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# How employees' intrapreneurial profiles map across gender in different sectors? -analysis of a pilot study

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## Abstract

Organizations are pushing to be proactive and intrapreneurial so as to explore and utilize any potential competences among employees and attain competitive advantage and growth. Intrapreneurship is a major driver for facilitating organizational renewal or reinvention enabling employees to unleash their passion while generating new strategies for business growth and development. It instigates entrepreneurial spirit and freedom among employees and can help transfer resources from an area of low productivity to an area of high productivity. Employee innovation behaviour is key to sustaining an intrapreneurial climate inside an organization. Such behaviour paves way towards developing new products and markets as well as improving business functionality. How can organizations push employee innovation behaviour? So far, there are very limited research on how to measure the intrapreneurial behaviour among employees and the factors that influence their engagement with innovation. This paper addresses some of these gaps and reflects on the various personality traits among intrapreneurial employees and how these might map across gender and various industrial sectors. Using the 'Spectral Inventory' Scale of Lessem (1986) that categories seven distinct intrapreneurial profiles in employees, this study examines their variation and occurrence in different sectors. As part of a pilot study, this study reflects on 228 participants who completed an online survey on intrapreneurial profile mapping. The analysis shows how some employees demonstrate single dominant intrapreneurial profiles and in some cases a combination of profiles. Based on the findings, the study illustrates four key profiles within the intrapreneurial spectrum- uni, dual, triple and quadri profiles. The analysis further discusses these profiles with examples and explores how they map across gender and in different industrial sectors. Are there any consistent patterns in intrapreneurial employees? Can organizations utilize these to understand their employees and facilitate their engagement with intrapreneurship? These are some of the areas this paper explores.

**Keywords:** Intrapreneurship, intrapreneurial profiles, innovation, employee engagement, personality traits

## Intrapreneurship

Today there is a growing need for organizations to be proactive and to explore and utilize any potential competences among employees so as to attain competitive advantage and growth. Intrapreneurship is a term that describes this internal process by which individuals pursue opportunities for innovation without regard to the resources they may or may not control. An intrapreneurial culture within an organization can instigate entrepreneurial spirit and freedom among employees and according to Oden (1997) can help transfer resources from an area of

low productivity to an area of high productivity. It is a major driver for organizational renewal or reinvention enabling employees to unleash their passion while generating new strategies for business growth and development (Seshadri and Tripathy, 2006). It offers strategic ways to manage resources and address organizational complexities (Baruah & Ward, 2014). For Pinchot (1985) intrapreneurs are 'dreamers who do', they are motivated employees who have an entrepreneurial mindset with the potential to design and develop new ideas or prototypes into profitable realities within the umbrella of the organization. Mohanty (2006, pg. 101) supports "*intrapreneurship is propelled by an individual's or a team's willingness to take calculated risks and act to create business opportunities that serve an organization's needs for growth and improvement*". For Åmo (pg. 149), an intrapreneurial employee is "a proactive actor with a strong need to pursue its innovative ideas inside the borders of the organization....". The roles played by intrapreneurs within an organization is critical for nourishing and sustaining innovation. As Camelo-Ordaz et al. (2011, pg 2) explain "...the degree of innovation achieved by a creative firm depends significantly on the intrapreneur or intrapreneurial team..". But Foba and Villiers (2007, pg 1) report "...*the conceptual leap to recognizing the increasingly important role of intrapreneurship in the corporate environment and the need to be able to measure the intrapreneurial behaviour as a part of the new management dynamics of the global business environment had not yet been made*". Although some researchers have explored the characteristics of intrapreneurs, very limited work has been focused on the personality traits and styles of intrapreneurs and how these map across gender in different sectors. This paper therefore, aims to shed light on some of these gaps and reflect on the various personality traits among intrapreneurial employees.

### **Employees' engagement with innovation**

Toftoy and Chatterjee (2004) believe that an 'intrapreneurial' company is the best possible environment for employees who keenly engages with innovation and creativity. They explain (2004, pg. 2), "An intrapreneurial culture supports entrepreneurial spirit with emphasis on creating, experimenting, taking responsibility and ownership". Åmo (2010) discusses this employee innovation behaviour as a key element for intrapreneurship which results in organizational change or improvement. The author describes this employee innovation behaviour as a "behaviour from an employee toward developing new products, developing new markets or improving business routines in their employing organization" (pg. 149). The output from such behaviour includes "spin-off organizations, a new product, a new market, or an implemented cost-reducing routine or a complete failure" (Åmo 2010, pg. 149). Mohanty (2006) reports the importance of motivated employees who values an innovation philosophy, saying "Paradigm-breaking companies invested and nurtured intrapreneurship from which they executed effective innovation processes leading to innovations in new product, services, and processes and superior business performance results" (pg. 102). Veronica et al. (2011, pg. 4) note "...employees who have a creative spirit are the basis of a competitive and successful company. If employees demonstrate creative power at their workplace, if they come up with new ideas that can further be valuable for future products and processes, they help to increase the possibility that other employees feel motivated to come up with new ideas". Employees' engagement with intrapreneurship is therefore a key aspect for innovation but how do intrapreneurial styles and motivation factors vary among employees? Lessem (1986) believes that in order to understand intrapreneurs, there is a need to derive theory of personality which can uncover any underlying attitudes, motivation and behaviour. Based on spectrum theory, Lessem (1986) proposed seven typical intrapreneurial stereotypes along with their key attributed personality traits as shown in table 1. The author adds "*The 'spectral inventory' which is based on a model of communication and enterprise developed over fifteen years, is designed to 'profile' both your personality and leadership*

style” (pg 16). Each intrapreneurial type according to this author has its own range of distinct personality traits and attributes that could help organizations to segregate and understand intrapreneurial employees. Can this personality spectrum be used by different organizations to understand their employees at an individual level and uncover the factors that motivates their engagement with innovation?

<b>Personality type</b>	<b>Intrapreneurial type</b>	<b>Key attributes</b>
Imagination	Innovator	Originality, Inspiration, Love, Transformation
Intuition	New designer/Enabler	Evolution, Development, Symbiosis, Connection
Authority	Entrepreneur	Direction, Responsibility, Structure, Control
Will	Animateur	Achievement, Opportunity, Risk Taking, Power
Sociability	Adventurer	Informality, Shared Values, Community, Culture
Energy	Adventurer	Movement, Work, Health, Activity
Flexibility	Change agent	Adaptability, Expressiveness, Curiosity, Intelligence

Table 1: Spectrum of personality and intrapreneurship (Lessem, 1986, pg. 15)

### **Research Objectives and Methodology**

The overall aim of this study is to investigate the intrapreneurial profiles across professionals in varying fields, industries and organisations in the UK, Nigeria and India. The core framework used in this study is the ‘Spectral Inventory’ Scale of Lessem (1986) and the Multidimensional Work Motivation Scale of Gagné et al (2015).

As reported earlier, the ‘Spectral Inventory’ Scale classifies employees into seven individual categories shown in table 1. Each intrapreneurial personality type has its own set of attributes. For instance, an innovator is associated with originality, inspiration, love and transformation whereas a new designer/enabler is associated with evolution, development, symbiosis and connection. The Multidimensional Work Motivation Scale on the other hand involves 19 items and the analysis helps in identifying the intrinsic and extrinsic sources of motivation among employees.

As part of the objectives, comparison and correlation of different intrapreneurial personality traits with demographic variables such as gender, ethnicity, organizational background was carried out. However, as an initial analysis, this paper will only report on the mapping of various intrapreneurial profiles of participants based on Lessem’s (1986) framework.

A survey was initially created using the ‘Spectral Inventory’ Scale of Lessem (1986) and the Multidimensional Work Motivation Scale of Gagné et al (2015) along with some demographic questions. This was tested among a small sample to evaluate and review the overall feasibility, time and size. Following feedback from the participants, this online survey was further edited and then administered using Qualtrics - an online survey platform. One of

the criteria of the sampling process was to recruit participants who are employed or have been employed in the past. This would allow participants to reflect on their work experiences and motivation regarding their job roles which is a key element in the ‘Spectral Inventory’ Scale of Lessem (1986) and the Multidimensional Work Motivation Scale of Gagné et al (2015). Participants were contacted through emails and by using social media like LinkedIn in 2017. This allowed the researchers to reach out to participants from a wide range of industrial sectors like consultancy, engineering, health, education, entertainment, finance, manufacturing, media, retail among others. In the given timeframe, a total dataset of 228 responses were collected. Out of these responses, 111 were complete with no missing data thus deemed useable. It is worth noting that there were 55 males and 56 females in this dataset thus showing a good balance in gender.

**Data analysis: Nature and distribution of Intrapreneurial Profiles across gender**

Lessem’s (1986) ‘Spectral Inventory’ scale involves participants ranking eight sets of seven distinct statements in an order of 7 (High) to 1 (Low) ensuring no two statements within a set have the same ranking even if one has to make a forced choice. The personality profile is calculated by taking a total rank score of all the statements and plotting them against the seven intrapreneurial types. Any style that scored above 40% on this spectrum plot was listed as a dominant profile. This helps in measuring one’s personality traits within the intrapreneurial spectrum and profiling specific dominant style. As discussed earlier, the ‘Spectral Inventory’ Scale classifies intrapreneurs into seven individual categories: Innovator, New designer/Enabler, Leader, Entrepreneur, Animateur, Adventurer and Change agent. The overall analysis is shown in Table 2. It must be noted that the sample was almost balanced in gender as there were 55 male and 56 female. Out of 111 participants, 29 showed uni-profiles (mapping only one dominant intrapreneurial personality type), 60 showed dual-profiles (mapping two intrapreneurial personality types), 20 showed triple-profiles (mapping three intrapreneurial personality types) and 2 showed quadri-profile (mapping four personality intrapreneurial types). From this sample, females seem to demonstrate more uni-profiles than males. In the dual-profiles, there is an equal distribution between male and female. There are more males with triple-profiles than females. Quadric-profiles are rare as it involves participants scoring higher than 40 in four personality types. As expected, within this sample there were two cases of quadric-profiles, one male and one female. It is however, very small to make any statistically relevant inferences. It still signifies the fact that employees can have multiple personalities within the intrapreneurial spectrum.

	Male	Female	Total
UNI	11	18	29
DUAL	30	30	60
TRI	13	7	20
QUADRI	1	1	02

Table 2: Nature of intrapreneurial profiles across gender

To illustrate the spread of the dominant profiles, let us consider the following examples of a male and a female participant with uni-profiles chosen at random (See Table 3). As evident from the table 3, the female in this case has a dominant profile as an Adventurer with a score of 42 whereas the male has a dominant profile as an entrepreneur with a score of 41.

Uni-Profile Female		Uni-profile Male	
Adventurer	42	Adventurer	37
Innovator	37	Innovator	26
Designer	28	Designer	31
Leader	27	Leader	27
Entrepreneur	33	Entrepreneur	41
Change agent	31	Change agent	27
Animator	26	Animator	35

Table 3: Example of intrapreneurial profiles: female

Using radar plot, figure 1 and 2 shows examples of how the four intrapreneurial profiles map across gender and this includes the uni-profiles from table 2. Within each plot, a unique case of participants' dominant traits within the intrapreneurial spectrum can be seen. For instance, the dual-profile female in figure 1 has dominant characteristics as Adventurer and Entrepreneur whereas the dual-profile male in figure 2 has dominant characteristics as Change agent and Animator. The triple-profile female is an Entrepreneur, Change agent and Animator whereas the triple-profile male has dominant characteristics as Adventurer, Change agent and animator. The quadric-profiles similarly show their respective mapping across the intrapreneurial spectrum.

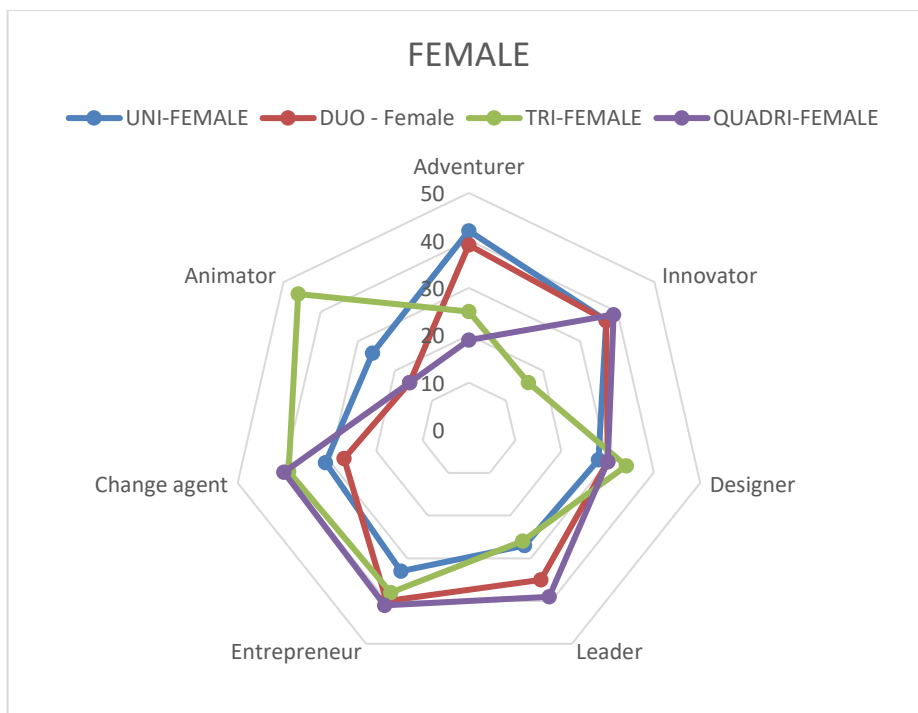


Figure 1: Example of intrapreneurial profiles: female

Following the analysis of the overall data, the study found 36 specific intrapreneurial profiles as shown in table 4. This includes 6 uni-profiles, 15 dual-profiles, 14 triple-profiles and 1 quadri-profile. These profiles are further illustrated in Figure 3 to show their distribution across gender. Animating change-agent appears to be the most popular profile among males. Across females, three profiles seem to have stood out equally; animating change-agent, animating innovator and entrepreneur. It is very encouraging to see ‘Entrepreneur’ uni-profiles to be a strong trait across female participants. Across the uni-profiles’ mapping, males have scored higher as adventurer and animator whereas for females, these are designer and innovator. Dual-profiles evident in males include adventurer animator and animating change-agent. In the female participants, dual-profiles include adventurous innovator, animating innovator, change-agent innovator and entrepreneur leader among others. Similar inferences can be drawn for triple and quadri profiles. Some profiles seem to be a more significant feature among males than females and vice versa. There were few cases which showed a balance between male and female. For instance, profiles of animating entrepreneur, change-agent leader and change-agent designer entrepreneur has an equal spread across male and female.

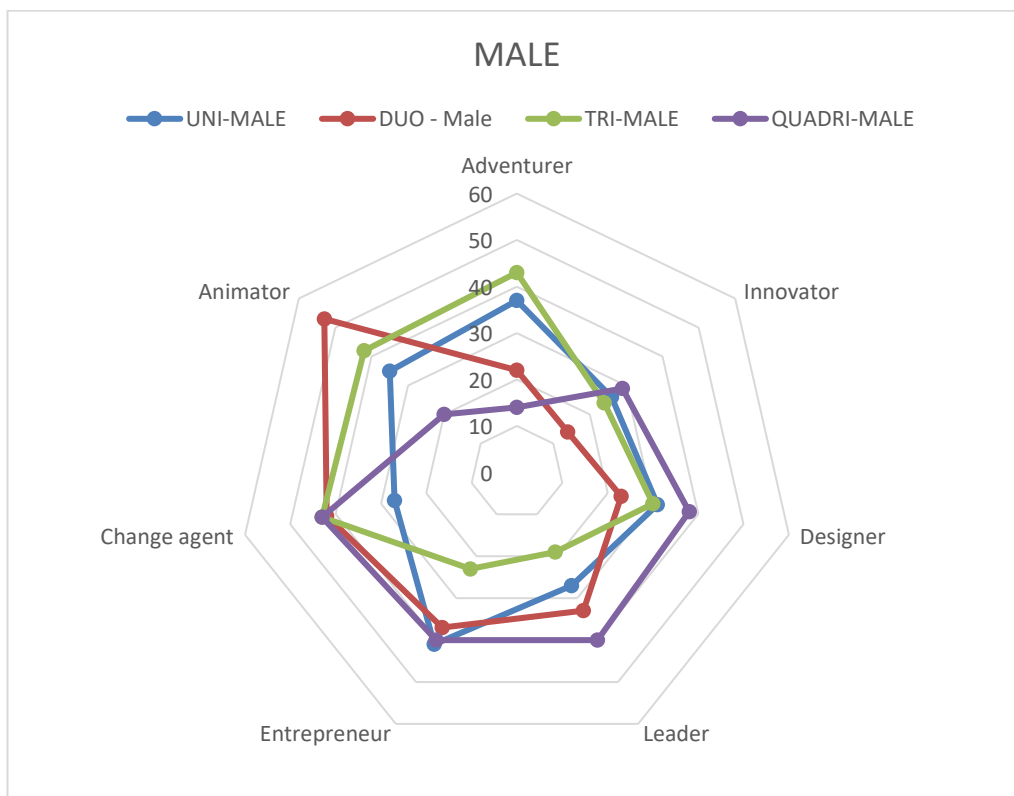


Figure 2: Example of intrapreneurial profiles: male

Using this approach, further analysis can illustrate how these profiles map across sectors. For instance, Figure 4 shows the spread of these profiles across sectors. It appears that dual-profiles might be a common employee trait in various sectors like consultancy, education, engineering, health and media. Can the data show how these profiles distribute across gender? Table 5 shows the gender specific distribution of various profiles in these sectors further illustrated in figure 5. Given the sample size in this pilot study, it is premature to draw

any statistically significant conclusion. However, the initial findings do seem to imply how the nature and profiles of employees might map across sectors thereby showing ways to improve and facilitate employee management.

<b>Emerging intrapreneurial profiles</b>	
Adventurer	Animating Innovator
Adventurous Animator	Animating Leader
Adventurous Animator & Change-agent	Animator
Adventurous Animator & Designer	Change agent
Adventurous Animator & Innovator	Change-agent & Entrepreneur
Adventurous Animator & Leader	Change-agent & Innovator
Adventurous Change-agent	Change-agent & Leader
Adventurous Change-agent & Designer	Change-agent Designer & Entrepreneur
Adventurous Entrepreneur	Change-agent Designer Entrepreneur & Leader
Adventurous Innovator	Change-agent Entrepreneur Innovator & Leader
Animating Change-agent	Designer
Animating Change-agent & Designer	Designer Entrepreneur & Leader
Animating Change-agent & Entrepreneur	Designer Innovator & Leader
Animating Change-agent & Entrepreneur	Entrepreneur
Animating Change-agent & Leader	Entrepreneur & Innovator
Animating Designer	Entrepreneur & Leader
Animating Designer & Entrepreneur	Innovative leader
Animating Entrepreneur	Innovator

Table 4: Intrapreneurial profiles among the sample

Organizations might be able to use such approach to explore and understand their employees' potential and possibly investigate how they can interlink various skills from different departments to build stronger innovation culture. Understanding employees' profiles will also help companies address any skills gaps within a given sector. Is dual profile always the most common personality trait among intrapreneurial employees as this pilot study reported? This will need further investigation with a bigger sample to draw more conclusive summary. A large scale cross sector study will also help researchers explore any consistent patterns of the profiles and how they vary across male and female gender. The paper proposes four combinations of intrapreneurial profiles and shows the potential application of this approach to review and explore employee profiles in more details.

This is one of the first studies to investigate the mapping of different intrapreneurial profiles across gender. It therefore, makes an important contribution to the literature of intrapreneurship. The results of this study will help different organizations in their skills analysis and in understanding employees' intrapreneurial competences. It will help organizations and Top Management Teams (TMTs) to tailor different motivational techniques to facilitate employees' engagement with intrapreneurship and enhance an innovation culture.



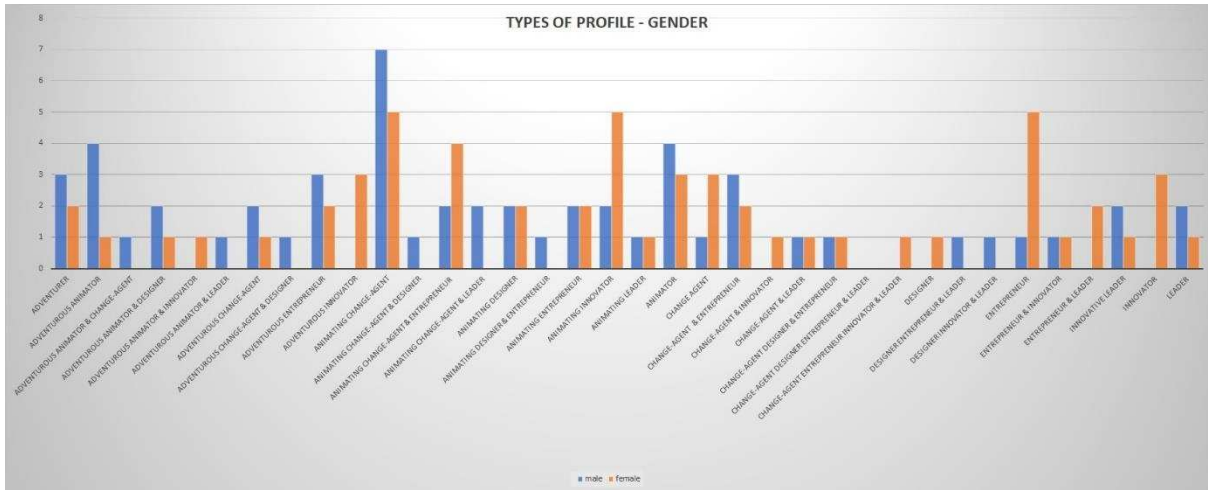


Figure 3: Distribution of various intrapreneurial profiles across gender

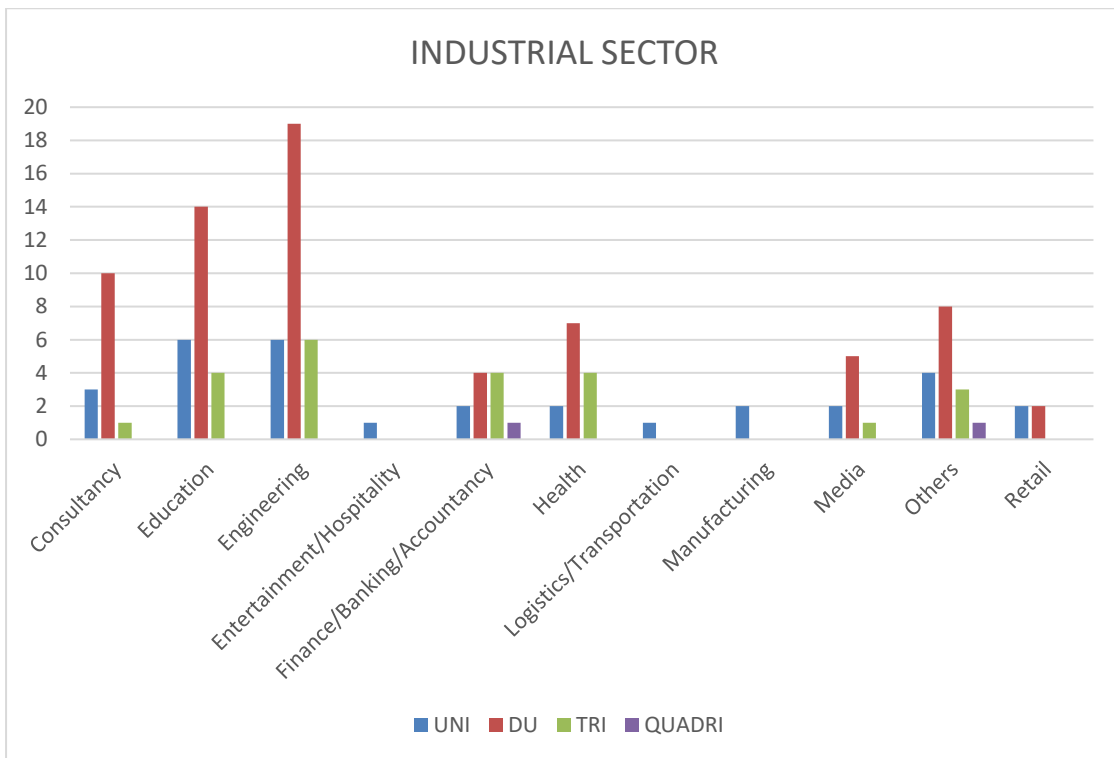


Figure 4: Mapping the overall nature of intrapreneurial profiles across sector

INDUSTRIAL SECTOR	UNI		DU		TRI		QUADRI	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
Consultancy	2	1	5	5	1			
Education	2	4	10	4	3	1		
Engineering	4	2	16	3	4	2		
Entertainment/Hospitality		1						
Finance/Banking/Accountancy	1	1	1	3	2	2		1
Health		2	2	5	2	2		
Logistics/Transportation		1						
Manufacturing	1	1						
Media		2	2	3	1			
Others	2	2	2	6	2	1	1	
Retail		2		2				

Table 5: Gender based Intrapreneurial Profiles across sectors

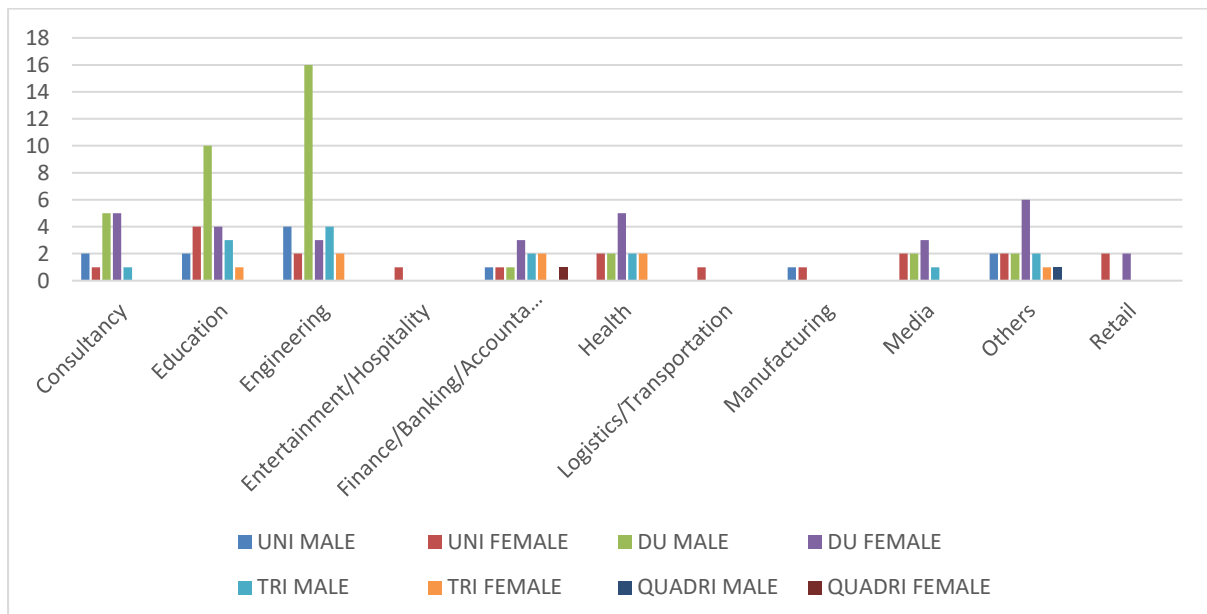


Figure 5: Mapping gender based Intrapreneurial Profiles across sectors

## Conclusion

Organizations are heavily investing and prioritizing the nourishment of an intrapreneurship culture. It helps them explore and utilize any potential competences among employees and attain competitive advantage and growth. Researchers have labelled intrapreneurship as major driver for facilitating organizational renewal or reinvention and for managing resources and resolving organizational complexities. Employee innovation behaviour is key to sustaining intrapreneurship inside an organization as it paves way towards developing new products and markets as well as improving business functionality. This paper explores some of the gaps on intrapreneurial profiles of employees using the 'Spectral Inventory' Scale of Lessem (1986). As a pilot study, this study focuses only on the intrapreneurial profiles of employees. It illustrates four key profiles within the intrapreneurial spectrum of Lessem

(1986)- uni, dual, triple and quadri profiles. Using examples, the analysis shows how these profiles map across gender and in different industrial sectors. Dual profiles were found to be the most common intrapreneurial profiles. Many participants from this study identified themselves with two dominant intrapreneurial types. As this was a pilot study, there were limitations with the sample sizes with only 111 useable responses. The consistency in patterns among intrapreneurial employees should be further investigated by using a large-scale study. The overall approach shows potential especially for organizations to understand their employees and facilitate their engagement with intrapreneurship. This is one of the first studies to explore the mapping of different intrapreneurial profiles and motivation factors across gender. Motivation is a multidimensional construct that plays a key role in the examination and understanding of human behavioural exhibition and engagement with a broad spectrum of activities. The motivation profile of an individual often influences the behaviour exhibited by said individual; although it is noted that behaviour is an over determined construct, nevertheless motivation is a major factor and determinate of behaviour. Further studies will explore the link between intrapreneurial profiles of employees and their motivation factors. The variation of these profiles in terms of motivation factors will also be analyzed and evaluated based on the Multidimensional Work Motivation Scale of Gagné et al (2015).

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