

# **INTRAPRENEURIAL ORIENTATION IN THE TRANSPORT INDUSTRY: A PILOT STUDY**

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## **ABSTRACT**

The transport industry holds a prominent place in the South African economy, positively contributing to the fiscus, as well as acting as a change agent in alleviating socio-economic ills by creating employment and thereby alleviating poverty. Yet, the transport industry faces numerous challenges brought on by the state of the South African economy, such as lower levels of consumer spending and margin pressures. The worrying state of the South African economy manifests itself in high levels of unemployment, as well as slow creation of Small and Medium-sized enterprises. Promoting entrepreneurial action within SMEs, particularly at employee-level, and the industry can assist in lessening the impact of these problems.

This pilot study investigates the Intrapreneurial Orientation (IO) of employees, at an individual level, thereby providing an indication of the levels of IO at employee-level. The pilot is quantitative in nature and made use of an adapted questionnaire. Data was analysed through SPSS by means of frequency distributions. Results of the pilot study indicate moderate to high levels of risk-taking propensity, managerial support, proactiveness, personal control, self-esteem, autonomy and innovativeness. The value of the study lies in its novelty, as no study to date has been conducted in the transport industry on individual-level IO, thereby indicating entrepreneurial inclination of employees within SMEs in the industry. Results of the pilot can inform future full-scale studies.

## **1. INTRODUCTION**

The role of entrepreneurship in the modern economy has been widely acknowledged, as entrepreneurship acts as an engine for innovation, organisational growth, employment creation, as well as the reduction of socio-economic ills (Lumpkin & Dess, 1996; Bharadwaj & Menon, 2000; Hornsby, Kuratko, Shepherd & Bott, 2009). Yet while the importance of entrepreneurship and the creation of new small and medium-sized enterprises (SMEs) has been widely noted in the existing body of knowledge, the beneficial nature of entrepreneurial actions by existing employees, also termed corporate entrepreneurship or intrapreneurship, has not received as much attention. Nevertheless, an emerging and growing body of knowledge connects intrapreneurship to the successful achievement of organisational objectives, mainly in the form of higher levels of organisational growth, enhanced performance and greater levels of innovation (Lumpkin & Dess, 1996; Antoncic, 2007; Rauch, Wiklund, Lumpkin & Frese, 2009). Perhaps worryingly, some authors have noted that while intrapreneurship has been explored in some depth at the organisational level, little research has been conducted at the individual employee level (Gawke, Gorgievski & Bakker, 2017). Organisations, by virtue of an ever-increasing competitive environment, are required to adapt and innovate, not only by

means of formalised research and development activities, but also by means of entrepreneurial actions of employees (Marvel, Griffin, Hebda & Vojak, 2007; Morris, Kuratko & Covin, 2008; Hornsby, Kuratko, Shepherd & Bott, 2009). Such entrepreneurial actions by employees are referred to as an employee's Intrapreneurial Orientation (IO), formally defined as "an individual employee's predisposition to accept entrepreneurial processes, practices and decision-making characterised by a preference for innovativeness, risk-taking and proactiveness" (Stewart, 2009:29). Worryingly, in the South African context only very limited research has been carried out in this field (see Jacobs & Kruger, 2001; Goosen, De Coning & Smit, 2002; van Wyk & Boshoff, 2004 and Urban & Oosthuizen, 2009). Even more concerning is that despite the transport industry experiencing high levels of business failures and low levels of innovativeness, mainly attributable to a lack of entrepreneurial spirit (Rapoza, 2005; Kokkonen & Tuohino, 2007), no study to date has attempted to investigate the Intrapreneurial Orientation at the employee level in this part of the economy.

This study therefore performs a pilot study exploring Intrapreneurial Orientation in the transport industry, by utilising a newly developed measuring instrument tailored to the South African context.

## **2. PROBLEM STATEMENT**

While the importance of entrepreneurship and associated creation of new businesses has been widely acknowledged as a key factor in addressing South Africa's socio-economic problems, such as unemployment and poverty, the act of entrepreneurship by employees within existing enterprises has not received the same level of attention. Despite the multitude of benefits employee-level intrapreneurship holds, little research has been conducted on this topic. More troubling is that no research to date has been conducted in the South African transport industry, despite the important role this sector plays for the South African economy. In addition, this industry is experiencing similar issues as other industries in South Africa, such as high business failure rates and slow pace of innovation. By deepening an understanding of employee-level intrapreneurship, some of the industry's maladies could be addressed. This study therefore aims to provide preliminary insights into employee-level Intrapreneurial Orientation in the South African transport industry in the form of a pilot study.

## **3. OBJECTIVES**

The primary objective of this study is to generate preliminary insights into levels of Intrapreneurial Orientation in the South African transport industry, from the perspective of employees. Secondary objectives included piloting an adapted measuring instrument by assessing practicality, reliability and implementation issues.

## **4. LITERATURE REVIEW**

### **4.1 Entrepreneurship**

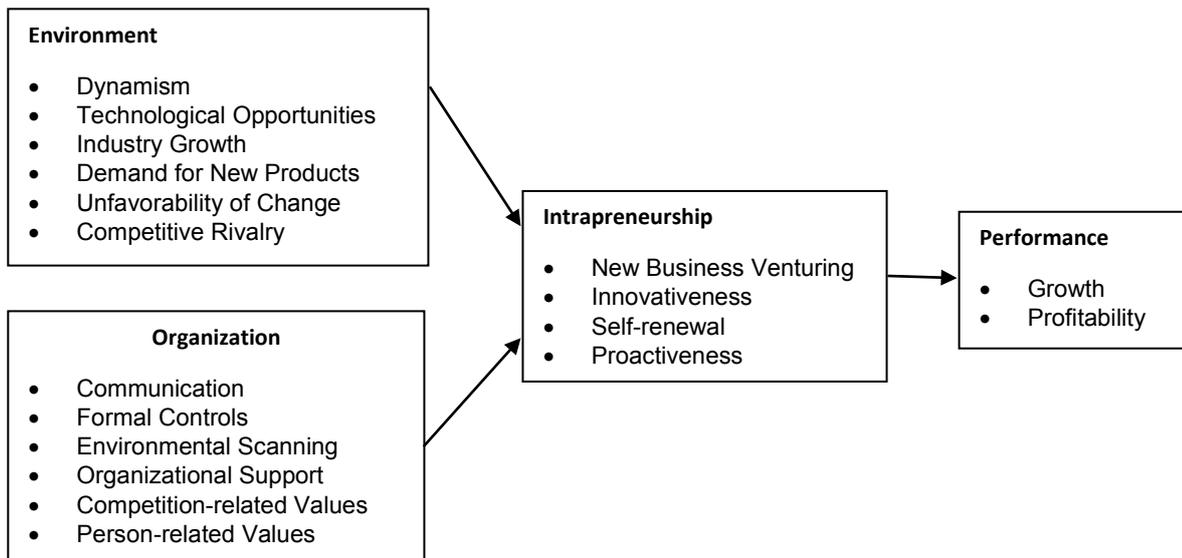
An entrepreneur can be defined as "a person who sees an opportunity in the market, gathers resources and creates and grows a business venture to satisfy these needs. He/she takes the risk of the venture is rewarded with profit if it succeeds" (Nieman & Nieuwenhuizen, 2014:9). Other authors view an entrepreneur from a value creation-perspective, by stating that an entrepreneur is "a person who seeks to generate economic and social value through the creation or expansion of economic activity, by identifying and

exploiting opportunities for new products, processes, markets and for meeting outstanding social and environmental needs” (Blundell & Lockett, 2011:6). This definition expands the role of entrepreneurship past the commonly accepted goal of creating economic gain, but includes elements of creation of social value, by means of not only creating a new business, but also expanding an existing business while at the same time addressing both social and environmental challenges. The role of entrepreneurship in addressing these universal needs has been widely acknowledged, with some authors stating that entrepreneurs, and in particular small and medium-sized enterprises (SMEs) positively contribute to Gross Domestic Product (GDP) growth, raise standards of living, ease the burdens of unemployment and poverty, as well as create innovative products, services and processes (Nieman & Nieuwenhuizen, 2014). Yet despite the important role entrepreneurship and SMEs play, the majority of small businesses fail within the first two years of operation, with only 25% surviving for a period longer than two years (Fatoki & Odeyemi, 2010). More worryingly however is that entrepreneurial activity within existing businesses in South Africa, referred to as Entrepreneurial Employee Activity, is amongst the lowest in the world, at 0.7%, thereby indicating that businesses and employees alike are not exploiting the entrepreneurial potential that exists.

#### 4.2 Corporate Entrepreneurship / Intrapreneurship

Corporate Entrepreneurship (CE) is commonly viewed in the same light as traditional forms of entrepreneurship, yet the context differs as this phenomenon occurs within an existing organisation, usually in the form of bringing about change through internal forms of innovation (Morris, Kuratko & Covin, 2008; Jia, Wang, Zhao & Yu, 2014). While CE is the most commonly utilised term for forms of entrepreneurship within an established organisation, it is restrictive in that it refers to corporates. The term ‘intrapreneurship’ is therefore used interchangeably with CE as it refers to the same phenomenon but performed in an organisation of any size (Pinchot, 1985; Kuratko & Goldsby, 2004), usually in the form of a “semi-autonomous group operating within the overarching structure of the parent organisation” (Blundell & Lockett, 2011:8). The study of intrapreneurship has cast the spotlight on entrepreneurship being performed internally to an organisation, thereby improving performance and enhancing competitive positioning (Antoncic & Hisrich, 2003). Intrapreneurship is important for organisation as it allows innovation and entrepreneurial practices to be weaved into day-to-day processes, by adopting best practices and improving internal responsiveness (Nielsen, Peters & Hisrich, 1985). Additionally, intrapreneurship has been shown to enhance organisational growth, internal performance, profitability and strategic renewal, benefits which an organisation cannot ignore (Zahra, 1991). These internal entrepreneurial practices need to be operationalised for intrapreneurship to be effective, thereby culminating in the creation of Entrepreneurial and Intrapreneurial Orientation, which are discussed in the next section.

The implementation and interplay between Intrapreneurship, environmental elements and it’s direct effects are depicted in Figure 1 below. The figure indicates that IO is a dynamic concept influenced by environmental factors, as well as by internal organisational factors. The outcomes of IO are usually in the form of new entry, innovativeness, strategic self-renewal or proactiveness. These elements hold a positive effect on organisational performance metrics, such as growth and profitability.



Source: Antončič & Hisrich (2001, p.505)

**Figure 1: The intrapreneurship model and its direct effects**

### 4.3 Intrapreneurial Orientation

Intrapreneurial Orientation (IO) evolved from the concept of Entrepreneurial Orientation (EO). EO is usually referred to as a strategy-making process that aims to inspire entrepreneurial actions within an organisation, usually in the form of “policies and practices that provide a basis for entrepreneurial decisions and actions (Rauch et al., 2009:6). EO is usually referred to as an organisational-level concept, as it manifests itself in policies that aim to guide employee behaviour, thereby making EO the ‘mindset’ and motivator of an organisation aspiring to act in a more entrepreneurial manner (Hughes et al., 2016). Organisational level EO traditionally make reference to an organisation exhibiting three specific dimensions, namely a propensity to take risks, acting innovatively and behaving in a proactive manner (Miller, 1983). While Miller’s (1983) three dimensions are the most commonly used dimensions, recent EO research utilises two additional dimensions as proposed by Lumpkin and Dess (1996), namely competitive aggressiveness and autonomy. While EO has been widely researched, a growing appreciation formed that while entrepreneurial actions can be inspired through policies and practices, it is ultimately each individual employee who is required to act as an entrepreneur, thereby giving birth to the IO concept.

IO therefore makes reference to the entrepreneurial ambitions of the individual employee, while EO mainly concerns itself with an organisation-wide entrepreneurial stance (Bolton & Lane, 2012). The entrepreneurial traits and ambitions of the individual employee are said to be as important, if not more so, than the organisation’s policies and leadership (Sinha & Srivastava, 2016). IO holds significant value for organisations as intrapreneurship enhances the propensity to identify business opportunities and ensuring more effective utilisation of resources (Hisrich & Peters, 2002), ushering in a new era for an organisation as a deviation from past practices occurs, thereby renewing focus on attainment of strategic goals (Heinonen, 1999). Additionally, IO allows employees to become an integral component of internal innovation efforts (Manimala, Jose & Thomas, 2006). IO can be viewed as a fusion of traditional forms of entrepreneurship with industrial psychology, as personality traits, individual characteristics and attitudes of existing employees take center stage in the quest to become more entrepreneurial from the inside out (Jain & Ali, 2012). Hughes, Ucbasaran and Lewis (2016:98) however express that the IO of an employee is reliant on policies and practices of an organisation, as “without an EO to guide them,

employees in an organization are unlikely to combine and use knowledge in novel ways, which can result in myopia". This interplay between an individual employee's entrepreneurial characteristics and organisational stance is acknowledged by authors such as Khandwalla (1977), who states that an existing internal risk-taking stance and associated resource commitments are necessary for attainment of internal forms of entrepreneurship.

When unpacking the IO concept, there is some agreement in literature that IO tends to be underpinned by five dimensions, namely proactiveness, risk-taking, competitive aggressiveness, innovativeness and autonomy (Lumpkin & Dess, 1996). At the individual level, proactiveness refers to preparation for an expected situation, while risk-taking refers to any behaviour that holds the potential to result in loss or failure. Competitive aggressiveness means proactively engaging and challenging existing competitors, while innovativeness makes reference to the introduction of new products, services or processes. Lastly, autonomy refers to a need to act independently, with freedom from control and a need for discretion (Lumpkin & Dess, 1996). As IO is reliant on supportive policies and practices, Goosen, de Coning and Smit (2002) propose the concept of 'management' within IO actions in support of entrepreneurial actions. Contained in the 'management' construct are items such as effective goal setting, rewards and innovation systems promoting entrepreneurial actions, Intracapital (the provision of financial capital for experimentation), effective two-way communication between management and employees, intrapreneurship championing by managers at all levels, soliciting staff input, as well as intrapreneurial freedom, which refers to empowering employees to make decision and experiment. Intrapreneurship makes reference to entrepreneurial actions within existing organisations. Table 1 below indicates recent prominent studies which have investigated the IO phenomenon and stated which constructs were under investigation. It becomes apparent that little research has been conducted or published in this field, or that a strong conceptual basis exists.

**Table 1: Evolution of IO**

<b>Author</b>	<b>Year</b>	<b>Constructs investigated</b>
Jacobs & Kruger	2001	autonomy; innovativeness; risk-taking; pro-activeness; competitive aggressiveness; strategic planning; perseverance
Goosen, De Coning & Smit	2002	Management; Innovativeness; Proactiveness
Van Wyk & Boshoff	2004	Achievement; Innovation; self-esteem; personal control
Shetty	2004	Innovativeness; Personal control; Achievement; Self-esteem
Urban & Oosthuizen	2009	Innovativeness; Risk-Taking; Pro-activeness;
Jain & Ali	2012	Innovativeness; locus of control; self-efficacy; work environment; Achievement orientation; risk-taking; pro-activeness
Sinha & Srivastaa	2013	Achievement orientation; Self-esteem; Innovation orientation; Perceived personal control;
Sinha & Srivastaa	2015	Achievement orientation; Self-esteem; Innovation orientation; Perceived personal control;
Sinha & Srivastaa	2016	Achievement orientation; Self-esteem; Innovation orientation; Perceived personal control;
Farrukh, Chong, Mansori & Ramzani	2017	Innovativeness & Risk-taking

Source: Author's compilation

## **5. METHOD**

This study is designed in the form of a pilot study by utilising a newly developed measuring instrument. The measuring instrument contained two sections, namely Section A and B. Section A investigates key demographic variables while Section B is structured according to prominent IO variables. Only prominent IO variables, as utilised in other studies, were included, mainly covering the topics of managerial factors (intracapital, goal-setting, intrapreneurship championing, reward and innovation systems, intrapreneurial freedom and communication), while personal factors included risk-taking, proactiveness, innovativeness, personal control, self-esteem and achievement orientation. The instrument further contained eight organisational growth-related variables. The measuring instrument contained 50 items and utilised a five-point Likert scale to accurately gauge strength of responses. Items in the measuring instrument were adapted from prominent past EO and IO studies. Management related items, namely goal setting, reward and innovation systems intracapital, communication, intrapreneurial freedom and intrapreneurship championing were adapted from an instrument proposed by Goosen, de Coning and Smit (2002). The risk-taking, innovativeness and proactiveness elements were adapted from Bolton and Lane (2012). Personal control, self-esteem and achievement orientation were adapted from Robinson et al (1991), while the IO elements were adapted from Stewart (2009).

As this study took the form of a pilot study, four distinct piloting principles were followed in order to ensure methodological correctness. These principles include stating the purpose of the study clearly, ensuring population representativeness and testing procedural elements, accurate reporting of outcomes, as well as participants drawn from the population under investigation (Kelly & Denney, 1969; Thabane et al, 2010; Schachtebeck, Groenewald & Nieuwenhuizen, 2018).

Data was collected between November 2017 and January 2018, with the assistance of fieldworkers. Data was collected both online, as well as in hard copy. Respondents, in the form of SMEs, were drawn randomly from databases such as YelloSA, Ezee-Dex and the Small Business Directory. A probability sampling approach was therefore followed in the form of simple random sampling, thereby giving each member of the SME population an equal chance of inclusion in the sample. Data was captured in Excel and imported into the Statistical Package for the Social Science (SPSS) version 25. Tests for reliability and descriptive statistics were conducted. Descriptive statistics included the means and standard deviations, thereby providing preliminary data on the level of IO in the South African transport industry.

In terms of ethical considerations, the front page of the questionnaire informed respondents of their rights, which included voluntary participation in the study, right of withdrawal at any time, right to anonymity, as well as assurance of confidentiality. Ethical approval was obtained from the College of Business and Economics at the University of Johannesburg, prior to the study being conducted.

## **6. DISCUSSION**

A total of 30 responses were received from employees working in SMEs within the South African transport industry. Of these employees, 21 were male, while 9 were female. Thirty-six percent of respondents were between the ages of 18-30, with another 36% being between the ages of 31-40. This indicates that most respondents were below the age of 40. The vast majority of respondents (77%) were in Gauteng, with the remainder of

respondents being located in Limpopo, Mpumalanga and the North-West Province. In terms of organisational size, most respondents indicated working in an organisation with more than 51 employees (33%), with the remainder being equally distributed in organisations with less than 5 employees, 5-20 employees and 21-50 employees. This indicates that responses from a variety of SMEs were captured.

The purpose of a pilot has been stated as testing the viability of a full-scale study, as well as presenting preliminary insights into the phenomenon under investigation. With regard to the four piloting principles, firstly, population representativeness was met as a sample was drawn from the target population, namely employees in SMEs active in the transport industry. Secondly, the outcomes of the pilot are reported as part of this pilot study under Table 2, which provides preliminary insights into the IO phenomenon in the transport industry. Thirdly, in terms of problems encountered with procedural and administrative elements, these were recorded. In terms of procedural elements, some respondents reported encountering problems with the length of the questionnaire, thereby indicating that part of the questionnaire could be shortened. Also, phrasing of some questions proved difficult, indicating that the wording of some items should be simplified. As the measuring instrument was adapted from international and local instruments, this finding proves valuable in ensuring better understanding of terminology. Lastly, in terms of administration issues, response rates from online surveys was low, with the paper-based questionnaire recording higher response rates. This indicates that future studies should be conducted on paper rather than online, due to lack of internet access and low rates of engagement with the instrument.

A reliability analysis, by means of determining the Cronbach Alpha, was conducted in order to ensure that the newly developed measuring instrument is reliable. The findings of the reliability analysis are outlined, per construct, in Table 2.

**Table 2: Reliability analysis**

<b>Construct</b>	<b>Cronbach's Alpha</b>	<b>Number of Items</b>	<b>Mean Inter-Item Correlation</b>
Risk-taking	0.626	4	0.294
Innovativeness	0.685	4	0.354
Proactiveness	0.760	5	0.397
Achievement Orientation (AO)	0.662	4	0.333
Self-esteem (SE)	0.528	4	0.278
Personal control (PC)	0.708	4	0.384
Growth	0.829	8	0.392
Management	0.873	14	0.331

Source: Research findings

A Cronbach Alpha of more than 0.7 is most commonly suggested as a measure of good internal consistency. This value can however be lower owing to a small number of variables in a particular scale (Pallant, 2016). In the case where a scale contains a small number of variables, it is advised to observe mean inter item correlations, which should be above a cut-off value of 0.2 (Briggs & Cheek, 1986; Pallant, 2016). Table 1 shows that those constructs which recorded a Cronbach Alpha of <0.7 display mean inter-item correlations of >0.2. The measuring instrument can therefore be deemed reliable, displaying adequate internal consistency. Next, preliminary data in the form of descriptive

statistics is presented in Table 3, thereby providing insights into the employee-level IO phenomenon in the transport industry.

**Table 3: Descriptive statistics**

<b>Construct</b>	<b>Mean</b>	<b>Standard Deviation</b>
Risk-taking	3.92	1.05
Innovativeness	4.01	0.96
Proactiveness	4.29	0.85
Achievement Orientation (AO)	4.45	0.83
Self-esteem (SE)	4.35	0.89
Personal control (PC)	4.36	0.87
Growth	3.90	1.07
Management	3.81	1.22

Source: Research findings

Table 3 indicates that respondents indicated agreement with all constructs. Respondents, who are employees in the transport industry, indicated a propensity for risk-taking (3.92), thereby indicating that employees are willing to take risks in day-to-day activities in the pursuit of reward. Secondly, the mean for innovativeness (4.01) indicates that respondents believed that they acted in an innovative manner in their role of employees, thereby displaying creativity in the creation of new products, services or processes. Thirdly, employees indicated acting proactively (4.29), thereby attempting to leapfrog competitors as an opportunity for exploitation was discovered. Fourthly, employees indicated a strong agreement (4.45) with possessing an achievement orientation, indicating that the pursuit of opportunity is based on an internal locus of control, driven by a need for personal achievement, rather than being driven by external reward. Fifthly, respondents indicated strong agreement (4.35) with having high levels of self-esteem, thereby indicating the confidence and strong self-belief in pursuing opportunities. Sixthly, respondents indicated strong agreement (4.36) with possessing personal control, indicating that employees possess the ability to structure their day-to-day activities to their own liking, rather than being controlled by management. In terms of overall organisational growth, respondents indicated agreement (3.90) that their organisation showed growth in revenue, customer numbers, market share and profitability in the past financial year. Lastly, respondents indicated some agreement (3.90) that management is supportive of entrepreneurial efforts, provides the necessary resources and discretion in decision-making, as well as provides adequate levels of communication and championing of entrepreneurial efforts by employees.

While no similar study has been conducted in the South African transport industry, the results of this study are broadly in agreement with other studies in terms of risk-taking, innovativeness and proactiveness (Antoncic & Hisrich, 2003; Lumpkin & Dess, 2005; Aarakit, 2010). In terms of managerial support, the findings of this study concur with those of Goosen, de Coning and Smit (2002), as well as Fasnacht (2009). The remainder of the IO components agree with studies by Robinson et al. (1991), van Wyk and Boshoff (2004), Shariff and Saud (2009), as well as Krishnan and Kamalanabhan (2015).

## **7. RECOMMENDATIONS, VALUE AND CONCLUSION**

The purpose of this pilot study was to investigate Intrapreneurial Orientation (IO) of SME employees in the transport industry by generating preliminary data. The findings of this study revealed moderate to high levels of risk-taking propensity, managerial support,

proactiveness, personal control, self-esteem, autonomy and innovativeness. The value of the study lies in the generation of preliminary data on IO of employees in the transport industry. This data provides initial insights into employees' IO, manifested in risk-taking propensity, support from management, perceptions of personal control and self-esteem, as well as degree of autonomy and perceived ability to innovate. The findings of the study therefore inform decision on future large-scale studies, procedural elements for noting or amendment, as well as confirms usability of the newly developed measuring instrument, as the instrument displayed good internal consistency and reliability. The pilot study provides value for academia and industry alike. For academia, the study provides initial insight into the IO phenomenon and expands on the existing body of knowledge. The developed measuring instrument can further provide the basis for other studies. Practically, from an industry and managerial point of view, the study provides initial insights into levels of employee IO. The developed instrument can also be utilised in industry to identify and pinpoint areas of concern and improvement, thereby potentially enhancing the ability of organisation in the transport industry to be more entrepreneurial from the inside out.

The study experienced some limitations, primarily as the study was conceptualised as a pilot study. This means that while initial insights into the IO phenomenon can be gained from the study, definite, wide-ranging conclusion cannot be drawn, owing to sample size. Also, no distinction between levels of employees were made, thereby potentially ignoring IO elements which might be influenced by level of seniority.

In terms of recommendations, future studies can use the newly developed measuring instrument to test employee-level IO on a larger scale, thereby allowing for deeper insight into employee-level IO in the transport industry. Future studies could also be performed longitudinally in order to track changes in IO before and after an organisation's leadership has made changes to policy, practice and management of employees. As the developed instrument is tailored to the South African context, future studies could also be performed outside the bounds of South Africa in other emerging markets. The developed measuring instrument requires further testing in practice in order to determine its usability across different contexts as well as sectors in the industry. Practically, the management of an organisation in the transport industry can make initial changes to the management and policing of employees, such as allowing for greater discretion in decision-making and freedom, provision of capital for experimentation, improved communication between management and employees, as well as championing of entrepreneurial actions by employees at different managerial levels throughout the organisation.

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