Digital Spiritual Formation in Post-Christian Europe

A Framework for Spiritual Formation in Digital Culture

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Abstract

English-speaking Bible apps pioneered digital access to Scripture, offering production quality and formats familiar from other media. YouVersion reported more than one billion cumulative installs across its family of apps in 2025. Other language communities have often received a more limited experience. Meanwhile, many spiritual apps have inherited Silicon Valley's engagement mechanics without adequately asking whether those mechanics serve formation. Growing content catalogues offer choice and recommendations, but receptive content remains largely generic.

This paper examines these problems through cognitive science, behavioral data, Christian formation tradition, and the European post-Christian context. It focuses on spiritually liminal[1] audiences: Europeans who have walked away from institutions but have not stopped seeking. Its hypothesis is that AI could support more personally responsive spiritual formation and make richer resources available to less-resourced language communities. Whether it can do so without commodifying spiritual practice or displacing human community remains an open question.

The analysis develops a **missional product design framework**: seven principles and six diagnostic questions connecting theology to product development. Multimodal formation, resistance to spiritual commodification, grace-based mechanics, and a communal horizon constrain what responsible personalization could mean. A concluding evaluation section distinguishes business metrics from provisional formation indicators and signs of harm, and identifies findings that would count against the paper's hypotheses. The framework specifies requirements for future design and evaluation; it does not demonstrate that a particular product produces spiritual growth.

Keywords: Digital spiritual formation, Bible engagement, AI companion, European Christianity, liminal spirituality, behavioral design ethics, post-Christian context

[1] Liminality (from Latin *limen*, threshold): **the experience of being in transitional or in-between spiritual states.** Defined fully in Section 1.5.

Introduction

Imagine a common morning commute in Berlin. A woman on the U-Bahn in Berlin opens a Bible app on her phone. She grew up evangelical, but is drawn to contemplative prayer now. Struggling with doubt since her mother died, worried about her family. She scrolls past a daily verse and reading plans she knows won't happen. She searches for "comfort after loss." The results are there but generic, the same list everyone gets. A newer AI chatbot might have felt more personal, but still lacked the scriptural grounding, theological range, and continuity needed to become a trusted spiritual companion. She closes the app. Opens Spotify.

She is not unusual. In Germany, 40% of non-religious respondents say they find biblical content *interesting*. Still 56% never open a Bible at all (Deeg et al., 2023). Roughly 51% of Americans say they wish they engaged Scripture more (ABS, 2024). The aspiration is there, but the apps are still not reaching them.

This paper asks why, and what a different approach would look like.

The paper starts from a European reality: urban professionals navigating faith across post-Christian, post-secular, but also some actively Christian spaces. Christianity is still culturally central in North-America in many ways, the home of the most successful Christian apps. Not so in Europe. That minority position surfaces questions that majority-culture thinking can miss.

This paper bridges academic research and design application. Part 1 maps the changes: cognitive science, cultural shifts, the AI wave already moving. Part 2 examines what the Christian formation tradition actually requires, then integrates empirical research with theological grounding into seven universal design principles and six diagnostic questions (the missional product design framework). Section 2.5 sets out evaluation requirements, limitations, and findings that would count against the hypotheses. No product outcome is offered as validation of the framework.

Three assumptions need to be said upfront—they'll need ongoing testing. First: spiritually liminal Europeans will actually seek formation through a dedicated app. Second: an AI spiritual companion can support formation without displacing human community (*Antiqua et Nova*, 2025). Third: European minority positioning raises questions that majority contexts overlook. Not because the framework only works in Europe. Because building from a place where Christianity is **culturally marginal** surfaces problems that otherwise stay invisible. The frameworks and analysis have merit on their own, separate from whether any one product executes well.

PART 1: WHAT'S CHANGING AND WHAT HASN'T CHANGED YET

When missionaries enter a new culture, they listen, learn the language, understand the rhythms of life, then build something serving people as they are. Digital culture warrants that same respect. We live bicultural lives: behavior, language, attention function differently on screens than offline. Yet churches keep applying century-old approaches to a fundamentally different medium (Hutchings, 2017; Grethlein, 2016).

Part 1 maps that cultural context. What screens do to cognition. How people actually engage Scripture, and how far that is from what apps assume. Four waves of innovation, each importing the design philosophy of its era. The European reality where every American assumption breaks. The audience most underserved. And the AI turn already happening. Each section builds on the last, and by the end, a trajectory emerges that demands a different kind of response.

1.1 What Screens Do to Scripture

In 2019, John Dyer gave the same Bible passage to two groups of readers (one on screens, one in print) and measured what happened. The screen readers accessed Scripture more often. They also understood it less. "Readers have lower comprehension when reading the Bible on screens compared to print. However, readers using mobile devices are more likely to engage scripture daily than those using printed Bibles" (Dyer, 2019, p. 195). **More access, less depth.** This is the central design tension, and every Bible app lives inside it.

The emotional data tells an even sharper story. After reading Jude, 30% of digital readers reported feeling "confused" as opposed to just 16% of print readers. Only 36.7% of the digital group felt "encouraged," versus 44% in print. Dyer's conclusion is worth quoting directly: "the screen appears to induce a mood that is more confused [and] less spiritually nourished" than print Bibles (Dyer, 2019). That's not a usability problem. That's a formation problem.

Broader research confirms this pattern. A 2019 meta-analysis of 33 studies found paper readers outperforming screen readers on comprehension (the "screen inferiority effect"). The mechanisms are well-documented. Screens train us to skim (Wolf, 2018). The device fragments attention through multitasking association (Mangen et al., 2013). Print provides spatial memory cues (where something appeared on the page) that screens eliminate (Baron, 2021). Most troublingly, people overestimate their screen-based comprehension (Ackerman & Goldsmith, 2011). Scripture engagement historically required sustained attention, deep comprehension, reflective pause. Digital reading undermines all three.

But nuance matters here. Retention matters differently at different engagement levels. Deep study needs comprehension. Habitual spiritual practice works differently: formation happens through *repeated encounter* rather than single-read recall.

The American Bible Society's State of the Bible 2024-2025 data bears this out. Using Harvard's validated Human Flourishing Index, the ABS found that Scripture *engagement frequency* correlates with flourishing more strongly than comprehension depth does, especially among Gen Z (ABS, 2024-2025). A caveat: the data is cross-sectional, not longitudinal; the finding is suggestive, not causal. And "engagement" includes audio, prayer, and communal encounter, not only reading. So the frequency-flourishing correlation supports regular spiritual engagement across formats. It's not an argument for more screen-based reading.

In its 2025 year-end summary, YouVersion reported more than one billion all-time installs across its family of Bible apps (YouVersion, 2025). But the cognitive research invites a question: does the way people encounter Scripture digitally support the depth of engagement that produces formation?

What Wellness Research Suggests

Secular mindfulness apps offer a useful analogy and expose a research gap. Meta-analyses of mindfulness-app trials report small average reductions in depression and anxiety symptoms relative to control conditions, with longer-term effects and some comparisons still uncertain (Gal et al., 2021; Linardon et al., 2024). These symptom findings do not establish spiritual formation outcomes or an effective dose for a spiritual formation app.

Park et al.'s (2024) scoping review screened 413 articles and included five studies under its Gen Z, digital-methods, and spiritual-and-mental-health criteria. Within that scope, including an updated search in November 2023, it found no study of a digital spiritual-and-mental-health application among Gen Z. A separate four-week single-group feasibility study of Pray.com reported preliminary pre/post improvements among racial or ethnic minority participants, but its uncontrolled design cannot establish a causal app effect (Laird et al., 2024).

These findings and the ABS associations motivate testing digital spiritual practices, rather than demonstrate their effects. The analogy remains indirect. The ABS findings require longitudinal replication before drawing causal conclusions; the prayer-app feasibility study is preliminary and includes disclosed provider employment, consulting and equity relationships.

An important distinction follows: evidence about mindfulness symptoms, prayer-app feasibility and Scripture-engagement associations does not validate the mechanisms an app uses to encourage return. Whether engagement is driven by genuine desire or manufactured by streak mechanics remains a design ethics question Section 1.3 examines.

Implications for Design

The comprehension deficit is real but not the whole story. Engagement frequency correlates with flourishing even when comprehension is lower. The wellness evidence and Bible engagement research motivate a design hypothesis: short, rich encounters (5-10 minutes) at regular intervals, achieved through experiences worth returning to rather than mechanics that manufacture return.

Gerbaulet and Korn (2018) study "zenware" (software externalizing the user's desire to focus, then receding). Apps with audio devotionals partially do this: press play, the screen becomes secondary. But incidental screen exit (audio playing while the phone sits) differs from *intentional* screen exit designed around physiological transition: ambient music pulling toward receptive stillness, explicit

invitation to put the phone face-down, formation in darkness. *Christian zenware* designates a digital contemplative container where technology initiates encounter then steps aside. A design philosophy for specific experiences (audio devotional, guided meditation), not the whole product.

The cognitive research tells us what screens do to reading. But reading is only one way people encounter Scripture, and, as the engagement data reveals, not the way most people encounter it at all.

1.2 How People Actually Engage — And the Aspiration Gap

Three million people subscribed to one-year Bible reading plans on YouVersion on January 1st, 2024 alone (Gerhardt, 2025). Bible Gateway data shows what happens next: reading plan traffic drops 30% in the first week. A third gone by February. Half by May (Bible Gateway, 2018). By December, completions are vanishingly small. Sequential reading makes it worse. Readers who start Genesis hit sacrificial regulations in Leviticus by late February (what might be called the Leviticus wall), exactly when resolution motivation wanes.

The plans don't fail because people lose interest. They fail because the structure assumes consistent daily availability most lives can't provide.

Missing a day creates a failure state (the what-the-hell effect documented in goal-regulation research). Walk Thru the Bible reports "thousands of people give up because they've fallen so far behind they don't believe they'll ever catch up." To be fair, YouVersion has introduced catch-up features. But the underlying architecture (linear, daily, cumulative) still punishes irregular lives.

What People Actually Do

Large-scale survey data should unsettle every Bible app designer. When Lifeway Research (2017) asked Americans how they approach the Bible, the most common active response was: **"I look things up when I need specific information"** (30% of respondents). Only 22% reported reading systematically, while 27% read sections recommended by others. Another 35% reported never picking it up independently.

Behavioral data confirms this. The most-searched terms on YouVersion and Bible Gateway aren't theological concepts; they're **emotional states and life situations**: love, anxiety, peace, fear, hope (YouVersion, 2025; Bible Gateway, 2018). The most-highlighted verse is Isaiah 41:10. "Do not fear, for I am with you." A reassurance verse, not a study text.

The dominant use case is personal. Someone has a feeling or a life moment and turns to Scripture for something that speaks into it. That's what people actually do.

Apps have evolved. Audio devotionals and AI chatbots serve this mode better than early search-based tools. But even the best current responses are generic: the same devotional for everyone, the same AI answer regardless of whether this is the user's first crisis or their tenth. What's missing isn't better responses; it's *memory*. A system that knows your story and can offer something specific because of it.

The Aspiration Gap

Approximately 77% of Americans own a Bible (ABS, 2025). Only 10-14% read it daily (ABS, 2024-2025; Barna, 2025). And 51% say they wish they read more (ABS, 2024).

That gap (genuine desire, minimal practice) is the story. I've been there myself. Open YouVersion, feel overwhelmed by reading plan options, close it. Committed Christian. Real intent. The app failed to meet me where I was.

Regular practice matters. But what drives the return matters more. A user opening a devotional each morning because yesterday's resonated is being formed. A user who opens it to preserve a 47-day streak is being managed through loss aversion. Same frequency. Different formation entirely.

The barriers people cite are telling: 26% lack time, 17% don't know where to start, 16% aren't excited about reading, 15% find the language difficult (ABS, 2024). These are exactly the navigation, accessibility, and format problems design should solve.

How Format Is Shifting

People are listening. Audio chapter plays on YouVersion reportedly grew 47% year-over-year in 2023 (YouVersion, cited in industry press; independent verification unavailable). In 2024, global digital Bible distribution surpassed print for the first time: 25.9 million digital versus 22.5 million print (Evangelical Focus, 2025). When people have spiritual questions, they increasingly look outside the church altogether, turning to friends, videos, podcasts, and digital resources rather than to institutional religion (Bible Society/UBS, 2024).

But the data understates what is actually happening. Audio alone is not the breakthrough; audio *adapted to the listener* is. Streetlights Bible (Shedd, 2009) took the NLT text word-for-word and performed it over original hip-hop and lo-fi production. The text did not change; the sonic environment did. The result: 430,000 users and 18 million plays, reaching audiences (young urban men in Chicago, initially) who had never engaged with Scripture in print. Bible BFF (Idea Garden, 2025) went further, retelling Bible stories in casual Gen Z register with a narrator who sounds like a friend on FaceTime. It reached 60,000 downloads and $60,000 in monthly recurring revenue within its first month, driven almost entirely by TikTok. Neither project changed what Scripture says. Both changed *how it sounds*, adapting delivery, register, and sonic environment to specific audiences. **The pattern suggests that the next step is not another audience-specific adaptation but adaptation to the *individual*: audio shaped by who you are, what you are carrying, and what you need today.**

And this recovers something ancient. For most of Christian history, Scripture was encountered orally and communally. Extended, silent, individual Bible reading? That's largely a product of the printing press. The situational, audio-centric patterns in the data may be a digital-era recovery of how most Christians have always encountered Scripture.

My own schedule shows this. Continually shifting times, no regular solitude, family pressure: no room for traditional quiet time. I experimented with audio devotionals fitting spaces that actually exist. Soultime impressed me here. In closing the host asks to pray *for* the listener, and does not require them to speak their own. Design recognizing exhaustion instead of setting expectations.

A Spectrum of Engagement

Drawing on behavioral data, information science theory, and platform design patterns, I propose a spectrum of engagement types.

Table 1. Spectrum of Spiritual Engagement

Engagement type	Description	Examples	Design significance
Ambient encounter	Passive, incidental exposure to spiritual content	Verse of the Day; audio Bible during a commute	Often underestimated, despite its role in everyday formation
Receptive engagement	Intentional but brief interaction with spiritual material	Short devotionals; podcast episodes; thematic reflections	Supports recurring engagement without heavy obligation
Guided engagement	Structured participation in curated spiritual pathways	Reading plans; courses; reflective practices	Provides scaffolding for sustained practice
Self-directed engagement	Sustained, exploratory, internally motivated study	Long-form reading; commentary; original-language study	Represents depth, but should not be treated as the sole ideal

The same person may move across all four depending on context, need, and season. A key design risk in current spiritual apps is treating self-directed engagement as the normative ideal, when much everyday formation appears to occur in the ambient and receptive modes. **AI may make dialogic accompaniment newly scalable.**

Where the Gaps Are

Existing apps cluster at two extremes: micro, app-directed engagement (daily verse, notifications, short prayers) and sustained, user-directed engagement (deep study tools, commentaries). Apps like Hallow, Pray.com, and Glorify have begun serving the middle with daily audio devotionals and guided meditations. These examples illustrate receptive content that can be shared by many listeners. **The design question is how receptive content could respond more closely to the individual**: their questions, struggles and growth over time.

The design opportunity considered here is receptive content shaped around the listener's questions, struggles and growth over time. A commuter listening to a generated devotional shaped by their own struggles is something qualitatively different from generic audio.

1.3 Four Waves. And the Design Philosophy They All Inherited

July 2008. Apple App Store launches with roughly 200 free apps. One of them: a Bible. YouVersion pulled 83,000 downloads that first weekend. A signal nobody anticipated. People wanted Scripture on phones. That signal spawned everything that followed: development waves that would bring Scripture to large numbers of devices. But it also locked something in: each wave would import whatever technology paradigm was dominant that year, for better and worse.

Wave 1 (2000s) digitized what was already on the desk. BibleGateway, Logos, Bible Works. They brought the printed Bible and its scholarly apparatus online. The breakthroughs were real enough: instant full-text search, multiple translations you could read side by side, copy-paste for sermon prep, cross-reference tools that would've taken scholars hours with concordances. For pastors and students, the Bible had never been this accessible. So: Wave 1 was built for people who already had a printed Bible open.

Wave 2 made the Bible social. YouVersion brought Scripture to smartphones; its family of apps eventually reached more than one billion cumulative installs, according to its 2025 year-end summary (YouVersion, 2025). Reading plans, community features, verse sharing, daily engagement streaks. The social media playbook applied to Scripture. For the first time, you could encounter a Bible verse at lunch, share it with friends, watch your reading streak grow week after week. Scripture left the desk. It left the pew.

But the assumption buried here: an active churchgoer with a smartphone. The formation belief was simple: consistency produces growth. Show up daily, and formation follows.

Wave 3 (2018-present) bet on the ears. Pray.com, Hallow, Glorify, Dwell: they recognized that people would engage Scripture through listening instead of reading. Right call. Hallow hit #1 in the Apple App Store overall during Lent 2024 (not just in the religion category), which proved something: demand for contemplative digital practice was much larger than religious tech expected. Pray.com brought podcast-style devotionals and bedtime Bible stories. Dwell reimagined audio Scripture with ambient soundscapes, professional narration. Glorify offered prayers, devotions, courses always as text and audio.

The achievement: breaking the assumption that *Scripture = text*. Finding audiences waiting for audio. But overwhelmingly, English-language. Hallow's #1 ranking? English-speaking markets. Pray.com's podcast library? Predominantly English. Dwell's professional narration? English translations. The audio revolution hasn't reached most European language communities, not from lack of demand, but because professional audio production economics don't justify it for markets of 1-10 million speakers.

The user base expanded. Spiritual-but-seeking, wellness-adjacent, people outside churches altogether. Formation assumption shifted: "feel something, and growth follows."

Wave 4 is different in kind, not just degree. Bible Chat, Magisterium AI, bible.ai, Hello Bible, a growing field of AI Bible tools. Conversational access to Scripture. A new believer types: "I'm anxious about my job and want to know what the Bible says" and receives a personalized response instead of a search results page.

But the deeper shift isn't adding AI chat to existing apps. It's *formation through hyperpersonalization*: systems that remember a user's spiritual journey over months, adapt content to their current state, generate experiences tailored to their tradition and struggles and growth. The trajectory parallels what has already happened in other domains.

Freeletics and Gyroscope transformed fitness for me, replacing generic workout plans with adaptive, memory-based personalization. Woebot and Wysa did the same for mental health, shifting from static Cognitive Behavioral Therapy (CBT) worksheets to AI companions that track progress and adjust therapeutic approach over time. Sword Health launched Dawn in early 2026: 24/7 adaptive mental health support backed by 58 peer-reviewed studies, remembering every interaction, integrating

calendar and wearable data, proactively checking in before predicted moments of stress (Sword Health, 2026). Thea takes a different approach: voice-based emotional AI detecting emotional signals from twenty seconds of speech, responding with personalized sound (Thea, 2026).

Across these examples, the design direction is from static content toward more responsive support. That trajectory motivates exploring personalization in spiritual formation; it does not demonstrate a formation benefit. The design question remains whether answers alone can produce growth.

Each wave genuinely improved on the last. But all four imported something they never questioned.

The Inherited Assumption

Wave 1 was different. It assumed the scholarly use case, leaving most people behind, but it didn't gamify Scripture. That arrived with Wave 2. From Wave 2 forward each generation applied attention economy mechanics (streaks, notifications, social sharing, completion rewards) to spiritual engagement without systematically asking: do these mechanics serve formation or just drive retention?

Streaks, push notifications, DAU/MAU targets: designed for advertising-revenue platforms where the business goal is maximum daily time-in-app. Christian apps didn't adopt them innocently: app stores reward engagement statistics, investors pressure growth. But formation goal is structurally different from advertising goal. Section 1.1 showed that the engagement that matters is meaningful encounter, not app opens.

Self-Determination Theory (Ryan & Deci, 2000) shows the mechanism: extrinsic motivators displace intrinsic motivation over time. Broken streaks create guilt, not grace. Wave 3 evolved the format but not the behavioral design philosophy. Wave 4 introduces AI, but most implementations add a chatbot to existing engagement models rather than guiding formation over time.

There's another risk here. Instead of performance pressure, AI spiritual tools often land in pure affirmation. Cole-Turner (2025) makes it plain: spiritual companionship "that is wholly nonjudgmental is deficient by any serious standard of spiritual growth." Dyer goes sharper: "People are formed in the way of having relationships with machines that are always, always listening to them, always amenable to them, always wanting to please them" (Missional AI, 2026). Cheng et al. (2026), published in *Science*, confirm the scale: across 11 major language models, AI endorsed users 49% more often than humans did and users rated the sycophantic responses as more trustworthy. The design challenge isn't just gamified anxiety or empty validation. It's grace-based engagement that somehow still offers honest challenge.

The Quiet Time and the Guilt Machine

The cultural assumption runs deeper than engagement mechanics. **The gap between what evangelical culture expects of Bible reading and how people actually engage Scripture in digital contexts can create real spiritual harm.** The "quiet time" (a daily, extended period of Bible reading and prayer) functions in many circles less as invitation than as performance metric. Greg Johnson notes that personal devotions can become "a performance treadmill in which Christians feel their daily acceptance with God is based on what they do instead of what Christ did" (DeYoung, 2023).

The cognitive research from Section 1.1 makes clear this isn't a discipline problem. Someone reading five fragmented minutes on the train isn't failing spiritually. They're encountering how digital media actually works. Now layer gamification on top: an app decides *for* the user that they need a daily streak, a completion badge, a push notification reminding them they haven't read today. It digitizes the guilt.

YouVersion's reading streak is a clear example. Users build multi-day streaks; you hit milestones (100 days, 365 days) and get badges, social sharing. The mechanic works. It increases daily engagement. But the neuroscience here is clear. Uncontrollable stressors produce cortisol responses, with big effects for social-evaluative threats (Dickerson & Kemeny, 2004). Unfinished tasks impair recovery through affective rumination (Syrek et al., 2017). A reading plan marking you as "behind"? Neurologically, that's an unresolved threat. Systematic reviews of gamified health apps show this pattern: streak-based systems produce guilt, anxiety, stress, frustration. Those are the most commonly reported negatives (Chen et al., 2024). Sheen et al. (2025) documented users reporting "devastation when they missed a single day." If fitness streaks create shame around exercise, the stakes go higher when the content is Scripture and the failure reads spiritual.

The alternative is not complicated. In March 2026, in my work as Head of Product Design at Bibel TV, I spoke with a German user who preferred Bibel TV's reading plan to YouVersion's (Treppmann, 2026). The difference was not the content, but what happens when life gets in the way. YouVersion confronts returning users with missed days and asks them to catch up or skip forward. Bibel TV simply shows the next day in the plan. No guilt. No accounting.

The format is the same: a daily reading plan. But one design says, "You fell behind," and the other says, "Welcome back." That difference is theologically loaded: one treats return as a failure of self-management; the other as a gift to receive.

Many believers have found formation through disciplined daily Scripture reading, even imperfectly, even within streak systems. The quiet time tradition has sustained millions in genuine relationship with God. My critique targets *imposed* mechanics and *unexamined* assumptions about engagement – not the discipline itself.

The Theological Stakes

The critique runs deeper than psychology. Reformation theology emphasizes *sola gratia* (salvation by grace alone), and many Protestant thinkers extend this principle beyond justification to sanctification. Jerry Bridges puts it plainly: "Both justification AND sanctification are by grace" (Bridges, 2008). Dallas Willard makes a related distinction: "Grace is not opposed to effort, but to earning" (Willard, 2006, p. 61). **Spiritual disciplines have their place, but as means of receiving God's transforming grace rather than as performance metrics.** Performance spirituality, on this view, contradicts the gospel's core logic: transformation comes through grace received, not spiritual standards achieved.

Catholic and Orthodox traditions have rich theologies of cooperative grace, but the question remains the same across traditions: is spiritual practice framed as participation in grace or as a mechanism of self-management? An ecumenical app should avoid encoding any formation logic in which grace is confessed in theory but performance becomes decisive in practice.

There's a bigger pattern. American ministry culture has a documented habit of adopting secular business practices such as marketing frameworks, growth metrics, management approaches, often without asking whether those tools serve the mission. Guinness (1993) warned the church growth movement made "the audience, not the message, sovereign." Jethani (2009) says corporate values flipped the pastoral model: success became institutional growth instead of community formation. Christian app companies applying Silicon Valley's engagement playbook to Scripture? They're continuing that pattern, just online.

FaithTech's James Kelly names the underlying assumption directly: the "killer app trap," the belief that technology will solve humanity's deepest problems (Kelly, 2024). At Harvard, Kelly went further: the technology industry's dominant posture is to "solve first, solve quickly, solve selfishly, and solve without account for the repercussions" (Kelly, 2025). The major platforms pursue God's *unique* attributes (omniscience, omnipotence, omnipresence) while neglecting God's *shared* attributes: holiness, love, wisdom, faithfulness.

I recognize this temptation in my own work. The belief that the right technology stack will solve problems that are fundamentally about formation, not features. The killer app trap doesn't require malice or even awareness. It's the water technologists swim in. Kelly's sharpest version: "AI becomes what its builders worship. It amplifies its encoded values" (Kelly, 2026).

The Personalization Gap

The personalization gap makes this worse. Hallow's "intention setting" feature lets users specify an intention before meditation. In my testing, everyone receives the identical meditation regardless. The stated context just disappears; the content pipeline ignores it.

True personalization is what a spiritual director does: listen to where you are, draw from a tradition they know deeply, offer something specific *because* they know your story. What's absent isn't more customization options. It's *adaptive* guided formation that responds to the individual. When multimodal diversity arrives without this formation intentionality, a new problem shows up: what Section 2.2 examines as the "spiritual legos" problem.

Personal Reflection

My own formation was shaped by performance-based Christianity: measuring worth through spiritual productivity, guilt over lapsed disciplines, transactional God-relating. Encountering grace-based tradition primarily through Soul Shepherding Institute shifted this fundamentally. Formation as receiving God's love rather than achieving standards.

Mentoring product design students at CareerFoundry revealed the same pattern. Perfectionist-driven students got stuck. Those finding freedom through self-compassion achieved more. Guilt-driven engagement produces compliance, not growth – whether in design careers or spiritual formation.

Formation-First Tools Without Personalization

Not every tool followed the engagement playbook.

Pray As You Go, a Jesuit initiative running since 2006, delivers 10-minute audio prayer combining music, Scripture, and guided reflection. Thirty million annual uses across nine languages, without a single engagement mechanic (Pray As You Go, 2025). No streaks. No badges. No push notifications. Lectio 365 structures daily prayer around lectio divina mornings and Ignatian Examen evenings, again without gamification (Lectio 365, 2024). John Mark Comer's Practicing the Way has reached over 21,000 churches across 157 countries by diagnosing the same problem this section documents (Comer, 2024). And yet none of the major spiritual formation scholars (Richard Foster at Renovare, Ruth Haley Barton at Transforming Center, James Bryan Smith at Apprentice Institute) have built mobile apps.

These examples illustrate formation-oriented design; their existence and uptake do not by themselves establish causal formation benefits or the absence of personalized alternatives. The design opportunity explored here is formation-oriented support that responds to the individual. Part 2 builds out that philosophy.

1.4 The European Context: Why American Apps Don't Translate

In 2024, Catholic and Protestant churches in Germany lost over one million members. Monthly church attendance: 5% (lower than Belgium at 9%, Hungary at 11%, far below Spain at 18% or Italy at 23%). For the first time, the religiously unaffiliated outnumber Catholics and Protestants combined. 47% of Germans (39 million) identify as nones. Catholic and Protestant churches combined represent 45% (24% Catholic, 21% Protestant per EKD) with 3.9% Muslim and 4.1% other (Zenit, 2025; Evangelical Focus, 2025).

Every American assumption about Bible app design breaks here: users attend church, identify with a tradition, want to read more Scripture. Not this reality.

My work at Bibel TV, a Christian broadcast television ministry serving German-speaking Europe, and at ChurchDesk, a European church management software company, has given me firsthand experience within Christian media and church technology, particularly in Germany. This professional perspective informs the analysis that follows. Europe's GDPR[2] framework reflects deeply rooted cultural values: not just legal compliance but convictions around privacy, human dignity, and data sovereignty. The ecumenical environment (Protestant, Catholic, and Freikirche traditions coexisting with high mutual awareness) demands active hospitality across traditions. And German cities represent the broader European pattern: highly secularized public spheres where faith is private, Christianity is culturally minoritized, and young professionals navigate spiritual formation without assuming church community.

[2] **GDPR (General Data Protection Regulation):** European Union regulation governing data privacy and protection, representing European commitment to human dignity and data sovereignty.

Germany is not all of Europe. Poland has 87% Catholic identification and 36% weekly Mass attendance, far closer to American patterns. But urban Polish professionals experience their own liminality: culturally Catholic yet personally uncertain. The European spectrum runs from deeply post-Christian (Germany, Czech Republic) through culturally Christian but individually liminal (Poland, Italy). A European design approach therefore cannot assume a single religious context across language communities.

Four Traditions, One Context

Four distinct Christian communities coexist in Germany, and each brings different assumptions about what a Bible app should do.

The **EKD (Protestant)** churches are state-affiliated mainline traditions – the default "church" in most Germans' imagination. **Catholic** presence is massive institutionally but collapsing numerically (400,000+ members lost in Germany in 2023 alone). **Freikirche** (Free Church) evangelical and Pentecostal congregations are the most digitally engaged Christians in the country. And the **Orthodox** community (Russian, Greek, Romanian diaspora) navigates a double displacement: Orthodox in a Western context *and* immigrant in a post-Christian secular one. An ecumenical Bible app can't assume one tradition's categories as normative.

US Comparison: What European Context Assumes Differently

Dimension	European Approach (German Case Study)	US Evangelical Approach
Cultural Positioning	Christians as cultural minority in post-Christian context	Christians as cultural majority with institutional influence
Biblical Literacy	Cannot assume baseline knowledge	Often assumes churched audience
Privacy & Technology	GDPR as cultural value reflecting human dignity; privacy by default	Privacy often treated as opt-in feature; growth metrics prioritized
Denominational Context	Ecumenical awareness as survival necessity	Evangelical market large enough for internally-focused products
Language & Content	Fragmented language communities too small to sustain quality spiritual media at English-market scale	English-language content dominates; other languages are afterthought localization
Investment Ecosystem	DACH region: 112 religion-tech companies, $17.7M total VC (Tracxn, 2026)	US: 1,841 companies, $622M total VC; Hallow alone raised $157M (Tracxn, 2026)
Innovation Philosophy	Sustainable service, human dignity, responsibility	Scale, growth, disruption, venture-backed models
Church Engagement	5% monthly attendance; cannot assume church community	Higher attendance; can assume churched audience

The language dimension is a structural barrier, not a localization problem. Recent multilingual benchmarks show LLMs perform best in Germanic languages (0.727 average accuracy) and nearly as well in Romance (0.716), but Slavic languages drop to 0.694 (Thellmann et al., 2024). Those differences compound across thousands of devotional interactions. Turkish is spoken by 80 million people, yet under standard multilingual models, OpenAI's tokenizer requires 3.10 tokens per Turkish word versus 1.33 for a Turkish-specific one (a 7.28x efficiency penalty). The EU-funded EuroLLM-22B was trained on EU supercomputing infrastructure for all 24 official EU languages plus Turkish and Ukrainian (Martins et al., 2025). That it needed to exist at all confirms the problem.

A devotional that sounds slightly off in Estonian doesn't merely fail as product, it fails as formation, because trust requires linguistic naturalness. AI narrows that gap. It doesn't eliminate it.

The Hochverbundene: What Committed German Readers Want

Within this landscape sits a small but influential group: the *Hochverbundene* (the highly invested). Active German Bible readers whose preferences reveal what European design values look like.

The INSA-Consulere/Idea German Bible Reading Survey (2024) profiles them. About 9-10% of Germans read the Bible weekly or monthly. Of those, 42% are highly engaged in church life. And the number that matters most for product design: 78% value interpretive diversity. They want multiple perspectives on a passage, not a single authoritative reading.

Privacy as Dignity

"No ads + subscription" doesn't get you there. European privacy expectations run deeper than a business model. Users should be able to see exactly what data is stored about them. They should be able to export and review their records at any time. And when the app collects anything at all, it owes them a plain-language explanation of why. User data sovereignty (the person controls their information, not the platform) isn't just a legal requirement under GDPR. It's a theological claim: **people made in the image of God are not data points to be harvested.** In practice, this also means offering private session modes (like browser incognito or AI chatbot "secret chats") for conversations users don't want the system to remember. A person processing spiritual doubt at 2 AM shouldn't have to wonder whether that conversation is being mined for engagement metrics.

European practical theologians have been thinking about this context for years. Grethlein's 2025 book considers Christian life in relation to contemporary challenges including digitisation (Grethlein, 2025). Karle identifies a compounding crisis in German Protestant churches: membership declining, institutional belonging eroding (Karle, 2010). Hutchings' ethnographic fieldwork found online Christian communities developing their own distinct cultures of worship and belonging (Hutchings, 2017).

Dual Context as Methodological Asset

I'm German and lived in the United States for several years. Experience across German and American Christian contexts shapes the questions I bring to this paper. I value the resources and insights of both, and examine assumptions in both—including my own.

Practically this means translation in both directions: connecting European Christians with American evangelical formation resources (Willard, Barton, Smith) while examining what changes when those practices and product designs move between contexts. Michael Stewart Robb's Sanctus Institute in Munich (2017-present) undertakes similar work – adapting formation practices for European Protestant contexts where seminaries historically neglected formational disciplines (Robb, cited in Christianity Today, 2025).

Global South Voices in European Cities

European urban centers increasingly include diaspora communities navigating what Kwame Bediako termed the "dual heritage" of their cultural Christianity and European secularism (Bediako, 1995; Jenkins, 2011). An ecumenical app serving European cities must incorporate Global South voices

accordingly (Agana, 2022; Ndereba, 2023). The primary focus remains European urban professionals in post-Christian contexts. But who is most underserved? The growing population that fits no existing category: spiritually interested but institutionally homeless, carrying fragments of faith traditions they cannot reassemble alone.

1.5 The Audience Without a Guide: Serving the Spiritually Liminal

She grew up Catholic, left during university, hasn't set foot in a church in twelve years, but she still prays sometimes. Usually in crisis. He deconstructed his evangelical faith after a church split and reads theology blogs at night, looking for something that holds together. Not atheists. Not believers in any settled sense. In between. And there are far more of them than the apps designed for.

Defining the Spiritually Liminal

"Liminal" comes from Latin *limen*, which means threshold. It describes those occupying in-between spaces. In the European context, I see five overlapping categories. Though the boundaries blur by nature.

New believers uncertain of theological identity. In Europe, someone exploring Christian faith may spend years without clear denominational identity, moving between communities, not sure where they belong (Davie, 2015; Woodhead & Catto, 2012). **Returning believers after years away** carry childhood faith memories, some warm, some deeply painful. A returning believer at 35 is not the same person who left at 18. **Tradition-switchers** (a Catholic drawn to Reformed theology, an EKD member visiting a Freikirche) need resources honoring both where they've been and where they're exploring. **Post-evangelical deconstructors** aren't usually leaving Christian faith; they're renegotiating what authentic faith looks like after certainties cracked. And **spiritual-but-not-religious seekers,** drawn to spiritual experience but wary of institutional frameworks, are the hardest group for traditional Christian apps to reach.

These categories overlap constantly, and this kind of uncertainty isn't confined to those who've left. Among 19-27 year old church members in Germany, 58% of Protestants and 51% of Catholics describe themselves as "not religious" (EKD SI, 2018).

What unites these groups: uncertainty plus seeking. Existing apps handle this poorly, they often assume users know what they want. Barry and Connolly documented it: people "do not know what they want or need" spiritually, requiring a director to "help them discover what God is doing in their lives" (Barry & Connolly, 1982, p. 8).

Traditional Bible apps provide libraries without guides. AI suits this audience for a paradoxical reason: institutional independence. Users in this searching state, especially post-evangelicals and those wounded by church, carry justified wariness toward denominational authority. **A human pastor, however well-intentioned, represents an institution. AI carries none of that.**

The data bears this out. Pew's 2025 study of religious "nones" across 22 countries found that 47% left religion because they dislike religious organizations, not because they abandoned spiritual seeking (Pew Research Center, 2025). The *New York Times* documents individuals hurt by their churches turning to AI chatbots for spiritual support, finding more consistent companionship there than from the communities that wounded them (Jackson, 2025).

Hallow's data is revealing here. 40% of its users are non-Catholic, drawn to a Catholic app not despite its tradition-specificity but *because* clear grounding feels safer than the vague "non-denominational" label that often masks unexamined evangelical assumptions.

Generic fitness programs failed for me. One-size-fits-all created paralysis I see in Bible apps. Freeletics worked: personalized adaptive pathways. Injured? The app offered reduced difficulty, not punishment. If personalization transforms health engagement for people struggling with generic approaches, it applies to spiritual formation. The person in this searching phase, asking "Which devotional?" faces the same problem. They need a system knowing their context, remembering their journey, offering guidance fit to where they actually are.

How Large Is This Population?

Larger than expected. And crucially, *interested*. Only 5% of Germans attend church monthly. But 55% still identify with Christian traditions (45%) or other religions (10%), and maintain spiritual practices outside institutions (Statista, 2025). A representative poll of 2,010 Germans conducted in May 2024 found that 68% of the adult population never reads the Bible, but among 18-29 year-olds that figure drops to 56%, with 11% reading daily, suggesting that the generation most associated with secularization also shows the strongest signs of renewed curiosity (INSA-Consulere, 2024). More striking: 40% of people *without any church affiliation* find biblical content interesting (Deeg et al., 2023). That gap between interest and engagement is the design problem.

The pattern holds across Europe, and the trend lines are accelerating. The Bertelsmann Religionsmonitor 2023 surveyed 10,657 people across seven countries and found that among 25-39 year old church members, 35% have firm intentions to leave. Among 16-24 year olds, it's 41% (Bertelsmann Stiftung, 2023). Only 32% of Germans describe themselves as "religious" at all. But here's the thing: criticism of churches doesn't mean abandoning faith. Across all surveyed countries, majorities agreed that "it is possible to be a Christian without a church."

Globally, the Patmos World Bible Attitudes Survey (91,000 respondents across 85 countries) found the same pattern. In the "Secular West" cluster (Western Europe, North America, Australia, New Zealand), 35% expressed interest in learning more about the Bible even though only 40% said religion was important in daily life (Bible Society/UBS, 2024). Among people who identify as non-religious globally, 20% still wanted to learn more. That's roughly 240 million people (Bible Society/UBS, 2024).

In the UK, you see it in the numbers. Bible sales rose 87% between 2019 and 2024. That is real purchasing behavior, not just sentiment surveys. Gen Z is driving it. Meanwhile, overall non-fiction sales declined, which makes the Bible uptick even more striking (SPCK/Nielsen, 2025). And here's what matters: church exit rates consistently exceed formal atheist identification. People aren't leaving spiritual seeking. They're leaving institutions.

Europe sits in a paradox that most American observers miss. It's *post-Christian*: institutional Christianity is no longer the default framework for public life. But it's also *post-secular*. The confident prediction that religion would simply vanish has itself been discredited (Habermas, 2008).

Davie's "believing without belonging" distinguishes religious belief from institutional participation in modern Britain (Davie, 2015, chapter 4). That distinction helps frame the liminal audience considered here.

This paper proposes that digital spaces may offer points of contact for some people who remain spiritually curious while detached from churches.

Why Serving the Liminal Is Essential

"All guests who present themselves are to be welcomed as Christ." Benedictine Rule 53, written fifteen centuries ago for monks receiving strangers at the door. I keep coming back to that line because it reframes everything. The stranger isn't an interruption to community life. The stranger *is* Christ showing up.

Many people occupy this space without fitting the market segments Christian products often assume. Some are long unchurched yet still spiritually curious. Some have left church after disappointment or harm but retain devotional practices. Others would never identify as religious, yet still pray, light candles, or reach for spiritual language in moments of suffering. They are not projects or "unchurched prospects," but people with real spiritual lives that defy neat categorization.

The theological case isn't hard to find once you look. Jesus sat with the doubting Thomas (John 20:24-29), not the confident Peter. He spent an afternoon at a well with a Samaritan woman who had every reason to distrust religious authorities (John 4:1-42). He ate with tax collectors – and it was the religious insiders who objected (Luke 5:29-32).

Catholic spiritual direction has always treated uncertainty as part of the journey. Barry and Connolly's "consolation" and "desolation" aren't signs of failure but normal rhythms of a living faith (Barry & Connolly, 1982). Ruth Haley Barton, writing from the evangelical tradition, makes a similar case: spiritual growth is cyclical, and wilderness isn't a detour – it's a necessary stage (Barton, 2008). Hospitality to the uncertain isn't opportunistic market positioning. It's core Christian practice across every tradition I can find.

Yet the tools that should extend this hospitality digitally keep falling short. Not because they're badly intentioned – most aren't. But their design assumes committed users. Streak mechanics and structured reading plans work fine for dedicated believers. For the liminal user who needs gentleness, not productivity tracking, they feel like one more institution making demands.

So where do these users go when the apps designed for committed Christians don't fit? Increasingly, they turn to AI – in numbers that surprise even researchers.

1.6 The AI Turn: Where People Are Going Instead

Faced with apps that assume committed users, overwhelm with choices, or assume a cultural context that isn't theirs, where do people actually turn? Increasingly, to AI.

The Unexpected Scale

People are turning to AI for help with mental health and spiritual questions in numbers that no one anticipated. A 2025 survey of US adults with mental health conditions *who already use AI* found nearly half are asking large language models for therapeutic support (making these tools potentially "the single largest venue for mental health support in the country"). Among young adults 18-21, 22% use

generative AI for mental health advice; over 90% report finding it helpful (Rousmaniere et al., 2025). A caveat on the Sentio data: the institution is relatively new and the study has not been independently replicated; the finding is directionally significant but should be treated with appropriate caution.

Not algorithmic preference; necessity. One in five Americans experience mental illness but many don't access care. Globally, 75% in low- and middle-income countries with mental disorders receive no treatment (WHO, 2022). Bible-specific AI tools reach tens of millions (Bible Chat surpassed 25 million downloads) while religious chatbots (QuranGPT, Gita GPT, Catechism Bot, Bible Chat) serve millions more. Yet this adoption concentrates in English. AI text generation quality collapses for smaller European languages. LLMs achieved 73.5% on Irish grammar where native speakers scored 90.1% (Molloy et al., 2025); 55 models on Maltese performed near zero (Muscat et al., 2025). An AI spiritual companion hallucinating Scripture or producing grammatical errors risks real harm to vulnerable seekers. People ask AI theological questions not from algorithmic wisdom but from freedom from judgment (Wright, 2024). Theologians rightly warn of shadow sides: AI tends toward affirmation rather than challenge, telling users what they want rather than what formation demands. Purpose-built spiritual AI must resolve this tension between accessibility and accountability.

Barna Group's 2026 State of the Church research (n=1,514 US adults; n=442 US Protestant pastors) puts numbers on the shift: nearly one in three US adults say spiritual advice from AI is as trustworthy as advice from a pastor (two in five among Gen Z and Millennials). Four in ten practicing Christians say AI has already helped them with prayer, Bible study, or spiritual growth. But only 12% of pastors feel comfortable teaching about AI, even as 31% of their congregants want guidance on it. Barna's Daniel Copeland: "Their views are shifting and remain largely uninformed by their pastor" (Gloo & Barna Group, 2026). A generation is turning to AI for spiritual guidance, and their pastors don't know what to say about it. That vacuum is being filled by tools with no theological grounding.

The market is responding. The most visible example right now is **Creed**, a Christian AI companion launched in 2025 and profiled by *Christianity Today* in early 2026. Creed calls itself "a best friend and youth pastor in your pocket." Around 200,000 users in the first four months, roughly 25,000 daily active users, 60% aged 15-30, about half identifying as recent converts or spiritual explorers (Christianity Today, 2026). Those numbers matter because they validate what this paper argues: demand for AI spiritual companionship is not hypothetical, much of it comes from younger and liminal users, and the core use case is ongoing accompaniment, not just information retrieval.

Creed is also instructive because it embodies both the promise and the unresolved tensions of Wave 4. Its founders position it against the romanticized AI companion market, emphasizing prayer, Bible engagement, and real-world church connection. It uses major AI models with Christian fine-tuning, guardrails, and human intervention for high-risk cases. All of this is noteworthy. But Creed also uses Duolingo-style daily quests and points (even if only cosmetic rewards are locked behind them), avatar-based interaction, and chat-first design that optimizes for responsiveness. Its theological decisions are partly embedded through fine-tuning rather than made visible through retrieval and source citation. In other words: Creed validates the market and sharpens the critique at the same time. It proves that serious Christian technologists are building in this space, and that even thoughtful products can inherit the design assumptions this paper interrogates. The field has moved from "Would anyone use this?" to "How should this be designed?"

Clinical Evidence from Adjacent Domains

A 2023 meta-analysis of 15 randomized controlled trials found reductions in depressive symptoms and psychological distress compared with control conditions, but no significant improvement in overall psychological well-being (Li et al., 2023). In a two-week unblinded trial of 70 young adults, Woebot reduced depressive symptoms relative to an information-only NIMH ebook; the trial did not compare it with therapist-delivered treatment (Fitzpatrick et al., 2017). A provider report also describes increased access through AI-enabled self-referral in NHS Talking Therapies (Limbic, 2024).

Among Sentio survey respondents who had used LLMs for mental-health support and had experience of human therapy, nearly 75% rated their LLM experience as on par or better; this was a self-reported experience comparison, not a comparative clinical-efficacy trial (Sentio University, 2025). A meta-analysis also found benefits from spiritually oriented psychotherapies for some psychological problems, but that evidence concerns psychotherapy rather than AI spiritual-formation apps (Smith, Bartz, & Richards, 2007).

These adjacent findings motivate investigation; they do not establish the effectiveness of purpose-built spiritual formation tools grounded in multi-tradition theological sources.

Documented Risks

Clinical benefits exist alongside serious risks. Only 16% of AI chatbot studies underwent clinical efficacy testing (Hua et al., 2025). Hallucination rates in health AI are alarmingly high (Huo et al., 2025). The “compassion illusion” (emotional recognition mistaken for emotional resonance) fosters emotional substitution (Ajeesh & Joseph, 2025). Dependency is serious: a four-week RCT (n=981, >300K messages) found heavy chatbot users showed consistently worse psychosocial outcomes (Fang et al., 2025).

AI spiritual chatbots are “generally affirming” and act as “‘yes men’” (Jackson, 2025). Scholarship identifies “spiritual echo chambers” reinforcing existing beliefs (Brumec & Platovnjak, 2025; Alkhouri, 2025). An academic study of five AI Jesus platforms found none church-endorsed, all profit-driven, algorithms nudging theology toward popularity. The first peer-reviewed study of an AI-led church service found attendees refusing to recite the Lord’s Prayer when prompted by an avatar (Simmerlein, 2025). *Nature* proposed “red lines for religious AI” targeting spiritual manipulation and dependency (Tretter & Puzio, 2025). When Lucerne University installed an AI Jesus avatar in a Swiss confessional booth, two-thirds of roughly 900 visitors described the experience as “spiritual” (HSLU, 2024).

In February 2024, 14-year-old Sewell Setzer III died by suicide after a prolonged emotional relationship with a Character.AI chatbot. A predictable consequence of deploying AI companions without safeguards.

What Human Spiritual Direction Provides

Spiritual direction is “help given by one Christian to another which enables that person to pay attention to God’s personal communication” (Barry & Connolly, 1982). What AI cannot replicate: the director’s own spiritual formation, genuine empathy, contemplative presence, and accountability to a community. The Vatican’s *Antiqua et Nova* (2025) frames the fundamental limitation: AI “lacks the capacity for genuine understanding, empathy, or moral agency.”

Where AI Genuinely Helps

What I find most persuasive is the specific mechanism: AI fills the gap not because people prefer it to human care, but because human care is structurally unavailable. The student in India asking GitaGPT about exam anxiety at 2am has no access to a wise teacher at that moment.

Bible Chat has been downloaded more than 25 million times with over 5 million monthly active users (Jackson, 2025; Oaca, 2025). In March 2026, Bible Chat added a “Spiritual Assistant” alongside community reactions and a Bible trivia game (Bible Chat, 2026). Wave 4 technology grafted onto Wave 2 design assumptions. The pattern is consistent: as AI capabilities become available, existing apps bolt them on without revisiting the underlying formation philosophy.

AI may offer an accessible entry point and daily support for European searching users who lack access to human spiritual direction. Whether it can augment spiritual formation at scale remains untested; this paper proposes support that points toward embodied spiritual direction rather than attempting to replace it.

The Proliferation Problem

Duomo’s US App Store listing, checked on 1 November 2026, includes annual subscriptions at $69.99 and $89.99. Its public website markets an AI spiritual assistant and identifies its founder and a team including writers. One theological article inspected includes references, but the team page and two articles checked did not identify a named theological reviewer or describe an approval process. The company’s actual review arrangements were not established by this check. The wider question is how commercial incentives are held accountable to formational and theological commitments.[3]

[3] **Public-edition update (1 November 2026):** Sources are the US App Store listing, Duomo’s product and team page, *A Theology of God’s Timing*, and *What True Repentance Really Is*, all checked on 1 November 2026. This dated review of public materials was prepared for the public edition after the original paper submission.

The theological stakes of Part 2 are not hypothetical. Ungrounded AI spiritual guidance is already happening at scale. The question is not whether people will use AI for spiritual formation but whether anyone will build it with theological integrity.

PART 2: WHAT FORMATION ACTUALLY REQUIRES

From Landscape to Requirements

A searching user in a post-Christian European city opens a Bible app on a phone screen that fragments her attention. She closes it and asks ChatGPT instead. This is the lived reality Part 1 documents. The real risk is ChatGPT and Claude becoming people's de facto spiritual directors by default.

Part 2 asks what the Christian tradition says formation actually requires. Three neglected dimensions: formation was never just reading (§2.1), formation was never consumer choice (§2.2), formation was never only private (§2.3). Not novel claims; recoveries of what the tradition has always known, now confronting a digital landscape that forgot them. §2.4 synthesizes Part 1's empirical findings and Part 2's theological foundations into the missional product design framework.

One meta-principle cuts across all seven: **hyperpersonalized formation grounded in institutional independence.** Spiritual formation remains the conspicuous exception to the shift from generic content to adaptive, memory-based companionship that transformed health, fitness, and mental health. And liminal users distrust denominational institutions, which makes AI's freedom from institutional agenda a structural advantage, not a deficiency.

2.1 Beyond Text: Recovering Multimodal Formation

Think about a Benedictine monastery before the printing press. The monks rise at 3am for Matins. Scripture chanted in the dark, words entering through the ears, shaped by melody and the breathing of the room. By dawn they're doing manual labor; hands in soil, the morning's psalm still turning somewhere in the body. At midday, a brother reads aloud from the Fathers while others eat in silence. They're receiving theology without ever opening a book. Compline ends the day: candlelight, incense, the body bowing. Scripture has been encountered eight times (through song, speech, physical posture, communal silence, careful listening), and not one of those encounters involved private reading.

Now picture a man on a Berlin S-Bahn, earbuds in, scrolling past a notification: "You're 3 days behind on your reading plan." He taps it, skims two paragraphs of Romans, feels vaguely guilty, closes the app. Scripture encountered once. Fragmented, private, anxious, through the single mode the app offers.

Formation was never just reading. Scripture itself commends contemplative prayer and silence (Psalm 46:10), service to the marginalized (Matthew 25:31-46), communal confession (James 5:16), fasting (Matthew 6:16-18), artistic expression, intercession, pilgrimage, and Sabbath rest. Yet in many evangelical circles, saying "I prayed but didn't read my Bible today" feels like failure. The emphasis on *sola scriptura* (Scripture as supreme authority) seems to have created tunnel vision. Somewhere along the way, Bible reading became the only spiritual practice that really counts. How did we get here?

Recovering Oral and Communal Tradition

Digital media may actually enable a recovery of older, pre-print forms of Scripture engagement. For most of Christian history, Scripture was encountered orally and communally (Rhoads, 2006; Ong, 1982). Section 1.2 discussed growing audio engagement and digital Bible distribution. These developments invite comparison with older oral and communal traditions of encountering Scripture.

Listening as Primary Posture

Contemporary spirituality prioritizes *doing* over *being*. How many chapters? What insights? Christian contemplative traditions prioritize something different: receptive listening. The goal isn't information acquisition but transformative presence with God. In Ignatian spiritual direction, the director's primary task isn't advising. It's listening. Creating space for the directee to discern how God moves (Columbia Theological Seminary, 2024). Lectio Divina works the same way: *lectio*, *meditatio*, *oratio*, *contemplatio*. Scripture isn't information to master; it's living word to encounter.

Digital spiritual tools risk defaulting to productivity paradigms. The deeper question: **Is this platform teaching users to listen, or just to consume?**

Why Format Matters

Songs may be the most underestimated formation vehicle. *Lex orandi, lex credendi*: what Christians sing shapes what they believe. The Ebbinghaus forgetting curve tells us most spoken content fades within days. But neuroscience research on musical memory (Haiduk et al., 2020) and clinical observations of hymn persistence through cognitive decline tell a different story. Songs create uniquely durable formation. People deep in dementia who can't remember their children's names still sing hymns from childhood. A May 2025 East Texas Baptist University report on student analysis of the fall 2024 CCLI Top 100 songs reports that nearly half lacked explicit reference to Jesus' death, burial and resurrection (East Texas Baptist University, 2025).[4] What people actually internalize through song can diverge significantly from what's preached.

[4] This is a university news summary of student coursework; the underlying paper, coding methods and dataset were not examined here.

Christian media reach audiences across formats. NRB's public summary of its 2025 study with Barna reports that more than 60% of US adults consume Christian media in some form. It reports engagement with Christian social-media accounts at 64% for Gen Z and 58% for Millennials (NRB, 2025a, 2025b).

Short-form devotionals and spiritual practices (2-5 minutes) build consistent habit. ABS data shows engagement frequency correlates with flourishing more strongly than session depth (ABS, 2024-2025).

The Counter-Argument

The strongest objection comes from within the contemplative tradition itself. If formation requires sustained attention, isn't a multimodal platform the wrong medium? But the contemplative tradition was never mono-modal. Ignatian spirituality uses imaginative visualization. Orthodox worship

integrates icons, incense, chanting, and prostrations. The Psalms were sung. An audio devotional guiding a user into two minutes of silence serves contemplative depth. A text-only app optimized for chapters-per-day often doesn't.

I need to be honest about a caveat. There's no direct empirical evidence that audio-first digital formation produces better *spiritual outcomes* than text-based engagement. Audio formation as a primary mode is an untested hypothesis. Evaluating it would require the provisional indicators and explicit limits discussed in Section 2.5, rather than assuming that audio engagement demonstrates spiritual growth.

Multimodal richness creates its own danger. Offer Ignatian Examen alongside Reformed devotionals alongside Orthodox prayer alongside contemplative silence. At some point diversity becomes a spiritual buffet. Users assembling custom religion from decontextualized pieces. That's a real risk.

2.2 The Spiritual Legos Problem: Formation vs. Commodification

A woman opens her app before bed. She scrolls the practice library: "Ignatian Examen (5 min)," "Breath Prayer," "Lectio Divina," "Orthodox Jesus Prayer," "Mindfulness Check-In." She picks the Examen because the name sounds calming. She doesn't know that Ignatius designed it for Jesuit novices embedded in a community of discernment (that the practice assumes a director who helps interpret what surfaces, that its five movements map a theology of divine presence in daily experience). Four minutes later, she rates it four stars and moves on to "Gratitude Journaling." Tomorrow she might try the Jesus Prayer. She's assembling a spiritual life from pieces, and the app is designed to help her do exactly that.

Religious studies scholar Liz Bucar captures the dynamic: practitioners taking what she describes as vanilla versions of practices and globbing them together for personal optimization, assembling traditions' integrated wisdom into discrete practices according to personal taste (Bucar, 2022). When spiritual disciplines become a self-improvement toolkit, they cease to form and begin to perform.

The theological stakes run deeper than a design critique suggests.

Vincent J. Miller's *Consuming Religion* documents how consumer culture fragments religious traditions into abstracted symbols and practices, cutting them loose from their narrative and communal contexts (Miller, 2003). Carrette and King push further in *Selling Spirituality*: corporate interests repackage contemplative practices as productivity enhancers, stripping out the subversive, justice-oriented theological grounding entirely.

Concretely: practices that challenged economic exploitation – practices forming communities of resistance – become stress management. Power structures remain untouched.

The Vatican sees the same problem. *Quo Vadis, Humanitas?* (International Theological Commission, 2026) is blunt: the internet creates "a vast religious marketplace in which belief becomes customizable, tailored to personal taste." The sharpest line: "When technology becomes guide and arbiter of the sacred, faith is subtly reshaped in its image." The danger isn't offering diverse practices; Scripture commends rich variety (Section 2.1). The danger is building platforms that treat formation as self-directed assembly of pleasant experiences.

The Line Between Personalization and Commodification

This critique creates an uncomfortable question for any project that offers practices from multiple traditions: when does appropriate contextual selection become commodification?

Miller's analysis helps draw the distinction. The problem he identifies is not diversity of practice but **severance from context**: consumer culture abstracts practices from the narrative and communal frameworks that give them meaning. A guided Ignatian Examen that names its Jesuit origins, explains the tradition's theology of discernment, and invites users to explore further within that tradition preserves the practice-context connection. The same Examen offered as "5-minute evening reflection" alongside "mindfulness check-in" and "gratitude exercise" (stripped of theological content and presented as interchangeable wellness tools) is commodification.

But here's the deeper question: does hyperpersonalization itself become a more sophisticated version of the consumer spirituality this paper critiques? An AI system that learns what a user responds to and keeps adapting: that's what Netflix does. The difference between formation-driven and preference-driven personalization: a spiritual director sometimes offers what the person *needs* rather than what they *want*. The challenging psalm when you crave comfort. Silence when you reach for noise. Whether an AI system can replicate that kind of discernment is the central open question of this paper's thesis.

The risk is real. Any platform offering multiple traditions faces this failure mode. What the app *can* control is whether its design nudges toward depth or breadth. Rootedness or browsing. Accountability or autonomy. And even that's not enough. Private formation, however deep, misses something Scripture insists on: faith that moves into community, confession, and justice.

2.3 Formation as Communal Practice: Confession, Justice, and Embodied Action

Two scenes.

It's 11pm. A man sits on his couch, phone in hand, shame pressing down on him. He lost his temper with his children tonight. Badly. He opens an app and types a halting confession into an AI chatbot. The response comes back warm, measured, theologically correct: "God's grace covers all our failures. You might consider apologizing to your children tomorrow." He feels slightly better. Closes the app. Goes to bed.

Next morning, same man at the kitchen table, sitting across from a friend in his small group. He says out loud what happened. His voice breaks. His friend doesn't offer a theological framework. "I know. I've been there. Can I pray for you?" Hand on the man's shoulder, naming the specific children by name, asking God for specific grace. The man weeps. Something shifts that the chatbot couldn't touch.

The AI's theology was sound. That's what makes this worth examining. The difference between these two moments isn't information; it's *presence*. A body in the room. A hand on a shoulder. The vulnerability of being known by someone who will see you again next week. No algorithm produces this. But a well-designed digital tool might lead someone toward it.

Everything discussed so far still happens inside an individual. But Christian formation has never been only individual. The New Testament vision is irreducibly communal. Confess to *each other*. Bear *one another's* burdens. Every app reviewed in this paper serves a single user sitting alone.

Confession: The Communal Imperative

"Confess your sins to each other and pray for each other so that you may be healed" (James 5:16, NIV). Not to yourself. Not to an app. To *each other*.

I've sat in that small group chair where you know you should speak the real thing, not the sanitized version, yet every instinct resists. Theological conviction alone doesn't pull that word out. The person across from you does; someone who shared their own hard thing last month and showed up again. That's confession's foundation. Not privacy, not anonymity. Trust built with someone you'll see Tuesday.

Bonhoeffer understood why this matters. "Sin demands to have a [person] by himself. It withdraws him from the community" (Bonhoeffer, 1954, p. 112; wording modernized). Confession to another believer breaks the isolation and self-deception that private confession cannot address.

Catholic sacramental confession requires an ordained priest; no technology can perform a sacrament. Protestant traditions maintain the practice through mutual confession among believers. Neither tradition permits confession to an algorithm. But technology could serve as a bridge: prompts encouraging users to identify a trusted person, guided reflection preparing for human confession conversations. Confession belongs in community. Technology can invite people there but cannot replace the journey.

Justice-Oriented Formation

"To know God is to do justice" (Gutierrez, 1973/1988, p. 194). Liberation theology insists that authentic spirituality integrates *praxis* – reflection and action oriented toward justice, not personal well-being alone. The prophets condemn worship disconnected from justice (Amos 5:21-24; Isaiah 58:1-12). James declares faith without works dead (James 2:14-26). Scripture is blunt here.

Formation that stops at inner peace has stopped too soon.

Digital spiritual apps optimize for better mood, reduced anxiety, personal peace. Not wrong outcomes – for someone in crisis, genuinely important. But when formation *stops* there, it sanctifies consumer spirituality rather than challenging it.

Any product claiming to be a "spiritual formation" tool is claiming to help users grow toward Christlikeness. And Christlikeness is not separable from costly love for neighbor.

A structural objection: liberation theology's vision may be fundamentally *incompatible* with app-based formation. An app is an individual tool. I think the honest answer is that a digital tool can form *dispositions* toward justice but cannot substitute for embodied action. Justice-oriented content has to end with an invitation to *do something specific*. The liturgical calendar itself becomes a justice prompt: the Feast of the Holy Innocents surfaces forced displacement; Lenten almsgiving prompts connect to local food banks. Whether users actually act is beyond the app's control. But whether the app even *asks* is a design choice.

The Communal Thread

Confession requires other people. Justice requires action in the world. Neither fits inside a screen. A digital tool can't be community. But it can refuse to pretend solitude is sufficient. It can point users past themselves toward neighbors who need them.

2.4 The Missional Product Design Framework

Three theological recoveries: multimodal formation, resistance to commodification, communal practice reaching toward justice. Six empirical findings about cognition, engagement, design history, European context, uncertain audiences, and AI.

What do they demand, taken together? I've been circling this question for two years. What follows is my best answer so far.

Theological Foundations

A clarifying conviction first: the goal of spiritual formation is not tranquility but transformation. Moral formation into the likeness of Christ. Learning to genuinely love (Robb, 2026; Willard, 2006). Wellbeing may be a byproduct, but it's not the destination. Any framework that measures only wellbeing outcomes has already confused the map for the territory.

As Robb (2026) warns: "you can't just plug any theology you want into spiritual practices and expect the same kind of result." The theology underneath the design determines where the formation actually leads.

Which is why the principles below need theological commitments generating them, not just design instincts. I spent a long time trying to find the right level of specificity here. Too broad and the principles constrain nothing. Too narrow and they exclude traditions that should be at the table. What follows are convictions broad enough for any Christian tradition to affirm, yet specific enough to constrain actual design decisions.

Imago Dei. If users are image-bearers – creatures with inherent dignity and moral agency – then the attention economy's extractive logic isn't merely poor strategy. It's a theological offense. The German constitution opens with *Die Würde des Menschen ist unantastbar* – human dignity is inviolable. That's not just legal language. It's a theological claim secularized into law, and it shapes how I think about product design.

The design implications are concrete: transparent data practices, genuine user control over personalization, no dark patterns exploiting loss aversion or social comparison. GDPR, from this angle, isn't regulatory compliance. It's dignity architecture.

Incarnation. God works through material means. Bread, wine, water, flesh. The incarnational principle legitimizes digital media as a site of genuine sacred encounter. I know this claim makes some people uncomfortable. But that's the wrong question. The right one: does this particular digital experience create conditions for genuine encounter? A poorly designed retreat fails just as thoroughly as a poorly designed app.

Kenosis. The Netflix model – optimize for user satisfaction – contradicts the gospel pattern of Philippians 2:5-8: lose your life to find it. As Kelly (2025) puts it: "We've built technology without limits and God has built us for limits." Every historic formation practice works through chosen constraint, not infinite access.

An app that only serves what the user wants is a recommendation engine wearing spiritual clothing. A formation-designed app must sometimes offer what the user needs rather than what they request. Transparently, not manipulatively.

Koinonia. Formation is irreducibly communal. An app that never points beyond itself to human community has failed theologically, regardless of its engagement metrics. But requiring community as a prerequisite would exclude the searching users who need the app most. It means designing every feature with a communal horizon, even the features used alone.

Eschatological humility. Spiritual formation is the Holy Spirit's work. The gardener tends the soil. The gardener does not make the seed grow.

The "spiritual workout" trap is as theologically dangerous as the streak mechanic. Completion percentages, formation scores, leveling up through practices – I keep noticing them in apps that should know better.

The Spirit's transformative work resists measurement. Dark nights, as John of the Cross described them. Wilderness seasons. Apparent regression that may actually be growth. We create conditions, not outcomes. We observe indicators, not scores. Measure what you can, interpret with humility, never confuse the map for the territory.

These five commitments make the framework specifically *Christian*, not merely ethical. Kenotic and eschatological commitments have no secular parallel. They demand choices humanistic frameworks won't generate: serving content users didn't request, celebrating when users outgrow the product, holding metrics loosely when investors demand certainty.

The Missional AI community published *From Responsible to Redemptive* (Missional AI, 2026), seven principles for evaluating AI in ministry. Their framing is instructive: secular "responsible AI" sets a floor of harm avoidance; Christians should aim for AI that actively pursues flourishing. But their framework covers AI ethics broadly. This one is specifically for spiritual formation product design.

Seven Universal Principles

1. Meet the user where they are. Not where you wish they were. Behaviorally, spiritually, developmentally. *(Incarnation)*

The data is unambiguous (§1.2): the dominant engagement mode is reactive, situational, and brief. Reading plans fail at 50% dropout. So design for ambient and receptive modes first, not assumed deep study.

But behavioral patterns are only the surface. A first-week explorer needs different guidance than a six-month practitioner. Someone in grief needs different content than someone in a growth season. Content should move beyond access to understanding and application – not just encountering Scripture but being helped to make sense of it and live from it.

What does this mean concretely? Entry points based on the user's emotional and spiritual moment. Content sized for that moment. Formation trajectories that develop over months rather than generic pathways applied identically to everyone.

And critically – this is the part I keep having to remind myself of – at the user's pace of openness, not the app's pace of content delivery. The Spirit works at a pace the app cannot dictate.

2. Multimodal formation. *(Incarnation)* Audio, music, contemplative silence, guided practice – these should be primary formats, not supplements to reading (§2.1). Can an algorithm do justice to the breadth of Christian formation tradition? That's the right question. The tradition has always formed through multiple modes. Digital tools should recover that breadth rather than collapsing everything into text.

3. Resist spiritual commodification. *(Kenosis)* This one requires more explanation than it seems. When a practice is offered, name its tradition – Ignatian, Benedictine, Franciscan, Orthodox – and give enough context that users understand the community and theology it emerged from (§2.2). Why? Because stripped of context, a practice becomes a technique. Encourage commitment to a single practice or tradition for sustained periods rather than daily sampling. All content should flow from a coherent exegetical and theological foundation, not disconnected sources assembled for variety.

4. Don't just build for individuals. *(Koinonia)* Private practice disconnected from community risks the very consumerism this framework critiques (§2.3). I keep catching myself designing solo experiences because they're simpler to build. But structural prompts toward communal engagement – spiritual director connections, shared practice rhythms – counter the privatization tendency. The product has to push against what's easy.

5. Scaffold toward community without requiring it. *(Koinonia, Imago Dei)* Here's where it gets genuinely tricky. You cannot tell transitional users to "find a church" (§1.5). For many of them that's a prerequisite they can't meet and an invitation they'd refuse. Build bridges instead. Begin alone. Develop spiritual rhythm and theological grounding. Then, slowly, grow toward embodied community.

6. Grace-based mechanics throughout. *(Imago Dei, Kenosis)* No default streaks. No shame triggers. No social comparison. Opt-in accountability tools for users who choose them. The ethical line is consent – the user choosing tools for their own formation, not the platform deploying mechanics for its retention.

So what replaces streaks? Implementation intentions, for one. Specific "if-then" plans like "when I pour my morning coffee, I open the devotional." Gollwitzer (1999) established the framework; Masicampo and Baumeister (2011) showed they dramatically increase follow-through. Event-based triggers aligned with liturgical calendar provide natural rhythms without manufactured urgency.

Then there's progress transparency without shame: "You've engaged deeply with Psalms of Lament three times this month." Self-awareness without comparison. And graceful failure modes: "Your account remains available whenever you're ready." Spiritual seasons include wilderness and rest. The app should know that.

7. Formation metrics over engagement metrics. *(Eschatological humility)* Measure depth and freedom, not DAU and streak completions (throughout). Never present engagement as formation achievement.

Look, every investor will push back on this one. I get it. DAU is legible. “The Spirit transforms” is not a KPI. But the logic holds: the app creates conditions, the Spirit transforms. If the app doesn’t serve growth, users cancel. That’s supposed to be the point – though I’ll admit the business model makes this principle the hardest to hold onto in practice.

Contextual Principles: Deriving Your Own

The seven principles above apply to any digital spiritual formation tool. Tradition, audience, market – those don’t matter. But every product also needs contextual principles derived from its specific setting.

For the European audience examined in Part 1, three contextual principles emerge: (a) *European-specific defaults* (privacy-first architecture, multi-tradition hospitality, post-Christian assumptions, GDPR as dignity commitment) from §1.4; (b) *Serve the spiritually in-between* (guide through personalized companionship, not overwhelming libraries) from §1.5; (c) *Ecumenical breadth* (tradition-labeled content spanning Catholic, Protestant, Orthodox, and contemplative streams).

A Catholic app for committed believers in the US would look completely different. Liturgical calendar integration, magisterial alignment, parish-level community features. A Pentecostal app for African diaspora communities? Different still – oral-first content, communal prophecy discernment, multilingual worship resources.

What transfers is the method, not the specifics. Who is your user? What’s their context? What does the tradition say they need? Universal principles constrain the design space. Contextual principles locate you within it.

Six Diagnostic Questions

Principles need teeth. Before building any feature, I run it through six questions. The first three are relatively straightforward – the last three are the ones that keep founders honest.

1. **Formation or engagement metrics?** If the feature’s primary purpose is increasing DAU, it’s prioritizing business goals over spiritual flourishing. Be honest about which one you’re serving.
2. **Freedom or anxiety?** “Come to me, all you who are weary and burdened, and I will give you rest” (Matthew 11:28). Does this feature extend that invitation, or add to the burden?
3. **Kill-switch test.** Remove the mechanic entirely. Does engagement survive? If not, the motivation was extrinsic – manufactured by the platform, not owned by the user.

Now the harder ones.

4. **Dignity check.** GDPR principles (§1.4) reflect a conviction that goes beyond compliance: humans are subjects with *Würde* – dignity, but the German word carries more weight, something closer to inviolable worth. Does this feature treat users as bearers of that worth? Or as data points to be optimized?
5. **The graduation question.** If users developed deep communion with God and no longer needed the app, would we celebrate? Or mourn?

6. **The wilderness question.** A user has a spiritually dry year. They come back. Do they feel welcomed, or judged?

Tensions Within the Framework

I wish I could say these principles sit neatly side by side. They don't. Some pull in opposite directions, and how a designer resolves those tensions matters more than checking off each requirement in isolation. Three tensions in particular have shaped my own design decisions.

Brief engagement vs. commodification. Designing for situational, brief encounters (principle 1) risks producing exactly the commodification principle 3 warns against. Someone opens the app anxious about work, receives a comforting verse, closes it. Were they formed? Or just soothed? I genuinely don't know how to tell from the outside.

Hyperpersonalization sharpens the problem. An AI that learns what a user likes and serves more of it is a recommendation engine, not a formation companion. What does a spiritual director actually do? They listen. They discern. And sometimes – this is the part that makes me nervous about building an app – they offer what the person *needs* rather than what they *want*. That's the gap between formation-driven personalization and preference-driven personalization.

Community requirement vs. unchurched reality. Principle 4 says build for community. Principle 5 acknowledges that unchurched users don't have one. Both are true. The design has to scaffold *toward* community without making community a prerequisite for formation. I don't have a clean resolution here. It's a genuine tension that shows up in every feature decision.

Regular practice vs. anti-streak design. The evidence reviewed here motivates investigating regular practice, but does not establish that brief digital engagement causes spiritual formation (§1.1). How could a design encourage daily practice without building a streak mechanic?

The anti-streak principle doesn't reject daily practice but *mechanically enforced* practice. Intrinsic/extrinsic distinction applies directly: sustain rhythm through intrinsic desire, not loss-aversion. But where encouragement ends and manipulation begins remains unclear. I've spent significant time on that question.

A Note on Method

Park et al.'s scoping review found no study of a digital spiritual-and-mental-health application among Gen Z within its search scope, which included an update in November 2023 (Park et al., 2024). That bounded gap motivates investigation, rather than establishing a universal absence of research on digital spiritual practice.

Three research streams inform the hypothesis. Religion and spirituality correlate positively with wellbeing across many quantitative studies (Koenig, 2012). Mindfulness-app trials report small average reductions in depression and anxiety symptoms relative to control conditions, with longer-term effects still uncertain (Gal et al., 2021; Linardon et al., 2024). A four-week single-group prayer-app feasibility study reported preliminary improvements without establishing a causal app effect (Laird et al., 2024). Together, these findings provide an indirect rationale for testing the proposed combination; they do not validate its mechanisms or spiritual-formation outcomes. That's the hypothesis, not the finding.

The honest theological limit: spiritual formation involves divine action. You can't "optimize for theosis" the way Freeletics optimizes for VO2 max. The technology claims to create conditions where formation becomes more likely. Whether the Spirit uses those conditions is not a design question.

The hardest principle to implement is the first. Genuinely designing for brief engagement without reducing Scripture to what Germans call *Seelenpflaster* – a band-aid for the soul. Holding both is the design challenge that keeps me up at night.

How to Use This Framework

Three practical modes. **Feature design review**: run features through the six diagnostic questions before building. **Quarterly formation audit**: read analytics through the formation interpretation framework (Section 2.5) alongside contextual reading of instrument results. **Annual ethical audit**: is the app creating dependency? Substituting for community? A content governance board should run this with external voices.

This framework doesn't exist in a vacuum. Complementary work is emerging fast. FaithTech's reckless/responsible/redemptive taxonomy (Kelly, 2024). Gloo's FAI-C benchmark for theological accuracy (Gloo, 2025). Tretter and Puzio (2025) and the Vatican's *Antiqua et Nova* (2025). *Quo Vadis, Humanitas?* from the International Theological Commission (2026).

Notre Dame's DELTA framework caught my attention most, launched at a September 2025 summit after more than 200 cross-sector conversations (Sullivan, 2025). Sullivan's framing: standard AI ethics sets a floor ("don't cause harm"), but virtue ethics asks the harder question: does the technology actually make people better? The evangelical tradition got there earlier than most people realize. The ERLC published *Artificial Intelligence: An Evangelical Statement of Principles* in 2019, grounding twelve articles in *imago Dei* anthropology (ERLC, 2019).

Here's the gap, though. None of these frameworks provide a design methodology. They don't tell you *how to build*. DELTA asks *whether* technology serves human flourishing. This framework asks *how* to design a specific feature so that it does. They need each other.

The framework is also published separately at missional.design. Applying it requires an evaluation approach that can challenge its own assumptions.

2.5 Evaluation, Accountability, and the Limits of Measurement

The framework's claims remain provisional. A design can follow its principles and still fail to help the people it intends to serve. Evaluation must therefore be capable of identifying failure, not merely reporting engagement as confirmation.

Distinguishing Business Health, Formation Indicators, and Harm

Growing app engagement is not the same as growing spiritually. **Platform health metrics** such as daily or monthly active users, retention, and conversion answer whether a service is sustainable. They are formation-blind. **Formation indicators** might include greater practice autonomy, engagement with

both comfort and challenge, and movement toward human community. **Anti-metrics** would attend to dependency language, guilt-driven returns, and substitution of an app for embodied relationships. These are indicators and warning signs, not spiritual scores.

Possible methods include pairing satisfaction questions with formation questions, reading narratives of why users leave, and examining whether people continue a practice when reminders are paused. A notification-pause experiment could test dependence on prompts; unprompted return alone would not establish spiritual growth. The Daily Spiritual Experience Scale (Underwood & Teresi, 2002) and the Harvard Human Flourishing Index (VanderWeele, 2017) offer instruments for periodic assessment, but neither turns product analytics into a measure of the Spirit's work.

The commercial tension cannot be wished away. A service may benefit financially from continued use while its users would benefit from less use or deeper human relationships. If retention rises while human connections weaken, the framework's communal claim has not been met. Formation and ethics must override growth when those aims diverge.

Accountability with Authority to Pause Harm

A founder or team whose income depends on a service cannot be its sole check on harm. The governance requirement is independent accountability with actual authority: to pause features flagged by ethical indicators, review theological boundaries before deployment, and require changes when evidence shows harm. Multi-tradition theological perspectives and clinical psychology expertise are relevant to that review. This is a requirement for responsible implementation, not a claim that such a body has already been assembled.

An ethical audit must ask whether the tool creates dependency or substitutes for community. A finding of harm should trigger a pause and investigation regardless of favorable business metrics.

The Dark Night Problem

John of the Cross's account of spiritual desolation poses a limit for measurement. Falling session frequency, negative mood, and disengagement could reflect loss of interest, harm, or a season in which patient silence is appropriate. There is no reliable automated way to distinguish these from the behavioral pattern alone. The system must allow for the possibility that its interpretation is wrong, rather than automatically answering apparent withdrawal with re-engagement pressure.

At small scale, narrative attention is more appropriate than premature population-level conclusions. Attribution remains limited: analytics cannot isolate the contribution of an app from prayer, friendship, community, or divine action. The theological limit is fundamental. A service creates conditions; it does not manufacture transformation.

What Would Count Against the Hypotheses?

The assumptions named in the introduction require distinct tests. If spiritually liminal Europeans do not find a dedicated formation tool useful after sustained outreach, the demand assumption needs revision. If users experience AI guidance as hollow, manipulative, or theologically unreliable despite safeguards, that would challenge the proposed role of AI rather than merely its presentation. If use displaces embodied community, the claim that AI can support formation without substituting for human relationships has failed in that setting.

The contextual claim also remains open: European positioning may prove less relevant than proposed, or adoption elsewhere may expose errors in the audience analysis. A service's inability to cover its costs would challenge its business model, without by itself settling its theological claims. None of these outcomes should be folded into a single success score. Audio-first formation likewise needs direct comparison and appropriate interpretation; engagement or satisfaction alone cannot validate it.

Conclusion

The Woman on the U-Bahn Is Not a Hypothetical

She's the composite of millions of Europeans. Spiritually interested, institutionally homeless, carrying questions they can't ask in the spaces available to them. The tools that should serve her formation treat her as a user to retain. The tradition that should guide her sits in books she can't navigate alone. That gap between aspiration and access is the defining challenge of digital spiritual formation.

The field is stuck. Apps treating Scripture as content produce engagement without formation. Apps treating users as audiences produce metrics that don't measure what matters. The hyperpersonalization thesis emerges from this impasse: systems that attend to a user's story and context might support formation more responsively than generic content alone. That is a proposed response to interconnected problems in cognitive science, behavioral psychology, practical theology, and religious sociology. Whether it produces the hoped-for outcomes remains untested.

A Design Ethics for Transformative Contexts

The performance spirituality critique applies beyond formation. Duolingo's streak anxiety mirrors YouVersion's (Shortt et al., 2023). Chen et al.'s (2024) systematic review found streak-based systems increase anxiety, guilt, and burnout across fitness, diet, and wellness. Selwyn (2016) documented the same dysfunction in education technology. The seven universal principles and six diagnostic questions work as design ethics for any domain where users' success means they need your product less.

Limitations and Open Questions

Methodological: Cultural positioning bias is real. And the empirical validation gap is wide: whether Christians and seekers will pay for a formation-first app when free alternatives exist remains untested.

Theological: The category question for AI spiritual companionship remains unresolved. Pentecostal perspectives are underrepresented; the distinctive Pentecostal contribution is a formation posture: the expectation that God actively speaks in each encounter (Chan, 1998). How a digital tool could honor that posture without claiming divine authority remains an open design and theological question.

Evidentiary: The analogical reasoning from fitness and therapy to spiritual formation has limits. The cited evidence does not directly validate this proposed spiritual-formation model. The framework remains exploratory.

What Building This Requires: A Leadership Reflection

Building toward this framework requires more than technology and theology. It also requires people willing to be formed themselves, and communities with the authority to hold them accountable.

Mentoring UX and product design students at CareerFoundry taught me something about formation no theology textbook did. The difference between a student with curriculum and one with curriculum plus a mentor who knows their journey is categorical. Students with identical coursework produced radically different outcomes depending on whether someone noticed when they were stuck, asked "I see what you're trying to do; have you considered this?". Someone who met them where they were and held them to higher standards. Those who struggled most didn't lack talent but someone who knew their story well enough to offer the right challenge or encouragement at the right moment.

That experience helps explain why personally attentive accompaniment matters to this paper's argument. It does not establish that AI can provide what a human mentor does.

Co-founding *digitale christen* during the pandemic taught me something different. The initiative never launched, but navigating startup ideation with experienced founders gave me a bias toward action and pragmatism that academic theology doesn't teach. I carry those instincts into design work: test early, learn fast, let evidence guide the next step.

Closing

The framework remains a proposal. Its audience assumptions could prove wrong, its design requirements could prove insufficient, and the theological wager on AI companionship could be a category error.

But the questions themselves aren't going away. How do you design for formation instead of engagement? How do you honor two thousand years of tradition while building with tools that didn't exist two years ago? How do you serve the people consumer religion has written off?

Those questions belong to the field now, not to any single product.

I ride the unpredictable and crowded Berlin S-Bahn and U-Bahn often. Tomorrow morning someone will pull out her phone and open something: a prayer app, meditation timer, or podcast. The question is whether what she finds serves formation rather than merely engagement. Answering it requires theologically grounded design, independent accountability, and evidence willing to unsettle the framework itself.

Bibliography

Ackerman, R., & Goldsmith, M. (2011). Metacognitive regulation of text learning: On screen versus on paper. *Journal of Experimental Psychology: Applied*, 17(1), 18-32.

Agana, Agana-Nsiire. (2022). Rethinking African Theology in Light of Emerging Digital Culture. *Studies in World Christianity*, 28(1), 87-109. https://www.euppublishing.com/doi/10.3366/swc.2022.0372

Alkhouri, K. (2025). Spiritual confusion in the era of artificial intelligence: A psychology of religion perspective. *International Review of Psychiatry*, 37(5). https://doi.org/10.1080/09540261.2025.2488761

Bertelsmann Stiftung. (2023). *Religionsmonitor 2023: Zusammenleben in religiöser Vielfalt*. Bertelsmann Stiftung. https://www.bertelsmann-stiftung.de/fileadmin/files/BSt/Publikationen/GrauePublikationen/ST_DZ_Religionsmonitor_Zusammenleben_in_religioeser_Vielfalt_2023.pdf

Barna Group. (2025). Gen Z and Millennials Fuel a Bible Reading Comeback. Retrieved from https://www.barna.com/trends/bible-reading-trends/

Baron, N. S. (2021). *How We Read Now: Strategic Choices for Print, Screen, and Audio*. Oxford University Press.

Bible Chat. (2026, March 14). Version 4.3.1 release notes: Daily Devotional update – Spiritual Assistant, Community Reactions & Replies, Bible Trivia Game. App Store.

Barry, W. A., & Connolly, W. J. (1982). *The Practice of Spiritual Direction*. HarperOne.

Barton, R. H. (2008). *Strengthening the Soul of Your Leadership: Seeking God in the Crucible of Ministry*. InterVarsity Press.

Ndereba, K. M. (2023). Digital ecclesiology and Africa's digital natives: prospects and challenges. *HTS Teologiese Studies / Theological Studies*, 79(2). https://scielo.org.za/scielo.php?pid=S1015-87582023000200007&script=sci_arttext

Bediako, Kwame. (1995). *Christianity in Africa: The Renewal of a Non-Western Religion*. Orbis Books.

Bonhoeffer, D. (1954). *Life together* (J. W. Doberstein, Trans.). Harper & Row. (Original work published 1939.)

Bridges, Jerry. (2008). *Transforming Grace: Living Confidently in God's Unfailing Love*. NavPress.

Brumec, M., & Platovnjak, I. (2025). Artificial Intelligence and Spirituality: A Tool for Engagement or a Threat to Transcendence? *Scientia et Fides*, 13(2). https://doi.org/10.12775/SetF.2025.013

Bucar, E. (2022). *Stealing My Religion: Not Just Any Cultural Appropriation*. Harvard University Press.

Carrette, J., & King, R. (2004). *Selling Spirituality: The Silent Takeover of Religion*. Routledge.

Chan, Simon. (1998). *Spiritual Theology: A Systematic Study of the Christian Life*. InterVarsity Press.

Comer, J. M. (2024). *Practicing the Way: Be with Jesus. Become Like Him. Do as He Did.* WaterBrook.

Christianity Today. (2025, April). An Old Idea Is New Again in Europe: Spiritual Formation. Retrieved from https://www.christianitytoday.com/2025/04/spiritual-formation-popular-again-europe/

Christianity Today. (2026, January). Creed: The artificial intelligence "youth pastor" in your pocket. *Christianity Today*. https://www.christianitytoday.com/2026/01/creed-artificial-intelligence-church/

Cole-Turner, R. (2025). Artificial Intelligence and Human Spirituality: Is a Spiritual Chatbot a Good Idea? *Theology and Science*, 23(3), 471–486. https://doi.org/10.1080/14746700.2025.2514299

Columbia Theological Seminary. (2024). Spiritual Direction. Retrieved from https://www.ctsnet.edu/spiritual-direction/

DeYoung, K. (2023). On the Crushing Guilt of Failing at Quiet Times. Crossway. Retrieved from https://www.crossway.org/articles/on-the-crushing-guilt-of-failing-at-quiet-times/

Davie, Grace. (2015). *Religion in Britain: A Persistent Paradox* (2nd ed.). Wiley-Blackwell.

Deeg, A., Pickel, G., Jaeckel, Y., & Mélix, A. (2023). *Dimensionen biblischer Relevanz: Befunde einer empirischen Befragung zur gesellschaftlichen Verbreitung und Nutzung der Bibel in Deutschland 2022*. University of Leipzig. https://doi.org/10.36730/2023.1.dbr

Dyer, J. (2019). The habits and hermeneutics of digital Bible readers. *Journal of Religion, Media and Digital Culture*, 8(2), 181-205.

EKD Sozialwissenschaftliches Institut. (2018). *"Was mein Leben bestimmt? Ich!" Lebens- und Glaubenswelten junger Erwachsener heute*. Evangelische Kirche in Deutschland.

Evangelical Focus. (2025). Germany: Catholics and Protestants continue to lose members. Retrieved from https://evangelicalfocus.com

Gerbaulet, D., & Korn, O. (2018). Do zenware applications reduce the digital distraction of knowledge workers? A qualitative study based on expert interviews. In *Advances in Intelligent Systems and Computing* (Vol. 588, pp. 116-126). Springer. https://doi.org/10.1007/978-3-319-60582-1_12

Gollwitzer, P. M. (1999). Implementation intentions: Strong effects of simple plans. *American Psychologist*, 54(7), 493-503.

Gutiérrez, G. (1973/1988). *A Theology of Liberation: History, Politics, and Salvation*. Orbis Books.

Grethlein, Christian. (2016). *Praktische Theologie* (2nd ed.). De Gruyter.

Grethlein, Christian. (2025). *Christsein im Wandel: Kritische Überlegungen zu "Glaube", "Kirche" und "Religion"*. Mohr Siebeck. https://www.mohrsiebeck.com/buch/christsein-im-wandel-9783161643941/

Habermas, Jürgen. (2008). Notes on a Post-Secular Society. *New Perspectives Quarterly*, 25(4), 17-29.

Hutchings, Tim. (2017). *Creating Church Online: Ritual, Community and New Media*. Routledge.

Jenkins, Philip. (2011). *The Next Christendom: The Coming of Global Christianity* (3rd ed.). Oxford University Press.

Jackson, L. (2025, September 14). Finding God in the App Store. *The New York Times*. https://www.nytimes.com/2025/09/14/technology/ai-religion-apps.html

Karle, Isolde. (2010). *Kirche im Reformstress*. Gütersloher Verlagshaus.

Mangen, A., Walgermo, B. R., & Brønnick, K. (2013). Reading linear texts on paper versus computer screen: Effects on reading comprehension. *International Journal of Educational Research*, 58, 61-68.

Miller, V. J. (2003). *Consuming Religion: Christian Faith and Practice in a Consumer Culture*. Continuum.

Missional AI. (2026). *From Responsible to Redemptive: A Christian Framework for AI Ethics* (2nd ed.). Missional AI. https://missional.ai/

Oaca, A. (2025, June 20). How Romanian startup Bible Chat turned AI and faith into a global phenomenon. *tech.eu*. Retrieved from https://tech.eu/2025/06/20/how-romanian-startup-bible-chat-turned-ai-and-faith-into-a-global-phenomenon/

Ong, W. J. (1982). *Orality and Literacy: The Technologizing of the Word*. Methuen.

Pew Research Center. (2025). *The global rise of the religiously unaffiliated*. Pew Research Center. https://www.pewresearch.org/religion/

Rhoads, D. (2006). Performance criticism: An emerging methodology in Second Testament studies—Part II. *Biblical Theology Bulletin*, 36, 164–184.

Rousmaniere, T., Zhang, Y., Li, X., and Shah, S. (2025). Large language models as mental health resources: Patterns of use in the United States. *Practice Innovations*. https://doi.org/10.1037/pri0000292

Robb, Michael Stewart. (2017-present). Sanctus: A European Institute for Theology and Spiritual Formation. Munich, Germany. Retrieved from https://sanctus.institute

Robb, Michael Stewart. (2026). Letters to young pastors: Wisdom for spiritual formation [YouTube series]. Sanctus Institute. https://www.youtube.com/playlist?list=PL3ukzbDEoqBm1zjRLPdZt5MS7hQfQdwbn

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.

Sentio University. (2025). Survey: ChatGPT maybe the largest provider of mental health support in the United States. Retrieved from https://sentio.org/ai-research/ai-survey

Shedd, E. (2009). Streetlights Bible. GRIP Outreach for Youth / Streetlights. 430,000 app users, 18 million plays. NLT text performed word-for-word over original hip-hop/lo-fi production. Retrieved from https://www.streetlightsbible.com/

SPCK Group. (2025). *Bible trends 2025: Gen Z, Bible sales, and emerging readership in the UK*. SPCK Group / Nielsen BookData.

Statista. (2025). Religious service attendance in Europe 2024. Retrieved from https://www.statista.com

Treppmann, T. (2026, March 24). User interview: Bibel TV app usage [Unpublished interview transcript].

Underwood, L. G., & Teresi, J. A. (2002). The Daily Spiritual Experience Scale: Development, theoretical description, reliability, exploratory factor analysis, and preliminary construct validity using health-related data. *Annals of Behavioral Medicine*, 24(1), 22-33. https://doi.org/10.1207/S15324796ABM2401_04

VanderWeele, T. J. (2017). On the promotion of human flourishing. *Proceedings of the National Academy of Sciences*, 114(31), 8148-8156. https://doi.org/10.1073/pnas.1702996114

Wolf, M. (2018). *Reader, Come Home: The Reading Brain in a Digital World*. HarperCollins.

Woodhead, L., & Catto, R. (Eds.). (2012). *Religion and Change in Modern Britain*. Routledge.

East Texas Baptist University. (2025, May 6). ETBU Students Examine What the Church Is Really Singing. Retrieved from https://www.etbu.edu/etbu-now/news/2025/05/etbu-students-examine-what-church-really-singing

NRB. (2025a, May 1). Christian Media Reaches Digitally Engaged, Spiritually Committed Younger Demographic. Retrieved from https://nrb.org/christian-media-reaches-digitally-engaged-spiritually-committed-younger-demographic/

NRB. (2025b, June 3). NRB, Barna Group Release Landmark Study on the State of Christian Media. Retrieved from https://nrb.org/nrb-barna-group-release-landmark-study-on-the-state-of-christian-media/

YouVersion. (2025, December). Let's celebrate what God did through you in 2025! Retrieved from https://blog.youversion.com/2025/12/lets-celebrate-what-god-did-through-you-in-2025/

Zenit. (2025). Church membership and attendance in Germany: 2024 annual report. *Zenit News Agency*.

American Bible Society. (2024). *State of the Bible USA 2024*. American Bible Society. https://sotb.research.bible/

American Bible Society. (2025). *State of the Bible USA 2025*. American Bible Society. https://sotb.research.bible/

Bible Gateway. (2018). Bible Gateway's 25th Anniversary: Top Searches, Most-Read Verses, and 14 Billion Page Views. Retrieved from https://www.biblegateway.com

Gerhardt, J. L. (2025, December). Plan This Year's Bible Reading for Endurance, not Speed. *Christianity Today*. Retrieved from https://www.christianitytoday.com/2025/12/bible-in-a-year-slow-reading/

Evangelical Focus. (2025). Digital Bible distribution surpasses print for the first time. Retrieved from https://evangelicalfocus.com

Lifeway Research. (2017). Americans Are Fond of the Bible, Don't Actually Read It. Retrieved from https://research.lifeway.com

Bible Society and United Bible Societies. (2024). *The Patmos World Bible Attitudes Survey*. Gallup / United Bible Societies. https://unitedbiblesocieties.org/landmark-gallup-survey-finds-faith-the-norm-globally/

Gal, E., Stefan, S., & Cristea, I. A. (2021). The efficacy of mindfulness meditation apps in enhancing users' well-being and mental health related outcomes: A meta-analysis of randomized controlled trials. *Journal of Affective Disorders*, 279, 131-142. https://doi.org/10.1016/j.jad.2020.09.134

Haiduk, F., Quigley, C., & Fitch, W. T. (2020). Song Is More Memorable Than Speech Prosody: Discrete Pitches Aid Auditory Working Memory. *Frontiers in Psychology*, 11, 586723.

Koenig, H. G. (2012). Religion, Spirituality, and Health: The Research and Clinical Implications. *ISRN Psychiatry*, 2012, 278730.

Laird, B., Zuniga, S., Hook, J. N., Van Tongeren, D. R., Joeman, L., & Huberty, J. (2024). Mental Health and Well-Being in Racial or Ethnic Minority Individuals After Using a Faith and Prayer Mobile App (Pray.com): Feasibility and Preliminary Efficacy Trial. *JMIR Formative Research*, 8, e52560. https://doi.org/10.2196/52560

Linardon, J., Messer, M., Goldberg, S. B., & Fuller-Tyszkiewicz, M. (2024). The efficacy of mindfulness apps on symptoms of depression and anxiety: An updated meta-analysis of randomized controlled trials. *Clinical Psychology Review*, 107, 102370. https://doi.org/10.1016/j.cpr.2023.102370

Park, S. Y., Do, B., Yourell, J., Hermer, J., & Huberty, J. (2024). Digital Methods for the Spiritual and Mental Health of Generation Z: Scoping Review. *Interactive Journal of Medical Research*, 13, e48929. https://doi.org/10.2196/48929

Pray As You Go. (2025). About Pray As You Go. Jesuits in Britain. Retrieved from https://prayasyougo.org/about

Willard, D. (2006). *The Great Omission: Reclaiming Jesus's Essential Teachings on Discipleship*. HarperOne.

Dicastery for the Doctrine of the Faith & Dicastery for Culture and Education. (2025, January 28). *Antiqua et Nova: Note on the Relationship Between Artificial Intelligence and Human Intelligence*. Vatican. https://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_ddf_doc_20250128_antiqua-et-nova_en.html

Ajeesh, K. G., & Joseph, J. (2025). The Compassion Illusion: Can Artificial Empathy Ever Be Emotionally Authentic? *Frontiers in Psychology*, 16, 1723149. https://doi.org/10.3389/fpsyg.2025.1723149

Lectio 365. (2024). The App: Features and Design. Retrieved from https://lectio365.com/the-app/

Chen, H., Schoefer, K., Manika, D., & Tzemou, E. (2024). The "Dark Side" of General Health and Fitness-Related Self-Service Technologies: A Systematic Review of the Literature and Directions for Future Research. *Journal of Public Policy & Marketing*, 43(2), 151-170. https://doi.org/10.1177/07439156231224731

Cheng, M., Lee, C., Khadpe, P., Yu, S., Han, D., & Jurafsky, D. (2026). Sycophantic AI Decreases Prosocial Intentions and Promotes Dependence. *Science*. https://doi.org/10.1126/science.aec8352

Dickerson, S. S., & Kemeny, M. E. (2004). Acute Stressors and Cortisol Responses: A Theoretical Integration and Synthesis of Laboratory Research. *Psychological Bulletin*, 130(3), 355-391. https://doi.org/10.1037/0033-2909.130.3.355

Masicampo, E. J., & Baumeister, R. F. (2011). Consider It Done! Plan Making Can Eliminate the Cognitive Effects of Unfulfilled Goals. *Journal of Personality and Social Psychology*, 101(4), 667-683. https://doi.org/10.1037/a0024192

Sheen, E., et al. (2025). Living Well? The Unintended Consequences of Highly Popular Commercial Fitness Apps through Social Listening using Machine-Assisted Topic Analysis: Evidence from X. *British Journal of Health Psychology*. https://doi.org/10.1111/bjhp.70026

Syrek, C. J., Weigelt, O., Peifer, C., & Antoni, C. H. (2017). Zeigarnik's Sleepless Nights: How Unfinished Tasks at the End of the Week Impair Employee Sleep on the Weekend through Rumination. *Journal of Occupational Health Psychology*, 22(2), 225-238. https://doi.org/10.1037/ocp0000031

Sword Health. (2026, March 9). Sword Launches Dawn, Bringing World-Class AI Mental Health Support to Everyone, Instantly. GlobeNewsWire. https://www.globenewswire.com/news-release/2026/03/09/3252030/0/en/Sword-Launches-Dawn-Bringing-World-Class-AI-Mental-Health-Support-to-Everyone-Instantly.html

Thea. (2026). The Emotional Operating System for the Human Experience. Retrieved from https://www.theainsights.com/

Hua, Y., Siddals, S., Ma, Z., Galatzer-Levy, I., Xia, W., Hau, C., Na, H., Flathers, M., Linardon, J., Ayubcha, C., & Torous, J. (2025). Charting the evolution of artificial intelligence mental health chatbots from rule-based systems to large language models: A systematic review. *World Psychiatry*, *24*(3), 383–394. https://doi.org/10.1002/wps.21352

Huo, B., Boyle, A., Marfo, N., Tangamornsuksan, W., Steen, J. P., McKechnie, T., Lee, Y., Mayol, J., Antoniou, S. A., Thirunavukarasu, A. J., Sanger, S., Ramji, K., & Guyatt, G. (2025). Large language models for chatbot health advice studies: A systematic review. *JAMA Network Open*, *8*(2), e2457879. https://doi.org/10.1001/jamanetworkopen.2024.57879

Li, H., Zhang, R., Lee, Y.-C., Kraut, R. E., & Mohr, D. C. (2023). Systematic review and meta-analysis of AI-based conversational agents for promoting mental health and well-being. *npj Digital Medicine*, *6*, Article 236. https://doi.org/10.1038/s41746-023-00979-5

World Health Organization. (2022). *World mental health report: Transforming mental health for all*. https://www.who.int/publications/i/item/9789240049338

Fang, A., Tam, A., Wadden, D., Franke, L., Picard, R., & Resnik, P. (2025). How AI and Human Behaviors Shape Psychosocial Effects of Extended Chatbot Use: A Longitudinal Randomized Controlled Study. *arXiv* 2503.17473. https://arxiv.org/abs/2503.17473

Fitzpatrick, K. K., Darcy, A., & Vierhile, M. (2017). Delivering Cognitive Behavior Therapy to Young Adults With Symptoms of Depression via a Fully Automated Conversational Agent (Woebot): A Randomized Controlled Trial. *JMIR Mental Health*, 4(2), e19. https://doi.org/10.2196/mental.7785

Guinness, Os. (1993). *Dining with the Devil: The Megachurch Movement Flirts with Modernity*. Baker Books.

Jethani, S. (2009). *The Divine Commodity: Discovering a Faith Beyond Consumer Christianity*. Zondervan.

Wright, W. (2024, March 19). What Happens When God Chatbots Start Giving Spiritual Guidance? *Scientific American*. https://www.scientificamerican.com/article/the-god-chatbots-changing-religious-inquiry/

Selwyn, N. (2016). *Is Technology Good for Education?* Polity Press.

Shortt, M., Tilak, S., Kuznetcova, I., Martens, B., & Akber, H. (2023). Gamification in Mobile-Assisted Language Learning: A Systematic Review of Duolingo Literature from Public Release of 2012 to Early 2020. *Computer Assisted Language Learning*, 36(3), 517-554. https://doi.org/10.1080/09588221.2021.1933540

Smith, T. B., Bartz, J., & Richards, P. S. (2007). Outcomes of religious and spiritual adaptations to psychotherapy: A meta-analytic review. *Psychotherapy Research*, 17(6), 643-655. https://doi.org/10.1080/10503300701250347

Limbic. (2024). NHS Talking Therapies Access Report: AI-Enabled Self-Referral Outcomes. Retrieved from https://www.limbic.ai/nhs-report

Gloo. (2025). *FAI-C: Faithfulness to AI-Christian Worldview Benchmark*. Gloo / Center for AI & Faith. Retrieved from https://www.gloo.us/fai-c

Tretter, M., and Puzio, A. (2025). Red lines for religious AI. *Nature*, 646(8085), 550. https://doi.org/10.1038/d41586-025-03359-z

Simmerlein, J. (2025). Artificial Intelligence in Protestant Worship: A Case Study of the AI Service in Fuerth, Germany. *Review of Religious Research*. https://doi.org/10.1007/s13644-025-00612-x

HSLU Immersive Realities Research Lab. (2024). Deus in Machina: AI Jesus. Lucerne University of Applied Sciences and Arts. Retrieved from https://sites.hslu.ch/immersive-realities/en/deus-in-machina-ai-jesus-english/

Idea Garden. (2025). Bible BFF – Modern Bible Stories [Mobile application]. 60,000 downloads and $60,000 MRR within first month of launch. Retrieved from https://biblebff.app/

Kelly, J. (2024). *The FaithTech Playbook*. FaithTech. Retrieved from https://www.faithtech.com/playbook

Kelly, J. (2025). Which divine attributes are we imitating? AI, technological omniscience, and the call to wisdom, holiness, and love [Conference presentation]. Harvard Conference on Theology and Artificial Intelligence.

Gloo and Barna Group. (2026, February 19). *AI is becoming a spiritual authority in Americans' lives* [Research report]. Gloo. https://gloo.com/press/releases/ai-is-becoming-a-spiritual-authority-in-americans%E2%80%99-lives-new-research-reveals

Ethics & Religious Liberty Commission. (2019, April 11). Artificial intelligence: An evangelical statement of principles. ERLC. https://erlc.com/resource/artificial-intelligence-an-evangelical-statement-of-principles/

INSA-Consulere. (2024, June 13). *Bibelstudie 2024* [Representative survey, n=2,010, conducted 17–21 May 2024, commissioned by Evangelische Nachrichtenagentur Idea]. INSA-Consulere. https://www.idea.de/artikel/die-meisten-deutschen-lesen-nie-in-der-bibel

International Theological Commission. (2026). *Quo Vadis, Humanitas? Thinking Through Christian Anthropology in the Face of Certain Scenarios for the Future of Humanity*. Dicastery for the Doctrine of the Faith / Vatican Press. https://www.vatican.va/roman_curia/congregations/cfaith/cti_documents/rc_cti_doc_20260304_quo-vadis-humanits_en.html

Sullivan, M. (2025, September 22). The DELTA framework: Dignity, Embodiment, Love, Transcendence, Agency [Keynote address]. Notre Dame Summit on AI, Faith, and Human Flourishing, University of Notre Dame. https://ethics.nd.edu/programs/faith-based-frameworks-for-ai-ethics/delta/

Tracxn. (2026). Religion tech: 2026 market & investment trends. https://tracxn.com/d/sectors/religion-tech/

FaithTech. (2026, March 25). Redemptive AI seminar [Online seminar]. Featuring James Kelly (FaithTech) and guest speakers from Sprout AI/Factory and Google Cloud AI Research.

Kelly, J. (2026, March 25). Redemptive AI seminar remarks. FaithTech.

Thellmann, K., Stadler, B., Fromm, M., Schulze Buschhoff, J., Jude, A., Barth, F., Leveling, J., Flores-Herr, N., Köhler, J., Jäkel, R., and Ali, M. (2024). Towards multilingual LLM evaluation for European languages. arXiv:2410.08928. https://doi.org/10.48550/arXiv.2410.08928

Martins, A. F. T., et al. (2025). EuroLLM-22B: A Fully Open European LLM. *Hugging Face*. https://huggingface.co/EuroLLM/EuroLLM-22B

Molloy, C., Lynn, T., & Foster, J. (2025). Irish-BLiMP: A Linguistic Benchmark for Evaluating Human and LLM Grammatical Competence in Irish. *arXiv preprint*. https://arxiv.org/abs/2503.05529

Muscat, K., Borg, C., & Farrugia, A. (2025). Benchmarking Large Language Models against Smaller Fine-Tuned Models for Maltese. *arXiv preprint*. https://arxiv.org/abs/2501.14828

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