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ABSTRACT

Spirituality-based organizations in India, centered around a set of beliefs and practices, with a charismatic guru figure at their head, have embraced the information age enthusiastically, and have come to the fore as key players in the national narrative around social welfare and development in recent years. We conducted a qualitative study of four Hinduism-oriented Spirituality-based Organizations (SBOs) in India using interviews, on-site observations, and in-depth examination of their online outreach material to understand the ways in which technology impacts and advances their core functions. We examine five core ways which technology plays a critical role in these SBO - community-building, dissemination of core practices, self-fashioning, philanthropic outreach, and organizational growth - all of which inform these organizations' influence in society beyond the confines of their adherents. We find that all these functions are enabled in different ways by digital technologies, which have organizational value in and of themselves, but also play an equally important role in helping extend these organizations public image as modern, innovative organizations aligned with broader aspirations of national development and social welfare.

CCS CONCEPTS

• Human-centered computing → Empirical studies in HCI.

KEYWORDS

Spirituality, India, Social Media, Technology, ICTD

ACM Reference Format:

Azhagu Meena SP, Varuni Bhatia, and Joyojeet Pal. 2020. Digital Divine: Technology use by Indian Spiritual Sects. In *Information and Communication Technologies and Development (ICTD '20), June 17–20, 2020, Guayaquil, Ecuador*. ACM, New York, NY, USA, 11 pages. https://doi.org/10.1145/3392561. 3394650

1 INTRODUCTION

Historically, modern Hinduism has had a strong relationship with various forms of media and technology in terms of its outreach and public visibility [41][26, pp. 81–105]. Unlike book-based faiths such as Abrahamic religions that have a relatively uniform set of practices, Hinduism has traditionally embraced a wide range of practices

ICTD '20, June 17-20, 2020, Guayaquil, Ecuador

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ACM ISBN 978-1-4503-8762-0/20/06...\$15.00

https://doi.org/10.1145/3392561.3394650

that include ritual worship, the significance of gurus, and sect-based customs and practices. With the emergence of streamlined, systematic Hinduism in the colonial period, socio-cultural reform has been at the center of modern Hindu organizations. In the past century or so, the traditional Hindu concept of seva (ritual worship offered to a deified object or person) has undergone a transformation to mean service to the society and the nation. This transformation underscores the reformist and developmentalist program of modern Hindu organizations since the colonial period—from the Brahmo Samaj and Arya Samaj to the socio-political group, the RSS[5].

In recent decades, a number of Hinduism-oriented Spiritualitybased Organizations (SBOs) have emerged in India that operate as sects or religious sub-groups within Hinduism. They support syncretic, spiritualist practices meant to appeal to a wide range of audiences. While the HCI literature uses the term spirituality and religion interchangeably [4, 42, 50], the SBOs studied here depart from organized religion and present themselves as primarily non-denominational spiritual organizations, deriving their legitimacy from a charismatic guru figure, rather than through canonical Hindu scriptures. For the scope of the paper, we refer to Pargament and Mahoney's work in which they describe spirituality as a "private, internal process that is negotiated and narrated by the self, sometimes within or through religion, sometimes despite religion or in its absence" [31].

SBOs in contemporary India studied here present a form of organized spirituality, offering both a world of spiritual concepts and a community of shared practices. India has a long history of such organizations from the colonial and post-colonial periods in which various charismatic religious leaders have attracted a considerable following; some of these have successfully turned into enduring communities of religious identity and spiritual practices. In the last few decades, a number of major SBOs have built a significant presence in India, boasting of a large number of followers, sprawling premises at key locations, a considerable media presence and, often, some kind of implicit political influence.

These organizations (Table 1) on the one hand claim to closely follow canonical Hindu practices, especially those relating to yoga and meditation. On the other hand, they broadly present themselves as rational, scientific, and secular institutions, with a universal, non-denominational appeal. All four organizations studied here present themselves as pan-Indian organizations with followers from all parts of India. They each also have a global component, including with adherents who are not of Indian origin. This was an important criterion for choosing these SBOs over others for our study. Nonetheless, a closer look at each indicated a regional, linguistic, caste and class differentiation amongst their followers.

While there are thousands of small sects around charismatic leaders, there are broadly two kinds of large-scale SBOs in India boasting followers in hundreds of thousands or more. The first,

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which have a regional or caste association and draw their adherents largely from a single group – these include the Dera Sacha Sauda from Punjab or Shri Yoga Vedanta Ashram from Gujarat, even if they have smaller offices around the nation. The second type of SBO tends to be headquartered in one location, but have an appeal that extensively crosses linguistic groups – these include the Art of Living foundation and Isha Foundation, both led by gurus who often sermonize in English, in addition to in local languages.

The SBOs we studied tended had a diverse following on language, caste, wealth, as well as on the axis of the urban/cosmopolitan versus non-urban/ parochial divide. Two of the SBOs studied here tend to be driven primarily by doctrinal and philosophical content, while two others incorporate a range of bodily practices. All had some involvement in social service for the community beyond their adherents.

Our study examined the everyday use of ICTs by SBOs and their adherents in India. This as an aspect of daily life as central as any social or economic function is, in a country a high level of religious adherence, and because of the role these organizations have played in the national narrative. The use of information technologies for everyday purposes in SBOs also offers a space for reflection on the dissemination and ubiquity of technology throughout society. In this study, we refer primarily to digital technologies such as mobile based apps, social media, and internet websites alongside back-end systems and mined data that come out of these. Social platforms used by these SBOs primarily include Twitter, Facebook, Instagram, YouTube, and WhatsApp. Our paper makes two significant contributions to the ICTD community. First, we extend ICTD outside of an instrumental economic development perspective through a deep examination of technology in a religious/spiritual setting, a domain that is central to daily social and cultural life in many parts of the Global South and has received very little attention in this scholarly community. Second, we draw on literature from religious studies to show that the characteristics of modern spiritual organizations dovetail from Hindu socio-religious movements focused on social welfare and national development of the colonial and postcolonial era, and that digital technology only extends what has been done through other means in the past. To do these, we situate our findings in five groupings that are characteristic of religious organizations - community, practices, self-fashioning, philanthropy, and organization. Looking at how technology intersects with these helps us understand both the evolution enabled by digital technology, and the continuities engendered in how things work.

2 RELATED WORK

Anthropologist Vinay Lal astutely remarked, "Hinduism is the most apposite religion for the internet age." He goes on to say, Only Hinduism, then, can match the internet's playfulness... [It] anticipate[s] most of the internet's most characteristic features, from its lack of any central regulatory authority and anarchism to its legendary intrinsic spirit of free inquiry and abhorrence of censorship [28].Like political movements, religious groups have been resourceful with using modern means of communications to propagate and amplify their message. Several Hindu reformist and revivalist movements from the 19th century onwards actively harnessed contemporary

communications technologies for outreach. This included the widespread use of the printing press to publish propagational material in the form of translations of scriptures, prayer books, worship manuals, commentaries, and liturgical texts. Given that literacy rates in colonial India remained abysmally low, coupled with the immense popularity of the divine image in Hinduism, print medium was strategically used in bringing inexpensively produced "calendar art" versions of various Hindu gods and goddesses to almost every single Hindu household in the late nineteenth century [40]. In the twentieth century, religious outreach continued through the print medium. The Gita Press and its runaway success in bringing easily readable versions of the Hindu scripture Bhagavad Gita to the doorstep of every educated Hindu is a prime example of how print technology transformed peoples' religious practices [7]. Spiritual sects from across religious and denominational lines used print, radio, and television at various points to fulfill their positions, not just in India, but all around the world. In India, each form of broadcast media has allowed for new forms of outreach. Hindu mythologicals emerged as a genre of cinema unto itself in India [6, 33], and children's comic books took upon themselves the sage task of familiarizing young Indian children with Hindu tales and legends [35]. The runaway success of the teleseries Ramayana, based upon the life and legends of the Hindu deity Ram, on national television in the 1980s [32] accelerated television's challenge to print's domination for religious outreach. The use of inexpensive VHS (Video Home System) emerged during the same period as particularly significant in abetting the rise of "new age," global gurus such as Bhagawan Shree Rajaneesh [46]. And the modest and unpretentious cassette tape foundationally transformed the manner in which Hindu religious material-from sermons to devotional songs to right wing propaganda-was being produced, disseminated and circulated in the last couple of decades of the 20th century [34]. Cassette and VHS technology also played a key role in disseminating Hindu right wing propaganda that led to the razing of a 16th century mosque in Ayodhya in December 1992, as well as subsequent memorialization of the event. The events in India mirrored what was happening elsewhere in the world. While televangelism took hold in the broadcast-heavy parts of the West in the 1980s, radio-based outreach including faith-based communication and evangelism played an important part of religious practice in the US [18, 45], but also in Latin America [38] and parts of sub-Saharan Africa [39]. A strand of religious outreach that happened through the audio cassettes also underlined the communications strategies of movements that had tensions with the nation state they operated in [23, 47]. In India, cable television created a new market for exclusive spirituality-focused channels[30], and the subsequent growth of internet access, and specifically social media use gave rise to a spurt in internet-based content. Spirituality-based channels were often affiliated with one or another such as yoga-guru Baba Ramdev and Art of Living founder Sri Sri Ravi Shankar [20].

In the present day, digital technologies are being widely deployed by Hindu spiritual and community leaders, while the fundamental user-driven nature of this technology simultaneously abets the production of a vast amount of digital material relating to Hindu traditions and practices. Recent body of scholarship on religion and digital technology in India with a focus on Hinduism has primarily highlighted the rise of the Hindu nationalism and its relationship to new media technologies [21]. The changing face of Hindu rituals, sacred spaces, religious authority, and community life with the proliferation of new media is also beginning to be studied [43, 52]. However, the body of scholarship is sparse when compared to religious traditions in other parts of the world, particularly Christianity in the western context.

Modern Hinduism has remained strongly attuned to practices of self-fashioning that bring the social and the personal into a dialogue. During the colonial period, modern Hindu reformist movements encouraged a particularly anti-colonial, nationalist self-fashioning that brought together one's identity as a Hindu alongside one's commitment to the nation [16]. While philanthropy in its strict sense was not widely practiced, the idea of seva or service was becoming strongly embedded in various Hindu religious movements from at least the colonial period and, in the case of Sikhism, even before as a core practice of the religion.

Seva-a term that implies ritualized service of a deity or an unquestioning servitude to an overlord in orthodox Hinduism-was repurposed in the anti-colonial, nationalist milieu of the early twentieth century to mean service to the nation as an integral part and parcel of one's religious duty [2, 48]. So dramatically was the idea of seva transformed in the colonial period that it has now come to stand for a wide-range of activities that could very comfortably be characterized under the umbrella term of Hindu Philanthropy. Service, in this context, largely implies voluntary work performed by members of that particular religious organization, such as "providing education, healthcare, welfare and social development" [3]. Beckerlegge's study focuses exclusively on the Ramkrishna Mission and the centrality of service that the Mission holds. It is, however, in the context of another voluntary Hindu organisation, the Rashtriya Swayamsevak Sangh (RSS), that the idea of seva is broadened to bring together serving the nation alongside serving the religion in the most direct fashion [5].

There is a long history of work on the interaction of religion and technology, broadly defined, both in terms of the means of recording and outreach of religious texts, practices, and philosophies. Yet, the recent expansion of digital environments has given new meaning to the debates on this intersection, and as scholars like Campbell have argued, this domain continues to be an understudied area [10]. However, as past work has noted, the offline and online religious practices affect each other and disrupt the existing religious status quo by reshaping its identity, community, authority, and communication [12, 13], which happens at both the individual and the community level. At the individual level, technology is used as a means for contemporary religious practices and blends personal and professional life [51]. For instance, in recent years, several works have focused on how ICT is employed to take rituals to cyberspace [19, 25, 27, 29, 36], on the use of social media and communication platforms for meditation practices [9, 17, 53], and on designing computer games to facilitate spiritual experience [8]. A related line of work focuses on the application of technology not directly on the spiritual practices, but on the environment to make it conducive for spiritual experience such as automating home technologies on the days dedicated to spiritual practices [49]. Similarly, several works discuss how technology is employed for religious community building in novel and diverse ways, and how the online community empowers who are and dis-empowers who are not part

of the groups, respectively [11, 14, 24]. Moreover, past studies have noted that though traditionally inclined religious societies appear to show disinterest in the intervention of technology in religion, they have continuously worked at building and promoting tech-based religious practices [15, 22].

Our study focuses on those aspects of religious (or spiritual, as many of our informants insist) life that we found to be most meaningful for users of the digital medium in their pursuits. Our study is situated at a unique moment in the socio-political history of India, in which spiritual organizations, particularly a small number of large and highly influential organizations, have carved a niche in the public imaginary, particularly through broadcast and social media, as a central part an aspirational discourse of nationhood. This discourse around nationhood fully participates in a strong narrative about development, both of the self and the society, in ways that necessarily complement each other and have policy related implications as well. The sophisticated use of technology into the internal and external communication of these organizations is a key part of how these organizations integrate notions of national and spiritual development into their practices and branding. Unlike previously mentioned scholarship, our study was able to discern that many ordinary users turned to the digital medium for a combination of purposes. In addition to practices and community-building, these users also turned to digital technology to help them with spiritual disciplining as a part of what we call "internal management," as well as participate in externally-oriented philanthropic measures. Our study, thus, highlights aspects of self and societal management that users of digital technology for spiritual ends are able to bring together in an effective fashion.

3 METHODOLOGY

We conducted a qualitative study, including interviews, observations, and participation over three months between September and December 2019. We identified participants through purposive snowball sampling. The first cycle of research comprised unstructured interviews, field visits, and reading of existing literature on four key spiritual organizations. The main site for interviews was Madurai, which is a key center for Hindu worship, referred to as the "temple city". Our choice of Madurai was based primarily upon the presence of varied religious groups, including the SBOs we focus on, in the region. The lead author is fluent in Tamil and familiar with the religious world and spiritual practices of the city, and this too informed our choice of the city as the primary site for our field research.

The objective of the first cycle of unstructured interviews and field visits was to get an insight into nature, day-to-day functioning, and participatory culture among various religious and spiritual groups as well as their use of technology. We interviewed 43 people who were either associated with or managing any Hindu-related mainstream religious groups such as priests or devotees at major Hindu temples, SBOs, or people who take part in trance activities such as spirit possession. Spirit possession was an important part of our initial research because it is often pointed out as an activity that the SBOs (and historically several other religious reform movements) distance themselves for, highlighting it as a recidivist activity that does not represent modern spiritual practice. For this reason, we have not included that part of our fieldwork in our analysis here.

Throughout this work, we use the notation of SO* and S* to refer to spirituality based organizations and their key leaders, respectively. Our research is primarily based on the in-person and telephonic interviews we had with the volunteers of four SBOs (henceforth referred to as SO1, SO2, SO3, and SO4). While we were able to visit the headquarters of SO1, SO2, and SO3 for observations, SO4 allowed only their course-takers in. SO1 is located in the outskirts of an urban town in South India, where they offer various practices based on yoga and meditation, and particularly focus their discourse around engineering the self. SO2, located in a metropolitan city, offers a similar set of yoga and meditation programs based on Hindu scriptures. SO3 is located in a separate complex in a village in South India and is centered around a charismatic leader who focuses closely on discourses and individual contact. SO4 is a relatively older SBO, whose founder has passed away, but they focus heavily on meditation practices. All four had significant compounds as well as presence in cities across the country. All were based loosely on Hinduism, but represented some moving away from canonical scriptural ideas and idol worship. While we do not identify any organization or individual from the interview process, we do use identify various spiritual organizations online and their online footprint from public data, and use examples or excerpts from publicly posted advertisements, online posts and YouTube videos to help set up our arguments. The examples used are not necessarily from the four organizations studied.

Following the initial interviews, we analyzed transcripts and narrowed down our research questions to five core areas that emerged as important areas of discussion. These were community, practices, performativity, service, and organization, themes that emerged repeatedly in the interviews with all three broad buckets of interviewees. In the second round, we only interviewed people associated with SBOs, but also started examining digital artifacts such as their apps, web presence, social media, along with physical outreach materials. We did 2-day visits to three of the four SBOs that allowed visits, a fourth had strict requirements on who could attend, thus we were not permitted. Thirteen volunteers and five managers participated in in-depth interviews, and in addition we had conversations with various devotees and visitors at the sites. The identities of the organizations as well as the individuals participating in the research have been kept anonymous.

The interviews lasted between fifteen minutes and two hours and were conducted in English, Hindi, and Tamil. All interviewees were informed that their conversations were part of a research project. The study design went through an IRB process prior to the interviews. The interviews were translated and transcribed into English. Our data data set includes 200 pages of transcribed interviews, 100 pages of field notes, 60 memos that reflect the introspection of the authors, and over 200 digital photographs. The interviews were conducted in Tamil, Hindi and English, and all interviews were fully transcribed for analysis. In both cycles, the religious or spiritual association of the participants was the primary factor for recruiting and not variables such as age, gender, occupation, and education. The anonymized data was read by our team of researchers, and we held group discussions and coding sessions before carrying out our thematic analysis. Further, the primary researcher read the transcripts several times and assigned descriptive codes in the manner described by Miles et. al [37]. The core thematic analysis was done by the three authors.

4 FINDINGS

Our findings are restricted to what one can ascertain about SBOs from analyzing publicity materials as well as official and semiofficial communiques. We shall not be focusing on doctrinal, philosophical, or practiced aspects of these organizations, except where they allow us insight into an engagement with information technologies by them.

An overview of a sampling of SBOs (Table 1) shows that several of them have a very significant following online, particularly on social media, and several of them have their own apps on mobile app stores. It is also clear that an individual figure, in all cases, has a significantly larger following than the organization itself. This highlights the individual-centric nature of social media outreach, often reflective of the cult of personality around a key leader in a movement. We also see that different organizations have different approaches to where they lay their attention on social media - some like Sri Sri Ravi Shankar are much more prolific on the public-facing Twitter, whereas Mata Amritanandmayi is more prolific on Facebook, which is allows for relatively more interactivity among existing adherents, while Sadhguru and Baba Ramdev are leaders on YouTube, which is better suited to their sermons or Yogic demonstrations.

All four spiritual organizations that we studied have exclusive Information and Technology (IT) cells to manage their outreach or technological services. In order to build these IT cells, some organizations pulled in volunteers from among their existing followers who had engineering backgrounds, or they conducted tailored programs for IT professionals worldwide to attract sharp tech minds to work for their objectives. Several of these IT cell members were graduates of top schools or were from major software companies.

All SBOs studied almost exclusively created their own content, reinforcing the idea of having everything that could be needed for a follower available through a single window. YouTube is an important public channel, since it both allows the reinforcement of content to committed followers as well as outreach to potential new recruits. We also found that all SBOs had content that underlined the need for going beyond online videos towards a more high-touch environment for people who were new to the organization.

"here is a difference between reading the menu and eating and digesting the food, enjoying the taste, digesting it, getting the nourishment into your body. YouTube videos are titillations. Just to tickle you a little bit ...To bring it into your head youtube video is okay, to bring it to your life, you need a strong practice. You need a profound system so that it becomes a part of your life process." - S1 on YouTube

We found three recurrent themes across the online content of all SBOs. First, there was a use of scientific/rational language alongside the use of religious/spiritual language. Three of the four organizations either used a high degree of engineering and management vocabulary in their content - such as the use of technical metaphor or management jargon.

Spiritual Master (Organization)	Facebook	Twitter	YouTube	Instagram	Apps
Atman in Ravi	164K	#	23.5K*	#	Yes
Baba Ramdev	10M	#	3.51M	8.3K	Yes
BK Shivani (Brahma Kumaris)	2.9M (654K)	22.6K* (8.7K*)	2.33M (281K*)	574K (#)	Yes
Gaur Gopal Das	4.5M	63.2K*	2.65M	1.6M	Yes
Mata Amritanandamayi	16.2M	23.6K	#	#	Yes
Nithyananda Paramashivam	1M	18.6K*	184K*	#	Yes
Ram Rahim (Dera Sacha Sauda)	# (163K)	1.2M (365K*)	173K (36.8K*)	# (#)	Yes
Sadhguru (Isha Foundation)	6.1M (1.2M)	2.3M (256.3K)	4.76M (926K)	3M (552K)	Yes
Sri Sri Ravi Shankar (Art of Living)	4.5M (2.2M)	4.1M (255K)	759K (534K)	515K (247K)	Yes

Note: #-Accounts unavailable; *-Unverified accounts

Table 1: 'Followers' trend of spiritual masters and corresponding organizations (in parenthesis, if active) in different social media platforms. The last column indicates if either has a dedicated mobile application. Data as of 26th April 2020.

Second, we found that all four called out social work as a central tenet of what they did as an organization. Hence, the stated goals of the organizations were not just around providing religious and spiritual guidance, but to actively impact change in society through non-profit activities, which are in effect aligned with some of the developmental imperatives of the state.

Third, we found that all SBOs used a discourse of "distress" in their outreach, particularly directed towards casual users, underlining that their outreach was specifically relevant to the lives and needs of those who found themselves in difficult times.

Fourth, we found that management vocabulary and corporate speak are highlighted when the charismatic leaders of the SBOs are being compared to one another, particularly by highly-educated adherents who take away who take away science and rationality from the sermons and approaches of their leaders.

"I prefer S1 over S2. S2, in his talks refers to vedas and puranas. But, S1 is scientific and logical. For instance, in his video on aura cleansing, he gave a scientific explanation for one of the ancient rituals which my mom does at home. Initially, I thought what mom does was nonsense, but after watching his video I got convinced. He even gave an example of an ADHD child on whom this process has worked well." - R6

4.1 Community

When respondents discussed the ways in which they came to being adherents, some recalled going through process that involved a search for the 'right spiritual guide', which typically meant sampling various gurus before arriving at the right one. In this, SBOs are different from mainstream denominational religions in that the primary relationship is between the individual and an invisible and inaccessible entity. However it is here in mediating this purportedly "unmediated" relationship between human and divine that technology as well as the figure of the charismatic guru have a central role to play. The existence of the leader or guru in flesh and blood increases the opportunity to interact—with him as well as with the rest of the community. While the leader can create new content periodically, the community helps create a second layer of communication, a reminder that the leader is always around them.

One pattern we noticed across SBOs was a very sophisticated awareness within the organizations regarding the point at which an interested "lay" follower can be nudged towards "conversion" and a deeper commitment. We consistently heard in the interviews that people turned to SBOs at a time of distress. Some among those who joined their SBO during a stressful period in their lives or that a critical life event made them join the movement. Another common response was people noting a longer standing discontent such as feeling different from the rest, or mocked and judged for their choices. The SBO represented both a space of acceptance by an authority figure as well as an entirely new community to start life in. For instance, when R5 was initially sceptical about the guru S1 following the demise of her husband, R5's daughter (already an adherent) used S1's sermons on YouTube to help her mother better understand the teachings. R5 sceptically participated in a death ritual organized by S1, which was a turning point for her.

"There are few rituals designed by S1 (guru) for dead ones. I was very disturbed after the death of my husband. My daughter took me to SO1. I saw people performing rituals for dead ones to ensure that their soul rests in peace. I did the same for my husband. I totally forgot about the ritual. After 2 months or so, S1 and my husband came in my dream. In the dream, S1 came to our home along with my husband. He dropped my husband at our home, smiled and left.....After this dream I feel so calm. Now I am focusing on my everyday routine and also helping my children as much as I could. This is because of S1's grace. S0 I started practicing SO1's Yoga techniques everyday." - R5

While the physical presence of the guru was a highly exalted and valued thing, technology enabled engaging with others in the community. Devotees have queries, and gurus are supposed to have answers to them. Yet the guru cannot respond to every query, thus layers of devotees on WhatsApp groups form a second layer of communication, ensuring that questions got answered. A vast majority of our respondents were on WhatsApp groups related to their SBO where they posted questions or daily concerns - seeking and offering support. WhatsApp groups offer a light-touch means of staying in contact with the community, but in many cases also became a first stop for news, casual conversation, or social support. The existence of these WhatsApp groups aligned with the lifestyles of many members of the faith, whose economic lives required them to be able to move and recreate social networks. Without technology, in the past, members of such sects would invariably have trouble continuing their practice on moving away from the primary site. However, both the access to technology and the increasingly large footprints of some of these organizations has meant that there is greater access to community in new locations. Geographical spread among adherents also acts as a stimulant to those seeking community.

"I checked other organizations too. They don't have a strong presence there, but SO1 has. There is an (SO1) WhatsApp group. Now I am in the US. I felt so out of place here. But through this WhatsApp group, I am connected with like minded people. We all meet once a month and meditate together. I was longing for such a like minded company for long and I finally got it" - R11

As with R11 above, we noticed a trend in respondents that they had sought out more than one SBO, and several had at least briefly been "shopping" with various organizations and leaders before finalizing. However, we rarely find that adherents moved away from a single SBO once they had settled in. After this, we find significant conviction with regard to the buy in for the charismatic leader, the programs of the organization, and the community itself.

"S1 is very cosmetic. He simplifies all complex issues and gives a vague answer for all to woo people. He never gives one straight answer. People follow him but I don't feel like following him. I follow S5 (not included in this study). S5 might sound boring for the followers of S1. S1 markets very well. But I feel S5 is genuine. I follow S5's teachings on YouTube and Twitter, we even have a whatsapp group. I feel glad about my association with S5" - R8

One organization formalized the extension of the leader through the community by creating an online blessing tool. SO2 has a program that trains "advanced" adherents to bless others – analogous to say priests or the act of confession and blessing in the Catholic faith. However, individuals do not need to come in person to receive a blessing; these are enabled online in the SBOs. The volunteers of SO2 create organizations on various social media platforms with the blessers who have completed this program and the basic level meditators, typically those who avail of the blessings. These groups have two functions - to share one's own problems or that of their connections and to bless the sufferer to offer solace.

Besides being run through community groups, blessing requests are also important in that they are quasi-public, in that everyone else in a group knows they have been asked for, or given. Adherents share requests related to health issues, personal concerns, pets, or financial issues, to name a few, in much the same way as people of faith "pray for" one or another entity or issue. Besides the technological means of delivery, the language of the blessing is also packaged within a skill-based vocabulary, with a coating of science. As one of the respondents said,

"...You should complete the basic program and 2 advanced programs to be eligible for doing a blessings course. Once you do this course, you can bless people. People who finish this course are also made a part of whatsapp groups. Guru receives a lot of blessings request on an everyday basis. He won't have time to bless everyone personally. Blessings program is very scientific. You just transfer the energy In (my) lonely time, I open either facebook or whatsapp and bless people." - R25

We see with SBOs that the spiritual community also plays the role of enabling these new kinds of rituals and practices, such as online blessings. With easy certification, online spaces are sufficiently populated with individuals able to provide blessings and those in need can get one from the best-available blesser, rather than an analog model that would require going to one's regular priest. This form weakens the individual's relationship with a human religious authority, such as a priest, but in the process also makes the online community, with its ability to network ad hoc, an elastic and central part of the individual's spiritual experience with the SBO.

4.2 Practices

One of the key tenets of most organized religions are its practices of the self, and this was no different of the SBOs that we studied. All the SBOs studied had specific ritual requirements of adherents, many related to traditional Vedic or Yogic practices. The reformulation of bodily practices associated with Yoga, rendering it more in tune with modern science and aimed at mental and physical well-being of the practitioner rather than any salvific goal, is characteristic of all kinds of modern Yoga-based movements [1, 44]. We noticed in two specific cases that the SBOs had given a distinct brand name to a set of physical and meditative practices associated with modern Yoga. Having separate brand names rendered these practices into commodities, thereby enabling the SBOs to conduct online courses where people could choose which one they wanted to do. The branding of Yoga and meditation practices also enabled participation in physical practices without necessarily investing in its religious dimensions.

In the context of practices, the nature of the relationship between the follower and the key leader of the SBOs, and technology's role in mediating this relationship becomes critical. In one of the SBOs studied, physical contact with the key leader is considered to be a central part of the movement's outreach model, which is not possible remotely. But for the others, where easily transferred meditation practices were the main sell, this was easier. Volunteers of two of the SBOs covered in this study reached out to different communities in person and conducted meditation programs, charging from little or nothing to a significant amount, depending on the level of program and the economic status of the community. The success of such programs was contingent on the availability of an appropriate space, especially trained meditation guides, the level of interest within the community, and the possibility of finding a longer-term advocate for their program within the community.

Social media allows good metrics to understand where one's known following is, which helps the SBOs we studied to carry out targeted marketing of their practices-as-commodities. Content placed on social media platforms can be tracked for location, the extent to which it is getting reactions, and what content, within a broader body of work, gets the most affective appeal. For both these SBOs online engagements offer insight into where the outreach efforts can be focused to turn online fluid audiences into anchored followers.

Managers we spoke to, during the process of our work, felt that the current mode of program offerings, through YouTube videos, dedicated websites, and apps, have significantly reduced human effort and time spent to recruit followers and make the programs more successful. For instance, guided meditation videos create a window for skeptical audiences to experience their practices, which they would otherwise not engage in since getting them through the door into the ashram or a community session would typically be very difficult.

In the past, while the volunteers had to repeat the same set of instructions every time they organized the same program in different communities and languages, the online platforms and the availability of dedicated apps in multiple Indian languages have now greatly enabled them to offer tailored programs. For instance, one of the spiritual organizations was able to amplify its outreach through their well-packaged online programs and revealed that,

"During Diwali, first part was offered as a free online course. We created Diwali gift vouchers and asked our volunteers to share it with their friends and relatives. Inorder to complete the second part they had to do physical registration and also pay the fees. This initiative was a grand success. We got 6.25 lakhs registration within 4 days." - R9

Maintaining the integrity of the practices is critical to the organization as it scales up. One problem that SBOs have traditionally faced is around the dilution of their principles and practices as they pass through several rounds of new entrants. We found in all four SBOs that there is a huge inflow of volunteers from diverse cultures to become the trainers of their programs. Thus having content online is uniquely useful since it can be closely vetted. Either the leader themselves will create the content, or it is appropriately vetted such that the precise message with the exact instructions on practice can be relayed.

"ICT has maintained the integrity of the program. It prevents the information from re- interpretation and misinterpretation. Now, we are able to reach more people. S1 himself gives instructions on how to do the practice through videos. This gives authenticity to our program" - R19

Here, the app space offers particular affordances that are valuable in maintaining practices. As with mainstream religious practices, where apps provide instructions, reminders, scriptural guidance etc. the same is true for SBOs. We noticed in our engagements a gradual shift from print and audio-visual material on CDs to purely online communication. All three visited SBOs had bookstores, but while physical books were on sale, the focus in each was on getting people to sign up for their apps. In bookstores (as elsewhere) there are ads to get people to follow the leaders or the movement on various social media platforms

"I update my spiritual knowledge, mostly on the phone, through WhatsApp and Twitter. I don't read books, we have Alexa with S2. Ipad is more than enough. (however) I purchase books to gift it to my friends and relatives, it is a token of love. But the messages and tweets are dispersed. So I pick all the interesting ones and paste in a single mail and I will mail the same to myself. Data is safe, and I will also get a book reading experience as it is all in one place" - R2 As we see with R2, the book is mainly symbolic, but it nevertheless plays an important symbolic role. Two SBOs offered courses on "digital detoxification" wherein followers are made to stay away from their digital devices for a period of time. Here, we see the tension between the practices - on one hand, the digital technology is the primary means of outreach. On another, the very recognition of digital technology addiction as a contemporary social problem signals the SBOs understanding of issues that afflict our generation, and demonstrates a willingness to address them.

The message of digital detoxification is disseminated through claims positioned as rational arguments, such as cautioning followers about impacts of the radiowaves emitted by mobiles. One SBO also said that ICTs can lead to addiction and distract the followers from the spiritual path since it is overloaded with anti-spiritual information. The attempt, thus, is as much to regulate what the followers receive over social media and other digital platforms as it is to encourage their overall digital health and well-being

"We organize a special program for IT professionals. The program starts on Friday evening and ends on Sunday afternoon. It is a silent retreat program. All IT professionals are requested not to use any of their gadgets. This process prepares them to receive the knowledge that we are disseminating effectively. Like hammer and screwdriver, technology is a tool. Though designed for a good purpose, it can be also used for causing destruction." - R1

4.3 Performance

Present-day SBOs are constantly evolving. They construct, deconstruct and reconstruct their identity and public persona based on societal requirements. They recognize that their follower base is a culturally and linguistically diverse one, while being relatively more homogeneous in socio-economic composition. The recruitment and servicing of communities through online means has meant that the performance of self has to be done carefully, in a professional manner, aligned with how people expect to see high quality content online.

"People watch videos on YouTube, so if we are using YouTube as a platform for promoting our spiritual organization, then, we should also provide a similar quality of videos to our audience, if not they might skip our video and move on" - R1

The professionalization of content creation, and the involvement of young, social media savvy volunteers has impacted the form and content of SBO outreach. One trend in particular is the rise of shortvideo formats, driven in part by Instagram, that focus on both quick content consumption, but also repeatable short-form videos that can be viewed over and over. Rather than stick to the long-discourse style of guru-adherent exchange, we found use of Instagram-style short form content, as well as YouTube playlists which allowed the flexibility of longer form content as well as collections of short videos that come together thematically as a whole.

"our team has created 30 seconds videos on various topics such as drug addiction, stress, relationship issues and many such relevant issues which affects the daily life of people and for which spirituality has a solution. We have several WhatsApp groups with different volunteers. They can share these videos as their status on every day basis. This approach is working well" - R25

These examples of short-form content are often aimed at achieving virality, since they easily forwarded on fora like WhatsApp. Even short 3 to 5 minute videos have micro highlights that last for 5 to 10 seconds, featuring the most interesting parts of the videos. We found that each of the SBOs makes fairly sophisticated use of hashtags and affordances of existing social media.

"On Twitter, if you follow the hashtag.....you will get every update. We created hashtags. This was a top trending hashtag. If it is in media, it will reach masses. Twitter is official social media platform for many organizations. If Tweet per unit time is high, the media is also interested in that. Through media, we can reach masses, that's why we focus a lot on Twitter. These days, we are using Instagram for targeting youngsters. Facebook is just for sharing memes. Facebook is dying. Instagram is next. It fulfills all our needs. I made a crowdfunding in post in Twitter, WhatsApp, Facebook and Instagram." - R26

One of the important findings here has been the minuteness to which organizations have studied the unique values of specific social media channels. YouTube pages of S1, for instance, use slickly edited songs and videos, aimed at younger audiences, and content is branded with clever, memorable catch lines.

"....We also created a rap songReligion has failed already. Youth are not interested in temples. Pandits are not role models anymore. I think you might well be aware of the crimes that are happening in the name of religion. Ours is a spiritual organization. No philosophy is propagated here. You learn the tool and you go. You need not come back again..... You need not mark the attendance regularly like in a temple or any other religious institutions..." - R25

An important part of performing the leader and organization to the public was diversifying the message to the audience. SO1 and SO2, both had recruitment and image management exercises that varied by platform. Ads and posts on LinkedIn have a corporate touch, and both SO1 and SO4 had management-specific discourses. While SO3 in its messaging focused on love and community and generally avoided contemporary or controversial issues, the others were willing to engage with major national events, and express their opinions. Both SO1 and SO2 were implicit in their support for a specific political party and gave a nod to nationalistic sentiments in the run up to major elections. Another form of performance is the affiliation with public figures. SO1, SO2, and SO4 all had well publicised interactions with public figures such as celebrities, politicians, sportspersons etc. Two of the SBOs also had major retail interests for which marketing was done by public figures.

"S1 did a live video for (a major environmental project) with many celebrities. K1(celebrity) has around 20 million followers. S1 has around 2 million. When S1 does a video with K1, the video will reach more people." - R26

Finally, all the SBOs that we studied had international branches cumulatively in over 100 countries. This meant that the branding of the organization, and particularly the performance of the key leader had to be carefully orchestrated to appeal across cultural diversity. "We have a toll-free number. If people want to get any clarification about our program, they can call us. People who approach a spiritual organization might be in some kind of frustration or distress. I don't think it is right to direct them to some automated system. They need a human touch. They need someone to listen to them and comfort them. We have a live chat window in our website and people in our IT team can volunteer to respond to the queries on rotational basis." - R1

4.4 Philanthropy

Insitutionalized social service work in addition to devotional and spiritual activities was a defining aspect of all the SBOs studied. Each of them was involved in more than 50 different socio-economic development projects, and all integrated the social service work into the core value proposition for new recruits.

"Maslow's need hierarchy theory works well here. Only when the basic needs of the people are met, they can focus on selfactualisation. What is the point in talking about spirituality to the needy crowd? They might not be in the state to receive that knowledge." - R1

SBOs use technology at various points through a project's cycle from planning and executing to post-hoc analysis of impact. ICTs facilitate volunteering opportunities across locations and enable ways of identifying unique skill-sets and pooling talent. An advantage of a diverse and sizable follower base which is well connected is that a great deal of expertise exists within the network itself. Institutionalizing philanthropy means this expertise can be brought alive at short notice. One SBO reported a reduction in screening problems in their flagship village adoption project from 6 to 2 months by using data collection and analysis apps. This increased their reach five-fold, and demonstrates the importance of technology in development and social welafre projects undertaken by the SBOs. However, the lack of privacy and data management standards alongside strong back-end data manipulation abilities through tech savvy members of the SBOs helps increase the granularity of analysis and reporting. These villages in turn also serve as recruiting grounds for new adherents.

"We have developed an app for collecting data from the villages in which we are working. We collect data such as income, number of members in the family, skills they have, their medical condition and more such data. Volunteers collect that data from the ground and they share it with us. In the past, these activities were done manually. Data collected from villages should be sent by post for analysis and more such complexities. Now, within no time, the data collected in those villages reaches our head office. This data helps the head office team to do need analysis and plan interventions which will be helpful for those villages." - R14

The engagement with technology for philanthropy follows a longer history, beyond what is seen currently with digital technology. One SBO has been using a hyper-local community radio service to disseminate relevant information to selected villages across India, and has been doing so for two decades, winning recognition from the government en route. While we clearly see a push towards more social media and app-based information, there is a recognition that a diversification of the kinds of technology-based outreach, based on the client populations, needs to be in place.

"The content for our community radio service was curated locally. There was a demand for such a service in the community. People also took an active part in the programs organised by us. It was unbiased information dissemination medium which was available to the people at free of cost. We use to share lot of information which includes updates on immunisation, maternal health care, agriculture, education and much more. This information which was previously unavailable to the masses helped them a lot." - R1

The immense influence that SBOs have, both through their adherents within major corporations and government, but also through their political influence, is clear in the ways they are able to galvanize technical capabilities and resources around initiatives that are important to them. For all practical purposes, we find that once an SBO becomes large enough, it becomes a key player in the 'development' work of the region where it operates.

Two SBOs, working on environment-related philanthropic initiatives, were able to use satellite maps of from the national space agency to trace water paths, land use patterns, and conduct environmental analysis on dam construction. SO1 has a massive environmental project, and is able to use its moral authority and positioning as a socially-conscious organization to both raise funds and conduct activities that may otherwise be fraught because of environmental and regulatory concerns. The group uses a large social and mass media campaign for outreach, which is pitched on the merits of the project rather than following of the organization. High quality videos and ads on YouTube to help people understand the gravity of the issue, trending hashtags on Twitter to grab mainstream media's attention, and live videos on various social media platforms with celebrities and with the general public to display their reach. Importantly, the organization also understands the value of quick and on-the-spot engagement, encouraging easy donations from adherents through technology-enabled payments using PayTM QR codes. Donors receive instant e-certificates as appreciation (alongside tax breaks). There is also a standard template for volunteers who are part of the crowdsourcing work, rewarding them when they bring in new funds in a pyramid structure.

4.5 Organization

All the managers interviewed agreed that ICTs have greatly strengthened their internal organization and management. Masters within the SBOs are able to organize meetings over video calls with members and volunteers who are dispersed across the world. Tour calendars of both the leaders and key figures within the SBOs are uploaded on the apps and websites. While these do not dilute the centrality of the key charismatic leader, they create alternate voices of authority. The professional management of social media also means that organizational priorities can be better enabled through coordinated efforts. A case of fundraising highlights this:

"I shared my crowdfunding post for P1 on Twitter. S1 from his personal handle, shared this post in his wall and also appreciated me for the efforts. I was unable to believe it. Around 1000 people had liked this post. I was starstruck. I immediately shared this on all my social media accounts, Twitter, Facebook, Insta, and WhatsApp. " - R14

Volunteers in three SBOs had moved to cloud-based solutions to compile and organize data from different sources systematically. For instance, by sharing the original Photoshop files created by one of the teams of SO1 with other teams in the organization, volunteers working on diverse projects were able to use the template with minor modifications. This is arguably an import from the corporations that many adherents come from - attempts in all the organizations are made to standardize communications and create tree structures to keep track of files.

"There were 10 people for content creation. We had created content banks. WhatsApp was an important tool. It helped us a lot in coordinating with different volunteers. I had created folders in Google drive. I shared the link with the rest of our team. Google drive helped us a lot in content management. I always have my phone with me. So I can access the content anytime and share it with the relevant people whenever it was required." - R25

Event management, especially those involving the leader, are a critical part of what SBOs do. Volunteers spend a lot of time and energy organizing various events throughout the year. People who are in key positions within the spiritual organization are a part of more than 100 WhatsApp groups to coordinate their functions. Technology has dramatically increased the ability of groups to micro-manage their activities.

An organizer of one of these revealed that they deploy around 25 departments to manage a single event. These departments manage a range of functions which include logistics, travel, food, accommodation, registration, financial management and much more. We found that followers who work on the organization side of things are constantly on the lookout for new technologies that can help them do their work better.

"If you see, a new start-up called 'xxx' has a template for all the events. The final product is more like an app. We also have a calendar and planner feature in xxx.... One of our teams keeps looking for new technological developments continuously. We will then see how that can be used in our organization. (For instance) we create emails with different templates and also integrate it with social media. We have developed an inhouse tax filing system for ourselves. All our taxes are filed internationally through this system. This is one of the largest in-house-auditing systems. We use technology in such things. If technology can perform all such operational tasks, we can focus just on our spiritual development" - R16

Leading SBOs have divided their courses into two parts. The first part is offered at free of cost over the internet, but the followers who have completed the first part are expected to finish the course by attending the second part of the program at the nearest meditation program venue in person in the presence of one of their own spiritual trainers. Similarly, one of the respondents categorized the entire spiritual process into two distinct categories: knowledge acquisition and experiential realization. According to him, technology can be used very effectively for the former function, but not very much for the later. An important function of the organization has to do with managing when and how content goes online, and when the escalation to the physical presence of the leader is necessitated. This was a consistent theme, and a good deal of technical thought was put into the inflection points for this. Unlike with SO4, where the majority of organizational effort is put into managing physical contact with the leader, SO2 is restrictive about who reaches the leader, and when, through a careful organizational process. An aura of importance to the physical presence also needed to be communicated. Here, the technological avatar of the leader is what gets engaged till a devotee is "ready" for the real thing.

"When the master touches you, the devotee will get another level of clarity. Just being in the presence of the master opens the devotee to various unleashes dimensions of spirituality... we currently we are not offering any of our important courses online. We use video lectures only for knowledge dissemination." - R22

One of the SBOs that we studied used CRM (Customer Resource Management) software for managing their day to day administration and volunteer data. At the reception area of these organizations' headquarters, visitors are offered entry passes with QR codes. As with entry into a swipe-card enabled office building, the QR coded badge reminds the bearer of the technological frame within which the organization and access to it is situated.

5 DISCUSSION AND CONCLUSION

Past work on the interface between religion and ICT in India has focused largely on individual SBOs and their charismatic leaders. This comparative study of the four groups underlines how central technology has become to the public outreach and functioning of organized spirituality in India. While there are clearly elements of these developments that are no different from an information systems study that may approach questions of functional efficiency in an organization, commercial or otherwise, there is something unique in the discourse of technology we see across the four groups.

The technology use we observe here is more than instrumental, it is woven into the being of adherents and watchers alike as a marker of modernity. We see in the use of technology in managing philanthropy or day to day organization that there are obvious functional improvements that allow for a smoother running of operations. But our interviews also reveal that the design and use of apps, social media, and digital content allows unique ways of organizing and enabling spirituality and religious experience, while at the same time also surveilling the community. The latter is essential to maintaining the moral order of groups that are increasingly geographically dispersed.

The role of technology in the national narrative is a key part of this – digital technology is an inseparable part of aspiration in contemporary India. This kind of aspirational relationship with digital technology is constantly reproduced in the public sphere through its institutional apparatus - whether in schools, in popular media, or in mainstream politics. While on one hand, technology as an applied articulation of science and a necessary handmaiden of development is largely seen to stand in contrast to religion, what we find the SBOs do in practice challenges any such notion of a distinction between spirituality and technology.

The kind of cultural changes that we have described above-from community building to everyday practices, organizational management to dissemination of charisma, philanthropy to social service-all point to a large-scale use of instruments and infrastructures of development for religious and spiritual ends. This allows us to make the claim that from a postcolonial, Global South perspective, we need to redefine development and to push the parameters of development beyond its socio-economic registers to think about how technology fundamentally transforms how people relate to all aspects of their lives, including religious and spiritual aspects. It allows us to reconceptualize development from within a religious framework, where spiritual organizations stand at the helm of developmental programs. Technologies, often those specifically spoken of in "developmental" terms, we highlight, have a pivotal role to play in reformulating tradition, and enable people to relate to their history, culture, and values in new, attractive, and empowering ways. In doing so, they have repercussions that go beyond the cultural.

For some observers, this may be an ironic consequence of the spread of ICT. Even where scholars observing the impact of digital technology on religious practices have challenged this binary between science and religion, they have tended to emphasize the secularizing role that technology has played in society. In the context of India, and through the study of the SBOs covered here, we see that digital technology has facilitated new forms of engaged spiritual practice which exist alongside, rather than in opposition to, modern life. Many of the adherents that we talked engaged with their SBOs almost on an hourly basis - something that in the past would probably only be possible for those who had forsaken public life to lead lives primarily within spiritual sects. Now, technology allows this level of engagement seamlessly, and across geographies.

In the words of our interviewees, technology has led to a greater emphasis on community formation, enabled a more meaningful engagement with practices founded in religious traditions, and led to the formation of new organizations that effectively operate as sects led by a charismatic guru figure. Moreover, the SBOs participate in development in a much more direct fashion through their philanthropic and social service programs.

6 FUTURE WORK

Here we discuss the limitations of our study and note directions for future work. First, our study was limited to four SBOs. India has many more such organizations. Each one deserves its own study and, taken together, they are sure to extend our understanding about the deep penetration of ICT in the Indian social, cultural, and religious contexts. Further, we engaged with a good number of volunteers in each SBO. However, as the scale of operation of these SBOs are much larger than we expected, in future we seek to interact with more volunteers working on various sectors within the organizations to bring in a diverse perspective to our work. Third, we would like to extend our focus from Hinduism based SBOs to other religious groups and communities. Finally, we specifically expect to draw design implications for ubiquitous and extraordinary computing, and celebratory technologies from the lens of post-colonial computing to contribute to the literature on techno-spirituality in the global south.

ICTD '20, June 17-20, 2020, Guayaquil, Ecuador

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