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## **WHEN THE HEARTBEAT QUICKENS THINGS ARE SET IN MOTION: EXPERIENTIAL LEARNING PROCESSES OF PORTFOLIO ENTREPRENEURS**

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### **Abstract**

Portfolio entrepreneurs, i.e., entrepreneurs who simultaneously master multiple businesses, are particularly relevant for the creation of economic value. Portfolio entrepreneurship has thus gained scholarly attention. However, related processes of how portfolios are developed by the entrepreneurs are little investigated. Drawing on experiential learning and affective events theory we carve out learning events from six longitudinal, in-depth case studies of portfolio entrepreneurs operating in the small food processing industry of a developing country to investigate how the processing of events that are experienced as pleasant or unpleasant and with higher or lower levels of arousal influences learning directions and the entrepreneurs' behavior relative to starting, improving, maintaining, and quitting businesses. Findings indicate that affectivity indeed influences learning directions and changes in the entrepreneurs' business portfolios. Notably, learning and change are set in motion on the basis of getting aroused by others' success, exposure to modern technologies, and internal management problems. However, some counterintuitive patterns emerged, particularly with regards to portfolio entrepreneurs starting new businesses though they are not particularly engaged, and the role of 'side businesses' and 'keeping-alive strategies'. These patterns are inductively explored in more detail to contribute to a better understanding of entrepreneurial dynamics and growth in general, and how portfolio entrepreneurship unfolds in particular.

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**ABSTRACT**

Portfolio entrepreneurs, i.e., entrepreneurs who simultaneously master multiple businesses, are particularly relevant for the creation of economic value. Portfolio entrepreneurship has thus gained scholarly attention. However, related processes of how portfolios are developed by the entrepreneurs are little investigated. Drawing on experiential learning and affective events theory we carve out learning events from six longitudinal, in-depth case studies of portfolio entrepreneurs operating in the small food processing industry of a developing country to investigate how the processing of events that are experienced as pleasant or unpleasant and with higher or lower levels of arousal influences learning directions and the entrepreneurs' behavior relative to starting, improving, maintaining, and quitting businesses. Findings indicate that affectivity indeed influences learning directions and changes in the entrepreneurs' business portfolios. Notably, learning and change are set in motion on the basis of getting aroused by others' success, exposure to modern technologies, and internal management problems. However, some counterintuitive patterns emerged, particularly with regards to portfolio entrepreneurs starting new businesses though they are not particularly engaged, and the role of 'side businesses' and 'keeping-alive strategies'. These patterns are inductively explored in more detail to contribute to a better understanding of entrepreneurial dynamics and growth in general, and how portfolio entrepreneurship unfolds in particular.

## INTRODUCTION

Portfolio entrepreneurs concurrently own and engage in more than one business (Carter & Ram, 2003; Westhead & Wright, 1998; Wiklund & Shepherd, 2008), defined as new and separate legal units as well as new business areas within existing structures (Wiklund & Shepherd, 2008). They exist in developed and developing countries (Cainelli & Iacobucci, 2011; Carter & Ram, 2003; Granovetter, 1995). Albeit not yet conclusive, there is evidence that the experience portfolio entrepreneurs gain from starting and operating multiple businesses ultimately leads to superior firm performance and innovation (Westhead & Wright, 2011). It is thus no surprise that the processes through which portfolio entrepreneurship unfolds increasingly receive scholarly attention (Carter & Ram, 2003; Iacobucci & Rosa, 2010; Sieger, Zellweger, Nason, & Clinton, 2011).

Related studies show that portfolio entrepreneurs master multiple businesses because they find ways to involve others (Iacobucci & Rosa, 2010; Rosa, 1998), report higher levels of managerial skills (Ucbasaran, Westhead, & Wright, 2006), and become more cautious and less biased than entrepreneurs without simultaneous ownership experience, especially when failure is involved (Ucbasaran, Westhead, Wright, & Flores, 2010; Westhead, Ucbasaran, & Wright, 2005). However, in-depth insight into the learning processes that are “required and exhibited” (Lechner & Leyronas, 2009: 663) to develop such skills is limited (Carter & Ram, 2003; Westhead & Wright, 2011). Since entrepreneurs predominantly learn from experience (Politis, 2005) and experience strong levels of emotions in relation to their activities (Jenkins, Wiklund, & Brundin, 2014; Shepherd, 2003), a deeper understanding of the linkages between experienced events, affective and learning outcomes, and behaviors is particularly needed (Morris, Kuratko, Schindehutte, & Spivack, 2012). Therefore, this article investigates how experiential learning processes influence portfolio entrepreneurship. Specifically, we explore how the processing of events that are emotionally experienced as pleasant or unpleasant, and with higher or lower levels of arousal, influences learning direction (explorative or exploitative) and behavior of portfolio entrepreneurs in relation to changes in their portfolio of businesses i.e., whether businesses were added, maintained, improved, or quitted. We thus build on organizational and entrepreneurial learning (March, 1991; Politis, 2005) but integrate affective events theory (Mano & Oliver, 1993; Weiss & Cropanzano, 1996).

As proposed by (Morris et al., 2012: 12), we investigate experiential learning processes by using qualitative methods. Specifically, we analyze events as “lived experience” (Morris et al., 2012: 11) based on an inductive-deductive approach and triangulated case study data,

including interviews, observations, secondary sources, and visual sources (Meyer, 1991; Yin, 2009), from six longitudinal, in-depth case studies of portfolio entrepreneurs operating in the small food processing industry in Tanzania. Our research setting is relevant since entrepreneurs in developing countries have distinct motivations for engaging in portfolio entrepreneurship due to inefficient factor markets (Khanna, 1997; Kock & Guillen, 2001), institutional voids (Khavul, Bruton, & Wood, 2009; Mair & Marti, 2009), and a high number of unexploited business opportunities, especially in the agri-food sector (Sørensen, 2003; WorldBank, 2007). Simultaneously, portfolio entrepreneurs have to be extra careful not to over-stretch particularly scarce resources and deter investments in existing businesses (Rijkers & Söderbom, 2013), and depend on enhanced learning to cope with difficult environments (Bradley, McMullen, Artz, & Simiyu, 2012; Mayer-Haug, Read, Brinckmann, Dew, & Grichnik, 2013). To study their learning processes, we inductively coded case data for learning events, and deductively coded each event for pleasantness and arousal, learning direction, and behavioral responses. Learning processes and their relation to changes in the entrepreneurs' business portfolios, were then analyzed on the single-event level and based on connected event streams using explorative methods and visual mapping strategies (Langley, 1999; Miles & Huberman, 1994).

Our analysis of 128 events identified within four event categories (capital gains, organizational capability building, innovation, and strategy formulation) provides support for the influence of affectivity on learning direction and behavior, and gives first insight into their relation to portfolio entrepreneurship. Although the processing of events is to a noteworthy extent in line with the theoretical framework, we find indication that the relationships are more complex in portfolio entrepreneurship contexts: The analysis on the single-event level for example reveals that exploitative learning paths more likely result into reduced effort behavior, rather than portfolio entrepreneurs withdrawing or improving their businesses.

In relation to the cumulative influence of event processing on business portfolios we find that, as expected, the portfolio gets in motion when arousal is high, i.e., entrepreneurs either add a new business or improve an existing one. Looking into the starting points of learning events that shape business portfolio development we specifically find that observing others' success with portfolio entrepreneurship entails arousal leading to enlarging the portfolio, while being excited by new technology and facing internal management problems influences improving businesses in the existing portfolio. However, some businesses are started even if entrepreneurs are not particularly engaged, and only few businesses are quitted in connection

to withdraw behavior. Reasons for this are found in the role of ‘side businesses’, i.e., businesses operated on the side of an existing employment, and ‘keeping-alive strategies’, i.e., instrumentalizing existing businesses with no more effort than needed for as long as possible to develop resources for leveraging business opportunities in the future. Drawing on inductive insights, we discuss these patterns in more detail to provide avenues for further research on disentangling the dynamic influence of experiencing emotions and learning on the composition of business portfolios.

## **THEORETICAL FRAMEWORK**

### **Portfolio entrepreneurship**

Portfolio entrepreneurs differ from novice entrepreneurs that start one business and serial entrepreneurs that start one business at a time (Westhead & Wright, 1998). In comparison, portfolio entrepreneurs are particularly relevant for the creation of economic value because they continuously explore new opportunities and increasingly have the means and skills to exploit them, e.g., more knowledge, higher levels of innovation, more resources, and better networks (Carter & Ram, 2003; Westhead et al., 2005). Their efforts often lead to the establishment of business groups, i.e., a set of small (i.e., small business groups) or large businesses (e.g., corporate groups) owned and controlled by an entrepreneur, entrepreneurial team, or entrepreneurial family (Carter & Ram, 2003; Sieger et al., 2011).

Studies suggest that entrepreneurial dynamics and a desire for capital accumulation motivate individuals to establish small business groups (Iacobucci & Rosa, 2010). Specifically, portfolio entrepreneurs are motivated by combinations of profit maximization, value addition to existing businesses, generation of satisfactory income, circumventing existing legislation (e.g., launder money, avoid taxes), spreading risk, and being excited about new challenges (Carter & Ram, 2003; MacMillan, 1986; Rosa, 1998; Westhead & Wright, 2011). Portfolio entrepreneurship is also motivated by maintaining ownership and offering employment and succession opportunities to family members (Ram, 1994; Sieger et al., 2011). Further, Carter, Tagg, and Dimitratos (2004) suggest that portfolio entrepreneurship is not limited to business ownership but also combined with wage-employment or non-earned income, e.g., pensions.

In developing countries, extreme resource scarcity and institutional shortcomings are traditionally strong external drivers of portfolio entrepreneurship. This is because inefficient factor markets lead to vertical growth barriers and favor accumulation of necessary resources via horizontal diversification (Khanna, 1997; Kock & Guillen, 2001). Further, institutional voids in terms of a lacking supportive environment for business development motivate

entrepreneurs to make do with whatever is at hand (Mair & Marti, 2009), rapidly cycle between business opportunities (Khavul et al., 2009), and spread risk (Carter & Ram, 2003; Downing, 1991). Finally, there is also some evidence that portfolio entrepreneurship in developing countries is driven by numerous unexploited opportunities and is more prevalent among well-educated individuals that are motivated by wealth accumulation (Kuada & Sørensen, 2000; Rosa, Kodithuwakku, & Balunywa, 2008; Sørensen, 2003).

Hence, multiple business ownership is driven by a range of context-specific motivations. Since they are also likely to change over time (Rosa, 1998; Westhead & Wright, 2011), attention has shifted towards understanding the dynamic processes through which portfolio entrepreneurship unfolds (Carter & Ram, 2003). Notably, implementation aspects with regard to multiple business management started to puzzle scholars. Small business groups are “an organizational and strategic paradox” (Lechner & Leyronas, 2009: 661) as entrepreneurs should theoretically specialize their efforts (Gifford, 1998). However, in practice such groups constitute entrepreneurial development models used to overcome constraints and accumulate resources (Cainelli & Iacobucci, 2011; Lechner & Leyronas, 2009; MacMillan, 1986). Studies suggest that they are possible because portfolio entrepreneurs build teams (Iacobucci & Rosa, 2010; Rosa, 1998) and also reach higher levels of managerial skills than other entrepreneurs (Ucbasaran et al., 2006). Notably, key employees are needed to take over operational management of existing businesses and free up time for engaging in new endeavors (Rosa, 1998). When building ownership teams, portfolio entrepreneurs also establish new firms for the sole purpose of attracting and involving others while maintaining control through owning the majority stake in the new business via holdings (Iacobucci & Rosa, 2010). Holdings are part of pyramidal ownership structures related to portfolio entrepreneurship (Rosa, 1998).

However, deeper insight into the management of small business groups in ways outlined above is still limited. In particular, there is a need to better understand the underlying learning processes necessary to develop skills for mastering portfolio entrepreneurship challenges (Lechner & Leyronas, 2009).

### **Learning and experience**

Effective management of multiple businesses depends on learning processes, i.e., how entrepreneurs gain skills for a) starting and b) managing new ventures (Politis, 2005; Wright & Stigliani, 2013). Since start-up and management skills mainly have to be acquired by doing, entrepreneurs predominantly learn from experience (Cope, 2011; Sarasvathy, 2001), i.e., from experiential learning processes during which “knowledge is created through the

transformation of experience” (Kolb, 1984: 41). Ongoing experience thus facilitates the development of a) creative start-up skills (Baker & Nelson, 2005; Haynie, Shepherd, Mosakowski, & Earley, 2010; Sarasvathy, 2001) and b) effective management skills to organize resources and build capabilities (Autio, George, & Alexy, 2011; Busenitz et al., 2003). Capabilities refer to the emerging organization’s capacity to structure and deploy resources and routinized processes in order to reach a desired goal (Amit & Schoemaker, 1993; Nelson & Winter, 1982).

With regard to learning, portfolio entrepreneurs have received special attention since they gain start-up as well as management experience from creating new businesses and maintaining existing ones (Ucbasaran et al., 2006; Westhead & Wright, 2011). Therefore, they may develop the skills necessary to simultaneously explore and exploit opportunities (Lechner & Leyronas, 2009; Politis, 2005), which is associated with superior business performance (cf. Teece, 2007). However, findings about the relationship between portfolio entrepreneurs’ experience and business performance are so far inconclusive and lack further insight into the micro-processes through which experience translates into knowledge and behaviors (Politis, 2005; Westhead, Ucbasaran, & Wright, 2009; Westhead & Wright, 2011). Such insight is necessary because the relationship between experience and learning is not linear, i.e. the more experience, the more knowledge (Jovanovic, 1982). Rather, learning is subject to the amount and nature of experiences made (Ucbasaran et al., 2010; Westhead & Wright, 2011). For example, portfolio entrepreneurs do not necessarily outperform other types of entrepreneurs. They may identify more opportunities, but the quality of these opportunities is not necessarily higher, and they may lack the skills to exploit them (Ucbasaran et al., 2006). Notably, whether portfolio entrepreneurs pursue time-limited strategies to experiment and hedge bets, or long-term strategies to maintain and develop existing businesses (see e.g., Carter et al., 2004; Khavul et al., 2009) may influence what kind of experiences they make, thus directing their learning efforts towards start-up *or* management skills (Politis, 2005). Further, they may draw on experience as a substitute for information search, which can lead to over-confidence bias and sub-optimal decisions (Ucbasaran, Westhead, & Wright, 2008), e.g., the establishment of under-capitalized firms (Hayward, Shepherd, & Griffin, 2006; Westhead & Wright, 2011). Such firms over-stretch the entrepreneur’s resources and are more likely to fail (Gifford, 1998). Yet, if they fail, studies show that portfolio entrepreneurs become more cautious and less biased than entrepreneurs without simultaneous ownership experience (Ucbasaran et al., 2010; Westhead et al., 2005). Learning from failure (Cope, 2011) is thus

particularly relevant for portfolio entrepreneurs. Especially in developing countries, they may, through failure, learn to avoid sorting effects, i.e., investing resources into new businesses rather than the established ones (Rijkers & Söderbom, 2013). On the other hand, a caveat applies: Failure only enhances learning if entrepreneurs do not fail too often (Ucbasaran, Westhead, & Wright, 2009), and too much, since failure can be a traumatic experience leading to feelings of grief that interfere with learning (Shepherd, 2003).

To gain further insight into learning processes, the nature of experience has been approached by relating events experienced by the entrepreneur to emotions and knowledge acquired in response to these events, and resulting behaviors (Morris et al., 2012; Politis, 2005). Events are abstract concepts used in process studies to refer to temporally bracketed sets of incidents that individuals or organizations experience (Langley, 1999; Van de Ven, 2007). For example, entrepreneurs may experience an event of negotiating with a partner. This event could consist of observable incidents, such as presenting a business plan. Over time, events unfold into event streams of interrelated events, e.g., meeting with investors and writing a business plan as part seeking finance (Morris et al., 2012). Entrepreneurs learn by processing such events into new knowledge, but the direction of their learning influences the kind of knowledge gained: Explorative learning paths directed towards novelty lead to enhanced start-up skills, whereas exploitative paths directed towards efficiency gains from improving existing processes lead to enhanced management skills (Politis, 2005). Explorative learning paths may thus lead to changing or adding new businesses to an existing portfolio whereas more exploitative learning leads to improvement of existing businesses. Third, events are processed into affective outcomes, i.e. emotions (Weiss & Cropanzano, 1996). Affective outcomes result from the combination of two dimensions: pleasantness and arousal (Mano & Oliver, 1993). Pleasantness influences the direction of experiential learning (Haynie et al., 2010; Morris et al., 2012). More specifically, positive or pleasant emotions encourage explorative paths since the entrepreneur will be optimistic and feel that the environment is a safe place to experiment (Carver, 2003; Fredrickson, 1998; Gasper & Clore, 2002). Negative or unpleasant emotions encourage exploitative paths because the entrepreneur will realize that something is wrong and focus on finding ways to improve it (Derryberry & Tucker, 1994; Morris et al., 2012). Arousal refers to the intensity of the emotional response, i.e. whether the entrepreneur is excited and stimulated or quieter and relaxed (Mano & Oliver, 1993). In combination with pleasantness, arousal leads to positive and negative affectivity (Watson & Tellegen, 1985). Negative affectivity will be high if the entrepreneur experiences an unpleasant emotion but is

aroused, and positive affectivity will be high if the entrepreneur experiences a pleasant emotion and is aroused. Negative and positive affectivity are relevant because they are positively correlated with engagement, but decline when the experience is less intense (Morris, Allen, Kuratko, & Brannon, 2010). Figure 1 illustrates these relationships as an experience space entrepreneurs are expected to move around in as they process events (Morris et al., 2012).

Finally, learning and affective outcomes directly influence behavior. Specifically, Morris et al. (2012) suggest that if entrepreneurs experience an event as pleasant and arousing, they are more likely to follow an explorative path to innovate more radically and take risks, e.g., introduce new products or make investments (Quadrant 4 in Figure 1). If they experience events as unpleasant but are still highly engaged, they are more likely to follow an exploitative path and increase their efforts to improve existing businesses through incremental adaptations to regain control (Quadrant 3 in Figure 1). If arousal is low, entrepreneurs are likely to reduce effort, which increases the probability of lifestyle over growth ventures (Quadrant 2 in Figure 1). Low levels of engagement in combination with negative affect are expected to make them withdraw their efforts all together, e.g., quit the business or a particular activity (Quadrant 1 in Figure 1).

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Insert Figure 1 about here  
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These linkages between affective outcomes, learning outcomes, and behavior are particularly interesting for understanding the nature of experience in portfolio entrepreneurship contexts. As previously outlined, relationships between experience gains from multiple businesses and performance gains are not yet clear. Insights into how portfolio entrepreneurs process events along these dimensions can thus contribute to a better understanding of the mechanisms underlying knowledge gains (Ucbasaran et al., 2006), learning from failure (Ucbasaran et al., 2010), and effective management of small business groups (Carter & Ram, 2003; Lechner & Leyronas, 2009). Specifically, the influence of emotional outcomes on learning and behavior can provide insight into when and why they will start a new business, improve or maintain an existing one, or quit an activity. Since these linkages have so far not been empirically investigated in-depth, we use Figure 1 as a theoretical framework for exploring the linkages between affectivity states, learning paths, behavioral outcomes and changes in the entrepreneurs' business portfolios.

## METHODS

To explore how experiential learning processes influence portfolio entrepreneurship, we draw on data from longitudinal case studies conducted over a three-year period (Yin, 2009). Since the study of learning processes (especially in relation to emotions) taps into a complex phenomenon and is a recent area within entrepreneurship studies, a qualitative approach is appropriate (Colquitt & Zapata-Phelan, 2007). Specifically, Morris et al., (2012: 32) suggest adapting qualitative methods for studying experiential learning processes. Our focal unit of analysis is the individual entrepreneur experiencing events over her career span (cf. Rosa, 1998), with a focus on real-time insight into the processing of events between 2011 and 2013. Typical for qualitative research, insights gained result from an iterative, rather than a linear, research process (Creswell, 2012). Empirically, learning processes of portfolio entrepreneurs in developing countries are particularly relevant because difficult environmental conditions motivate diversification but require enhanced learning to manage multiple businesses in a value-creating way (Carter & Ram, 2003; Mayer-Haug et al., 2013). Therefore, we draw on qualitative data from a developing country context.

### **Research setting and case selection**

Tanzania is a relevant setting for this study. Similar to other emerging economies in Africa, novel opportunities arise from rapid economic growth, socio-political change, and natural resource endowments (Economist, 2011; Lituchy, Punnett, & Puplampu, 2013). Contrary to studying livelihood diversification strategies of necessity-driven entrepreneurs, i.e., individuals who lack alternatives and are careful not to put all their eggs in one basket (Downing, 1991), the type of entrepreneur we investigate are well-educated and/or wealthier individuals as more opportunity-driven owners of small businesses (cf. Kuada & Sørensen, 2000; McDade & Spring, 2005). They are well suited for this study since research suggests that diversification is less common among survivalists and only flourishes once resource foundations are improved (Rosa et al., 2008; Sørensen, 2003).

We selected six cases of opportunity-driven portfolio entrepreneurs in Tanzania. Sampling was facilitated by collaborating with Sokoine University in Morogoro. Identifying cases started with the small food processing industry. This industry is relevant because it favors horizontal and vertical diversification due to underdeveloped value chains (Wolter, 2008). During a pilot study in 2010, we compiled a list of 30 small food processors using information provided by the municipality and local informants. After a screening process of 15 entrepreneurs willing to participate in the study, six cases were selected in which the

entrepreneurs reported a) simultaneous rather than sequential engagement in two or more businesses, and b) higher education and/or personal asset ownership (notably private houses and cars), used to classify them as opportunity-driven. Businesses were operationalized as entrepreneurial activities for which a separate business license by the municipal authorities is required. Depending on the strategy of the entrepreneur, new businesses were either integrated into existing legal structures, or established as a new company, as suggested by Wiklund and Shepherd (2008). Further, informal businesses were included to consider the prevalence of the informal economy in African countries (e.g., Webb, Tihanyi, Ireland, & Sirmon, 2009). Table 1 describes the entrepreneurs and their businesses in more detail. We also disclose previous or existing employment to include other income-generating activities (Carter et al., 2004; Nafziger & Terrell, 1996). Participant's names are anonymous since data was collected under a confidentiality agreement.

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### **Data collection**

Data sources include face-to-face interviews, observations, visual data, and secondary data collected during a pilot study (2010) and three field trips in February/March 2011, June/July 2012, and January/February 2013. We audio-taped 18 semi-structured, in-depth interviews with the six entrepreneurs. Interviews lasted between 60 and 150 minutes and were conducted by one of the authors in English (Case C, D, F) or in Swahili (case A, B, E). The latter were processed with the assistance of two local graduate students of agribusiness and management. In interview round one (2011), we asked entrepreneurs to describe their motivations for doing business, their life in the first year of business, encountered challenges and rewards, and future plans. We also took photographs of the production sites. In round two (2012) and three (2013), interview questions followed-up on the implementation of plans, positive and negative aspects of current operations, verifying interpretations from previous interviews, and (changes in) future plans. Prior photographs were used to support the description of events happening and elicited emotional responses. In addition, we asked participants to sketch how their businesses are organized and linked to each other, and, while drawing, describe advantages and problems (round three). These sketches supported the interview process by mapping emotions, learning processes, and behaviors to particular events (Meyer, 1991). Interview translation and transcription resulted in approximately 620 pages of single-spaced transcripts. An independent researcher verified random excerpts of the translations. In Case E, a third interview was not conducted as the entrepreneur cancelled several appointments.

However, existing interviews were extensive, and visiting the production site and informal interviews with employees indicated that major changes had not taken place since 2012. Participant observations were made during the interviews and ensuing visits of production facilities (DeWalt & DeWalt, 2011). In particular, we took notes of the entrepreneur's affective state in relation to responses or incidents (e.g., employees reporting a problem). Secondary data includes reports by local researchers, and business plans provided by participants. Business registration was verified using the online database of the Tanzanian Business Registration and Licensing Agency.

As highlighted by similar studies, interviewing is a social process that requires trust between researcher and participants and can never be truly objective (Rosa, 1998). In this study, repeated visits contributed to the emergence of a dialog with the participants (Creswell, 2012). Similar to the critical incident approach used by Cope and Watts (2000), we encouraged entrepreneurs to elaborate on best and worst times and thus had an active role helping them reflect upon their experiences. To harness this dialog, data from multiple sources of evidence (see above) was used. Notably, real-time observations facilitated an understanding of the actual scope of the businesses and 'how it felt' to operate them (e.g., one participant was repressing anger after several interruptions due to problems in production). We also kept detailed field diaries and discussed interpretations with assistants and local informants to understand the contextual meaning of responses (Bujra, 2006).

### **Data analysis**

Qualitative data is useful for studying how phenomena unfold over time (Van de Ven, 2007) but requires strategies to make sense of the eclectic nature of this kind of data (Langley, 1999). We used a mix of narrative and mapping strategies to uncover meanings and patterns in relation to the processing of events (Creswell, 2012; Miles & Huberman, 1994). First, case data was translated into comprehensive narratives (Creswell, 2012). To the extent possible, we constructed detailed timelines of the history of the entrepreneurs and their businesses. Similar to the approach used by Berglund (2007), relatively unstructured interviews thus led to protocols in the form of case histories. They were then iteratively and systematically coded to capture events within four main event type categories emerging from the data (financial and physical capital gains, capability building, innovation, and strategy (re-)formulation). Events were furthermore also coded for their start incidents (e.g., observing others, management problem), end incidents (e.g., product innovation, capital accumulation), connection to other events in coherent event streams (e.g. several events leading to obtaining

external finance), and influence on the portfolio of businesses (start/add a business, improve or maintain an existing business, quit a business). Temporally, data collection was designed to capture events taking place within approximately one year, with some events lasting longer (e.g., capital accumulation). Given the idiosyncratic and subjective nature of events (Morris et al., 2012), events were thus coded inductively.

In total, 128 events were found. Table 2 provides an overview of the number of events per case and in the different categories. Each event was then deductively coded based on the theoretical framework (Figure 1) for the entrepreneur's emotional state in terms of affect (pleasant/positive or unpleasant/negative) and arousal (engaged/excited or less engaged/quiet), learning direction (explorative or exploitative paths), and corresponding behavior (innovate and take risks, adapt and improve, withdrawing, or reduced effort)<sup>1</sup>. Events were coded by both authors. One author had in-depth experience from collecting data; the other one used transcripts only. Following suggestions for establishing intercoder agreement (Creswell, 2012: 253), we continuously discussed differences in individual codings and incorporated only reviewed coding results. Overall, not all 128 events could be fully coded. For 18 events, codes for pleasantness were not clearly identified, for 17 events we could not find indications for arousal, and for 8 events it was not possible to find clear indications for learning direction. This led to missing values (MV) for the analysis.

Coding was facilitated by a spreadsheet to create within-case and cross-case displays (Miles and Huberman, 1994). Coded transcript passages were copied into the spreadsheet to maintain connection with the original data before discrete variables were assigned to create event sequences. Event sequences were imported into SPSS to explore learning processes on the event level using frequency counts and cross-tabs.<sup>2</sup> Finally, the dynamic influence of learning processes on portfolio entrepreneurship was analyzed by visualizing the relationship between changes in the business portfolios and event streams (connected sequences of events). Case narratives, case characteristics, and comparisons with existing studies were used to interpret these relationships within and across the cases (Yin, 2009). We particularly drew on original

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<sup>1</sup> The coding scheme and examples of how events were coded are available upon request.

<sup>2</sup> As highlighted by Langley (1999), these techniques would not be appropriate for comparing similarities across event sequences. However, cross-tabs could be used to explore the linkages between affect states, learning direction, and behavior on the level of each event (cf. Morris et al., 2012: 32). For analyzing the event streams (streams of event sequences) a visual mapping approach was used since the small number of events per case did not allow for meaningful comparative statistical analysis of event sequences on the case level (cf. Abbott, 1990; Garud & Van de Ven, 2002).

transcript passages to inductively find explanations for patterns found. The entrepreneurs are subsequently quoted as ENT A-F.

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### FINDINGS

Firstly, we explore how entrepreneurial learning processes influences portfolio entrepreneurship on the basis of single events related to the entrepreneurs’ affectivity (pleasantness and arousal), learning directions, behavioral outcomes and changes in their business portfolio. Using insights from this analysis on the event level, we secondly focus on how the cumulative processing of events and event streams relate to changes in the entrepreneurs’ portfolios.

#### **Experiential processing: Analysis on the single-event level**

In a first step, we investigate the relation between affectivity, i.e. theoretically relevant combinations of pleasantness (positive vs. negative emotion) and arousal (aroused vs. quiet) on learning direction using the four quadrants presented in the experience space (Figure 1) as a theoretical framework (Table 3). The patterns for Quadrants 1, 3 and 4 are generally in line with theory. For Quadrants 1 and 3, significantly more events that lead to exploitative (and fewer to explorative) learning directions than expected belong to the group of events exhibiting the respective affectivity states ( $p = .00$ ). The same appears to be the case in Quadrant 4: Significantly more events with exploitative (and fewer with explorative) learning directions can be found within this quadrant ( $p = .00$ ). Quadrant 2, however, shows a pattern that does not conform to the framework outlined in Figure 1. Although pleasantness combined with negative engagement is theoretically expected to entail explorative learning, the results of this analysis indicate that Quadrant 2 comprises only six events with explorative learning paths (compared to 13 with exploitative learning directions). The pattern is statistically significant: More events with exploitative (and fewer with explorative) learning directions than expected belong to the group of events within Quadrant 2 ( $p = .00$ ). This might indicate that entrepreneurs are satisfied with their businesses and focus on learning to maintain existing operations, rather than exploring novelty. We elaborate on this as part of the event stream analysis.

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Insert Table 3 about here  
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Second, we analyze how exploitative vs. explorative learning directions influence behavioral outcome based on the framework outlined in Figure 1 (Table 4). The results indicate that, in line with the theoretical framework, significantly more events that exhibit exploitative (and fewer that exhibit explorative) learning directions than expected can be assigned to the groups of entrepreneurs who withdraw their efforts or show an adapting and improving behavior ( $p = .00$ ). In a similar vein, significantly more events that exhibit explorative (and fewer that exhibit exploitative) learning directions than expected can be assigned to the group of entrepreneurs showing an innovation and risk-taking behavior ( $p = .00$ ).

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Interestingly, findings in Table 4 reveal one pattern that is not in line with the theoretical framework outlined in Figure 1: Significantly more exploitative (and fewer explorative) learning events than expected are related to entrepreneurs reducing their effort ( $p = .00$ ). This finding may point to those entrepreneurs focusing on maintaining (albeit not improving) operations that started to need less of their attention. Hence, it will be discussed with regard to the dynamics of portfolio entrepreneurship in the event stream analysis.

Finally, we graphically explore entire single-learning events following the logic of affectivity influencing learning direction and subsequently entrepreneurial behavior as outlined in Figure 1, and investigate how they influence the entrepreneurs' businesses (Figure 2<sup>3</sup>). Events per quadrant seem to be equally distributed over cases, i.e. there are no significant differences in the case-sources of learning events (Chi-square value = 9.997,  $p = .820$ ).

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Insert Figure 2 about here  
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Figure 2 shows that interestingly only five learning events leading to withdraw efforts in Quadrant 1 (four events) and Quadrant 3 (one event) relate to entrepreneurs quitting a business. Compared to this relatively low number of quitted businesses, many more (22 events) conclude with maintaining the existing business or businesses. Of those, eight events result from withdraw effort in Quadrants 1 and 3 and 14 from reduced efforts in Quadrants 1 and 2. Though the relatively large number of 12 learning events relating to maintaining an existing business in Quadrant 2 fits with the reduced effort behavior, this behavior results to a

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<sup>3</sup> We use graphical exploration instead of crosstab analysis since crosstabs with layer variables result into more than 20 percent of the cells having expected counts of less than five. Hence, Chi-square tests could not be performed reliably.

much larger extent from exploitative than from explorative learning (cf. Table 4). Looking into when entrepreneurs start or add a new business also reveals an interesting pattern: Most learning events (nine events) closing with a new or additional business expectedly result from an innovate-and-take-risk behavior in Quadrant 4. However, a relatively large number of new/additional businesses can be associated with a reduced-effort behavior in Quadrants 4 (two events), 2 (three events) and 1 (one event). Another pattern found in the data relates to the behavior of improving businesses within the entrepreneurs' existing portfolios. As expected, a large number of events closing with an adapt-and-improve behavior in Quadrants 3 (17 events) and 4 (four events) relate to entrepreneurs improving their existing business or businesses. Interestingly, however, a similarly large number of events resulting from an innovate-and-take risk behavior in Quadrants 4 (19 events), 3 (one event) and 1 (one event) entail improvement of the portfolios rather than the start of new businesses, i.e., greater innovation effort (changing rather than adapting) is directed towards existing businesses.

#### **Influence on portfolio entrepreneurship: Event stream analysis**

Since looking into the relation between learning events and changes in the business portfolio on a single-event level does not account for events influence changes in the portfolio over time, we next examine streams of event sequences and explore patterns with respect to how different event stream types relate to portfolio entrepreneurship. Finally, we use in-depth insight to inductively explore details behind relevant patterns.

For this purpose, event histories shown in Figures 3 to 8 visualize the dynamics between the experiential processing of events and the development of the six portfolios investigated. Each case is visualized as a temporal sequence of events identified. In detail, codes of start incidents and end incidents are given (e.g., MP for management problem, see Table 2). Immediately below, event streams are indicated as connections between related events, e.g., starting farming, accumulating capital, networking with middlemen, and using capital accumulated to invest in processing facilities after observing owners (see first event stream case A, Figure A). Next, affectivity states are indicated by a layer showing the four quadrants of the experience space in which the respective combination of pleasant/unpleasant and aroused/quiet is highlighted. In the quadrants themselves, the learning direction is also displayed, i.e., explorative path (ER) or exploitative path (ET). The layer below indicates resulting behavior of innovate-and-take-risk (INNO in terms of product, process, service, or market innovation, RISK when acquiring external capital), adapt-and-improve (ADAPT), reduced-effort (REDUCE), and withdraw-effort (WITHDR). Light and dark shading is used

to mark whether learning direction and behavior correspond or deviate from expected outcomes (light = yes, dark = no). Dotted areas indicate missing values (MV) on one or more coding dimensions. Finally, the development of the portfolio is displayed as the number of businesses as well as the influence on the portfolio in terms of starting/adding new businesses (↑), maintaining (↔) or improving (↗) existing businesses, and quitting businesses (↓). Hatched portfolio areas at the end of each sequence indicate the entrepreneur's future plans (according to the final round of interviews), as also indicated by the time line below displaying the years in/over which the events took place.

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Insert Figures 3-8 about here  
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**Starting/adding (↑).** In terms of starting new businesses, event histories suggest an expansion of portfolio size to a level of three (Figures 3, 4, 5, and 8) to four (Figures 6 and 7) businesses, excluding future plans. Concerning start-up dynamics, visual analysis shows that adding businesses is mainly part of iterative CREATE-GAIN-CREATE event streams that include observations or networking incidents in combination with capital gains (e.g., Case A, event stream leading to start of business no. (2), Figure 3). Inductively analyzing the underlying in-depth data indicates that positive affectivity results from seeing a new business opportunity when observing (or interacting with) other entrepreneurs. Specifically, excitement about having identified a new business opportunity tends to induce exploratory learning paths to find out about basic entry requirements, and getting started if sufficient slack resources to meet them are available. However, when observing others, entrepreneurs do not only get excited by specific opportunities but also by others' success with multiple business ownership. This is illustrated by the following quote:

*"I don't believe in just having one [business]. Large businesses, they have multiple [laughs]! I like that feeling... So when I look at [them] - I am involved in just three businesses, that's a shame, just three businesses? [laughs] ... So I have to learn. I know it's going to take a lot of work, but maybe it's what I like to do. It's interesting. So I am excited about it." (ENT F, in 2013)*

Second, event histories show that starting businesses with low arousal is particularly related to Cases C and D (Figures 5 and 6). These businesses were started by entrepreneurs who are still employed (or in Case B and E were employed/in school when they started, see Table 1, Figures 4, 5, 6, and 7). Effort is reduced since start-up activities cannot be attended to full-time, leading to 'side businesses', i.e., businesses operated in addition to being employed or getting and education. Although in-depth insight suggests that these start-ups are initially also

connected to arousal after observing others, e.g., coworkers that have successfully (financial perspective) started businesses (Case D), arousal declines when a second or third side business is started “*just by the way*” (ENT D) and through exploiting knowledge one already possesses (Figure 6, start of business no. (3)). At the extreme, a side business might be added although affect is negative and arousal is low (see case C, starting business no. (3), Figure 5). In this case, a sales outlet established after receiving external funds (a GAIN event in relation to business no. (2) did not lead to expected sales. The outlet was turned into a retail shop to gain financial and non-financial resources (showroom, meeting place), although ENT C did not like the idea of selling groceries. A different perspective on side businesses is provided by case F (business 2) started in 2010, see Figure 8). ENT F invested in the consulting company started by his team members. He became a shareholder and advisor but was not involved in operational management, thus entailing reduced effort. Operating businesses in the form of ‘side businesses’ thus provides insight into the unexpected behavior of starting new businesses as a result of low arousal (cf. Quadrant 2 in Figure 2).

***Maintaining*** (↔). Event histories show that events connected to maintaining existing businesses account for most of the deviations from the theoretical framework. Two interesting patterns can specifically be highlighted. First, portfolios characterized by a relative dominance of maintaining influences tend to involve CREATE-BUILD-GAIN-CREATE streams that do not involve continuous improvements in existing businesses (see particularly Figures 3, 5, and 6). Rather, these streams are characterized by starting a new business and subsequent capability building events that tend to be shorter in duration and lead to informal organization (see first BUILD in Figure 6). In-depth insights suggests that once the business is operationally functioning and profit is made, entrepreneurs are often satisfied with the operations and direct exploitative learning efforts towards maintaining existing businesses in such ways that capital accumulation can be sustained. This tends to lead to reduced effort, which frees up time for observations and networking, and may start the next iteration. Case A (Figure 3) best illustrates connected streams of starting a business, establishing it to a level where profits can be obtained, and then maintaining it following an exploitative path and reduced effort, while directing explorative learning and innovate-and-risk-taking behavior towards new opportunities. These portfolio-related dynamics help explain why pleasant emotions entail exploitative learning paths in more events than expected, especially in relation to Quadrant 2 (cf. Table 4 and 5). An illustrative quote is provided below:

*“It’s good to have many enterprises... You can start with one, you get experience, it’s experience of 2-3 years, then you start another... If the capital increases, I think [expansion] is not a problem, because there will be another supervisor [in charge]... Then I will be somewhere! [laughs] Walking around [looking for opportunities]! I will not be attached to a single project... “ (ENT D, in 2013)*

Second, if ‘maintainers’ attempt to improve existing businesses but encounter external challenges, event streams characterized by CREATE-CHANGE-CREATE patterns emerge (e.g., between business no. (2) and (3), Figures 3 and 6). Specifically, unpleasantness in combination with low arousal often leads to withdrawing the improvement effort (but not quitting the business). Instead, existing businesses continue to be instrumentalized until sufficient capital is accumulated to start a different business (e.g., Case A), and/or more time and attention can be allocated to existing businesses (e.g., Case C). For example, ENT A observed viable growth opportunities in regionally exporting maize flour. He explored requirements, but experienced the export market as risky, bureaucratic, corrupt, and too expensive. He lost interest and decided to maintain his milling business, concentrating on the local market. Through observations he got excited about starting a security guard business, and he started to describe milling as “*the mother business*” (ENT A) that provides funds for other activities. At the extreme, it is also possible that entrepreneurs “*leave for a while [and] come back if the situation changes*” (ENT D), i.e., temporarily withdraw effort (see CHANGE events, Figure 6). A final portfolio-related perspective on withdrawing effort in combination with maintaining but not quitting is that businesses are handed over to others (e.g., through a leasing agreement) if management gets out of hand and an existing business needs more attention (see specifically CHANGE event in 2010, Figure 7). Here, ENT E lost interest in managing his guest house after problems with the employees. Instead, he started to lease it against a fixed monthly fee. If entrepreneurs operate in teams, they also hand-over operational management to team members rather than quit (indicated by ‘>’, see e.g., Cases E and B). In Case C, handing-over two businesses to her children is part of the entrepreneur’s future plan (Figure 5). Event stream analysis thus reveals that not withdrawing businesses from the portfolio after unpleasant and (ultimately) less arousing learning events may result from entrepreneurs deliberately keeping businesses alive to bridge critical time gaps and maintain capital accumulation. This provides insight into the counterintuitive relation between withdraw behavior and maintaining existing businesses (cf. Quadrant 1 in Figure 2).

**Improving (↗).** Event histories show that learning events connected to improving the existing portfolio are largely processed as expected, i.e., greater innovation-and-risk-taking efforts and

adapting-and-improving behavior take place when affectivity is high. Interesting for individual business growth, streams encompassing repeated improving events indicate periods of more focused effort to develop individual businesses. This is visible by consecutive BUILD events, GAIN events (incl. capital acquisition), and CREATE events in which innovate-and-take-risk behavior (notably more radical process innovation) is directed towards the existing businesses (see particularly Figures 4, 7, and 8). In particular, positive affectivity often precedes process innovations while negative affectivity, especially in response to internal problems, precedes organizational capability building. For example, ENT E travelled to Kenya in 2009 (Figure 7). He visited competitors and became excited about modern equipment, i.e., the “*beautiful things*” (ENT E) that influenced his decision to become the first modern butcher in the region. With regard to the development of individual businesses, in-depth insights suggest that arousal tends to be established and maintained (consider optional withdraw behavior) by excitement about modern technology (specifically Case B and E). For example, consider the following quotes by ENT B:

*“My concern is to make this company grow... And to buy some more machines... To have the most up to date machines!” (ENT B, in 2011)*

*“You cannot say you cannot buy a car because you don’t own a house [and rent premises]... to me, looking at the two things, my own place or the machines, I think the machines are coming first.” (ENT B, in 2013)*

On the other hand, management problems (notably employee shirking and theft, inefficient business processes, but also increasing need for delegation) and production problems (notably inadequate or defective equipment) lead to negative affectivity and exploitative learning paths to find ways to correct what is wrong. This often entails capability-building events related to major improvements in business processes. In particular, in-depth insight suggests that event streams encompassing consecutive BUILD events entail greater management problems leading to heightened arousal with regard to improving resource deployment and routines (see e.g., Case F with regard to BUILD events, Figure 8). In comparison, event-stream types where businesses are established and maintained (and not significantly improved, see above) tend to be characterized by fewer and/or less upsetting management problems that can be more easily corrected. This provides insight into the finding that unexpectedly many events with exploitative learning directions do not exhibit arousal (cf. Figure 2).

Most deviations from expected processing, i.e., unexpected learning directions or behaviors, tend to result from encountering temporary implementation barriers. For example in Case B,

the entrepreneur explored new technology after observing others, but cost considerations made him decide to use his own knowledge and adapt a locally available machine (see ADAPT behavior in 2011, Figure 4). Subsequent failure of this machine led to a production problem and negative affectivity. This resulted in a new event stream of external capital acquisition, correcting a management problem to drive capital accumulation, and eventually an excited purchase of the “*real machines*” (ENT B) from abroad (see INNO behavior in 2013, Figure 4). Further, ENT F read about successful portfolio entrepreneurs (notably Richard Branson) in the course of introducing new management tools. This created excitement regarding future plans for a group of businesses, which could, however, only be implemented once increasing profits enabled negotiations with an investor interested in the dairy business. For this purpose, the businesses were legally separated and a holding company was established (BUILD event 2012-2013, Figure 8).

**Quitting** (↓). Event histories show that quitting businesses is rare (cf. Figure 2). Rather, they tend to be maintained with reduced effort, as previously described. If businesses are quit entirely, it tends to result from unpleasantness and low arousal, in line with the theoretical framework (cf. Figure 1). However, exploring the underlying in-depth data reveals that to quit a business entirely, events have to be experienced as extremely unpleasant. For example in Case F, the entrepreneurs were on their way towards a CREATE-GAIN-CREATE event stream (see start of business no. (2) in 2004, Figure 8). However, the farming business they had added led to a loss ENT F, years later, “*cannot forget*”. For him, advice to concentrate on dairy processing led to withdrawing effort from farming. In other cases, quitting resulted from experiencing human resource management problems (Cases A, B, and E). For example, ENT E plans to ultimately quit his (profitable) businesses and withdraw to farming because he struggles with the management and mistrusts his employees.. Similarly, ENT B quit the transport business and ENT A was in the process of quitting it due to road accidents and problems with drivers (see related CHANGE events, Figure 3 and 4). ENT B sold his trucks and did not want to be “*tempted anymore*” (ENT B) to start a new business. ENT A continued to be negatively aroused. However, since he could not find a way to correct the problem he considered to quit transport and start a hotel – a “*more local*” business that would “*not make so much headache*”, as illustrated by the following quote:

*“Even if you are asleep at night, if you just hear your phone calling, you just look, is that the driver? If you see that it is the driver, the heartbeat quickens, because of the way the environment is... You just ask: ‘Has the car had an accident? Have you killed somebody? ... Is the truck stolen? Has somebody kidnapped you on the way?’ ... At the same time, the driver confuses you, he steals the fuel, maybe he sells parts of the truck, so this [transport] business is not supposed to be done...” (ENT A, 2013)*

## DISCUSSION

Building on the experiential learning literature in entrepreneurship (Morris et al., 2012; Politis, 2005) and affective events theory (Weiss & Cropanzano, 1996), this article explored the linkages between affectivity states, learning paths, and behavioral outcomes in relation to portfolio entrepreneurship. Since entrepreneurs in developing countries particularly depend on learning, we drew on data from six longitudinal case studies of Tanzanian portfolio entrepreneurs in the small food processing industry.

The findings of analyzing 128 individual events constructed from the case study data provide empirical support for the argument that affective states influence learning direction and behavior of entrepreneurs in ways suggested by Morris et al. (2012). First, findings suggest that the application of affective events theory is more complex in the context of portfolio entrepreneurship. We identified some deviations from expected linkages that particularly concern Quadrant 2 of the theoretical framework (Figure 1). Notably, events connected to reduced effort behavior seem to entail not only less risk taking and innovation, but also few explorative learning events, despite pleasantness. This may result from positively but not strongly positively affected events driving exploitative paths as already discussed by Morris et al. (2012), i.e., entrepreneurs might only be satisfied, rather than strongly pleased. However, insight from inductively analyzing the underlying data suggests that linkages between behavioral outcomes and low arousal states are relatively more complex for portfolio entrepreneurs since relationships between businesses (and other activities) need to be considered. Interestingly, the combination of exploitative learning and reduced-effort behavior is connected to maintaining businesses and only few businesses are closed as a result of withdraw behavior. Some businesses are even started following events entailing reduced effort. At the same time, innovation-and-risk-taking efforts are directed towards both existing businesses and new businesses. This suggests that ‘lived experiences’ are particularly interesting in portfolio entrepreneurship contexts since the entrepreneur and multiple ventures – as opposed to only one venture – emerge in relation to each other (cf. Alvarez & Barney, 2007; Morris et al., 2012). Portfolio entrepreneurs may thus be special in the sense that they develop unique affective and learning relationships to the businesses in their portfolio, such as for example the ‘mother business’ one cannot quit.

Second, high levels of arousal due to full-time commitment and a certain technological affinity towards ‘the most modern machines’ seem to direct explorative learning and innovative behavior towards existing businesses, thus supporting the argument that those

individuals that cumulatively experience more positive and intensive affective states are more likely to create innovative, growth-oriented ventures (Morris *et al.*, 2012). Considering what excites entrepreneurs is therefore relevant for understanding growth processes, especially if environmental conditions are tough. Third, findings indicate that unpleasant experiences are an important driver of organizational capability building – as long as arousal remains high. In this regard, incidents involving human resource management problems appear to entail (too) unpleasant experiences. In light of tight income and labor market conditions, specifically in developing countries, and since negative events tax individuals more (Weiss & Beal, 2005), especially those entrepreneurs without any business training thus need guidance to learn from failure (Sitkin, 1992) to avoid affectivity running down.

Fourth, event streams connected to observing others and to ‘side businesses’ kept alive for various reasons contribute to understanding lived experiences of portfolio entrepreneurs. The create-gain-create event streams we identified in relation to adding businesses support the argument that diversification tends to follow an allocation logic and only flourish once resource foundations are improved (Rosa *et al.*, 2008; Sørensen, 2003). We add an experience-based explanation to this logic by showing that the individual entrepreneur translates observing others into being positively excited about exploring new opportunities, while generating the means to respond to them through existing businesses. Interestingly, entrepreneurs do not only get excited about specific opportunities but are also aroused by others’ success with multiple business ownership, i.e., portfolio entrepreneurship itself is attractive. In this regard, observations made by the entrepreneurs investigated go as far as to being excited about the prospect of one’s own business group à la Richard Branson.

Event stream findings furthermore helped attribute the counterintuitive starting of businesses with reduced effort to ‘side businesses’. Following the create-gain-create logic, they are used to develop resources, top up salaries, and as future career opportunities. Context-specifically, such businesses are rooted in Tanzania’s socio-cultural history. During socialism, business activities of civil servants were discouraged, yet after market reforms micro businesses flourished among government employees to counteract salary cuts (Olomi, 2009). In line with a suggested need to consider learning events within broader perspectives of portfolio activities (cf. Carter *et al.*, 2004), findings thus indicate that the suggested relationship between low arousal states and lifestyle vs. growth ventures (Morris *et al.*, 2012) is more nuanced in portfolio entrepreneurship contexts. Rather than lifestyle businesses, low arousal states seem to encompass instrumental businesses that contribute to financial or non-financial goals

related to other (and potentially more exciting) businesses, or personal aims. This is generally interesting with regard to the development strategies of SME owners (Carter et al., 2004), and may also be relevant for particular industries in developed country contexts, e.g., the creative industries, where entrepreneurs often need to (temporarily) engage in less exciting businesses to develop resources. However, concerning the entrepreneur's knowledge gains from less exciting side businesses, a caveat applies. Findings indicate that exploitative learning connected to low arousal states and side businesses hampers capability building. If exploitative paths are followed when less aroused, organizational capability building might thus be handicapped due to limited management experience gains (due to becoming more effective in coping with the liabilities of newness, as suggested by Politis, 2005). Hence, there is a risk that keeping businesses alive at a manageable size does not expose portfolio entrepreneurs to experience gains from coping with more severe management problems (see above). Especially for opportunity-driven entrepreneurs in developing countries, this can be a barrier to managing (future) growth of businesses in the portfolio.

Since studies capturing the dynamic nature of experience in the portfolio entrepreneurship contexts are rare (Ucbasaran et al., 2010; Westhead & Wright, 2011), we applied exploratory analyses and visual mapping strategies to make sense of process data (Langley, 1999). We specifically followed suggestions by Morris et al., (2012) to use qualitative methods for investigating the linkages between affectivity states, learning directions, and behaviors.

However, the qualitative nature of this study also entails some limitations concerning reliability. Although prolonged engagement in the field led to rich insight, allowing us to make sense of complex event histories supported by other sources than interview protocols (e.g. field notes, diaries, visual data, etc.), we acknowledge the need for additional coding of the underlying event data by independent experts. Furthermore, using retrospective data might constitute a limitation in the coding of emotions that were experienced longer ago, i.e., prior to 2010. Another limitation to be addressed by future research is related to measuring the magnitude of affectivity states (pleasantness and arousal), i.e., not just looking into positive and negative values. Finally, it is relevant to investigate to which extent the case study findings can be generalized to other contexts, specifically regarding the conditions under which the findings are applicable to portfolio entrepreneurship in developing and developed country contexts.

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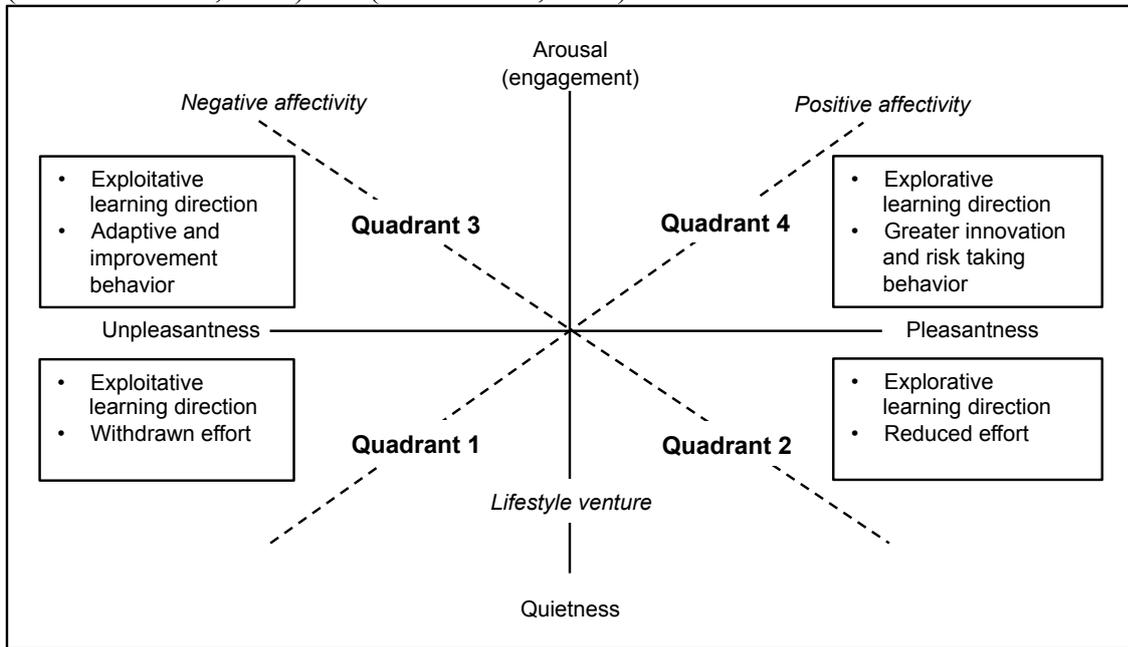
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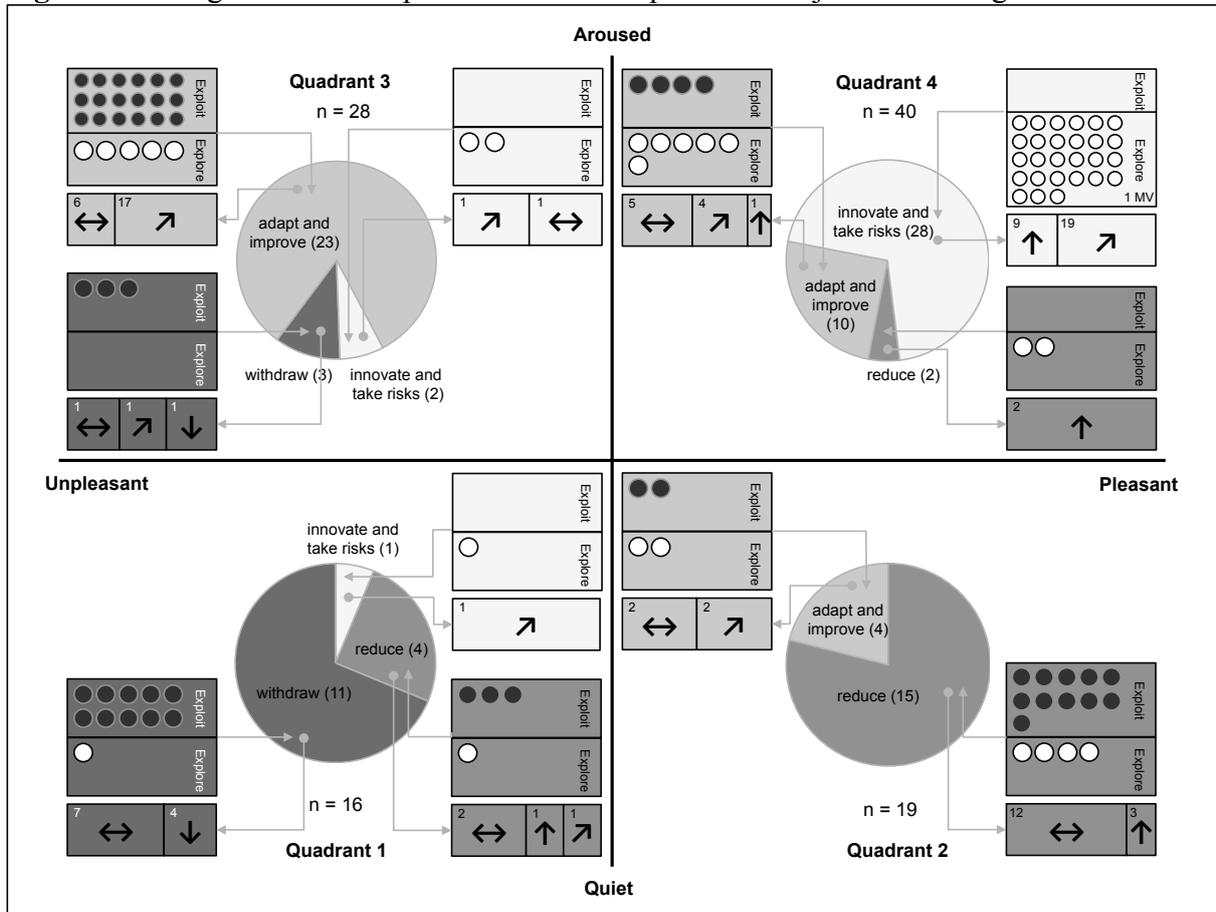
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## FIGURES AND TABLES

**Figure 1:** Learning and affective outcomes in the experience space. Source: Adapted from (Mano & Oliver, 1993) and (Morris et al., 2012)



**Figure 2:** Changes in the entrepreneurs' business portfolio subject to learning events



Note: Start/add business (↑), improve existing business (↗), maintain existing business (↔), quit business (↓)

**Figure 3: Event stream analysis case A**

Case A																	
Event type	CREATE	GAIN	CHANGE	CREATE	BUILD	GAIN	CREATE	GAIN	CREATE	CHANGE	GAIN	CREATE	BUILD	BUILD	GAIN	CHANGE	CHANGE (GAIN)
Start → End Incident & event streams	NC→PI	PR→CA	NT→WS	OS→PI	MP→FO	PR→CA	SR→SI	PR→CA	OS→MI	EX→WS	PR→CA	SR→SI	NT→FO	MP→FO	PR→CA	MP→WS	OS→FP
Affect state & learning direction	ET	ET	ET	ER	ET	ET	ER	ET	ER	ET	ET	ER	ET	ET	ET	ET	ER
Behavior	INNO	ADAPT	WITHDR	INNO	ADAPT	REDUCE	INNO	REDUCE	INNO	WITHDR	ADAPT	INNO	ADAPT	ADAPT	REDUCE	WITHDR	INNO
Influence on portfolio & no. of businesses (#)	↑ (1)	↔	↓	↑ (1)	↗	↔	↑ (2)	↔	↗	↔	↔	↑ (3)	↗	↗	↔	↓ (2)	↘ (1)
Time	1985	1985-2000	1995-2000	2000	2001-2002	2001-2008	2008	2008-2012	2011-2012	2012	2012	2012	2012	2012	2012-2013	2013-2014	2014-2016

**Figure 4: Event stream analysis case B**

Case B																					
Event type	CREATE	GAIN	CHANGE	CREATE	GAIN	CREATE	BUILD	GAIN	BUILD	CREATE	GAIN	CREATE	CREATE	CREATE	GAIN	BUILD	GAIN	CHANGE	CREATE	CHANGE	
Start → End Incident & event streams	SR→SI	PR→CA	OS→WS	OS→PI	MP→CA	NT→PI	ML→FO	NT→CQ	EX→FO	SR→SI	PR→CA	PP→PI	NT→MI	OS→PI	PP→CQ	MP→FO	PR→CA	MP→WS	SR→PI	OS→FP	
Affect state & learning direction	ER	ET	ET	ER	ET	ER	ET	ER	ER	ER	ET	ET	ER	ER	ER	ET	ET	ET	ER	ER	
Behavior	INNO	REDUCE	WITHDR	INNO	ADAPT	INNO	ADAPT	RISK	ADAPT	INNO	ADAPT	ADAPT	INNO	ADAPT	RISK	ADAPT	ADAPT	WITHDR	INNO	ADAPT	
Influence on portfolio & no. of businesses (#)	↑ (1)	↔	↔	↑ (2)	↔	↗	↗	↗	↗	↑ (3)	↗	↗	↗	↗	↔	↗	↗	↓ (>)	↗	↗	
Time	1990	1990-2000	1998-2000	2000	2000-2008	2001-2008	2009	2009	2009-2010	2010	2010-2011	2011	2011	2011	2011	2012	2012	2012	2012-2013	2013	2013-2016

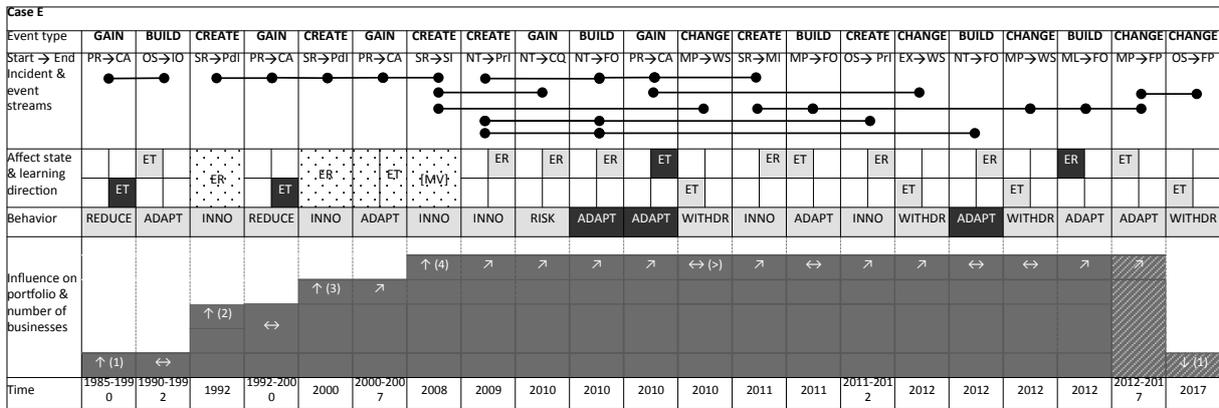
**Figure 5: Event stream analysis case C**

Case C																			
Event type	CREATE	CREATE	GAIN	CREATE	CREATE	GAIN	CREATE	CREATE	GAIN	CREATE	CREATE	CHANGE	BUILD	GAIN	CREATE	BUILD	GAIN	CHANGE	CHANGE
Start → End Incident & event streams	SR→PI	SR→PI	EX→CA	ES→PI	NT→PI	ES→CA	SR→SI	EX→PI	PR→CA	OS→PI	ES→MI	EX→WS	MP→IO	PR→CA	OS→PI	PP→IO	PR→CA	OS→FP	
Affect state & learning direction	ER	ER	ET	ER	ER	ER	ER	ET	ET	ER	ER	ET	ET	ET	ER	ET	ET	ET	ER
Behavior	REDUCE	REDUCE	ADAPT	INNO	INNO	ADAPT	REDUCE	REDUCE	REDUCE	INNO	INNO	WITHDR	REDUCE	ADAPT	REDUCE	REDUCE	REDUCE	REDUCE	INNO
Influence on portfolio & no. of businesses (#)	↑ (1)	↑ (2)	↔	↗	↗	↗	↑ (3)	↔	↔	↗	↗	↔	↔	↔	↔	↔	↔	↔	↘ (>)
Time	2000	2002	2002-2007	2007	2007-2010	2010	2011	2011	2011	2012	2012	2012-2013	2012-2013	2012	2012	2012-2013	2013	2013	2018

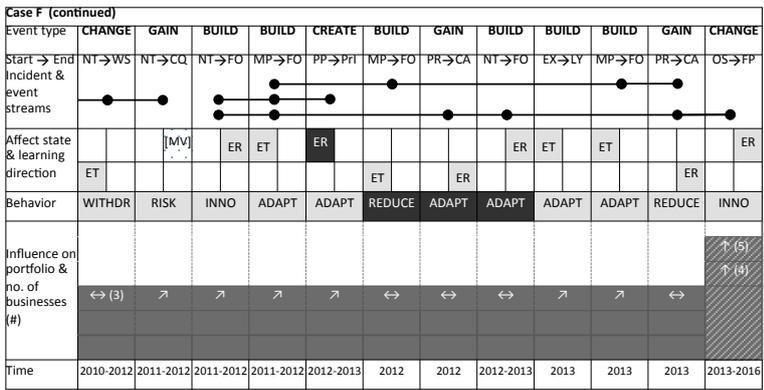
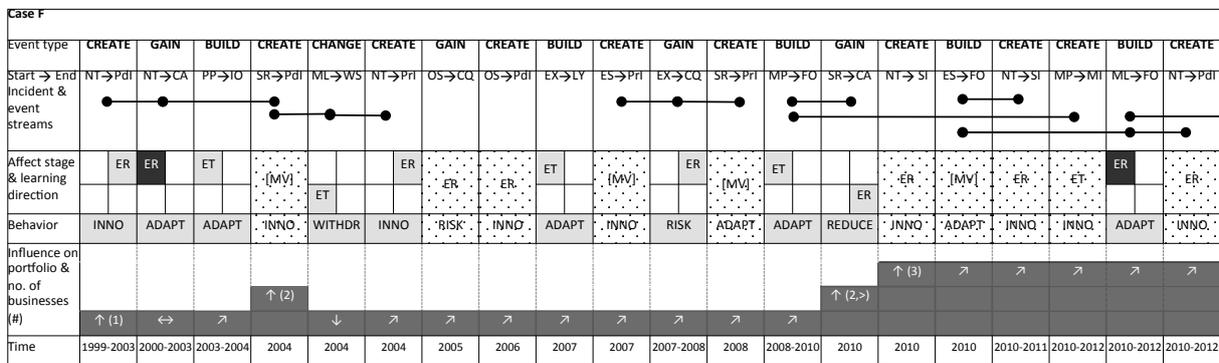
**Figure 6: Event stream analysis case D**

Case D																				
Event type	CREATE	GAIN	CREATE	BUILD	GAIN	CREATE	BUILD	GAIN	GAIN	BUILD	CHANGE	GAIN	CREATE	GAIN	CREATE	CHANGE	BUILD	GAIN	BUILD	CHANGE
Start → End Incident & event streams	SR→PI	PR→CA	OS→SI	MP→IO	PR→CA	SR→SI	ML→IO	PR→CA	OS→CA	NT→FO	EX→WS	NT→CQ	ML→SI	PR→CA	OS→PI	EX→WS	NT→IO	ES→CQ	MP→IO	SR→FP
Affect state & learning direction	[MV]	ET	ER	ET	ET	[MV]	ET	ET	ER	ET	ET	ER	ER	ER	ER	ET	ER	ER	ER	ER
Behavior	REDUCE	REDUCE	REDUCE	ADAPT	REDUCE	REDUCE	ADAPT	REDUCE	ADAPT	ADAPT	WITHDR	RISK	INNO	REDUCE	REDUCE	WITHDR	ADAPT	RISK	REDUCE	INNO
Influence on portfolio & no. of businesses (#)	↑ (1)	↔	↑ (1)	↗	↔	↑ (2)	↔	↔	↔	↔	↔	↗	↗	↔	↑ (3)	↔	↑ (4)	↗	↗	↑ (6)
Time	2004	2004-2006	2007	2007	2007	2008	2008	2009-2010	2010	2010	2011	2012	2012	2011	2012	2012	2012	2012-2013	2013	2013-2016

**Figure 7: Event stream analysis case E**



**Figure 8: Event stream analysis case F**



**Table 1: Case overview**

Case (age, sex)	Education and work experience	Businesses (in chronological order)*	Team**	Total number of employees (2013)	Legal status (2013)
A (53, male)	<ul style="list-style-type: none"> <li>• Primary school</li> <li>• Commercial farm laborer</li> <li>• Soldier</li> <li>• Short course in entrepreneurship (2012)</li> </ul>	<ul style="list-style-type: none"> <li>• 1980s: Farming (-)</li> <li>• 2000: Maize processing</li> <li>• 2008: Transport (-?)</li> <li>• 2012: Security guard services</li> <li>• Future plan: Hotel</li> </ul>	(children are shareholders but not actively involved)	<ul style="list-style-type: none"> <li>• 7 permanent</li> <li>• 6-14 casual</li> <li>• 30 security guards</li> </ul>	<ul style="list-style-type: none"> <li>• Sole proprietorship (milling and transport)</li> <li>• Security Guard Ltd.</li> </ul>
B (44, male)	<ul style="list-style-type: none"> <li>• Secondary school</li> <li>• Ministry technician</li> <li>• Short course in entrepreneurship (2009)</li> </ul>	<ul style="list-style-type: none"> <li>• 1990: Rice processing (&gt; brother in 2012)</li> <li>• 2000: Maize processing</li> <li>• 2010: Transport (-?)</li> </ul>	<ul style="list-style-type: none"> <li>• Wife</li> <li>• Brother</li> </ul>	<ul style="list-style-type: none"> <li>• 5 permanent</li> <li>• 25-40 casual</li> </ul>	<ul style="list-style-type: none"> <li>• General trading Ltd. (2009)</li> </ul>
C (58, female)	<ul style="list-style-type: none"> <li>• MSc Education</li> <li>• Extension officer, full-time (ongoing)</li> <li>• Business trainings since 2007</li> </ul>	<ul style="list-style-type: none"> <li>• 2000: Poultry farming</li> <li>• 2002: Food processing</li> <li>• 2011: Retail shop</li> <li>• Future plan: Concentrate on food processing in pension, hand-over poultry farming to son</li> </ul>	(husband and children help but are not permanently involved)	<ul style="list-style-type: none"> <li>• 2 permanent</li> <li>• 2-8 casual</li> </ul>	<ul style="list-style-type: none"> <li>• Retail license (shop)</li> <li>• Sole proprietorship (processing, 2010)</li> <li>• Informal poultry farming</li> </ul>
D (41, male)	<ul style="list-style-type: none"> <li>• BSc Agronomy</li> <li>• Extension officer, part-time (ongoing)</li> <li>• MBA Agribusiness (2013)</li> <li>• Business trainings since 2006</li> </ul>	<ul style="list-style-type: none"> <li>• 2004: Poultry farming (-)</li> <li>• 2007: Trading with crops and agricultural inputs</li> <li>• 2008: Retail shop</li> <li>• 2012: Timber production</li> <li>• 2012: Sunflower processing</li> <li>• Future plan: Commercial crop farming, Poultry farming</li> </ul>	<ul style="list-style-type: none"> <li>• Wife</li> <li>• Brother</li> </ul>	<ul style="list-style-type: none"> <li>• Casual labor on demand</li> </ul>	<ul style="list-style-type: none"> <li>• Retail license (shop)</li> <li>• Informal trading</li> <li>• General Ltd. (+)</li> </ul>
E (43, male)	<ul style="list-style-type: none"> <li>• Secondary school</li> </ul>	<ul style="list-style-type: none"> <li>• 1990: Retail shop (later including fish imports)</li> <li>• 1992: Butcher</li> <li>• 2000: Cattle/dairy farming</li> <li>• 2008: Guesthouse (&gt;tenant)</li> <li>• Future plan A: Grow existing businesses</li> <li>• Future plan B: Quit all businesses but dairy farming</li> </ul>	<ul style="list-style-type: none"> <li>• Wife</li> </ul>	<ul style="list-style-type: none"> <li>• 20 permanent</li> <li>• 20 casual</li> <li>• House workers/casual laborers</li> </ul>	<ul style="list-style-type: none"> <li>• Retail license</li> <li>• Sole proprietorship (butcher)</li> <li>• Informal farming</li> <li>• Leasing agreement (guesthouse)</li> </ul>
F (37, male)	<ul style="list-style-type: none"> <li>• BSc Agribusiness (2002)</li> <li>• Internships</li> <li>• Business trainings since 2007</li> <li>• Research consultancy (2000-2004)</li> </ul>	<ul style="list-style-type: none"> <li>• 2003: Dairy processing</li> <li>• 2004: Vegetable farming (-)</li> <li>• 2000: Consulting company (&gt;co-founders)</li> <li>• 2010: Mobile financial services (&gt;wife)</li> <li>• Future plan: Farming, Real estate</li> </ul>	<ul style="list-style-type: none"> <li>• Non-family co-founders</li> <li>• Wife</li> <li>• Potential investor</li> </ul>	<ul style="list-style-type: none"> <li>• 19 permanent</li> <li>• 2 casual</li> </ul>	<ul style="list-style-type: none"> <li>• Processing Ltd (2006)</li> <li>• Consulting Ltd (2010)</li> <li>• Holding Ltd (2013)</li> </ul>

\*(-) business exited; (-?) exit in preparation; (>) hand-over of operational management to team member/tenant;

\*\* Team members are individuals with ownership stake and/or management responsibilities

**Table 2: Overview of events**

<b>Coding category</b>	<b>Sub-categories</b>	<b>Code</b>	<b># of events per sub-category</b>
Cases	Case A	A	n=17
	Case B	B	n=20
	Case C	C	n=18
	Case D	D	n= 20
	Case E	E	n= 21
	Case F	F	n=32
Event type	Financial/physical capital gains	GAIN	n=35
	Organizational capability building	BUILD	n=29
	Innovation	CREATE	n=44
	Strategy (re)formulation	CHANGE	n=20
Start incident	Necessity (need to generate income)	NC	n=1
	Slack resources (savings, extra income)	SR	n=21
	Make a profit	PR	n=18
	Make a loss	ML	n=6
	Management problem	MP	n=18
	Production problem (technology-related)	PP	n=5
	Observe others	OS	n=19
	Networking (interaction with others)	NT	n=23
	External challenge (e.g., regulations)	EX	n=11
	External support (training and funding)	ES	n=6
End incident	Capital accumulation (internal financial/physical capital gains)	CA	n=27
	Capital acquisition (external finance/loans)	CQ	n=8
	Formal organization (formalized management processes, permanent employment, company registration)	FO	n=19
	Informal organization (flexible processes, casual labor, informal businesses or registration of business name)	IO	n=8
	Lobbying	LY	n=2
	Market innovation	MI	n=4
	Process innovation	PdI	n=14
	Product innovation	PrI	n=15
	Service innovation	SI	n=11
	Future plan	FP	n=7
	Withdrawal and new strategy	WS	n=13

**Table 3:** Relation between affectivity and learning direction

	Learning direction	
	Exploit (n = 51)	Explore (n = 51)
	Observed frequency (Expected frequency)	Observed frequency (Expected frequency)
Quadrant 1 (unpleasant, quiet)	13 (8)	3 (8)
Quadrant 2 (pleasant, quiet)	13 (9.5)	6 (9.5)
Quadrant 3 (unpleasant, aroused)	21 (14)	7 (14)
Quadrant 4 (pleasant, aroused)	4 (19.5)	35 (19.5)
Chi-square	40.470	
(p-value)	(.000)	

**Table 4:** Relation between learning direction and behavioral outcome

	Behavioral outcome			
	Withdrawn effort (n = 14)	Reduced effort (n = 25)	Adapt and improve (n = 41)	Innovate and take risks (n = 40)
	Observed frequency (Expected frequency)	Observed frequency (Expected frequency)	Observed frequency (Expected frequency)	Observed frequency (Expected frequency)
Exploitative learning	13 (6.7)	17 (11.9)	25 (19.5)	2 (19)
Explorative learning	1 (7.4)	8 (13.1)	16 (21.5)	38 (21)
Chi-square	47.721			
(p-value)	(.000)			