THE LEARNING PARADIGM AND DEVELOPMENT COMMUNICATION

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Abstract

Development communications for the past seventy years have followed two paradigms grounded in mass communication and marketing theories. The aim of development communication is changing behaviour, which is much closer to the definition of learning. Therefore, this article proposes a new learning paradigm and conceptual model for development communications that are more audience-centric than the current dominant paradigm and more operational and sustainable than the current participatory paradigm. Twelve in-depth interviews with four categories of development communication professionals were conducted to substantiate the model. The advertising experts, public relations professionals, campaign funders, and NGO executive managers concurred with the suggested conceptual model envisioning the potential for applying the learning paradigm's seven principles to support sustainable and inclusive development. The article briefly reviewed the literature to introduce the two current paradigms, their underlying theories, and their critiques before proposing the new Learning Paradigm and the Sustainable Learning Conceptual Model associated with it. The findings and discussion open a new potential stream of future research in development communication and beyond.

Keywords: development communication, the dominant paradigm, the participatory paradigm, the learning paradigm

Introduction

Development Communication is the science and art of human communication for societal transformation that can raise a developing nation out of poverty and into prosperity. It has been defined as a social process engaging interpersonal and mass media communications to foster a consensus for action and change of behaviour (Servaes, 2021). Development Communication (devcom) aims to remove two constraints toward an increasingly participatory and equal society. The constraints are the lack of information among citizens and the prevalence of power inequalities (Waisbord, 2020). Two paradigms of devcom have evolved in light of both approaches to development; the dominant paradigm and the participatory paradigm. The dominant paradigm is not inclusive, and the participatory paradigm is not sustainable, while effective development has to be both inclusive and sustainable (McCall, 2011). Given the limitations of the dominant and participatory paradigms, the 'Learning Paradigm' is proposed as an effective approach for devcom.

This article will briefly review the literature to introduce the two paradigms, their underlying theories, and their critiques (Lennie & Tacchi, 2013) before proposing the new Learning Paradigm and the Sustainable Learning Conceptual Model associated with it. It will then review our methodology for substantiating the learning paradigm and present our research findings, followed by our discussion, limitations, and future directions for research.

The Dominant Paradigm

The dominant paradigm (Rogers, 1978) and the associated modernisation theory, profess that underdevelopment results from uniformed citizens who need to follow the ways of developed countries to prosper. Hence it focuses on effectively getting the information designed and drafted by the

developed world to the underdeveloped world. In the wake of the modernisation school of thought, many theories emerged (Nakamori, 2020), including The Diffusion of Innovations Theory by Rogers (1962; 2003), which aimed to explain how innovations were spread amongst populations. It divided the process into five parts: awareness, knowledge and interest, decision, trial, and adoption/rejection. Rogers divided information recipients into innovators, early adopters, early majority, late majority, and laggards. The Two-Step Flow of Communications Theory (Katz & Lazarsfeld, 2017) suggests that mass media messages go through opinion leaders first, passing it on to the rest of the population (Miller, 2022).

The Social Marketing Theory: Kotler and Zaltman (1971) theory focuses on how marketing and advertising techniques and tools can encourage behaviour change. The theory suggests using marketing research and segmentation techniques and then converting those findings into culturally acceptable messages and communication products that would encourage behavioural change at the recipient's end. *The health promotion and health education communication theory* initially aimed to induce behavioural change (Sharma, 2022). The theory is built on the belief that health problems are mainly caused by individual behaviours that need to be tackled through top-down behavioural change efforts.

The Entertainment-Education strategy aims to deliver developmental messages in a way that is entertaining to the target audiences (Sood et al., 2004). The approach first developed in Mexico during the 1970s when popular soap operas (also known as Telenovas) had developmental messages embedded in their scripts and storylines. This top-down strategy follows the *Shannon Weaver linear communication model* (Kubota, 2019). It builds on Bandura (2001) *Social cognitive learning theory's* premise that people acquire new behaviours by watching others do them first.

Critiques of the Dominant Paradigm

The dominant paradigm has received considerable criticism since its inception in the mid-60s (Snyder, 2003). The paradigm was critiqued for disregarding developing countries' actual needs and contexts, causing underdeveloped countries to depend more on developed countries. While the Entertainment-Education and Health Education paradigms realised the importance of education for behavioural change, they continued to follow the dominant paradigm's top-down communications approach,

Several theories criticised the Dominant Paradigm, including *The Dependency Theory*, propagated by Baran in 1957 (Ghosh, 2017). This neo-Marxist theory suggests that internal factors did not cause underdevelopment, but global social, political, and economic structures did, which led to the dominance of developed countries over underdeveloped countries

Another neo-Marxist theory is written by Herbert Schiller in the 1970s is The *Culture Imperialism Theory* that resonated with the Dependency theory's fundamentals with a particular focus on culture. According to the theory, developed countries' economic and political dominance led to dominance over the mass communication content of underdeveloped countries. This dominance undermined the cultural autonomy of underdeveloped countries, given that mass media messages affect recipients' culture (Straubhaar, 2021).

The Participatory Paradigm

The increasing criticism of the dominant paradigm paved the way for the participatory approach, which Freire first conceptualised in the 1970s. The approach introduced a redefinition of the concept of development communication. Rather than being a pure top-down instructive process, participatory theories suggest that it should be a process that aims to utilise mass communication tools and channels to increase citizens' participation in development. Their participation will motivate, inform, and train populations of rural areas, mainly in grassroot levels (Servaes & Malikhao, 2005). Another perception shift to devcom suggested by the participatory theory was the need to rely more on interpersonal communication and less on mass communication (Servaes, 2021).

Essentially, the participatory approach called for human-centric devcom that harmonises with audiences' contexts and needs and where the audiences are actively involved. Participatory approaches include media advocacy for a specific cause or innovation, making it a national or political priority. In devcom, international players can initiate media advocacy but need local players' buy-in and ownership. Activities under the umbrella of media advocacy include interaction with decision-makers, direct mail,

seminars, rallies, regular mass media coverage, and seeking endorsements (Wilkins, 2014). This concept resonates with McCombs and Shaw's Agenda Setting theory that suggests that mass communication can shape the public agenda (McCombs & Shaw, 1972; Perloff, 2022).

Another participatory approach is *Social Mobilization*, where community members become aware of an issue, identify it as a high priority to act upon, and plan how to tackle it (Hart, 2013). Social mobilisation highlights the importance of broad community participation so that citizens feel ownership of the cause and do not feel it is imposed on them (Khan & Short, 2021). According to Waisbord (2020, p. 119), 'social mobilisation is the glue that binds advocacy activities to more planned and researched program communication activities.'

Critiques of the Participatory Approach

The approach faced many criticisms, including being too idealistic, without operationalising guidelines, and too risky for citizens of non-democratic countries who could risk retaliation if involved in social change mobilisation activities (Chaudhry, 2022). Criticisms of the participatory approaches include having the potential to deepen divisions within communities and not being efficient in contexts that require fast results, such as national mobilisations or health crises.

The Learning Paradigm and Research Questions

Effective development has to be inclusive and sustainable (McCall, 2011). The dominant paradigm is criticised for not being inclusive, and the participatory paradigm for not being sustainable. The limitations of the dominant and participatory paradigms call for a new inclusive and sustainable alternative. This article proposes the 'Learning Paradigm' as an effective approach for devcom.

Angelo (1993, p. 3) defines learning as 'an active, interactive process that results in meaningful, long-lasting changes in knowledge, understanding, behaviour, dispositions, appreciation, belief, and the likes, which sums up the impact devcom campaigns, aim and hope to achieve. The essence of development communication is to inform the public, help them acquire new skills, and eventually instill a permanent behaviour change. This essence resonates with the Cambridge Dictionary's definition of learning as 'to get knowledge or a new skill, be told facts or information that you did not know, and start to understand that you must change the way you behave' (Woodford & Walter, 2007).

The learning paradigm is founded on Ambrose et al. (2010) seven learning principles grounded in the research literature and broadly applicable across domains, learners, and contexts. The principles operationalise the role of the learner's prior knowledge, motivation, and developmental level, as well as opportunities for the learner to practice, receive feedback, and learn to become a self-directed learner (Ambrose et al., 2010, p. xiv). The article will introduce the seven principles, their implications for devcom, and the research question to address.

Principle 1: Students' Prior Knowledge Affects Their Learning

Given devcom's aim to create sustainable behavioural change, one of the biggest challenges devcom campaigns face is the prevailing beliefs and information in impoverished and under-educated target audiences. Audiences resort to prior knowledge when reviewing and processing new messages (Ausubel, 1968), challenging primary frameworks, socially or personally accepted beliefs, and ideologies (Goffman, 1974).

According to Brod (2021), 'only when activated, relevant, and congruent will prior knowledge reliably help.' Prior knowledge also includes declarative knowledge (facts and concepts that can be declared) or procedural knowledge (how methods, approaches, or theories are applied) (de Jong & Ferguson-Hessler, 1996). Inappropriate or faulty prior knowledge can hinder learning effectiveness or stop it altogether (Ambrose et al., 2010).

An example is raising awareness against hepatitis C, in a society where people think there is no harm in reusing injection needles (faulty information/declarative knowledge). Similarly, raising awareness against domestic violence in a society where it is common and accepted (faulty primary and personal frameworks). Festinger's (1957) theory of cognitive dissonance explains how the contradiction of

existing beliefs/knowledge with new information causes a mental conflict. This conflict is relieved by rejection, attempts to explain, complete avoidance, denial of conflict, or attempts to reconcile the discrepancies impeding the acceptance of different messages (Hamilton & Johnson, 2020).

Inequality arises because lower socioeconomic classes have less information than higher classes. Consequently, they do not understand the content they view or know how to apply the information they receive (Manstead, 2018), hindering the success of devcom campaigns. The issue of inequality was detailed in knowledge gap theory which suggests that lower socioeconomic segments inevitably absorb information at a slower rate than higher segments which widens the gap between them (Tichenor et al., 1970).

Therefore, the first research question is:

RQ1. Does the target audience's prior knowledge significantly impact the effectiveness of devcom?

Principle 2: The Way Learners Organize Knowledge Affects Their Learning

How the message recipients in devcom campaigns organise their existing and acquired knowledge can significantly affect the comprehension and impact of the message received. Ambrose et al. (2010) classify knowledge organisation models as sparse and interconnected. In the sparse model, the recipient memorises each piece of information as a standalone fact that does not support future learning. A capability barrier happens when the message recipient cannot implement a behaviour because they lack the necessary awareness or skills (de Moliere et al., 2021).

In the interconnected model, the recipient interconnects the new information with the overall learning context, enabling reasoning, answering questions, and laying the foundations for future learning. Anderson's (1983), *Associative Network of Memory Theory* suggests that concepts are stored in the memory as nodes. When one node is activated, it activates all the similar nodes around it (Lee et al., 2016).

Egypt's awareness-raising campaign against hepatitis C is an example of how tailoring development communication campaigns according to the knowledge organisation model of audiences contributes to increasing the campaign's impact. The campaign was a series of ads, each dedicated to a key message: i) call for action to get tested, ii) what to do in case of infection, iii) how to avoid infection, and iv) to prevent stigmatisation of the infected (World Health Organization [WHO], n.d.). The campaign that guided novice learners away from the sparse knowledge organisation model into an integrative processing mode led Egypt to eliminate hepatitis C (Hassanin et al., 2021).

We, therefore, propose the following research question:

RQ2. Do the target audience's knowledge organisation models (KOM) significantly impact the effectiveness of devcom?
    RQ2a. Does sparse KOM negatively impact the effectiveness of devcom
    RQ2b. Does interconnected KOM positively impact the effectiveness of devcom?

Principle 3: Factors That Motivate Students to Learn?

The APA dictionary of psychology (2021) defines motivation as 'the impetus that gives purpose or direction to behavior and operates in humans at a conscious or unconscious level.' Ambrose et al. (2010) suggest that motivation influences the quality, intensity, persistence, and direction of learning behaviours and accordingly affects acquiring new information. Thus, understanding recipients' motivation to acquire new information or adopt new attitudes is key to the success of devcom campaigns. If a goal is perceived as valuable and the environment as supportive, the audience is motivated, and success expectancies are positive.

Lloyd and Merten (2018) highlighted that prerequisites to motivation were designated in Vroom's (1964) Expectancy Theory of Motivation, which suggests that individuals actively make choices and that decisions are based on the goal's value, importance, and success expectancies.

Ambrose et al. (2010) position on motivation is in harmony with Bandura's (2018) Social Cognitive Learning theory. Bandura suggests that individuals learn through observing others within their social

context and contemplating personal and environmental factors before accepting or rejecting the behaviour modelled by celebrities, family members, friends, or anyone within the individual's surroundings. Following is the third research question:

RQ3. Does motivation influence the quality, intensity, persistence, and direction of learning behaviours and affects acquiring new information accordingly?

Principle 4: How Students Develop Mastery?

Mastery in learning is defined as acquiring a high degree of competence in discrete skills and content knowledge within a complex task. Reaching mastery entails acquiring and practising crucial component skills and applying them with a degree of automaticity (Ambrose et al., 2010), like driving a car. Pokrajac et al. (2020, p. 1091) suggested that mastery learning is based on deliberate practice that led to effective knowledge transfer and that simulation-based mastery learning, which in turn led to effectively mastering procedural skills.

In Zimbabwe, the UNICEF's Young Mentor Mothers Program was launched in 2019 to support young mothers living with HIV and spur treatment adherence and testing rates. The program trained 48 young mothers as mentors and linked them to 26 centres to prevent mother-to-child transmission. The mentors visited beneficiaries at home, sent reminders through SMS, and performed advocacy activities in the facility- and community-based groups. Eighty percent (80%) of the program's beneficiaries received HIV viral load test results, 93% of which had undetectable viral loads, which meant they became healthy and non-contagious. The following research question is:

RQ 4. Does developing mastery require learners to first:
    a. acquire essential component skills,
    b. practice effectively integrating them, and
    c. know when to apply them?

Principle 5: The Kinds of Practice and Feedback That Enhance Learning?

Ambrose et al. (2010) suggested that practice and feedback are integral to knowledge transfer. However, for those two concepts to fulfil their potential, deliberate practice needs to be goal-oriented, and feedback needs to be targeted.

Goal-Oriented Deliberate Practice

Goal-oriented deliberate practice is acquiring targeted skills through repeating actions under the supervision of a mentor who provides frequent feedback. (Ericsson et al., 1993). The deliberate practice must focus on a clear and specific performance goal, target an appropriate level of challenge relevant to the learner's current performance, and ensure the quantity and frequency of practice are sufficient to develop skills and knowledge.

Targeted Feedback

French et al. (2015) suggest that impactful feedback is specific, timely, and centred around the recipient's learning goal. The feedback process is in harmony with the concept of conceptual change, which is the process through which learners' existing conceptions develop into intended normative conceptions (Qian & Lehman, 2019; Vosniadou & Skopeliti, 2014). Hence, targeted feedback that handholds the information recipients toward their learning goals is integral to effective knowledge transfer and skills acquisition (Ozdemir & Clark, 2007; Taber, 2013).

In devcom, community health workers exemplify how targeted feedback can catalyse conceptual change. According to the World Health Organization (WHO, 2021), community health workers (CHWs) have enormous potential to extend healthcare services to vulnerable populations in remote areas and historically marginalised people. They attend to unmet health needs in a socially acceptable

manner, improve access to services, address inequities in health provision, and enhance health system performance and efficiency. Their roles always involve some degree of targeted feedback. The fifth research question is:

RQ5. Are deliberate practice and goal-oriented feedback integral to the process of knowledge transfer?

Principle 6: Students' Current Development Level Interacts with the Course's Social, Emotional, and Intellectual Climate to Impact Learning.

The Theory of Student Development aims to clarify student learning, growth, and development in education (Cox & Strange, 2010). Learning climates refer to 'the social, emotional, and physical conditions under which one acquires knowledge (Seif et al., 2012, p. 554).

An efficient learning process must factor in that knowledge recipients are not only intellectual beings but also emotional and social beings. Therefore, it is essential to acknowledge the complex social, emotional, and intellectual challenges knowledge recipients face. It is critical to be aware of where they are on the development spectrum and whether the interaction of their course climate and position on the development spectrum will result in a successful and meaningful learning process (Patton et al., 2016).

Student Development

Various learner development theories provide a spectrum through which a learner's development stage can be determined. Chickering & Reisser's (1993) model suggests the following seven vectors of development: developing competence, managing emotions, developing autonomy, establishing identity, freeing interpersonal relations, developing purpose, and developing integrity.

UNICEF Thailand's 'Every Child Can Read' campaign integrated the concepts of applying one of Chickering's seven vectors of student development and promoting a positive learning climate to promote reading skills amongst children, focusing on disadvantaged areas (United Nations International Children's Emergency Fund [UNICEF], 2019). Initiatives under this project aimed to support creating a favourable learning environment that encourages children to enhance their reading skills and schools developing fun reading activities that engage young readers and embed a love of reading in children.

A social media campaign was launched to encourage engagement in the children reading skills enhancement efforts, encouraging communities and families to support the project and encouraging children to read by applying Chickering's development vectors. A few months into implementation, the project benefitted 10,000 children nationwide. The sixth research question is:

RQ6. Are learner development and learning climate integral to effective and sustainable learning?

Principle 7: How Students Become Self-Directed Learners

Self-directed learning is when information recipients take responsibility for their own learning by paying attention to and directing their learning process. They establish their learning needs, articulate them, recognise the human and material resources needed, select and execute appropriate learning strategies, and assess learning outcomes (Knowles, 1975, p. 18). Boateng et al. (2022) found that collaborative contexts and support from a more capable colleague led to better learner engagement and contributed significantly to successful learning.

Fleur et al. (2021) explain metacognition is the capacity to be conscious of one's cognitive processes (metacognitive knowledge) and to manage them (metacognitive control). Metacognition can be helpful in devcom efforts that aim to introduce ongoing behaviour change to avoid harmful repercussions. It would initiate sustainable awareness and change beyond the message viewership duration. Tormala and Rucker (2022) explored metacognitive perspectives to describe how people's beliefs about their attitudes and thought processes drove persuasion outcomes. Chin et al. (2022) fused the perspectives of culture, knowledge management, and humanistic philosophy to explain why cross-cultural

metacognition is essential for realising cosmopolitan humanitarian knowledge facing global crises such as health pandemics. The last research question is:

RQ7. Does self-directed learning guided by a metacognitive approach result in an efficient and sustainable knowledge acquisition?

The Sustainable Learning Model

This article aims to present a new devcom paradigm and answer the seven research questions raised by the learning paradigm. The suggested learning paradigm focuses on the audiences' internal and external factors that can affect if they successfully acquire and effectively apply information disseminated through devcom campaigns. Ambrose et al. (2010) book presented concepts to establish sustainable and effective learning. While the book encompassed all preceding learning theories, it does not link the principles into one conceptual model.

The suggested paradigm's conceptual model presented in Figure 1 attempts to present a precise mapping of the sustainable learning process by arranging Ambrose et al.'s principles into the main path comprising the hierarchy of stages a learner needs to go through to reach sustainable learning. This path prioritises learning principles beginning with the initial assimilation of newly acquired knowledge to become self-directed learners who manage their learning process. Mapping out learning processes for a clear conceptualisation of the steps that lead to sustainable learning is similar to Gagne's (1968) 'Cumulative Learning Model,' where learning simple tasks are stepping stones toward learning more complex tasks.
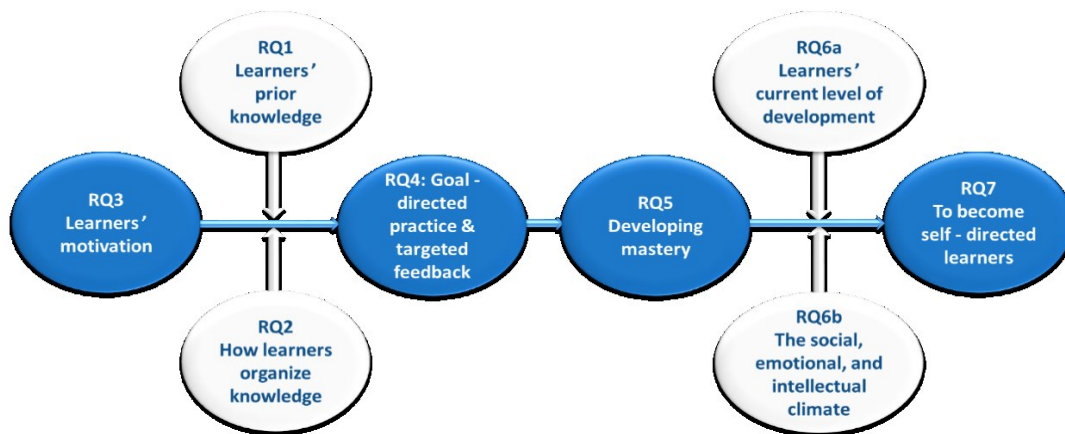
Figure 1: The learning Paradigm Conceptual Model
(Developed by the authors based on Ambrose et al., 2010)

The Main Path

The model's main path comprises the sequence below:

Motivation: Filgona et al. (2020) describe motivation as an impulse that drives all human behaviour, including learning. Scholars suggest that whether or not the students are motivated to learn can make or break the learning process. Being in a learning context or being subjected to learning material is not enough to accomplish learning. It is the duty of the teacher or message communicator to motivate the learner enough to acquire the shared knowledge enthusiastically. The suggested conceptual model then moves to goal-directed practice and targeted feedback upon achieving motivation.

Goal-Directed Practice and Targeted Feedback: Ambrose et al. (2010) highlight the critical role that directed practice and targeted feedback play in enhancing learning quality. For practice to be effective, it needs to be goal-oriented and coupled with targetted feedback that lets the learner know where they stand from their learning goal and what they need to do to come closer to it. A motivated learner who deliberately practices and receives goal-oriented feedback then moves on to achieving mastery.

Mastery: Patrick and Kaplan (2022) provide a rich account of mastery-structured classrooms associated with adopting optimistic growth mindsets (Holzer et al., 2022), attributing success to effort (Ames & Archer, 1988; Hatteberg, 2022), believing their learning is valuable and essential (Lazarides et al., 2018), and adaptive engagement (Benita et al., 2022). Skills mastery is trying and failing many times until a person succeeds in accomplishing the task without thinking about it. The educator must encourage the learner to adopt a mindset that views setbacks as learning opportunities. The educator also needs to give precise feedback and share problem-solving strategies that enable the learner to progress. A motivated learner who delivertely practices receives goal-oriented feedback and has achieved mastery can reach the farthest in the sustainable learning model, becoming a self-directed learner.

Self-Directed Learning: Loeng (2020) describes self-directed learners as persons who take the initiative and responsibility for their learning, setting their own learning goals and thinking about how to accomplish them. Self-directed learning occurs both outside and inside educational institutions. Li et al. (2021) suggest that self-directed learners acquire knowledge more effectively than passive information recipients. He also adds that self-directed learners have greater motivation and are inclined toward applying the acquired knowledge in their daily lives. Regarding devcom, self-directed learners would pursue learning in their day-to-day lives, regardless of whether they are within an educational institution.

Moderating Variables

In addition to its main path, the suggested conceptual model also includes moderating variables. According to King (2013, p. 1256), a moderating variable 'affects the direction and strength of the relationship between an independent or predictor variable and a dependent or criterion variable.' The model's moderating variables can encourage or hinder the process of sustainable learning. Those variables are:

Learner's prior knowledge: According to Fryer et al. (2021), prior knowledge is the information a person already has before learning about a new topic. Prior knowledge is suggested to have a role in knowledge acquisition (Dochy et al., 1999). An estimated 30% to 60% variance in learning outcomes is attributed to prior knowledge (Tobias, 1994). In devcom, prior knowledge can be a deal-breaker. For example, a woman convinced that birth control is a religious sin would not even consider listening to a family planning campaign.

How learners organise their knowledge: Angelo's fourteen principles of improving higher learning (1993) suggest that information processed in a personally meaningful and interconnected manner has higher chances of being remembered and used. Accordingly, acquired information processed in a silo is unlikely to be retained. A devcom campaign should be designed and delivered to activate interconnected knowledge processing.

The learning climate: Daggol (2019) describes the learning environment as the learner's physical, psychological, and emotional surroundings. The learning environment has helped employees successfully adapt to change and setbacks and bounce back after adversity to come back better than before (Caniels et al., 2022). Granting learners responsibility and autonomy and having a leader who facilitates learning are essential elements of a learning climate that enhances informal social learning (Crans et al., 2021). The learning climate should be capitalised upon if conducive to learning or otherwise mitigated in designing development communication campaigns.

The learner's current level of development: Darling-Hammond et al. (2020) suggest a relationship between a learner's cognitive and emotional development and how efficiently they learn. Widodo et al. (2020) suggest that learning readiness includes a person's ability to respond to learning material and social, linguistic, and cognitive skills. In devcom, the messaging and approach must be tailored to the target audience's capabilities and stage of development.

The conceptual model diagram (Figure 1) has broken principle six into two separate constructs. The principle indicated that the learner's social, emotional, and intellectual climate, as well as development level moderate sustainable learning. While this statement is true, learning climate and level of development are measured differently. The former would be measured regarding the learner's surroundings and whether they are conducive to learning. The latter would be measured in terms of the

learner's capabilities to process information. Based on this difference in measurement units, the constructs were therefore separated.

This article suggests a new learning theory for the continuously evolving devcom campaigns. The suggested learning paradigm is audience-centred and aims to examine the role factors such as capabilities, knowledge processing models, and surroundings, play in the success of devcom campaigns.

Methodology

The dominant and participatory paradigms have been the two alternatives for guiding development communications for the past 70 years. This article explores the potential of using the learning paradigm and the associated sustainable learning conceptual model as an alternative. The learning paradigm and its related constructs and relationships have been studied and tested in education. It also has great potential and value to add to the theory and practice of development communication.

The research applied an exploratory qualitative research design, including semi-structured industry expert in-depth interviews to develop a profound understanding and substantiate the sustainable learning model in devcom.

Data Collection

A total of 12 in-depth expert interviews were conducted (Dexter, 1970; Fontana & Frey, 1998) with high-ranking managers, chief executives, and senior consultants with 20 years or more experience in devcom. Purposive sampling (Denzin & Lincoln, 1994) was planned to cover four stakeholder groups. The 12 participants were selected based on their professional perspective, comprehensive knowledge, and relevant expertise in devcom as the phenomenon under investigation (Lincoln & Guba, 1985). They included top advertising agency executives, experienced public relations professionals, senior CSR executives funding devcom campaigns, and leaders of foundations executing devcom operations.

Table 1. Profile of experts interviewed in each of the four professional perspectives

Advertising Agencies involved in Devcomm Campaigns (AdExec)		
Mr. Ahmed Badie https://www.facebook.com/ABTBWA	Chairman and CEO of TBWA Egypt https://tbwa.com/	Apr. 20, '22
Mr. Haitham Abdel Basset https://www.linkedin.com/in/haytham-mustafa-abdel-bassit-brandworx/	Founder and CEO of Brandworx https://www.instagram.com/brandworxltd/	Apr. 29, '22
Ms. Sherine Helal	CEO & Manager Partner of HIT Creative Communications http://www.hit.com.eg/home	Apr. 28, '22
Public Relations Professionals involved in Devcomm Campaigns (PRExec)		
Dr. Sherine Zaklama https://www.linkedin.com/in/sherine-zaklama-18b250110/	CEO of Rada Public Relations http://www.rada.com.eg/	Apr. 22, '22
Ms. Heba Selim https://www.linkedin.com/in/heba-selim-387bba87/	Freelance Management and Communications Consultant and Trainer	Apr. 27, '22
Ms. Randa Nassar https://www.linkedin.com/in/randa-nassar-340097130/	Former Managing Director of Weber Shandwick Egypt https://www.webershandwick.com/	Apr. 29, '22
Owners funding Devcomm Campaigns (Funder		
Dr. Dalia AbdelKader https://www.linkedin.com/in/dr-dalia-abdel-kader-755296111/	Chief Sustainability Officer of the Commercial International Bank (CIB) https://www.cibeg.com/en/responsible-banking	Apr. 21, '22
Ms. Zeinab Hegazi https://www.linkedin.com/in/zeinab-hegazy-67996674/	Communications, Public Affairs and Sustainability Director for CEMEX Egypt and UAE https://www.cemex.com/sustainability/overview	Apr. 28, '22
Ms. Sara Eid https://www.linkedin.com/in/sara-eid-332a309/	Head of Transparency and Citizen Engagement Unit, Official Spokes Person for Macro Policy and State Budget at Egypt's Ministry of Finance	Apr. 26, '22

NGOs implementing Devcomm Campaigns (NGOExec)		
Ms. Ola Mohamed https://www.linkedin.com/in/ola-mohamed-22653225/	Manager of Communications and Awareness in Children Cancer Hospital Egypt 57357 https://www.57357.org/en/home-page/	Apr. 25, '22
Ms. Doaa Mabruk https://www.linkedin.com/in/doaa-mabrouk-539265242/	Co-Founder and Managing Director of Baseera Foundation http://baseerafoundation.org/	Apr. 25, '22
Ms. Maha Helaly https://www.linkedin.com/in/maha-helali-4364b327/	Disability and Development Consultant http://lrcegypt.org/	Apr. 25, '22

Ten female and two male informants with a minimum of 20 years of firsthand experience with devcom signed consent forms and committed to sixty minutes of uninterrupted recorded interviews. The twelve interviews were conducted and recorded via Zoom or MS Teams in the last ten days of April 2022. Table 1 shows the informants' names, positions, and interview dates. Participants' ages ranged from 45 to 65, tenured in multinational, local, corporate, governmental, and not-for-profit organisations representing large, medium, and small sizes to provide diverse and comprehensive insights into the research questions.

Voluntary participation and privacy were guaranteed (Huber & Power, 1985) and the authors secured the university institutional review board's approval before conducting interviews. All interviews were recorded and transcribed verbatim for reliability. The interviews began by discussing the interviewee's job title and roles before delving into the interview guide (Creswell, 2003). The interviews resumed until theoretical saturation was realised when no new insights about the research topics emerged (Bryman & Bell, 2015; Corbin & Strauss, 1990; Strauss & Corbin, 1998).

Data Analysis

The data was coded, identified, organised, and thematically analysed to understand the seven research questions profoundly. Thematic analysis was applied to find, examine, record, and report the apparent themes while referring to the literature and the conceptual model (Braun & Clarke, 2006). The seven research questions were the organising themes and the primary triggers in the in-depth interview guide. Beyond the research questions, interviewers probed for insights into the four main constructs and the four moderating factors in the sustainable learning model as appropriate. To further interpret the findings, the transcribed interviews were content analysed to identify the differences in themes, focus, vocabulary, and experience effects within the four professional perspectives following Krippendorff's (1980) procedures. A second experienced coder studied all the transcripts and generated themes. The themes were compared, and the reliability was assessed using inter-coder agreement $k = 0.845$ (Cohen, 1960). Discrepancies were identified and deliberated by the coders until a consensus was reached.

Findings

The content analysis of the 12 in-depth interviews was themed along the seven research questions. The findings are generally attributed to one of the four professional perspectives; Advertising executives (AdExec), public relations executives (PRExec), corporate social responsibility directors or owners of campaigns (Funder), foundations and non-governmental organisations (NGOExec), or (All) indicating a consensus from all perspectives. Near-verbatim phrases from the transcribed interviews were used to highlight the insights of the executives along the research questions and the model constructs and relationships.

RQ1: Can the target audience's prior knowledge significantly impact the effectiveness of development communication?

The background of audiences certainly affects how they receive the message (All). We should explore the audience's prior knowledge, determine their motivation factors based on their perceptions, values, beliefs, and information, and craft messages accordingly (AdExec). Prior knowledge research can also

help us identify opinion leaders who can relay the message to the target audiences (PRExec). Devcom campaigns need to be done in an engaging and tailored approach, and investigating the prior knowledge of target audiences will enable the campaign owners to do this effectively (AdExec).

Changing prior knowledge is done over time, gradually. Whether the level of knowledge is too low or the beliefs are too deeply embedded in the minds of audiences, consistent exposure to messages over a long period will ensure sustainable learning (NGOExec). An NGOExec gave an example of how she raised awareness in a school on the inclusion of visually impaired students over time. Teachers who were initially reluctant to have visually impaired students in their classes eventually became welcoming and even proud to teach those students (NGOExec).

Segmenting audiences per prior knowledge helps tackle this knowledge effectively (AdExec). It is worth noting that lower socioeconomic classes are less willing to have their prior knowledge challenged than higher socioeconomic classes because lower socioeconomic classes have minimal amounts of information. They believe in the information they possess and resist it being challenged (AdExec).

RQ2: Can the target audience's knowledge organisation models significantly impact the effectiveness of development communication?

Target audiences' knowledge organisation models significantly impact the effectiveness of devcom campaigns (All). The interconnected knowledge organisation model increases the likelihood of sustainable and efficient learning (All). An advertising expert explained that devcom campaigns should adopt holistic preparation and implementation approaches to trigger the interconnected knowledge organisation model. The campaign design should ideally include tools encouraging interconnected knowledge organisation, including stages, activities, videos, and real-life examples.

Identifying the target audience's development stage and knowledge organisation model is essential to crafting the campaign's messages accordingly (Funder). The campaign's tools and messages must be tailored to the target audience's needs, motivating factors, prior knowledge, and rituals. Ritual-specific messages enable audiences to easily plug the targeted behaviour into their daily lives (NGOExec). Other factors facilitating this plug-in are choosing an appeal in sync with the target audience's psychology and social vocabulary, identifying and targeting figures influencing the target audience, and using clear and consistent messaging (PRExec).

Prioritising key messages avoids overburdening the target audiences and encourages interconnected knowledge organisation (Funder). Due to their high internet research abilities, younger audiences are more likely to adopt the interconnected knowledge organisation model (NGOExec). Older, less tech-savvy audiences can be encouraged to use the interconnected knowledge organisation model by being subjected to emotional appeals (AdExec).

RQ3: Does motivation influence the quality, intensity, persistence, and direction of learning behaviours and affects acquiring new information accordingly?

The motivation to learn is an integral element of sustainable and effective learning (All). Campaign owners must segment target audiences per degree of motivation and motivation factors, and design their campaigns accordingly (PRExec). When audiences feel understood, they are more likely to listen to the messages presented to them (NGOExec). Also, consistent and clearly communicated messages that convey the campaign's value and calls to action are likely to increase motivation (Funder).

Motivation encourages interconnected knowledge organisation. Motivated learners are driven to mirror the information they receive against their prior knowledge (Funder). Unmotivated people should be targeted through channels and messages that don't require much effort to be understood (PRExec). Interconnected knowledge organisation increases motivation (NGOExec). For example, 57357 Children's Cancer Hospital in Egypt encouraged employees to turn off office lights on their way out to save energy by highlighting that money saved from the electricity bill will be channelled to treating more patients.

Engaging audiences motivates them to listen to the campaign's messages and is especially applicable to older individuals who have accomplished their work and family goals and are looking for more goals to fulfil. Making older audiences feel needed will encourage them to pay attention to development

communication messages (PRExec). Messages delivered in entertaining and culturally relevant ways will likely increase motivation (AdExec).

RQ4: Does developing mastery require learners to first: 1) acquire essential component skills, 2) practice effectively integrating them, and 3) know when to apply them?

When the context allows, the implementation plans of devcom campaigns should include innovative activities that allow target audiences to go through the three stages required for mastery (Funder). The implementation plans should also acknowledge that those three steps will require a long time (NGOExec).
Identifying the target audience's existing knowledge level is essential to know how far they are in the prerequisites of mastery. It is best to convey simple messages to ensure that all levels of mastery prerequisites attainment have been covered from the least to the most advanced (PRExec). To encourage mastery, it is also vital to communicate simple, concise messages that clearly illustrate the applicability of recommended steps (NGOExec).

Enabling target audiences to reach mastery requires devcom campaigns to espouse habit creation as one of their main objectives. Identifying the audience's needs, prior knowledge, and overall context is integral to guiding them toward habit formation (PRExec). Sometimes younger audiences don't have the discipline to go through motivation prerequisites. In this case, highlighting the benefits of completing the three steps might encourage discipline. The same applies to all age brackets of unmotivated audiences (NGOExec).

Sometimes target audiences strongly master skills other than those targeted by devcom campaigns. A public relations expert gave the example of illiterate people with sound mathematical skills targeted by illiteracy campaigns. Sometimes it is good to acknowledge the existing mastery and guide audiences on further capitalising on them and using them as tools to master the sought-after skills. To encourage mastery, you must speak the audience's language and operate within their comfort zone (All).

RQ5: Are deliberate practice and goal-oriented feedback integral to knowledge transfer?

Deliberate practice and goal-oriented feedback are integral to effective change (All). Deliberate practice and goal-oriented feedback transfer knowledge to the audiences' long-term memory and enable them to achieve mastery, which happens over a long time (NGOExec). Deliberate practice and goal-oriented feedback channels must be tailored to the audience's context. For example, community health workers can be used in underdeveloped areas that do not have access to the internet and mass media channels (PRExec).

Deliberate practice and goal-oriented feedback are applicable only when target audiences are motivated to change their behaviour and are willing to receive feedback on their performance (Funder). Goal-oriented feedback must be delivered in a non-imposing, non-condescending, assertive, constructive manner tailored to the target audience's context; otherwise, it will be useless or counterproductive. Accordingly, training the feedback provider on how to give goal-oriented feedback is crucial for the success of the process (NGOExec).

The deliberate practice applies to development communication efforts, but goal-oriented feedback only applies when a call to action occurs (AdExec). Efforts to encourage deliberate practice and goal-oriented feedback must be directed at the correct targets, which entails a deep and accurate understanding of the development campaign's context (AdExec). A campaign owner gave the example that targeting women in family planning campaigns would be useless if the men make those sorts of decisions.

The learning objective must be clear to the audience to encourage deliberate practice and goal-oriented feedback, managing audience expectations of the requirements and outcomes (PRExec). Bottom-up and top-down communications are a form of needed goal-oriented practice in policy change. Policymakers need to hear from the public before they form policies, and after they are enacted to ensure that they serve the intended purpose (Funder).

When audiences feel that they have an active and needed role in the development efforts, they will be more encouraged to conduct deliberate practice and open to receiving goal-oriented feedback

(NGOExec). Deliberate practice in devcom campaigns is done through intensity, frequency, and continuity of messages (AdExec).

RQ6: Are learner development and learning climate integral to effective and sustainable learning?

A supportive social and cultural learning climate will encourage sustainable learning, and the learner's ability to process messages affects the impact of devcom efforts (All). The learner's ability to process messages is affected by their prior knowledge, and unconducive prior knowledge can lead audiences to interpret messages differently or reject them altogether (Funder). A campaign owner gave the example of how some communities view birth control as religiously incorrect. Unless spoken to by trusted clerics, they will reject any message encouraging family planning.

In-depth research is crucial to identify opportunities and challenges in the audience's learning environment and determine their level of development (Funder). This research advocates building campaigns tailored to the target audience's overall context. It is vital to accurately identify people who influence the target audience's decisions and include them in the campaign's targets (AdExec). Segregating audiences per learning climate conduciveness and level of development also enables the campaign to tailor its messages and approaches to all target audience categories (Funder).

Raising awareness, incentives, and motivation are among the ways to deal with unconducive learning environments and increase the development of learners. In certain cases, building on the target audience's empathy and including practical activities in the implementation plan of campaigns can also be effective in increasing audiences' development (PORExec).

Motivation can mitigate an unconducive learning climate. Motivating increases when target audiences trust the campaign and feel it cares about them. Hence, in-depth research is essential, allowing the campaign to address the audiences in their language and be personalised enough to earn their trust (AdExec).

RQ7: Can self-directed learning, guided by a metacognitive approach, result in an efficient and sustainable knowledge transfer?

Positive learning climates and high learner development pave the way for target audiences to become self-directed learners. Self-directed learning supports an efficient knowledge transfer process (All).

Self-directed learning needs time to occur, and efforts dedicated to achieving self-directed learning must be frequent, consistent, and long-term (NGOExec). Developed audiences can organise their information interconnectedly and are more motivated to learn as they see value in the process. They will accept deliberate practice and goal-oriented feedback to become self-directed learners (PRExec).

Motivation, conducive learning environments, supportive prior knowledge, and a foundation of ample information are prerequisites to achieving self-directed learning. Accordingly, research of the audience about self-learning prerequisites is integral for building a campaign that resonates with its audience (Funder). Furthermore, segregating audiences is integral to effectively reaching each target audience subgroup (AdExec).

The seven principles of learning are similar to Maslow's needs hierarchy, where all principles build on one another, and reaching the last principle entails completing all the preceding principles first (PRExec). There need to be realistic expectations regarding the number of self-directed learners resulting from a devcom campaign. In this context, quality is over quantity, as a few self-directed learners can become campaign ambassadors and create a huge ripple effect in their communities (NGOExec).

Availing easily accessible information further enables target audiences to develop and become self-directed learners. To push audiences towards self-direct learners, we must first capture their attention, change their perception, make them feel that the message is relevant, and then articulate the message and call to action clearly (Funder).

Engaging target audiences to create communication and igniting a sense of competition are crucial factors initiating motivation and self-directed learning (AdExec). A campaign owner working on awareness-raising policies gave the example of how she opted to educate a large group of people about

her cause. Then she helped them form a community where they could continue exchanging knowledge and propagate what they learned.

Conclusion

The seven research questions resonated well with the professionals, each from their perspective. It was clear that the four perspectives had unique insights that kept repeating themselves throughout the interviews. All twelve experts agreed that the learning paradigm applies to devcom and that research is integral to creating an impact.

They all agree the story does not end with persuasion. It ends with the creation of habits, rituals, and the establishment of self-directed learning. There is no single approach to development communications implementation plans. The approach of each campaign is determined by its cause, cultural context, and target audiences. Audiences are no longer passive information recipients. They have become selective and aware information exchangers, and digital is not always the way to go.

However, advertising executives kept returning to the importance of segmenting the audience in different ways; prior knowledge, knowledge organisation, motivation, stage of development, and learning environment. They are more concerned than other professionals about tailoring the message to different target segments. Finally, they believed in high-frequency repetition to solve many issues, such as different audience competence levels.

Public relations executives focused most on research in all phases of the model. They advocated engagement activities and on-the-ground events, and ritualisation of behaviours to instil. More than once, they spoke of older generations as having a potential for conveying developmental messages. They anticipated cultural, social, political, or reputation crises from implementing specific programs and referred to crisis management provisions.

NGO executives always stressed that effective devcom requires long-term planning and flexible execution with attention to the phases the target audiences go through. They seem to worry more about the fine details on the ground and notice the differences between younger and older, less and more educated, and lower and middle-class audiences, for example. They also saw the role of cause ambassadors and the power of personal rather than mass communication.

Funders conversed about planning and costs. They referred to research but without details. They are worried about resistance from the target audience and how to pre-empt it. They foresaw conflicting rather than supportive prior knowledge and unmotivated more than motivated beneficiaries. Finally, they were concerned about why the model did not address key performance indicators and how to measure them.

Discussion

This study suggests a new learning paradigm in devcom that is more inclusive and audience-centric than the dominant paradigm and more structured and sustainable than the current participatory paradigm. The associated sustainable learning conceptual model encompasses the devcom campaign audience's internal and external factors, which directly impact their attention, understanding, processing, recall, and retention of the messages. Consequently, these messages uphold sustainable behaviour change, self-directed learning, and advocacy for new concepts.

For development efforts to be truly impactful, they need to be sustainable. Sustainable development adopts a holistic approach that intertwines economy, environment, culture, and society (United Nations Educational, Scientific and Cultural Organization [UNESCO], n.d.). Coupled with being sustainable, they need to be inclusive for development efforts to be truly impactful. Sustainable and inclusive development efforts should be supported by devcom that are also sustainable and inclusive. Sustainability and inclusiveness are critical features in the knowledge transfer fostered by the suggested learning paradigm long after the campaign.

Servaes (2020) describes devcom as the advancement of knowledge that aims to generate a consensus for action on social change and factors in the capacities, needs, and interests of all those concerned. Servaes adds that while communication channels and technology are essential in devcom, their use is not an end. All four of Servaes' concerns are addressed in the new learning paradigm. If

Devcom is the advancement of knowledge, then it is about learning, being motivated to learn, deliberately practising tasks and receiving goal-oriented feedback, developing mastery, and becoming self-directed learners capable of advancing their knowledge. Servaes stresses action on social change, which requires learning and mastering new behaviours to automaticity (Ambrose et al., 2010) becoming a self-directed learner and knowing how to think and control learning is the essence of social change. Servaes adds that Devcom must acknowledge and factor in the capacities, needs, and interests of all those concerned, which is covered in the four moderating factors in the proposed sustainable learning model. The model recognises the importance of the learners' prior knowledge and how they organise knowledge. It also considers the learners' current development level and social, emotional, and intellectual climate about learning.

The new model calls for tailored communication in every aspect; the learners, the process, and the environment. The learners' motivation is a prerequisite for the learning process, but their prior knowledge, how they organise it, and their level of development all moderate and possibly mitigate knowledge transfer and advancement. The learning process is at the model's heart, from practice to feedback, mastery to advocacy. The model's attention to deliberate practice is the foundation for sustainable learning. The goal-oriented feedback is another pillar in all learning models to achieve behavioural change. The learner acquires mastery of the advocated behaviour, develops a genuine interest in the knowledge and cause, and eventually turns around and advocates it to others.

The sustainable learning model addresses the learning environment eloquently in three words; the social, emotional, and intellectual climate. The social climate can challenge and even reverse the learning process by casting a storm of doubt, resistance, shame, and even blasphemy opposing the advocated social change. The emotional climate can affect the learners' motivation from the onset but can also distract them throughout the process, hindering their advancement. Finally, the intellectual climate may ridicule, discourage, or contradict the advanced knowledge or intended social change.

Learning is built on communication, and learning processes are variations of types, means, and styles of communication exchanged through various media to advance knowledge, skills, or abilities. Servaes stressed that media and technology are a means, not an end, for devcom. That concurs with the theories of learning, which advise tailoring the media and technology to the extended context.

The study conducted twelve in-depth interviews with four categories of development communication professionals (advertising experts, public relations experts, campaign owners, and on-the-ground development professionals). Collectively, they had over 300 years of experience in their field. In the interviews, we ratified the principles of the learning paradigm with the experts. They professionally subscribed to the model with its three integrated perspectives; the learner, the process, and the learning climate.

Limitations

This article chose to build the research on one theory. However, an extensive literature review of education theories concluded that Ambrose et al.'s (2010) work encompasses fundamental learning theories preceding it. Even a summary of that review could not be presented in this article for word-count limitations. The sample was limited to 12 in-depth interviews. However, the interviewees were strategically selected to cover the four key stakeholders in the ecosystem of devcom. The 12 in-depth-interviews produced a thick description of applying the seven principles to devcom. Those interviews also produced a wealth of insights into the process, priorities, and hurdles in implementing the seven principles. Nevertheless, there is a need to develop the measurement model associated with the proposed conceptual model to test it quantitatively. Each of the eight constructs identified in the conceptual model must be measured through four to six indicators (questions or items) that need to be developed in future research. The sample was limited to the Egyptian context. All 12 professionals practised mainly in Egypt, with a few who practised in the MENA region. Nevertheless, their profound insights probably apply to all developing countries where devcom is most needed and used. Still, other geographical contexts in Asia or Latin America may require further research and testing.

Future Research

As with all academic work, this article has shortcomings and areas needing further research that should be addressed in future research efforts. Further research is needed to develop and use a quantitative measurement model to test the conceptual model across contexts and geographic regions.

The proposed model seemed to have face validity in the 12 in-depth interviews, which were generic to a great extent and covered different communication campaigns across sectors such as health, family planning, domestic violence, child abuse, and antismoking. Given that devcom often tackles sensitive topics or deeply embedded ideas, it may very well be that the proposed model would need to be tweaked to fit specific contexts. Further research is needed to test if the proposed model applies to all sectors in its current formulation. Various campaign media mixes include field activation and events the target audiences attend. It would be good to explore whether all principles in the suggested model are applicable, notwithstanding the media mix involved in the campaign. More insights on whether further model tailoring is required should the campaign be bound to specific mixes.

We approached key stakeholders involved in creating and managing devcom campaigns. However, future research should address other stakeholders, such as learners and educators, social and community health workers, and individual and corporate donors. Another possible group of stakeholders to be addressed is policymakers responsible for institutionalising the sought-after change, as they may have views on the campaign in light of the country's broader development priorities and the institutional capacity of the relevant government agencies. Also, media outlet owners who may view how each media outlet and media type (for example, news articles and TV shows) can best serve the campaign objective should be considered.

Another area for future research will be if the owner of the development campaign is alien to the culture of the learners and the context in which the devcom campaign will be implemented. For example, the USIAD and other international development agencies sponsor and influence many devcom campaigns in developing countries. Ironically, they generally use multinational agencies to develop and implement their campaigns. Future research would study how those campaigns understand and respect the local culture and context. Moreover, corporates support national causes such as providing education and health to the underprivileged. Does lack of coordination between their campaigns confuse the audience, and does good coordination reinforce the impact?.

The conceptual model identifies four moderating variables. A critical area for future research is to propose and test other potential moderating variables that can be tested. Other moderating variables may be distinctive to particular applications, such as health, family issues, gender, or socioeconomic class. Future research should also address the moderating effect of budget availability. If the available budgets are high or limited, the devcom and results may differ.

Finally, the advertising and public relations interviewees were quite intrigued by the model and saw the potential for its application in advertising for products and services. That is a new domain for researchers interested in the learning model to explore and develop for marketing communication.

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