 - 0.038 - 0.071 - 0.121
 \end{aligned} \tag{1}$$

Y1: Product innovation performance

a: Intercept

X₁: regular salary pay

X₂: promotion within the organisation

X₃: equity /profit share to encourage participation

X₄: monetary bonus rewards

X₅: payment for suggestions that lead to financial benefits from innovations

X₆: recognition of achievement awards

X₇: commission on new products sold

X₈: team financial incentives for meeting or exceeding innovation objectives

X₉: company sponsored holiday

X₁₀: regular salary increases

X₁₁: remuneration depending on number of units produced

X₁₂: reward with time off

X₁₃: company sponsored lunch

X₁₄: scholarship to employees' dependents

X₁₅: receive company shopping vouchers

X₁₆: receive gifts for achievement

X₁₇: sponsoring special training for new skills

ε: Residual (error)

The results, standardized coefficient values (Table 3) show that X.1, X.3, X.5, X.7, X.8, X.9, X.10, X.14, X.15, X.16, and X.17 all have a negative influence on product innovation performance and on the other hand, X2, X4, X6, X.11, X.12, X.13 have positive influences on Product IP. This, imply that an increase in a unit of the reward element, result in a decrease (if the coefficient value is negative) or an increase (if the value is positive) of the particular innovation performance by the value indicated. For example, an increase by one unit of X.2 (promotion within the organisation) will result in an increase of 0.166 in Product IP while a similar increase in one element in X.3 equity /profit share, would decrease the Product IP by a value of 0.169. In addition, promotion within the organisation (X.2), and Payment as a result of suggestions that lead to financial benefits from innovations (X.5) significantly influence IP as shown by alpha values, 0.034 and, 0.001 respectively. It should be noted that reward X.2 has a positive influence on Product IP while X.5 has a negative influence on product IP. This means that an increase by one unit in X.2 will result in an increase in IP by 0.166 while a one-unit increase in X.5 will decrease product IP by −0.257. The effect is significant, positive on the former, significant and negative on the latter.

The analysis presented above will not be repeated for each of the remaining three innovation performance elements, product, process and paradigm. Brief explanations will be provided where deemed necessary. In the regression analysis, Y2, Y3 and Y4 will represent each of the innovation performances, process, position and paradigm respectively.

4.1. Rewards and Process Innovation Performance

The results on the influence of rewards and process innovation are presented in Tables 4 and 5.

Results from Table 4 show that Process Innovation Performance is predicted by R-square of 0.260. This means that a one-unit increase in rewards predicts 0.260 of Process

IP. From the model summary, it can be concluded that, Rewards significantly influence Process Innovation performance. Hypothesis HO₂ is supported.

The ANOVA analysis shows that there is a significant difference between the rewards and process innovation as shown by an alpha value of 0.00. To show which reward element have a significant influence on process innovation, coefficient results are shown in Table 5.

Standardized coefficient values (Table 5) show that X.1, X.2, X.3, X.5, X.7, X.8, X.9, X.10, X.11, X.14, X.16, X.17 all have a negative influence on process innovation performance and on the other hand, X.4, X.6, X.12, X.13, X.15 have positive influences on Process IP. This, imply that an increase in a unit of the reward element, result in a decrease (if the coefficient value is negative) or an increase (if the value is positive) of the particular innovation performance by the value indicated. Only the reward, *Scholarship to employees' dependents promotion within the organisation* (X.14), significantly influence Process IP as shown by alpha values, 0.009. The influence is however negative.

4.2. Rewards and Position Innovation

The results for the influence of the different rewards and position innovation performance are shown in Tables 6 and 7. These results show that Rewards have a significant influence on Position Innovation performance. Hypothesis HO₃ is therefore accepted.

The ANOVA analysis (Table 6) shows that there is a significant difference between the rewards and position innovation performance as shown by an alpha value of 0.00. The coefficient for rewards and Position Innovation are shown in Table 7.

The standardized coefficient values (Table 7) show that X.3, X.5, X.7, X.8, X.9, X.10, X.11, X.16, and X.17 all have a negative influence on Position Innovation Performance while the remainder are positive. Only Monetary bonus rewards (X.4) and Team financial incentives for meeting or exceeding innovation objectives (X.8) are significant at alphas of 0.005 and 0.001 respectively. X.4 has a negative significant influence while X.8's influence is significant and positive.

4.3. Rewards and Paradigm Innovation

Results for paradigm IP are shown in Tables 8 and 9 and brief discussions are provided. The Hypothesis HO₄ is accepted. Rewards significantly influence Paradigm Innovation performance.

The standardized coefficient values (Table 9) show that X.3, X.4, X.5, X.7, X.8, X.14, X.15, X.16, and X.17 all have a negative influence on paradigm innovation performance and the remainder have a positive influence. Only rewards; Promotion within the organisation (X.2), Payment because of suggestions that lead to financial benefits from innovations (X.5), Commission on new products sold (X.7) and Team financial incentives for meeting or exceeding innovation objectives (X.8) significantly influence paradigm innovation. Of these four, only X.2 has a positive significant influence and the remainder negative.

5. Discussion of Results

The study objective was to establish if the rewards offered to intrapreneurs significantly contribute to the innovation performance of manufacturing SMEs. The hypothesis (HO) that stated that; Rewards significantly influence the innovation performance of SMEs is supported. Results show that the rewards that have a positive and significant influence on IP are offered by a few of the SMEs. Different rewards also significantly influence different aspects of IP. Promotion within the organisation (X.2) has a positive and significant influence on Product and Paradigm IPs, while, Rewards payment for suggestions that lead to financial benefits from innovations (X.5), is significant but with a negative influence on the same elements. Team financial incentives for meeting or exceeding innovation objectives (X.8) is significant and negative in Position and Paradigm IPs. Scholarship to employees' dependents (X.14), has a significant and negative effect on Process IP; Monetary bonus rewards (X.4), significantly and positively influences Position IP and Commission on new products sold (X.7) has a significant and negative influence on Paradigm IP.

It is important to note that X.2 and X.4 benefits (which have a positive influence) are offered by 37.1% and 29% of the SMEs respectively. This is the second and third most common reward offered besides the regular salary, which is offered by 99% of the SMEs. The outcome is very encouraging because the two most popular / common rewards also have a significant positive influence. It should also be noted that these two rewards significantly influence three IP elements, save for Process IP. Those SMEs currently offering these two rewards should continue to do so and those not currently offering them, should be encouraged to do so. The importance of these two rewards are confirmed [2], as being part of high performance work systems (HPWS) that enhance employee performance. Rewards X.5, X.7, X.8 and X.14 that have a significant but negative influence, are relatively common, since they are offered by 12.2%, 18.1%, 13.1% and 10.9 % of the SMEs respectively (Figure 1). The term “relatively” was used given that there are lower scores, such as 8.6% (X.2) and 3.6% as the lowest (Figure 1). X.5 features in both Product and Paradigm IPs while X.8 appears in Position and Paradigm IPs. X.14 has a significant and negative influence on Process IP. Given the relatively high prevalence of X.8 and its significant and negative effect on IP, it is suggested that its offering be reconsidered and be further probed. The question would be whether “individual” as opposed to “team”, *financial incentives for meeting or exceeding innovation objectives*, would be more preferable and therefore have a positive influence. Alternatively, would rewarding both the individual as well as the group effort result in a significant positive effect? Besides “scholarship to employee’s dependents” (X.14), the other rewards, which are significant and negative, tend to be “after the act” incentives. This may explain the negative effect. For example, X.8, meeting and exceeding innovation objectives, commission on new products sold (X.7) and payment to suggestions that would have led to innovations (X.5), would be paid after the IP has been realised. This may imply that incentives that encourage participation in idea generation (crowdsourcing of ideas) whether these ideas are successfully converted to products and services or not, should be encouraged.

The crowdsourcing of ideas is important in innovation performance. The more people actively engage in innovation, the more likely positive results can be achieved. The adoption of multiple incentives by firms can be used to derive enhanced productivity, [69] such as to encourage or promote innovation performance. Different contexts or rewards do not trigger underlying employee mental processes the same and so provide intrapreneurial actions differently [70]. Solheim and Herstad; Murimbika and Urban [71,72] confirm that innovation performance can be achieved when organisations urge voluntary intrapreneurial inclinations through appropriate rewards. Rewards that characterise, high performance work practices (HPWP) include, recognition, training and continuous development, performance based pay and job security [73]. The findings corroborate Eisenberger and Byron’s [74] earlier findings that rewards increase creativity in an organisation and that creative performance is based on an individual’s responses to repeatedly being rewarded. In addition, innovation capability would not be possible if staff is not adequately skilled and motivated to adopt them, through provision of of discretionary time and participation in decision-making [73]. Creativity is believed to be the source of innovation. The study also concurs with Leavitt’s [54] findings that consistent recognition of those who contribute ideas, knowledge, and time has a positive influence on crowdsourcing innovation outputs. Financial incentives are proven to drive innovations in SMEs. According to Leavitt; Nacinovic et al., [27,54] senior management should recognise innovative teams and champions, and individual members for their contributions to the overall crowdsourcing effort.

Results in Figure 1 show that only 29% of SMEs provide monetary bonus incentives, which is a positive practice among SMEs. This is likely to affect the employees’ commitment to innovation and the overall innovation performance of the SMEs sector. De Jong, and Hartog [68] confirm that the availability of reward and resources is an important factor that could encourage individuals to act entrepreneurially and achieve innovation within a firm. In addition, Zheng, Wu, and Xie [75] observe that a transactional leadership style adopting contingent rewards is positively associated with the innovation performance

position. In line with the findings of this study, Maier and Zenovia [76] ascertain that innovation is more difficult to find in an existing SME as resources are linked to rewards for success. It can be argued that the reward system must be aligned with an innovation strategy of manufacturing SMEs. As pointed out by Marx, Soares and Barros [77] a reward system, designed strategically should link rewards directly to individual employees' attention and effort. Crowdsourcing for innovation performance is individually based, but organisationally driven through appropriate rewards. SMEs should therefore be aware of this strategic link if they want to enhance their innovation performance.

Reward is proven to motivate entrepreneurial behaviour [40]. With appropriate incentives, employees' willingness to assume intrapreneurial risk is likely to be enhanced. Rewards can therefore be used to crowdsource innovation performance. Considering the limited diversity of rewards to support innovation, the study further concurs with Azami's [11] findings that recognise that intrapreneurial success is very rare in SMEs. Azami [11] states that no company provided payment in advance, for what an intrapreneur may accomplish, but firms put high expectations that employees have to get involved and take risks. Although, Ireland et al., [43] find that rewards constitute an opportunity for employees to act intrapreneurially, Kuratko [78] asserts that a reward system has to have an explicit element of recognition given to people who pursue innovative opportunities.

Reward is supposed to be a reinforcement mechanism to motivate employees to engage in innovative behaviour [79]. The income received by employees is expected to positively affect their involvement in entrepreneurial activities [80]. In this context, it can be argued that the attachment to organisations by an educated and skilled workforce to support innovation could possibly be justified by employees' expectation of various types of rewards. The results confirm that manufacturing SMEs have done little in terms of aligning innovation objectives and rewards. In summary, SMEs are inclined to paying their employees a regular salary, but little has been done to offer other forms of rewards and promote innovation through a reward system. The next section will conclude the findings of the study and provide recommendations.

6. Conclusions and Recommendations

The empirical findings prove that some rewards have a more significant influence than others do on innovation performance. Some rewards have a positive influence while others' influence is negative. However, the lack of diversity in rewards paid by SMEs may hinder their innovation success. The study found that less than 37.1% of SMEs paid any other reward besides a regular salary. The study therefore concludes that efforts that may lead to innovation performance are overlooked in SMEs. Love, and Roper [81] opine that innovation poses skills and people management challenges that necessitates a new ecosystem of skills to retain skilled and entrepreneurial people in the organisation. Although, the reward of employees through promotion (37.1%) and provision of salary increases (31.7%) and awarding of bonuses (29%) are relatively the 3 highest rewards offered (other than regular salary) these are still low adoption rates and reaffirms the SMEs resource constraint and lack of opportunity for employees' growth.

Manufacturing SMEs have done little in terms of aligning innovation objectives and rewarding their members. It can also be interpreted that SMEs are inclined to paying their employees a regular salary, and may consider promotion and pay monetary bonuses, but do not promote innovation through a reward system. This study concurs with, Manso [39] that owner-managers should be keen to understand that recognition of employees success allows SMEs to record high innovation performance.

The study recommends owner-managers to consider diversifying rewards, despite the limited resources. They should specifically adopt those rewards that were found to positively and significantly influence IP and at the same time attempt to minimise the negative effect of the rewards found to be significant but negative. Owner-managers should stimulate employees to generate as many innovative ideas (crowdsourcing) as possible through a system rewarding suggestions that lead to innovations. The rewards, which

have shown a positive influence on IP (though the influence may not be significant), should all be considered. The study also recommends owner-managers to provide rewards that are affordable due to resource constraints. Strategically, SMEs should align the business reward systems with the innovation performance goals of the organisation. This implies the efficient use of limited resources to capitalise on activities that promote and sustain innovations. Furthermore, owner-managers should develop an individual oriented and a team-oriented reward system. This would counter the possible negative influence of team-based rewards, found to significantly and negatively affect IP. Representation from different sections of the business must be engaged to develop guidelines and suggestions to encourage crowdsourcing innovations.

Finally, owner-managers should support the growth and development of their businesses through redefining new approaches about innovations as an imperative for sustainability and competitiveness; that is, maintaining continuous improvement of their business models. This should be done by creating a high performance knowledge sharing culture (HPKC) which according to Rehman et al., [63] p. 4 is a “Knowledge-enabled collaborative work culture derived by a skilled, self-directed and engaged workforce that shares collective vision and exerts discretionary efforts to create a highly productive knowledge exchange system . . . ”. This type of culture will ensure social and environmental sustainability due to its proactive and adaptive capabilities DNA. Ali, Sun and Ali [82] support this thinking.

The application of these recommendations is likely to be more effective where the SME has innovations performance as its strategic posture. This is characterised by the generation of ideas and a regular conversion of these into new products and services. This entrepreneurial culture should drive the entity. An appropriate reward system (which satisfactorily rewards both idea generation and conversion) needs to be in place. The continual skilling of employees as well as retaining the skills and the people is critical. Though high salaries may not be available to reward employees (as in resource rich big companies) alternative reward systems should be considered.

South Africa’s low rank among the more innovative countries necessitates further research into the innovation performance of small and large companies. Furthermore, it is crucial to undertake a longitudinal study in order to observe changes in innovation performance based on changes in reward offerings. It might also be necessary to establish which combinations of rewards will likely result in higher innovation performance. This study looked at the types of rewards offered by different SMEs and if this will significantly lead to innovation performance. It did not assess or identify from the employees; which rewards would make them contribute more to innovation activities. These issues could be undertaken in future studies. The study was limited to manufacturing SMEs in Kwa-Zulu Natal region of South Africa and data collected at a specific time. The results may not be generalised to other regions or provinces where structural factors may be different. For instance, the prevailing economic environment such as the low growth may affect SMEs’ capacity to invest in research and development or other innovation programmes or the rewards offered. Lastly, only the manufacturing sector was included, and different sectors such as retail and construction may reach different conclusions.

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