



HRM as a catalyst for innovation in startups

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1. Introduction

In today’s global and highly competitive markets, and with the perpetual birth of new technologies, innovation holds prominent importance for the survival of startups given its role in facilitating the gain of market power improving operational efficiency, achieving product differentiation and enhancing organisational knowledge building (Marullo *et al.*, 2018; Simpson *et al.*, 2006). Startups’ innovations are seldom the outcome of ‘lone entrepreneurs’ working individually on creative ideas, as it is often the employees who work on concretizing the founder’s vision and contribute to shaping the business direction and later performance by initiating change and leading improvement projects (Muñoz-Bullon *et al.*, 2015).

In this regard, an emergent stream of literature highlights the role of employees as a key source of innovation for small-sized organisations and suggests that unleashing their innovative potential necessitates planned managerial interventions (e.g., McGuirk *et al.*, 2015; De Winne and Sels, 2010). Nevertheless, startups remain largely overlooked in the human resource management (HRM) literature, due to the prevailing assumption that they are unable to afford sophisticated people management systems. HRM is often associated with added costs and reduced flexibility which are more likely to adversely affect the everyday operations and the intended performance of resource-constrained small organisations such as startups (Chadwick *et al.*, 2013). The present study challenges this view and advocates that the early adoption of appropriate HRM practices, can act as a catalyst for innovation in startups because they constitute a powerful means to systematically promote and facilitate employees’ innovative behaviours by enhancing their motivation and abilities to think and act in unconventional value-adding manners.

Although existing research offered pertinent insights into the intensity with which HRM practices affect innovation in SMEs (e.g., Popa *et al.*, 2017; Sheehan, 2014; Ait Razouk, 2011; De Winne and Sels, 2010; Schmelter *et al.*, 2010), it tends to be dominated by quantitative studies that disregard the contextual complexities that may shape the adoption of HRM in innovative startups, and fail to uncover deep details about individuals’ experience and understanding of these practices. In a recent review of a quarter-century research on HRM in SMEs, Harney and Alkhalaf (2020, p.15) argued that

‘With respect to HRM, too often the purpose of research has centered upon justifying a pre-determined concept (e.g., HPWS), missing a great opportunity to explore what HRM looks like, and how it actually operates in the SME context’ (2020, p.15).

To the best of the authors’ knowledge, Adla *et al.* (2019) and Castrogiovanni *et al.* (2011) articles are among the scarce, if not the only, studies that qualitatively inspect the HRM and innovation relationship within the context of SMEs. Both studies highlight the importance of a supportive and enabling work environments along with strong social ties for fostering employees’ innovative behaviours. Open communication, training and development as well as recognition for entrepreneurial behaviour through promotion and financial rewards are also found to be key HRM interventions for supporting innovation among SMEs. Although this work has paved the way towards a better understanding of the utility of HRM in spurring innovation among small firms, it only considered data collected from established SMEs which overlooks the diversity related to companies’ size (micro, small or medium) and age (emerging or

established) (Harney and Alkhalaf, 2020). Startups for instance might rely on more formal or hybrid approaches to workforce management where direct interactions and spontaneous exchanges are among the main facilitators of innovation. Therefore, more efforts are still needed to reduce the blurriness remaining around the value that HRM can bring to innovation in the specific context of startups, and particularly in those operating in non-European regions (Do and Shipton, 2019). In order to diminish this gap, and in the aim of complementing the existing quantitative work, the present study adopts a qualitative approach to enable a grasp of the less apparent mechanisms that connect HRM and workplace innovation in start-ups, particularly in relation to work environment characteristics. Based on case-studies conducted among four Tunisian innovative technology startups, this article seeks to answer two central questions. First, what are the HRM practices that innovative start-ups adopt in order to engage employees in the process of innovation? Secondly, how do these practices contribute to fostering an innovation-supportive work environment within such organisations?

To achieve the study's aim, we draw on the dynamic componential model of creativity and innovation in organisations of Amabile and Pratt (2016) 'CTC' that goes beyond the mere focus on individual attributes which dominates the creativity research, by recognizing the importance of contextual and work environment forces in stimulating and facilitating firms' innovation (Do and Shipton, 2019). The model suggests that in order for companies to enhance their innovation performance, specific individual and organisational elements must coexist and interact in the workplace. Employees must possess domain relevant skills (consisting in technical expertise and know-how), creativity relevant skills (including cognitive abilities and personality traits such as risk taking) and intrinsic motivation for the work tasks, whereas the employer must provide an innovation-supportive work environment that comprises the necessary resources for innovation (such as creativity time, funds, information, materials), supportive innovation management practices related to work design and coordination and a clear orientation toward innovation reflected in the leaders' attitude towards creative initiatives.

The paper's contribution is three-fold. Firstly, it argues that to maximize the utility of HRM in startups, these practices should clearly target specific individual behavioural objectives such as innovative work behaviour rather than broad performance goals. Secondly, it sheds light on an overlooked aspect of innovation by suggesting that the creation of innovation supportive work environment should be a priority for innovation-oriented startups, a largely under-searched form of organisations, that due to their liabilities of age and size, are more reliant on the innovative contributions of their people to survive and grow (Tzabbar and Margolis, 2017). Thirdly, to the best of the authors' knowledge, this is one of the first studies that adopt a qualitative research design to provide a richer understanding of the HRM and innovation relationship by analyzing multiple respondents' views, and giving voice to employees, as recommended by Heffernan et al. (2016). It is worth specifying that innovative work behaviour (IWB) in this paper denotes a process whereby employees intentionally generate, promote and implement valuable ideas of products, services and work methods that are new to the organisation (De Jong and Den Hartog, 2010).

The rest of the paper is structured as follows; The first section presents an overview of the previous research examining the nature and importance of HRM in startups, and that looking at the HRM and innovation relationship in small businesses. Then the methodology for data collection and analysis is explained. After discussing the research findings, a conclusion is drawn including managerial implications followed by a discussion of limitations and suggestions for possible future research directions.

2. Literature review

2.1. The importance of HRM to startups

Small businesses scholars are increasingly supporting the adoption of superior HRM practices in startups. Bendickson et al. (2017) and Messersmith and Wales (2013), for instance, even advocate the importance of implementing integrated high-performance work systems (HPWS) (that are composed of interlinked practices such as structured selection, training, merit-based performance appraisal and promotion, share ownership rewards and flexible approaches to work) during early life stages of startups as they are found to increase their chances of achieving higher growth levels. In this sense, Baron and Hannan’s (2002) longitudinal study of a large sample of high-tech startups in Silicon Valley, underlined the lasting effect that early HRM decisions have on startups’ subsequent development. Altering firms’ organisational blueprint is found to undermine performance growth and to increase labour turnover which invites founders to make more cautious ‘initial HRM decisions’ (Dietz et al., 2006). In a similar vein, Rutherford et al. (2003) argued that once firms achieve higher sales growth, the formalization of certain HRM aspects such as employees’ development activities becomes fundamental. Nevertheless, HRM remains not prioritized and highly informal in small firms (startups in particular) as it involves the introduction of rules and regulations that are often perceived as a dreadful threat to their entrepreneurial spirit and flexibility (Wapshott and Mallett, 2015).

Unlike large originations, investing in HRM can present a much more critical decision for resource-constrained startups that requires careful assessment of the potential returns. Sels *et al.* (2006) studied the profitability of such investments in Belgian small firms and concluded that although intense HRM does boost productivity, the increase is not sufficient for covering the costs of the additional labour and new processes. Yet, the return on investment is obtained through enhanced innovation or reduced conflicts. It appears that the efficiency of HRM depends on ‘definitional parameters’ such as the business industry or strategic positioning. For instance, it is more probable to find HRM systems in firms with a differentiation strategy than in those aiming to achieve cost leadership (Harney and Alkhalaf, 2020). Conversely other scholars argue that companies with a differentiation orientation are less suitable for the adoption of high-investment HR systems, as their dynamism and flexibility may be suppressed by increased standardization (Chadwick *et al.*, 2013).

In this regard, through a qualitative case-study approach, Cho and McLean (2008) examined the HR development practices of four South Korean IT start-ups, that succeeded to grow into SMEs. Their results suggest that valuing knowledge workers by ensuring their growth and development, is an essential success factor for these firms. Supporting exploratory learning and promoting a culture of innovation, fun and risk-taking, are argued to be key success factors for these firms. Yet, as they grew and formalized their HRD practices, the culture of innovation was undermined by increased managerial control and structured processes (Dietz *et al.*, 2006). Do and Shipton (2019) made a pertinent observation in relation to formalizing HRM in SMEs and argued that these firms can benefit more from the coexistence of both formal and informal HRM in order to foster innovation. Followingly, instead of fearing increased formality in startups, both ad-hoc and structured practices could be adopted in a complementary manner to preserve employees’ positive perceptions of the work environment by organizing and standardizing some aspects and upholding the spontaneity of others.

2.2. HRM and innovation in small firms

Drawing on Amabile's CTC model (2012), Do and Shipton (2019) recommended that employees' positive perceptions of HPWS, is a key antecedent for SMEs' innovation. The authors extended the CTC model by introducing learning goal orientation 'LGO' as a hidden element moderating the HRM and employees' creativity link. This addition suggests that individuals with strong LGO are highly determined to strengthen their competencies and thus are more likely to see HRD practices such as training, comprehensive performance evaluation and job design, as an opportunity to enhance their skills and motivation to produce creative ideas and inventive work solutions. In a qualitative study exploring the antecedents of small firms' growth and stagnation, Hansen and Hamilton (2011) reported that the adoption of enhanced training and mentoring programmes is a common factor found in growing small companies that contributes to preserving a culture of flexibility and innovation. The importance of investing in employees' development in SMEs is also emphasized by Stoffers et al. (2020), who argued that putting efforts into strengthening employees' employability, such as their occupational expertise and anticipation abilities, can highly affect their tendency to engage in innovative work behaviours. In this regard, De Massis et al. (2018) who examined innovative German SMEs, mentioned that enhanced training is a major factor that contributed to their innovation achievements in conjunction with open communication, employees' participation in decision-making and a flat organisational structure. Hence, it can be deduced that implementing superior knowledge and skill developing HRM practices enables small companies to build a skilled human capital which is capable and eager to create outstanding innovations.

Furthermore, Curado (2018) provided evidence on the supportive effect of commitment-oriented and collaboration-oriented HRM systems to the innovation capacity of SMEs and found an association between the absence of such systems and that of innovation. The author's mixed methods study also laid emphasis on the role of the work environment's social settings in influencing innovation in SMEs. Specifically, the lack of trust and knowledge-sharing among the workforce is argued to be a major inhibitor of innovation. Dul et al. (2011) on the other hand emphasized the importance of conceiving a creativity conducive physical work environment to enhance the innovation capacity of SMEs' high-knowledge employees. Such individuals are found to engage in creative initiatives when they perceive the presence of specific features in their physical workspace (namely well-planned offices' layout that facilitates interactions and knowledge exchange).

Although the above discussed research evidenced that HRM can support innovation in smaller firms, mainly by pointing at the importance of employees' knowledge building and sharing, it does not provide clear insights into the work environment specificities of startups, such as the high dynamism, the short social and physical proximity among employees and managers or the predominance of the founder, that may interact with HRM to elicit or stifle employees' innovative behaviours. Therefore, little remains known about how to manage HR in ways that encourage and enable innovative behaviours within the specific context of startups. This knowledge gap is of concern considering startups' high dependency on their employees' innovative efforts for growth and their resource deficiency that impose more selective HRM investments.

The rest of the article will attempt to extend the debate about the contribution of HRM to innovation by studying the experiences of four Tunisian tech startups in this respect.

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3 **3. Methodology**

4 **3.1. Data collection**

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6 In view of the importance of context to understanding innovation in organisations, the exploratory
7 multiple case study approach was judged as a suitable strategy for this research as it allows seizing
8 contextual conditions and situational complexities that are likely to shape employees' behaviours. Case
9 studies were developed among four Tunisian tech startups that were selected following the 'purposive
10 sampling' technique. To ensure comparability and consistency, the companies were chosen based upon
11 recognition as a 'Labelled Startup'. In 2018, Tunisia passed a law, (the Startup Act) that supports new
12 ventures with access to funding and tax exemptions benefits. A labeled startup is a company that has
13 existed for less than eight years, employs a maximum of 100 individuals, and has an innovative
14 technology-based business model or highly depends on new technologies to perform its operations (Dahir
15 and Kazeem, 2018). Further information about the participating companies and the collected data are
16 presented in Table 1. It should be noted all startups are referred to with pseudonyms to preserve the
17 confidentiality of the shared data.
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21 The startups' founders were approached on LinkedIn to invite them to take part of the interviews,
22 who then granted permission to collect more data in their organisations and nominated innovative staff
23 members to participate in the study. Targeting the founders as initial respondents was judged essential
24 as they are expected to be involved in the daily management of the team and can thus have a broad
25 understanding of the utilized HRM practices, the vision behind them and any related challenges. The
26 founders are also expected to be able to provide accurate account of the business activity and its strategic
27 goals and to explain the value of innovation for its success. HR managers on the other hand were
28 interviewed in order to gather more detailed descriptions of the applied HRM methods and the attention
29 they accord to innovation requirements when they develop HRM practices and strategies.
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33 Finally, to obtain a complete picture, it was crucial to collect the views of employees who have
34 voluntarily generated a creative idea that was implemented or considered for implementation in the
35 organisation. These respondents were asked to recall and reflect on an innovative initiative they
36 undertook in their current job and to describe their motivation for carrying out such action as well as any
37 organisational facilitators or obstacles they encountered throughout the innovation process. This was
38 extended into questions about HRM functions, such as training, career planning, rewarding, job design.
39 The interviews ended with conversations about improvements that can be introduced by the
40 management to further stimulate innovative behaviours. This also enabled tapping into employees'
41 perceptions and experiences of the work environment and shedding light on the more spontaneous and
42 informal relations, daily interactions and routines that affect the application of HRM in these firms. This
43 multiple perspective data collection approach helped to mitigate the risk of 'over claiming' whereby
44 company owners deliberately or unintentionally embellish the described policies or practices and their
45 effectiveness in enhancing innovation.
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49 The empirical investigation produced rich qualitative data by means of observations, company
50 documentation and semi-structured interviews that lasted between 45 minutes and 90 minutes and were
51 digitally recorded, immediately transcribed, and anonymized. This triangulation, manifested through the
52 collection of data from various sources, is believed to enhance research robustness and the reliability of
53 findings (Bryman, 2004). An interview guide was prepared in advance that helped to both maintain
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flexibility and preserve a degree of consistency to guarantee a basis for comparison among the conducted interviews (Turner, 2010). The data collection started in April 2019 and ended in August 2019.

As depicted in Table 1, a total of 12 participants took part in the interview, who are aged between 23 and 32 years old and only three of which are female. Each participant was fully briefed about the study and asked to sign a consent form.

3.2. Data analysis

Thematic analysis (TA) was performed with the aid of qualitative data analysis software, NVIVO 12, that assisted with transcripts analysis and coding. TA's utility resides in the flexibility that it permits in exploring and extracting pertinent meanings from the gathered data to subsequently obtain exhaustive interpretations that are rich in insightful ideas in connection to the studied issue. Braun and Clarke (2006) reported two major techniques for coding the empirical data in TA: the first is inductive whereby the detection of patterns is 'data-driven' and is conducted with minimum reliance on pre-consulted theories (Gioia *et al.* 2013), while the second is theory-based and is mostly guided by specific assumptions from the existing literature. Since evidence on the contribution of HRM to startups' innovation remains scarce and inconclusive, we opted for the inductive approach to extract the first order codes by identifying recurring insights (across the four case studies) that are of significant relevance to the research question.

The analysis also involved a simplification stage consisting in a search for patterns among the extracted codes and their aggregation based on commonalities or possible associations as well as an omission of redundancies. This aggregation process involved a return to the relevant literature and theories to search for analogous concepts to our findings and to also understand the additions that our data offers in relation to the HRM and innovation link. Propositions from the CTC model for instance served to build connections between prevalent elements related to the importance of developing the necessary 'employees' raw material for innovation', consisting in key technical skills and knowledge for the work tasks. Moreover, contrasting our data with previous research enabled locating our theoretical contributions relating to 'reinforcing employees' sense of ownership' as an essential mechanism underpinning the HRM and innovation relationship in startups.

Eventually, our coding process yielded three broad themes which will be interpreted in the next section and supported with verbatim quotes borrowed from the data. The findings discussion will be based on Table 2 which provides a summary of the HRM practices that are adopted by the participating companies and are classified according to their relevance to the emergent themes.

4. Discussion of findings

Unlike the expectation that structured HRM is neglected in small businesses, the studied startups all displayed a high level of attention to employment matters reflected in the appointment of a dedicated HR manager which is consistent with Keating and Olivares (2007) findings showing the presence of formalized and planned HRM practices in Irish high-tech startups. Delegating HRM seems to stem from the founders' desire to optimize people related investments and processes. As these businesses progressed past the launch phase and achieved higher sales growth, founders started struggling to keep pace of the growing business needs while ensuring effective HRM and thus resorted to the support of an existing team member or a new recruit to champion the people management function (Rutherford *et al.*, 2003). This could also be explained by the fact that these startups are tech companies that largely rely on

high-knowledge workers to perform their key operations and thus must be carefully managed through more sophisticated HR practices to be acquired and retained, as suggested by Dietz *et al.* (2006).

4.1. HRM role in fostering a learning environment

In the four studied companies, HRM is found to be significantly focused on employees’ learning and development planning, mainly by building an environment for knowledge-sharing, experimentation and mutual support. The startups’ founders and HR managers all repeatedly commented on a need for putting more efforts into recruiting learning-oriented employees and providing them with adequate development guidance while preserving their control over the learning process. In the managers’ opinion, innovative employees tend to be independent and intrinsically motivated to search for and acquire new knowledge which exposes them to novel information and concepts that contribute to spurring their creativity.

Nevertheless, it seems that the founders recognize the importance of signaling their interest in employees’ knowledge building by providing tangible opportunities in this regard. LevelApp, for instance imposes learning time on its members that can be used to read, or to participate in workshops or trainings of their choice. In EvolveTech, the HR manager developed a standardized onboarding process whereby employees are expected to supervise new interns. By taking on such new challenges, employees break the routine of their work which gives them an extra opportunity for idea exchange and knowledge dissemination. Perkins (2018) referred to this approach as ‘provocation’ whereby SMEs’ managers can implicitly guide employees toward specific learning goals by asking them to take up new challenges that may open their eyes to hidden learning needs and interests. Meanwhile, in PureData, employees are required to prepare and deliver training sessions on IT related topics of their choice to their colleagues or to visiting students with the support of the HR manager who facilitates the promotion and scheduling of these events. In LevelApp, however, the founder noticed a deterioration of the entrepreneurial culture that was instilled in the founding team due to the recruitment of new members who although demonstrated creative thinking potential, they actually lacked key innovation capacities such as risk-taking, communication and convincing skills, leaving the company with loads of creative ideas that were either unsaid or ‘lost in translation’. As indicated in Table 2, the HR manager proceeded with developing a more selective recruitment process, a compelling idea-sharing mechanism and intensive soft skills training programmes. This again stresses the cruciality of knowledge building and sharing HRM in enhancing an innovation-enabling workplace as advanced by De Massis *et al.* (2018).

Pushing for more formal and planned trainings is found to be a top priority for the HR managers, since despite the availability of training funds, employees rarely expressed their training needs and tend to opt for online community and colleagues’ support to acquire new knowledge. From the employees’ perspective, it appears that close, trust-based and supportive relationships with their coworkers, are primordial for facilitating the exchange of work-relevant information, solutions and suggestions. The informality of relationships encourages employees to feel comfortable and confident asking for coworkers’ help and feedback for their innovative initiatives without fear of being judged.

‘Here everybody is passionate and helpful... for example I have always had interest in iOS app development, but I never had the chance to learn it in university. When I found out that one of my colleagues can write Swift codes for iOS I didn’t hesitate to ask to see his work.... So, whenever this guy goes for a cigarette, he leaves his computer logged in for me to see what he has been writing. He even lets me keep his work so I can learn in my own time. In 3 or 4 days I developed the first interface of DineHub Manager on IOS’ - IOS and Fullstack developer at DineHub

Similar to Curado's (2018) and Amabile's (2012) predictions, the data from this study indicates that fostering a nurturing social work environment where exchange and expansion of knowledge are encouraged, whether spontaneously or formally, is crucial for enabling not only the generation of creative ideas but also their effective concretization. In accordance with Do and Shipton's (2019) argument on the importance of embracing informality for developing innovation-supportive HRM in SMEs, the respondents' claims suggest that in startups, HRM can be adopted in a way that reinforces the relationship-based learning culture by incorporating more structured employee-led knowledge and skill developing practices.

4.2. Innovation and the physical work environment

This second theme is specifically concerned with the physical work environment and the extent to which employees consider it as 'their own' and a place where they find comfort when conducting their work. Across the four cases, employees highlighted the value of a pleasant workspace design for creating a favourable ambiance for thinking and innovating, as it helps employees to feel at ease when performing complex tasks, increases their willingness to stay longer hours to resolve problems and also creates opportunities for spontaneous conversations and exchange of ideas, especially in the presence of a social space, such as a garden, large eating areas or a games room. Although similar findings were reported by Dul *et al.*, (2011), what stands out in the present research is the identification of the importance of enhancing a sense of ownership towards the workspace, which gives employees the feeling of control over the physical settings and a reassurance that they can freely use the available facilities without any constraints from the founder.

Commenting on his previous workplace a software developer at EvolveTech mentioned: *'Everything was conceived to make people happy, but the management was really bad, they used to lock down the playroom, I mean everything that they did to create a good atmosphere for people, they were controlling it and restricting it, on the pretext that 'it was distracting, people are just wasting their time there', it didn't make sense!...They gave us a great environment but the managerial attitude was not on the same level.'*

In a similar vein, EvolveTech CEO added: *'Space is important, but you must make it ownable by the people working in it and make them feel that it's theirs... it's their home. When they see it as someone else's property, they won't be encouraged to give anything. It's like when you rent a flat, how much effort will you put in improving it?'*

The gathered data, therefore, also sheds light on the predominance of founders that characterizes startups, and their role in encouraging or inhibiting employees' innovative behaviours. Consistent with the conclusions of Castrogiovanni *et al.* (2011) who demonstrated that improving communication and trust between SMEs' workers and owner-managers helps in creating a favourable work environment for entrepreneurial action, the present study shows that building an innovation-fostering physical work environment also requires the presence of such trust-based relationships that allow employees to feel owners rather than simple workers. Investing in state-of-the-art office designs and equipment may bring little value to innovation if employees feel restricted to utilize them to share and experiment with their ideas.

4.3. Work autonomy and idea ownership

Reinforcing work environment aspects such as freedom and autonomy emerged as a key element for supporting innovative work behaviours. In the studied startups, employees tend to find themselves working long hours and multi-tasking to meet decisive deadlines and to keep up with the fast-growing business demands. It was clear for most founders that granting employees control over the way they organize and perform their work tasks, was inevitable to maintain a high-performance level. LevelApp’s talent manager initiated a performance timesheet to be completed by employees daily that tracks their work progress. Although the intention behind this intervention was to improve work efficiency and time planning, employees perceived it as a controlling tool and were reluctant to provide accurate information. It is therefore clear that employees are more encouraged by the ability to make decisions about appropriate ways for performing their work duties. The latter repeatedly expressed their appreciation for autonomy which grants them freedom to allocate time and effort for innovative initiatives at their convenience. In this sense Hunter et al. (2007) argued that work environment aspects related to autonomy can be reinforced by managers through simple interventions such as supporting employees’ involvement in decision-making and minimizing close supervision, actions that can easily be applied in start-ups as they require little resource investment. Some of them were found to be employed by the studied companies such as the ‘All team meetings’ held regularly at EvolveTech and PureData to hear employees’ suggestions about strategic challenges faced by the business. ‘Remote days’ where employees can work outside of the office are found to be a common practice among all the firms. Such empowering practices make employees feel more willing to propose novel business solutions and better equipped to implement them (Amabile and Pratt, 2016).

‘When I am not in the mood to work on a certain task, I just don’t work, I rather do it at a later time or finish it at home, no one would ask why...this is a place where you don’t have to switch your web browser tabs when one of the founders pass by as you are watching a Netflix series episode or playing a video game during work hours. When you have this level of comfort, that’s when you can start looking for creative ideas and innovations’ – Digital marketing officer at PureData

Besides ownership of work, developing psychological ownership towards the idea appears as a crucial factor for successful ideas implementation. In DineHub, the pressure for generating creative ideas left the company rich in compelling ideas that it did not have the actual ability to effectively put into action. Gradually, the company’s vision of improving the dining out experience, started to lose its meaning, and employees lost track of the main mission of the startup. Although employees were taking pride in suggesting original ideas, they were not taking action to study and plan their effective implementation, and they instead were leaving this to the upper managers to undertake.

‘Everybody was participating and then you realize that you are starting to have a bubble of ideas without any real execution behind them. Because it becomes a reflex that people suggest an idea and stop there. It’s like a ‘here you go, I gave you an idea!’ kind of mentality started to develop without any further effective action... At a certain point with the experience we had, we understood that we can all have ideas, but just giving ideas without knowing how to execute them, won’t take us anywhere.’ DineHub CEO

Followingly, it was decided by the CEO and HR manager that while creativity will still be encouraged, it needed to be redefined into a process that involves more than ideas generation. This means that employees who have outstanding ideas, are free to pursue them as long as they take full ownership of the

process, starting from research, idea development to promotion and implementation. The HR manager comes in as a facilitator who organizes brainstorming sessions to help the idea owner to collect feedback and provides support with coordinating and overseeing the implementation with the concerned team. Followingly, it can be argued that developing employees' sense of ownership towards novel ideas could help startups build a more robust innovation capacity rather than piles of dispersed creative initiatives. This can thus serve to extend Amabile and Pratt's (2016) model by adding 'idea ownership' as a key component for fostering innovation in startups.

5. Conclusion and implications

In view of the importance of innovation to startups' survival and growth, this paper employed a multiple case study approach to explore the role of HRM in fostering employees' innovative work behaviour in four Tunisian tech companies. Three major themes have emerged from the collected data to widen our understanding of innovation and HRM in startups that revolve around social and physical aspects of the work environment as well as work design. In line with previous research (Amabile, 2012; Hansen and Hamilton, 2011), the present study found substantial support for the importance of establishing a work environment where employees can upgrade their knowledge and skills that not only allow them to develop their innovative thinking but also help them gain confidence in their abilities to concretize their creative ideas. Informality is found to be an appreciated aspect of the learning supportive environment that is fueled by close and trust-based relationships. Yet our study recommends that startups may also benefit from the adoption of structured training practices where employees play the role of a contributor rather than only a receiver, which transforms learning into an exciting social task that can enhance their motivation to innovate and share creative insights. Organized training can also prevent monotony and routine which are considered to be 'innovation killers' as they hinder creative thinking, and thus can help to maintain a vibrant and thought-provoking work environment, that could even compensate for the lack of strong compensation packages (Rutherford et al., 2003).

The physical environment also stands out as a major contributor to innovative work behaviour, as participants continually referred to the 'homely feel' of the workspace which takes into account their comfort as well as the collaborative nature of their work. This supports previous research that emphasizes the role of physical work conditions in enhancing employees' creativity as they are found to affect the willingness to generate novel ideas (Dul et al., 2011; Amabile et al., 1996). The convenience of the workspace is perceived as a form of organisational support that reflects the employer's commitment towards the workers' wellbeing and towards innovation. The particular revelation of our study suggests that by having a feeling of control on the workspace and equipment employees develop a sense of ownership towards the organisation which is found to enhance their eagerness to exert innovation efforts (Coradi et al., 2015; Liu et al., 2019). This could serve to extend Amabile's model by incorporating 'ownership of space' as a key element of an innovation-supportive work environment. Therefore, investing in a comfortable and functional workspace where employees feel owners is an investment that is worth considering by innovative startup founders. Altering the tangible aspects of the work environment such as the office design may present a more straightforward HRM intervention as it can be easily seen and accepted by employees and thus can induce less destabilizing repercussions that usually follow organizational blueprints change (Dul et al., 2011; Baron and Hannan, 2002). This seems to indicate that dedicating efforts to create an inspiring workspace where employees feel that they can easily share their ideas and smoothly collaborate with their colleagues to develop them, can present a cost-effective HR investment for resource-limited startups.

Moreover, adequate job design appears to play a crucial role in facilitating the implementation of new ideas by promoting work autonomy and idea ownership. By having discretion in deciding how to execute their work tasks, employees develop a sense of responsibility not only towards their job tasks but also towards the organisations' performance in general. In high autonomy environments employees are given flexibility of time and space, which is a major sign of trust from their managers. When feeling trusted and empowered, employees tend to dedicate effort to improve the company's performance by bringing innovative ideas that exceed expectations (Kmieciak et al., 2012). Amabile (1998, p. 81) stated that 'Creativity thrives when managers let people decide how to climb a mountain; they needn't, however, let employees choose which one'. Alternatively put, creativity is best stimulated when employees are granted freedom to conduct their work (referred to as 'autonomy around process') while being given well-defined goals to work towards. Yet it is worth noting that in the absence of clear objectives, autonomy may become meaningless and ineffective for enabling innovative behaviour. The incorporation of flexible work and minimizing micro-management complemented by two-way feedback meetings as well as the involvement of employees in deciding performance goals are all possible approaches that can serve to mitigate such risks.

A core contribution of this study shows that by highly encouraging creativity startups can run the risk of developing an overly creative workforce that has little aversion to risk which can turn into source of stagnation, notably when several ideas are pursued simultaneously while the company still lacks sufficient resources and competencies. To prevent loss of focus, startup owners are encouraged to cultivate 'an environment for idea ownership (an additional component that can extend Amabile's CTC model), where the idea conceiver is allocated sufficient time to develop his or her novel idea and is expected to lead the implementation operations with the support of the HR manager who acts as a facilitator of communication and progress monitoring throughout the innovation process.

6. Limitations and future research directions

The aim of this exploration was not to generalize conclusions, it rather intended to extend our understanding of a behavioural phenomenon within a specific organisational context by providing a snapshot of innovative behaviour in four tech startups. In order to validate the findings, more extensive studies could be conducted by incorporating quantitative data from a larger sample of startups and including more insights from female respondents. Given that the results of the study are based on insights from Tunisian companies operating in the IT sector, future research could focus on other industries such as non-technological startups where innovation is less expected from employees. Furthermore, although the study attempted to examine innovation as a multi-dimensional process, it did not establish a sharp distinction between idea promotion and idea implementation. The role of HRM in facilitating intermediate idea championing steps such as the obtention of colleagues' and founder's adherence, for instance, deserves further investigation. Future investigations may also explore other external intervening factors to develop a more comprehensive understanding of the HRM and innovation relationship such as the dimensions of national culture. Finally, developing comparative studies to contrast the role of HRM in enhancing innovation in startups to that in more established small organisations, or medium-sized enterprises may present another possible avenue of research.

References

- Aït Razouk, A. (2011), "High-performance work systems and performance of French small-and medium-sized enterprises: examining causal order", *The International Journal of Human Resource Management*, Vol. 22, No. 2, pp. 311-330.
- Amabile, T. M. (1998), *How to kill creativity* (Vol. 87), Harvard Business School Publishing, Boston, MA.
- Amabile, T.M. (2012), "Componential theory of creativity", *Harvard Business School*, Vol. 12 No. 96, pp. 1-10.
- Amabile, T.M. and Pratt, M.G. (2016), "The dynamic componential model of creativity and innovation in organizations: Making progress, making meaning", *Research in Organizational Behavior*, Vol. 36, pp.157-183.
- Amabile, T.M., Conti, R., Coon, H., Lazenby, J. and Herron, M. (1996), "Assessing the work environment for creativity", *Academy of management journal*, Vol. 39 No. 5, pp. 1154-1184.
- Baron, J. N. and Hannan, M. T. (2002), "Organizational blueprints for success in high-tech start-ups: Lessons from the Stanford project on emerging companies", *California Management Review*, Vol. 44, No. 3, pp. 8-36.
- Bendickson, J., Muldoon, J., Liguori, E. and Midgett, C. (2017), "High performance work systems: A necessity for startups", *Journal of Small Business Strategy*, Vol. 27, No. 2, pp. 1-12.
- Bryman, A. (2004), "Triangulation and measurement", available at: www.referenceworld.com/sage/socialscience/triangulation.pdf
- Cardon, M.S. and Stevens, C.E. (2004), "Managing human resources in small organizations: What do we know?", *Human resource management review*, Vol. 14 No. 3, pp. 295-323.
- Castrogiovanni, G. J., Urbano, D. and Loras, J. (2011), "Linking corporate entrepreneurship and human resource management in SMEs", *International Journal of Manpower*, Vol. 32, No. 1, pp. 34-47.
- Chadwick, C., Way, S. A., Gerry, K. and Thacker, J. W. (2013), "Boundary conditions of the high-investment human resource systems-small-firm labor productivity relationship", *Personnel Psychology*, Vol. 66, No. 2, pp. 311-343.
- Cho, Y. and McLean, G. N. (2009), "Successful IT start-ups' HRD practices: four cases in South Korea", *Journal of European Industrial Training*, Vol. 33, No. 2, pp. 125-141.
- Coradi, A., Heinzen, M. and Boutellier, R. (2015), "Designing workspaces for cross-functional knowledge-sharing in R & D: the "co-location pilot" of Novartis", *Journal of Knowledge Management*, Vol. 19 No. 2, pp. 236-256.
- Curado, C. (2018), "Human resource management contribution to innovation in small and medium-sized enterprises: A mixed methods approach", *Creativity and Innovation Management*, Vol. 27, No. 1, pp. 79-90.
- Dahir, A. L. and Kazeem, Y. (2018), "Tunisia's "Startup Act" could show other African governments how to support tech ecosystems", *Quartz Africa*, available at: <https://qz.com/africa/1252113/tunisia-startup-act-to-boost-african-tech-ecosystem-and-innovation/>
- De Jong, J. and Den Hartog, D. (2010), "Measuring innovative work behaviour", *Creativity and innovation management*, Vol. 19 No. 1, pp.23-36.
- De Massis, A., Audretsch, D., Uhlaner, L. and Kammerlander, N. A. (2018), "Innovation with Limited Resources: Management Lessons from the German Mittelstand", *Journal of Product Innovation Management*, Vol. 35, No. 1, pp. 125-146.

- De Winne, S. and Sels, L. (2010), "Interrelationships between human capital, HRM and innovation in Belgian start-ups aiming at an innovation strategy", *The International Journal of Human Resource Management*, Vol. 21 No. 11, pp. 1863-1883.
- Dietz, G., Van der Wiele, T., Dietz, G., Van Iwaarden, J. and Brosseau, J. (2006), "HRM inside UK e-commerce firms: Innovations in the 'new' economy and continuities with the 'old'", *International Small Business Journal*, Vol. 24, No. 5, pp. 443-470.
- Do, H. and Shipton, H. (2019), "High-performance work systems and innovation in Vietnamese small firms", *International Small Business Journal*, Vol. 37 No. 7, pp.732-753.
- Dul, J., Ceylan, C. and Jaspers, F. (2011), "Knowledge workers' creativity and the role of the physical work environment", *Human resource management*, Vol. 50, No. 6, pp. 715-734.
- Gioia, D.A., Corley, K.G. and Hamilton, A.L. (2013), "Seeking qualitative rigor in inductive research: Notes on the Gioia methodology", *Organizational research methods*, Vol 16 No. 1, pp. 15-31.
- Hansen, B. and Hamilton, R.T. (2011), "Factors distinguishing small firm growers and non-growers", *International small business journal*, Vol. 29, No. 3, pp. 278-294.
- Harney, B., and Alkhalaf, H. (2020). "A quarter-century review of HRM in small and medium-sized enterprises: Capturing what we know, exploring where we need to go". *Human Resource Management*.
- Heffernan, M., Harney, B., Cafferkey, K. and Dundon, T. (2016), "Exploring the HRM-performance relationship: the role of creativity climate and strategy", *Employee Relations*, Vol. 38 No. 3, pp. 438-462.
- Hunter, S.T., Bedell, K.E. and Mumford, M.D. (2007), "Climate for creativity: A quantitative review" *Creativity research journal*, Vol. 19 No. 1, pp. 69-90.
- Keating, M.A., and Olivares, M (2007). "Human Resource Management Practices in Irish High-Tech Start-Up Firms." *Irish Journal of Management*, Vol. 28 No. 2, pp. 171-186.
- Kmiecik, R., Michna, A. and Meczynska, A. (2012), "Innovativeness, empowerment and IT capability: evidence from SMEs", *Industrial Management & Data Systems*, Vol. 112 No. 5, pp. 707-728.
- Liu, F., Chow, I.H.S., Zhang, J.C. and Huang, M. (2019), "Organizational innovation climate and individual innovative behavior: exploring the moderating effects of psychological ownership and psychological empowerment", *Review of Managerial Science*, Vol. 13 No. 4, pp.771-789.
- Marullo, C., Casprini, E., Di Minin, A. and Piccaluga, A. (2018), "'Ready for Take-off': How Open Innovation influences startup success", *Creativity and Innovation Management*, Vol. 27, No. 4, pp. 476-488.
- McGuirk, H., Lenihan, H. and Hart, M. (2015), "Measuring the impact of innovative human capital on small firms' propensity to innovate", *Research Policy*, Vol. 44 No. 4, pp.965-976.
- Messersmith, J. G. and Wales, J. W. (2013), "Entrepreneurial orientation and performance in young firms: The role of human resource management", *International Small Business Journal*, Vol. 31, No. 2, pp. 115-136.
- Muñoz-Bullon, F., Sanchez-Bueno, M. J. and Vos-Saz, A. (2015), "Startup team contributions and new firm creation: The role of founding team experience", *Entrepreneurship & Regional Development*, Vol. 27 No. 1-2, pp. 80-105. doi:10.1080/08985626.2014.999719
- Perkins, G. (2018), "How does self-direction within learning operate to affect idea generation in small-medium enterprise contexts?", *Human Resource Development Quarterly*, Vol. 29 No. 4, pp. 307-328.

- Rutherford, M., Buller, P. and McMullen, P. (2003), "Human Resource Management problems over the life cycle of small to medium-sized firms", *Human Resource Management*, Vol. 42, No. 4, pp. 321-335.
- Schmelter, R., Mauer, R., Börsch, C. and Brettel, M. (2010), "Boosting corporate entrepreneurship through HRM practices: Evidence from German SMEs", *Human Resource Management*, Vol. 49, No. 4, pp. 715-741.
- Sels, L., De Winne, S., Maes, J., Delmotte, J., Faems, D. and Forrier, A. (2006), "Unravelling the HRM–Performance link: Value-creating and cost-increasing effects of small business HRM", *Journal of Management Studies*, Vol. 43 No. 2, pp. 319-342.
- Sheehan, M. (2014), "Human resource management and performance: Evidence from small and medium-sized firms", *International Small Business Journal*, Vol. 32, No. 5, pp. 545-570.
- Simpson, P. M., Siguaw, J. A. and Enz, C. A. (2006), "Innovation orientation outcomes: The good and the bad", *Journal of Business Research*, Vol. 59 No. 10-11, pp. 1133-1141.
- Stoffers, J. M. M., Van der Heijden, B. I. J. M. and Jacobs, E. A. G. M. (2020), "Employability and innovative work behaviour in small and medium-sized enterprises", *The International Journal of Human Resource Management*, Vol. 31, No. 11, pp. 1439-1466.
- Turner III, D.W. (2010), "Qualitative interview design: A practical guide for novice investigators", *The qualitative report*, Vol. 15 No. 3, pp. 754.
- Tzabbar, D. and Margolis, J. (2017), "Beyond the startup stage: The founding team's human capital, new venture's stage of life, founder–CEO duality, and breakthrough innovation", *Organization Science*, Vol. 28 No. 5, pp. 857-872.
- Van de Vrande, V., De Jong, J.P., Vanhaverbeke, W. and De Rochemont, M. (2009), "Open innovation in SMEs: trends, motives and management challenges", *Technovation*, Vol. 29, No. 6-7, pp. 423-437
- Wapshott, R. and Mallett, O. (2015), *Managing human resources in small and medium-sized enterprises: entrepreneurship and the employment relationship*. Routledge, London.
- West, M.A. (2002), "Sparkling fountains or stagnant ponds: An integrative model of creativity and innovation implementation in work groups", *Applied psychology*, Vol. 51 No. 3, pp.355-387.
- Yin, R.K. (2012), *Case study methods*, SAGE, Los Angeles, California.

Company	Year of establishment	Size of workforce	Business activity	Interviewed members (founder, HR manager and employee)
EvolveTech	2016	8 employees and 3 interns	App creation in e-health, gaming, and creative industries.	<ul style="list-style-type: none">- CEO- HR manager (part-time)- Lead developer
PureData	2015	10 employees	Enterprise Resource Planning (ERP) software solutions for SMEs	<ul style="list-style-type: none">- CEO- Administrative manager- Digital marketing officer
DineHub	2015	20 employees	Online community platform showcasing local food businesses and dining restaurants	<ul style="list-style-type: none">- CEO- Happiness and administration manager- IOS and Fullstack developer
LevelApp	2016	15 employees	Web applications development and cloud solutions for local and foreign businesses	<ul style="list-style-type: none">- CEO- Talent manager and social media officer (part-time)- Fullstack Java Script developer

Table 1. Startups’ profiles and interviews’ participants

HRM practices				
Themes	EvolveTech	PureData	DineHub	LevelApp
Fostering a learning environment	<p>Structured internship programmes</p> <ul style="list-style-type: none"> - Selective interns' selection through collaboration with engineering universities - A preference for fresh graduates and candidates with limited professional experience, who are more likely tolerate new ideas and are eager to learn <p>Structured onboarding process</p> <ul style="list-style-type: none"> - Employees are required to supervise new interns to acquire leadership skills and to break their work routine <p>Personalized training and development support</p> <ul style="list-style-type: none"> - Paid access to learning platforms and online training programmes - Support workers' employability through career planning, personal branding and soft skills building 	<p>Careful selection process</p> <ul style="list-style-type: none"> - based on the candidate's domain passion, attitude towards learning and problem solving instead of experience and academic qualifications <p>Formal and informal training</p> <ul style="list-style-type: none"> - Regular employee-led workshops - Founders' knowledge transfer sessions upon participation in external events - Spontaneous and planned ideation sessions <p>Co-established development plans</p> <ul style="list-style-type: none"> - Personalized learning roadmaps co-created by the employee the line manager/ founder, and HR manager 	<p>Semi-formalized recruitment system</p> <ul style="list-style-type: none"> - Partnering with student associations to identify and attract passionate and innovative individuals <p>Training activities focused on external knowledge acquisition</p> <ul style="list-style-type: none"> - by inviting lecturers, students and professionals to hold workshops at the company <p>Frequent teambuilding activities involving fun team learning tasks</p> <p>Regular performance feedback during daily standup meetings and semiyearly evaluation meetings</p> <p>Challenge-oriented job design</p> <ul style="list-style-type: none"> - Job rotation - An encouraged trial and error approach to work 	<p>Selective recruitment process focused on interpersonal skills and attitudes to ensure cultural fit and maintain a family-like atmosphere</p> <p>On-the-job-training enhanced by employees' pairing to facilitate exchange ideas and knowledge exchange.</p> <p>20% time policy requiring employees to dedicate time for learning</p> <p>Organized idea and information-sharing through internal communication platforms such as Trello and Slack, employees' blog, and team meetings</p>
Building an ownable physical environment	<ul style="list-style-type: none"> - Collaboration-facilitating open space layout, equipped with large meeting tables and a social space - Anytime access to video games room - Freedom to use the space for social events – employees' birthdays celebrations, movie nights... 	<ul style="list-style-type: none"> - Well-equipped offices facilitating idea experimentation - 'Redecorate the office' events - Personalized mugs, walls, and desks - 'Plant adoption' programmes – to look after a plant in the office 	<ul style="list-style-type: none"> - Involving employees in the design of the company's new office - Effectively planned space comprising a learning space for workshops, open for external users - The presence of white boards walls and smart screens for ideation 	<ul style="list-style-type: none"> - Technology equipped ideation room, a large garden used as an entertainment and social space, a napping, and a prayer room - Anytime access to office - employees can come to work in the weekend or in the evenings - 'Bring your friend or family to work' days
Enhancing work autonomy and idea ownership	<ul style="list-style-type: none"> - Flexible work hours - Possibility of remote working 	<ul style="list-style-type: none"> - A weekly remote working day - Decentralized-decision-making: requesting 	<ul style="list-style-type: none"> - Remote working days - 20% time policy allowing employees to spend fixed time on new ideas development. 	<ul style="list-style-type: none"> - Work from home hours - Dedicated time for new ideas presentations during the 'All-team' weekly meeting.

	<div>- Minimized supervision supported by check-up meetings for feedback purposes</div> <div>- Internal promotion system prioritizing current innovative employees for new leadership positions</div>	employees' feedback on a regular basis Involving employees in setting their performance goals	<div>- Rotating leadership roles for key business projects.</div>	<div>- Personalized recognition for employees leading improvement projects</div>
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Table 2. Overview of the startups' HRM practices

Employee Relations