This study employs a participatory action research approach in order to develop potential strategies that are aimed at stimulating and accelerating demand amongst salaried workers who are an often neglected segment of the sanitation “non-adopter” population. Few researchers to date have questioned why “Middle of the Pyramid” consumers with a regular monthly income ($4 to $50 per day) are not investing in sanitation as a priority. This paper seeks to understand how establishing a sanitation marketing activity at such a consumer’s place of work can be utilised as a point of sale to increase sanitation adoption. Critical findings from the study indicate that worksite sanitation marketing interventions are an effective tool to “trigger” salaried workers to move from non-adopters to adopters of sanitation at a household level. The research uncovers a clear opportunity for employers to establish enabling environments unblocking constraints to sanitation adoption, for example, by offering flexible payment plans.

Introduction
In order to scale sanitation coverage to meet and exceed Sustainable Development Goal 6 (SDG 6) national targets, this paper employs a participatory action research approach in order to develop potential strategies that are aimed at stimulating and accelerating demand amongst salaried workers who are an often neglected segment of the sanitation “non-adopter” population. Few researchers to date have questioned why “Middle of the Pyramid” (MoP) (Chikwewe and Fletcher, 2014) consumers with a regular monthly income ($4 to $50 per day) are still not investing in sanitation as a priority. This paper seeks to understand how establishing a sanitation marketing activity at such a consumer’s place of work can be utilised as a point of sale to increase sanitation adoption.

Purpose of this study
Organisations are increasingly encouraging employees to engage in behaviours to increase occupational and public health outcomes, with the wellbeing of staff being viewed as a major determinant of workplace productivity (Stead and Angus, 2007). Research exploring the potential feasibility and effectiveness of social marketing as an approach to foster behaviour change amongst employees in a workplace setting is not a new phenomenon. However, the greater part of interventions, such as Bell et al. (2006) have focused on addressing vices (e.g., smoking) and encouraging physical activity of employees.

To date, no papers have explored the potential to drive sanitation outcomes through worksite interventions. In 2014, however, the World Business Council for Sustainable Development developed a pledge calling businesses to action by committing to deliver access to safe water, sanitation and hygiene at the workplace for all employees in all premises under direct company control (Albuquerque and Albuquerque, 2014). The long-term vision for the council extends further to push for access at employee household and community levels. Research in this area is only beginning. This study seeks to respond to a call for further research, as expressed in the White Paper written by Schulte and Fenwick (2014) that explores how businesses can contribute to addressing the sanitation crisis. The findings may contribute to understanding the opportunity for employers to stimulate demand for sanitation amongst their workforce.
Research aim and objectives
Research Aim: To investigate the extent to which sanitation marketing interventions at the workplace can trigger demand for household-level sanitation adoption amongst salaried workers in Northern Ghana.

Objectives:
- To assess if demand for sanitation is higher amongst salaried workers vs. non-salaried workers.
- To understand key behaviours, needs, barriers, and aspirations influencing sanitation adoption amongst salaried workers.
- To design an effective worksite sanitation marketing campaign aimed at increasing demand for improved sanitation amongst full-time salaried workers at iDE.

Literature review
An in-depth literature review indicates a high level of scepticism regarding the impact and sustainability of traditional sanitation approaches, and consensus amongst researchers (Chambers, 2009; iDE, 2016a; O’Reilly and Louis, 2014) that traditional approaches of community-led total sanitation (CLTS) and targeted hardware subsidies to households are failing because they create an unsustainable financial burden on governments and/or NGOs. Many researchers present sanitation marketing as an opportunity to develop an ecosystem where both supply and demand converge, establishing a platform for individuals to graduate up the sanitation ladder and sustainably purchase improved solutions (Devine, 2010; Jenkins, 2004). While emergent dialogue in the sector has begun to stress the importance of understanding customer needs and barriers to purchase as a vital factor driving successful sanitation interventions, few studies in practice have recognised the heterogeneous nature of emerging market consumers. Instead, market segmentation has stopped at differentiating between “rural vs. urban” or “poorest of the poor” customers. Furthermore, social marketing at the workplace is increasingly being viewed as an effective channel to implement health promotion activities (Gordon et al., 2006) as a method to reach economically active decision makers. However, there is conceptual confusion among researchers and practitioners concerning the interrelationships of behaviour change theories and the 4 P’s (Product, Place, Promotion, and Price) of sanitation marketing. Within the context of the marketing mix, much attention is paid to the key facilitating condition being the “low cost” of a toilet as the key driver of sanitation adoption. These discussions often ignore other factors potentially influencing decision making of MoP consumers such as the “place” of interventions, exploring cultural persuaders (Maheswaran and Shavitt, 2000, p. 59), or relationships in the environs of the point of sale.

Research methods
Participatory action research (Nastas et al., 2000) has been applied to investigate the extent to which sanitation marketing at the workplace can influence the decision making of salaried workers in Northern Ghana, triggering their demand for household toilets. The literature review explores the evolution of sanitation provision approaches and investigates interacting variables, within the context of sanitation marketing, which accelerate or hinder the decision of consumers to purchase a toilet.

Following the literature review, a baseline survey was conducted identifying determinants of sanitation adoption contrasting between both salaried and non-salaried worker segments, across the targeted regions. The behavioural change model established by Jenkins and Scott (2007) was selected as a framework to analyse results of respondents. These parameters formed the premise of design principles established to implement an effective worksite sanitation marketing campaign, intended to increase sanitation adoption of full-time salaried employees of iDE Ghana, a non-profit in Tamale, Northern Ghana. To conclude, follow-up surveys were effected on all employees who made the choice to purchase a toilet as a result of the worksite intervention.

Results and discussion
Key insights from the research show that there is significant opportunity to engage salaried workers through sanitation marketing at the workplace. Results from the baseline and endline study highlighted the following 5 key insights:
Insight 1 - Although salaried workers reported that they had a higher monthly income than that of non-salaried workers across the three Northern Regions of Ghana, current sanitation adoption was lower, compared to adoption by non-salaried workers.

Table 1. Comparison of average monthly salary by worker segment

<table>
<thead>
<tr>
<th>Question: What is your average monthly income?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaried</td>
</tr>
<tr>
<td>0-500</td>
</tr>
<tr>
<td>501-1000</td>
</tr>
<tr>
<td>1001-1500</td>
</tr>
<tr>
<td>1501-2000</td>
</tr>
<tr>
<td>2001-2500</td>
</tr>
<tr>
<td>N/A</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
</tbody>
</table>

Table 2. Comparison of sanitation adoption by worker segment

<table>
<thead>
<tr>
<th>Question: Do you have a toilet at home?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaried</td>
</tr>
<tr>
<td>YES (ADOPTER)</td>
</tr>
<tr>
<td>12.50%</td>
</tr>
<tr>
<td>NO (NON-ADOPTER)</td>
</tr>
<tr>
<td>87.50%</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
<tr>
<td>26.67%</td>
</tr>
</tbody>
</table>

As indicated by a plethora of studies exploring how to drive sanitation adoption among “the poorest of the poor rural consumers” (Pedi et al., 2012; Kar, 2003; Kar and Milward, 2011; O’Reilly and Louis, 2014), there is a postulation that economically active persons, particularly middle of the pyramid consumers, must already be adopters of a household sanitation solution. Our research findings contradict this assumption, as even though salaried workers indicated a higher income level than their non-salaried counterparts, 87.50% of salaried workers did not have access to a toilet at home, as compared to 69.70% of non-salaried workers (see Table 2).

Insight 2 – Lack of knowledge of a trusted product and point of sale are the most significant barriers to household sanitation adoption by salaried workers.

Figure 1 below shows results from an endline survey of key constraints to purchasing a toilet. It is evident that the largest constraint to purchase was that 71% of respondents stated that they “did not know where to buy a product that they could trust.”

![Figure 1. Endline key constraints and barriers to purchase](image-url)
When looking at the corresponding facilitating condition – iDE as an employer endorsing a particular product and increasing awareness of that product amongst the staff – was a significant motivator that influenced the purchasing decision. According to Rose (2011), settlers tend towards Luddism – i.e., they indicate a distrust of new technology. Following this premise, it is not surprising that the staff offer sought to depict the Sama toilet as a trusted product. Chikweche and Fletcher (2013) unravel this notion further when they suggest that in the BoP, “networks are powerful force in decision making of consumers and facilitate understanding and the behaviour of consumers”. They specifically reference that consumers in the “diluted Urban BoP” are more influenced by their professional associations regarding which product to choose or try.

It is critical to note, though, that when investigating these constraints – trying to ascertain why other staff were triggered to make a purchase by their worksite intervention at iDE – the findings confirm that only 29% of buyers rationalised that their intention had not converted to a buying decision because they felt they couldn’t afford a toilet. In fact, the key constraint was that employees did not know where to buy a toilet that they could trust (71.42%). One limitation of this study is that since both baseline and endline surveys were structured, there was not opportunity to probe further to unpack respondents’ definition of “affordability”.

**Insight 3** - Worksite Sanitation Marketing Interventions are an effective tool to “trigger” salaried workers to move from non-adopters to adopters of sanitation at a household level if the employer can establish an enabling environment aimed at unblocking constraints.

**Question: You had considered purchasing a toilet before the staff offer.**

![Figure 2. Intention to purchase a toilet by salaried workers](image)

The iDE worksite intervention conducted as part of this study was successful at increasing sanitation coverage by 15% amongst their staff population. It is important to note that the campaign accelerated a movement of this non-adopter segment up the sanitation ladder, from practicing open defecation straight to utilising an improved toilet. The results of the endline survey also suggested that a high proportion of employees who bought a toilet – 71.43% of purchasers – had previously, before the worksite intervention, considered purchasing a toilet. However, the fact that they had not actually made a purchase indicates that they were stuck in the “delay” part of the choice stage in their decision-making journey.

**Insight 4** – Worksite sanitation facilities and organisational values had a strong influence on an employee’s intention to purchase a toilet. This was more of an influence than the purchasing decisions of peers within their network.
Although there has been relatively little research aimed at understanding the influence of networks in BoP markets, and none at all into those in MoP markets, Chikweche and Fletcher (2008) propose the view that “networks are a powerful force in the decision making of consumers and networks facilitate understanding the behaviour of consumers and their interaction with firms” (p. 2). They go further to claim that whilst in “Western” markets purchasing decisions are very much individualist choices, in BoP markets, the “collective entity” has significant influence on how consumers act with products and services. The influence of the workplace as a network did not emerge strongly as a driver, with those employees surveyed at endline stating that their peers’ purchasing decision did not impact their own adoption (see Figure 2.). However, the influence of the beliefs of the organisation, as well as the toilet facilities at the workplace, were strongly influential.

In summary the results reveal that although demand is lower amongst this subset, their earnings and thus purchasing power is higher than that of non-salaried workers. The workplace itself proved to be a strong place to reached decision makers, many of whom already showed a prior interest or intention to purchase an improved sanitation solution. The endorsement of a product by a trusted employer, whose values evidently...
support the increase of sanitation coverage, was a key influencer. Surprisingly, the decision of peers was not a strong influencer, although it is evident that more research into this area is needed. Finally, the opportunity for employers to take the lead and drive sanitation adoption could drastically move non-adopters from open defecation, leapfrogging steps in the sanitation ladder, straight to users of an improved solution. This is a phenomenon that also needs further understanding, as this may be the case for more segments of the identified MoP consumers.

**Conclusion**

This study stressed the importance of understanding the needs, motivations, barriers, and constraints of different segments of the non-adopter population. It sought to challenge a number of common misconceptions about the marketing mix within sanitation marketing and to draw attention to a forgotten subset of middle-of-the-pyramid consumers who still predominantly practice open defecation. There is strong evidence to suggest that by establishing sales channels at workplaces, there could be an easily triggered proportion of salaried workers who have stagnated at the “delay” decision-making stage.

The approach of participatory action research presented should act as a useful guideline for other such companies or sanitation practitioners who would like to apply similar methods to trigger their staff to purchase a toilet at their households. In order to support future interventions from the results of this study, a new behaviour change framework is henceforth proposed. This framework details key activities that an employer should seek to implement in order to establish an enabling environment that would trigger employees defined as “early adopters.” The model illustrates that if employers seek to leverage the 4 Ps of the marketing mix, facilitating conditions implemented under each factor could be effective at triggering employees, who are stationary at the delay stage, to make a purchase.

To conclude, if employers establish strong enabling environments at their workplaces, they will prove to be huge players at driving the attainment of SDG 6’s target goals and significantly contribute to national and global sanitation objectives.

**Acknowledgements**

The author would like to sincerely thank both iDE Ghana and the Cambridge Institute for Sustainable Leadership (CISL) team for their support and guidance throughout the research and creation of this study.

**References**

Contact details
Valerie Labi is Director of Water Sanitation & Hygiene (WASH) of iDE Ghana. She fell into the world of social enterprise and WASH as CEO for Clean Team Toilets, with the objective of “democratising toilets” and “commercialising waste”. Her pride and joy is her 2-year-old son.

Valerie Labi
+233 (0) 243 800 521
Tamale, Ghana,
www.ideglobal.org