What Motivates ICT4D Champions?

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Abstract. The paper seeks to identify the factors that motivate a person who champions ICT4D initiatives. Given the important contributions of ICT4D champions to initiative success, better understanding of their motivations holds the potential to identify, develop and deploy such individuals more effectively, harnessing their potential positive contributions to ICT4D initiative success. A multiple case study strategy is used to explore the motivational factors of three successful ICT4D champions in the South African context. The Work Preference Inventory (WPI) of personal motivations was used to design in-depth interviews with the champions and semi-structured interviews with 29 other stakeholders. It found ICT4D champions are motivated by the need for personal actualization, business success and to address social concerns – origins of these motives could be traced to various internal and environmental stimuli. Practical implications drawn from the research are that profiling of stakeholder motivations in an ICT4D initiative is feasible and that organizations can use such information to create a conducive environment for grooming and empower new and existing champions to function more effectively. This first investigation of ICT4D champion motivations shows its importance and the potential thereof towards improving initiative success and emphasizes the need for further research of this nature.

Keywords: ICT4D projects, ICT4D success, Work Motivation.

1   Introduction

Champions of information and communication technologies for development (ICT4D) are critical to initiative success; they are, "*individuals who make decisive contributions to ICT4D initiatives by actively and enthusiastically promoting their progress through critical stages in order to mobilise resources and/or active support and cooperation from all stakeholders*" [1:129]. More than two-thirds of ICT4D initiatives fail completely or partially [2; 3; 4; 5]; the importance of champions is amongst often-recurring reasons for ICT4D initiative failure [6; 7; 8; 9; 10]. Better understanding these critical actors, it is reasoned, may contribute to the improvement of initiative success rates. To paraphrase the words of Donald Schön [11:84], "*Where ICT4D innovation is concerned, the presence of an ICT4D champion is required … the new ICT4D initiative either finds a champion or dies*".

The paper explores champion motivations by seeking to answer the following research question: *what are the factors that motivate a person who champions ICT4D initiatives?* This is an important question for three reasons. Firstly, leadership and organizational studies literature offer a breadth of evidence of the causality between an

individual's motivation and their behavior, such as leadership, in the organization [12]. Understanding the motivational factors of champions is therefore a promising line of enquiry because it might assist ICT4D practitioners to more effectively identify, develop, deploy and support such individuals.

Secondly, organizational environments can be crafted towards being more conducive to higher levels of employee engagement, including leadership behavior [13]. Better understanding the motives of successful champions is therefore needed in order to inform organizations what such conducive environments should look like. To this end, 'greenhouse' or 'incubator' services in organizations has been recommended [14]. Yet many questions remain about effectively identifying or developing champions, for example: what profiling tools would be most effective to identify potential champions, or, what factors in the organizational environment are most conducive to the emergence and development of champions [15]? These questions can be answered, in part, by gaining insight into the motivational factors of ICT4D champions.

Thirdly, on a more general level, literature about the effective identification of champions are scarce and studies that explicitly explore this aspect are divergent in their findings [16]. This paper therefore responds to explicit calls for more research into the champion identities and motivations [15; 16]. In so doing it aims to contribute knowledge deemed necessary to improve the success of ICT4D initiatives.

The paper is structured in familiar order, starting with literature foundations, then methodology, findings, discussion and conclusions.

2 Literature and Conceptual Foundations

Work motivation can be defined as "*the process by which behavior is energized, directed, and sustained in organizational settings*" [12:970]. The study of personal motivation in the workplace has a long and rich history [13]. This history shows the evolution in understanding personal motivations vis-a-viz the organization. Early conceptions revolved around *intrinsic* factors postulating that a person's workplace behavior stems from internal factors, such as a belief system, personal needs, values and aspirations. This view implies motivation to champion ICT4D initiatives is derived from within and that organizations cannot create a favorable environment to develop such individuals or encourage their emergence.

Fortunately, understanding of motivations in the workplace broadened to recognize the importance of *extrinsic* factors. This view postulates that a person's motivation is shaped by pressures, stimulants, incentives and constraints emanating from the organizational environment and larger social context. It follows that organizations can proactively shape those motivations. Because motivations shape behavior, organizations, such as those conducting ICT4D projects, can stimulate desirable behaviors, such as leadership and championing, by creating conducive environments [17].

Today, reasonable consensus exists that a person's motivation in the workplace can best be understood by combining multiple perspectives: intrinsic and extrinsic theories should be considered together, and even more perspectives, such as the role of self-concept, can be added [18]. However, the exact nature of interaction and causal-

ity between these perspectives are still debated [12]. The important conclusion to draw is that an individual's behavior in the organization stems from internal motivations and motivation-shaping factors in the work environment, such as the organization's aims, work practices, culture and values. It therefore stands to reason that research on the motivations of key ICT4D actors – including champions – has practical potential to stimulate behavior that would be conducive to positive development outcomes.

However, it is beyond the scope of this paper to engage with these debates; the approach taken to explore ICT4D champion motivations will rather be pragmatic. The interest in ICT4D champion motivations is driven by the objective to explore 'the factors that influence their behavior when promoting ICT4D innovations' or, differently phrased, their 'centroids of motivation'. The first step towards incorporating motivational factors in ICT4D practice could be to understand the motives of successful champions and how those motives played out in the organizational setting; this research aspires to make such a contribution.

The Work Preference Inventory (WPI) of personal motivations offers a set of motivational factor measures to assess peoples' work motivation [19]; it is a set of motivational factors based on underpinning personal trait and social behavior theories, mainly Self-Monitoring Theory [20] and Self-Perception Theory [21].

Table 1. Customized Work Preference Index of Motivational Factors

Motivational Factors	
1. To create my own job	13. To have financial autonomy
2. To develop an idea	14. To gain more flexibility in my personal life
3. To do things your way	15. Warm work relations
4. Personal growth	16. To fulfil a dream
5. To exploit a business opportunity	17. To contribute to the welfare of the community
6. To have an interesting job	18. To earn a lot of money
7. Personal self-realization	19. Social status and prestige
8. To be your own boss	20. Family tradition
9. A desire to be independent	21. To follow the example of someone admired
10. To cover my personal needs	22. To be accepted socially
11. To have economic security	23. Work frustration
12. To overcome a challenge	24. To succeed with the initiative

Source: Adapted from Barba-Sánchez and Atienza-Sahuquillo [22]

If the championing of an ICT4D initiative can be considered work – which is the position taken in this paper –, then the WPI has the potential to guide the exploration of their motivations for doing it. Within the stream of research that subsequently developed from the initial WPI, the work of Barba-Sánchez and Atienza-Sahuquillo [22] is of particular interest: they modified the WPI to investigate the motivations of entrepreneurs for starting new businesses. This progression is seen as relevant because similarities between champions and entrepreneurs are widely acknowledged in the literature [23; 24; 25; 26]. It is for this reason that the customized 24-scale WPI will be used to explore the motivational factors of ICT4D champions (Table 1).

3   Methodology

A case study strategy was followed because it does not require control over behavioral events, it does not have generalization as primary purpose, and it can be used for exploratory, descriptive and explanatory purposes [27]. This was particularly appropriate to explore the intrinsic motivating factors of ICT4D champions, as well as the motivation-stimuli from the organizational and wider environment. Multiple cases were deemed fitting to explore the phenomenon of interest; on the one hand, it could illuminate how champions differ, and on the other, provide an opportunity to identify any converging aspects that might be distinctive of ICT4D champion motivations.

For reasons raised earlier, much care was taken to select champions for inclusion in the study. Drawing on best practices from the champion literature (e.g. [28]), a two-part process was followed: peer nomination and verification. Four program managers and research staff at a South African parastatal organization, where access for the research has been obtained, were interviewed. Their involvement in multiple ICT4D initiatives over extensive periods of time placed them ideally to point out champion-type individuals from the range of projects. They were asked to nominate individuals that resembled the profile of the ICT4D champion definition introduced earlier; nine nominations were received. Next, the champion identification process aimed at verifying that the nominees were indeed ICT4D champions. Practically, this involved discussing nominations in more detail with the managers, meeting and interviewing the nominees themselves, and where possible observing the nominees in their work environment. Three candidates were selected for inclusion as cases.

The customized 24-scale WPI was used for designing in-depth champion interviews and semi-structured interviews with 29 key stakeholders in the three initiatives (Case 1: 10; Case 2: 8; Case 3: 11). Qualitative data was analyzed following the six phased approach to thematic analysis forwarded by Braun & Clark [29].

The Table 1 factors were used to code and analyze the interview data for each champion. Starting analysis with the champion interviews, it explored the reasons why they do the things related to the ICT4D initiatives that they do; their self-reported motivations were of interest. In seeking to triangulate from different data sources, the next step was to explore other stakeholder interview data identifying what, in their opinion, motivates the champion; and then to search for any alignment or misalignment that may emerge. A profile of the factors that motivate the ICT4D champions could then be compiled by evaluating the weight of evidence (frequency and triangulation); this could subsequently be interpreted and described in the anonymized case studies, introduced next.

4   Three ICT4D Champions in South Africa

4.1   Case 1: Mandisa

Mandisa grew up in The Village and is now in her early thirties. The Broadband Access Initiative (BAI) was launched in the region as part of a government-backed, digi-

tal inclusion initiative. She pursued an opportunity to become a BAI village operator. This involvement brought together her ICT passion and a desire to improve the social conditions in The Village community. She became an ICT4D champion.

Table 1 presents a synthesis of the findings for Mandisa's case. From this summary it can be observed that Mandisa's own account of what motivates her largely corresponds with those of other stakeholders; they are aligned, perhaps because she is effective in communicating her intentions to others, but more importantly, they can be considered as validated by this triangulation.

Table 1. Case One – Champion Motivators

Motivational Category	Motivational Factor	Identifying Stakeholders
Personal actualisation	Personal self-realisation	A1; A4; A5; A8; Self
	To have financial autonomy	A2; A4; A7; Self
	Personal growth	A2; A5; Self
	To create her own job	A2; Self
	A desire to be independent	A2; Self
	To be her own boss	A2
Business success	To exploit a business opportunity	A3; A7; Self
	Warm work relations	A6
	To succeed with the initiative	A4, A5
Social concern	To contribute to the welfare of the community	A1; A2; A3; A4; A5; A6; A8; A9; A10; Self
	To overcome a challenge	Self
	To follow the example of someone admired	Self

The identified motivational factors were grouped, as illustrated in Table 1, into three motivational categories: personal actualization, business success and social concern. All Mandisa's actions can in some way be traced back to these three pillars or centroids of motivation. Responding to a question about her motivation for becoming involved in the BAI, Mandisa explained, "… *they (the parastatal organization that started the BAI) wanted to develop young people to small entrepreneurs. So, that gave me the positive mind to where I could express myself, have my own business and grow myself to a better person, of having one computer and typing business profiles for my father. Doing CVs for my community and also to be helping them on how to use the Internet …* ". This extract illustrates how all three motivational pillars were in play when she decided to become involved in the BAI: there is an element of personal realization and growth; a clear business aspiration is present; and her social concern for the upliftment of the community is evident.

One stakeholder's explanation of what motivates Mandisa also reveals these three pillars: "*Deep down I think she is a person who is not necessarily thinking of herself, as much as she thinks of herself going up (growing and developing as a person) in terms of expanding her knowledge, at the same time she is also thinking about the benefit and the impact she can make to her community. So, it's like the person who is: 'I am here for myself and my community'. If I can go up, I can go together with my*

community … At the end of the day she would like to be a successful business woman, that's what I think." (Interview A5). His explanation is congruent with Mandisa's own account as well as with those of other stakeholders. Having identified these motivating pillars for an ICT4D champion is already helpful as a lens for interpreting actions, but the data affords an opportunity to extend the analysis one step further.

What factors led to the development of these motivators? Firstly, the socio-economic environment and cultural context in The Village is characterized by widespread poverty, unemployment, substance abuse and crime, on the one hand, and the prevalence of a rather vibrant civic culture – community members caring for and looking after each other – on the other hand. Mandisa lives within this reality and takes part in it. It can therefore be argued that this potentially influenced her identity and motivation; particularly her concern for the welfare of the community. Secondly, her upbringing has, most likely, shaped her motivations, particularly the influence of her grandfather and her dad who are important role models for Mandisa. They inspired her in three areas in particular: work ethic, financial and business acumen, and deep concern for the welfare of others. Finally, Mandisa had been on the receiving end of community care during her childhood; her dad needed to work away from home and spent lots of time on his business, they relied on the community to assist with Mandisa's childcare. This civic-mindedness left a deep impression on Mandisa who is now keen to reciprocate.

4.2   Case 2: Kagiso

Kagiso is a social entrepreneur in his early thirties. For many years he attempted to address the digital divide by finding ways to reduce the cost of telecommunications and expanding access to previously disadvantaged communities in the peri-urban settlements of a large South African city. Following a financial breakthrough resulting from meeting a suitable business partner, the Wireless Connectivity Initiative (WCI) was launched in The Township. He became and ICT4D champion.

Table 1 presents the motivators that were extracted from Kagiso's interview data as well as qualitative data from other WCI stakeholder interviews. Similar to the first case study, motivating factors were synthesized into three categories: personal actualization, business success and social concern. The ICT4D champion's actions can be explained from the perspective of these 'centroids of motivation'. Consider Kagiso's account to starting WCI: "*I had to think what is it that I am going to do in terms of coming up with a business that is firstly going to sustain me, my livelihood and the next thing is it obviously has to transcend to my family and you know those are the main things. I mean coming from a background where you have seen the challenges especially when it comes to poverty and some of the social challenges that people have within the black community – I mean it was basically to say alright fine let me start looking at myself … what can I do?*" Note how all three motivational pillars were in play when he decided to champion the ICT4D initiatives in The Township.

Kagiso's own account largely corresponds with those of other stakeholders. One exception to this – pertaining to money and wealth – is worth pointing out. A few stakeholders identified '*To earn a lot of money*" (interviews B1, B6, B9) as a motivat-

ing factor, which is contrary to Kagiso's own account only indicating '*To cover my personal needs*' as a factor. One possible explanation would be that, as the CEO of the WCI, Kagiso is seen as the driving force behind growing the organization's profitability; his personal motivation is therefore equated with the profit motive of WCI. However, considering Kagiso's decisions and actions throughout the early years of the initiative, another explanation is revealed; that he is indeed concerned about making money, but only as a means of sustaining himself and his family, not necessarily the pursuit of personal riches. For example, consider the following account from Kagiso, "*… am not driving a Ferrari, I still have those headaches where I have got a six-month-old son, you know he runs out of milk and I have to think where I am going to scrounge around for him you know because all the money that comes in goes back into this thing (WCI).*" This reveals some sense of prioritization – in terms of finances, putting money back into WCI is a higher priority than personal enrichment.

Table 1. Case Two – Champion Motivators

Motivational Category	Motivational Factor	Identifying Stakeholders
Personal actualisation	To earn a lot of money	B1, B6, B9
	Social status and prestige	B1, B6
	To do things my/their way	B6
	To cover my/their personal needs	Self
	To be my/their own boss	B1
	To fulfil a dream	Self
	Personal growth	B2
Business success	To succeed with the initiative	B2, B9, B10 + Self
	To exploit a business opportunity	B1, B5 + Self
Social concern	To contribute to the welfare of the community	B1, B2, B6, B9, B11 + Self
	To overcome a challenge	B1, B2, B11 + Self

Three aspects could be identified as potential sources of Kagiso's motivation. Firstly, he grew up during the Apartheid era and, as a black person, experienced the negative impacts of forced racial segregation – he is deeply motivated by this to correct the evils of the past by leveling the playing field, most notably through widening access to ICTs. Secondly, his father is his business mentor and role model – it is his dad who kindled Kagiso's interest in business and a sense of social responsibility towards the community. Finally, Kagiso was raised in a rather poor household and consequently places a high priority on providing sufficiently for his family. In sum, both the influence of people and wider environmental factors fundamentally shaped his motives for championing the ICT4D initiative today.

4.3 Case 3: Sarah

Sarah, in her late fifties, was an mathematics teacher for more than 20 years. The rise of social media awakened a passion for the potential of ICT to improve the failing

education system and gave her the capability to share good practices. She quickly became influential in the SA teaching community where she built online communities of practice for maths teachers and became an ICT4D champion promoting the use of technology-enabled means to improve the struggling education system. This profile led to her involvement in the Tablet Teaching Initiative (TTI) in The District where she made a decisive contribution to the success thereof.

Table 1. Case Three – Champion Motivators

Motivational Category	Motivational Factor	Identifying Stakeholders
Personal actualisation	Personal self-realization	C2, C3, C4, C5, C6, C7, C8, C10, C11, C12, +Self
	To be my own boss	C4, C5, C6
	Personal growth	C6, C10, C11
	To fulfil a dream	C3, C7
	To create my own job	C2
	To have financial autonomy	C4
Business success	To exploit a business opportunity	C2, C4
	To succeed with the initiative	C6, C7
Social concern	To contribute to the welfare of the community	C2, C3, C4, C5, C8, C10, C11, C12, +Self

Table 1 presents a synthesis of the findings from analyzing interview data from Sarah herself and other TTI stakeholders that she nominated as key collaborators. The identified motivational factors were grouped, as in the other cases, into three motivational categories, which can be perceived as 'centroids of motivation' influencing Sarah's actions as an ICT4D champion. Consider, for example, Sarah's own explanation: *"what motivates me is to love the people around me and help them be the best people they are because then I can be the best person I am."* It is clear that two of the motivational pillars – personal actualization and social concern – stand out as key reference points for Sarah in guiding her life decisions generally, but also in her role as ICT4D champion in TTI. Furthermore, the sheer weight of evidence shows that she is transparent about her intentions and motivations – stakeholders almost unanimously pointed to both these aspects, for example, *"(it is) her passion for moving the education system (that motivates her). [Sarah] – what drives her – it is not something material; it is not a name on a certificate; it's not an interview with a journalist; it's not money, huge project bonus, no, no. It is some sense of achievement within her"* (interview C6). The dominance of these two motivational pillars is validated by this triangulation and the importance of intrinsic motivation, as opposed to extrinsic motivation, is notable.

While business success, the third motivational pillar, is not as prominent compared to the other two pillars, traces of its prevalence can be observed throughout the data. Other stakeholders, such as the TTI programme manager, recognized a business perspective along with the personal actualization and social concern as part of her motivation, *"I think she wants to make a difference. I think she really enjoys doing this kind of thing (referring to the TTI). She loves technology; she is a kind of technology*

evangelist; social media evangelist; education evangelist and I think from a kind of business level obviously this is where she wants to see herself moving into the future as well." (interview C2). The interaction between business interests, on the one hand, and a genuine concern for the community and a desire for personal actualization, on the other, was evident.

Three factors in particular led to the development of these motivators. Firstly, Sarah is a Christian – all stakeholders, without exception, pointed to her faith and belief system as the source of her motivation that provide impetus for her champion behavior. Secondly, Sarah cited the importance of a secondary school teacher who deeply inspired her future career decisions, specifically becoming a mathematics teacher. Finally, the poor education system resulting from the history of racial segregation in South Africa and the opportunities afforded by emerging ICTs were environmental push- and pull-factors that impelled her to become a successful ICT4D champion.

5   Discussion

All three motivational pillars were found relevant in all three cases, but the pillars were not always equally important; it appeared as if champions prioritized the motivating pillars differently. Fig. 1 attempts to illustrate this sense of prioritization of motivating factors. These priorities were deduced from interview data based on triangulation between the champions's own reports and those of other stakeholders, as well as between different stakeholders. The results show differences between the three champions in terms of the relative importance of each motivational pillar – ICT4D champion motivations differ from one individual to the next; assuming homogeneity of characteristics in this regard is therefore flawed.

While the relative importance given to the different motivational pillars is clear from Fig. 1, the interaction and balance between the motivational pillars for each champion is less visible. It was observed how the champions balance these sometimes conflicting motives. For example, Kagiso launched WCI in The Township, which is a community some distance away from his own, because of the better business prospects to succeed in that setting; in so doing he had to compromise on his social concern for uplifting his home community. This ongoing prioritization, compromising and balancing between the different motivational pillars, could be observed in all three cases. It can even be suggested that this balancing skill – aligning their internal identities with the external requirements of successful performance – could be one basis for a champion's success.

Two practical implications can be drawn from the findings. Firstly, the congruence between the champions' own accounts of their motivations and those of other stakeholders suggest the practical feasibility to *profile* stakeholder motivations. The leadership development literature then shows, for example, how the emergence of more leaders and improved leadership behavior can be encouraged through targeted interventions in the organizational environment based on motivational profiles [17]. For

instance, potential champions[1] could thus be identified for development through targeted training (e.g. communication, leadership, entrepreneurship), mentoring and job role design conducive to both their motivational aspirations and the organizational goals.
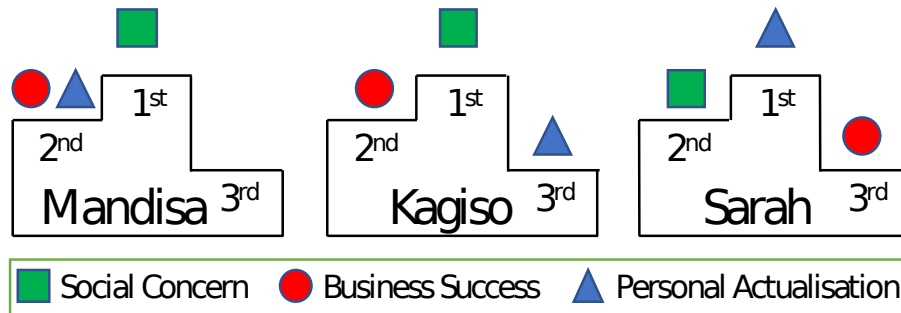

Fig. 1. Combined Results for ICT4D Champion Motivation Analysis

Secondly, motives of ICT4D champions in the three cases could be seen to *align* significantly with the organizational goals, values and aspirations. Sarah, for example, agreed to participate in the TTI because she could identify with the social objective to empower teachers in remote, rural areas with technology and skills to improve the educational offering to the poorest of the poor. The business prospects of earing an income from the consulting work can be seen to aligned with her business motive and the freedom to meaningfully influence the project with her own ideas created adequate room for self-actualization. These findings suggest that ICT4D organizations might create favorable environments for champions to emerge by framing their objectives, values and approaches in terms of the social concerns they seek to address, the business success that could be derived and the opportunities for stakeholders to actualize their aspirations. Involving potential champions in identifying projects, setting goals and long-term strategic planning are practical suggestions organizations could implement to help shape motivations and create better alignment between the individual's and organizational aspirations.

Similar interventions, based on work motivations, have in the past been proposed and is an integral part of organizational change and development models today [12]. It is therefore suggested that such practices be incorporated in ICT4D initiatives, particularly given the potential thereof to encourage the emergence of champion behavior which could ultimately contribute to improved ICT4D initiative success.

6   Conclusion

The paper makes two main contributions. Firstly, it offers a knowledge contribution about the characteristics of ICT4D champions by answering the research question concerning their personal identities, specifically by explicating the motivating factors

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[1]   Such profiling was used by the BAI for Mandisa's initial recruitment.

that influence a person's behavior who champion ICT4D initiatives. This finding is summarized as follows: ICT4D champion motivations – the factors that influence their decisions when promoting ICT4D innovations – center around three pillars: personal actualization, business success and social concern. On the one hand, these motivations are inextricably linked to the champions' social context. On the other hand, they respond to their context by continually balancing these pillars in their decisions in order to succeed with the initiative. While all three pillars are important, a sense of prioritization is often given to addressing social concerns – this might be a characteristic that differentiates them from other champions of technological innovations [30].

Secondly, a contribution towards ICT4D practice is forwarded. Based on the evidence presented it is proposed that the motivational profile of stakeholders in an ICT4D initiative can quite easily and accurately be obtained; this will enable project managers to identify potential champions and create an organizational environment conducive to champion emergence. Furthermore, a better understanding of the motivational factors of champions will enable managers to better support these key stakeholders thereby maximizing the potential positive influence on project success.

It is acknowledged that this research does not provide much details for implementing the practical suggestions, but this was not the aim at the outset of the paper; further work is needed to translate these recommendations into practice. This work is also bound by its limited scope to three cases in a single context; future research could extend these findings by investigating the motivational factors of ICT4D initiatives much more broadly.

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