









Welcome

QUT, Cisco and Anglicare Southern Queensland acknowledge all First Peoples of the land on which we live, walk and work on. We honour them and their Ancestors for their survival, continued traditions, spiritual connection and caring of country, sky, water and sea.

We pay respect to the Elders past and present and will continue to support their right for self-determination. We are committed to Reconciliation and respectfully recognise that sovereignty has never been ceded.

ACADEMIC RESEARCH TEAM

Nadine Ostern, QUT Shannon Colville, QUT Wasana Bandara, QUT Catherine Haslam, UQ Sophie Coulon, QUT

ANGLICARE SOUTHERN QUEENSLAND TEAM

Chloe Henry, Chief Client Officer Leanne Wood, Manager Research Evaluation & Advocacy Kylie Moulson, Client Service Lead Elizabeth Vilgan , Head of Client Experience

CITE THIS PAPER

Ostern, N; Colville, S; Bandara, W; Henry, C; Wood, L; Coulon, S; Haslam, C; Moulson, K; Viligan, E. (2025). More than a phone call: Using everyday interactions to detect and respond to loneliness. Centre for Future Enterprise, Queensland University of Technology. http://doi.org/10.5204/eprints.260043

© Copyright 2025. The Authors.



This work is licensed under a <u>Creative Commons</u>
<u>Attribution 4.0 International License.</u>

Contents

05

EXECUTIVE SUMMARY

08

INTRODUCTION

09

WHAT IS LONELINESS AND WHY DOES IT MATTER? 10

WHY CONTACT CENTRES?

13

CASE STUDY

16

SOLUTION SPACE

19

RECOMMENDATIONS

20

CALL TO COLLABORATE

21

REFERENCES

22

ACKNOWLEDGEMENTS

Forewords



CHLOE HENRY

Chief Client Officer Executive Leadership Anglicare Southern Queensland

At Anglicare Southern Queensland, our contact centre handles more than 30,000 calls each month — the majority from elderly Queenslanders. While many of these calls are for simple tasks such as rescheduling appointments or requesting assistance, they often become something more: moments of connection.

Our 24 dedicated contact centre agents strive to provide not only practical support, but also compassion and kindness. Over my three years as Chief Client Officer, I have seen the profound impact a longer conversation can have. For many of our older clients, that extra chat can turn an ordinary call into the highlight of their day.

Yet the reality of modern contact centres is complex. Staff work under constant pressure to manage time, ensure every call is answered, and meet efficiency targets. As organisations increasingly adopt omnichannel platforms — apps, chatbots, and online self-service — investment in human connection is often reduced. While these technologies bring convenience, they also risk pushing people further away from the incidental conversations that foster belonging, comfort, and trust.

This is particularly concerning for those experiencing loneliness. Few people will pick up the phone to dial a "loneliness line." But they will call to change an appointment, ask a question, or seek support — and in doing so, they may open the door to a meaningful interaction that helps ease their sense of isolation.

As organisations race to create seamless digital experiences, we must also pause to consider the unintended consequences. Self-service can increase efficiency, but it can also deepen disconnection. This white paper explores these challenges and highlights why preserving opportunities for genuine human connection — especially for the most vulnerable in our communities, young and old alike — has never been more important.



REG JOHNSON
General Manager, Education
Cisco Australia and New
Zealand

Loneliness has emerged as one of the pressing societal challenges of our time, affecting individuals, communities, and the systems that support them. For the National Industry Innovation Network (NIIN), this challenge aligns with our mission: innovation must not only advance technology but also shape its impact on society.

This whitepaper highlights how organisations can rethink everyday digital services—such as contact centres—to detect and respond to loneliness in ways that are practical, scalable, and human-centred. It shows that innovative technology, when designed with care, is becoming an enabler of connection and wellbeing in unexpected but powerful ways.

The research work presented here demonstrates the value of collaboration across industries, bringing together service providers, universities, and industry partners. It also underscores a call to action: digital transformation must be approached with responsibility and foresight, ensuring that efficiency gains are matched by a commitment to human connection.

At NIIN, we are proud to support this important work and invite others to join us in shaping a future where digital innovation strengthens both business performance and societal wellbeing.



DR NADINE OSTERN Cisco Chair in Trusted Retail QUT

Loneliness has become one of the defining challenges of our time. It does not discriminate - it touches people of all ages, backgrounds, and walks of life. While often seen as a private or individual matter, loneliness has far-reaching consequences for our communities, our workplaces, and our economy. It affects health and wellbeing and places growing pressure on already stretched systems of care.

This whitepaper asks us to see loneliness differently: not as a marginal issue, but as a challenge that organizations can play a role in addressing. It shows that businesses, service providers, and technology partners are uniquely positioned to intervene—not by replacing human connection, but by enabling it where it matters. The insights from this whitepaper highlight how everyday organizational touchpoints can become critical sites for reducing loneliness and fostering belonging.

At the heart of this work lies a question that also drives our research: how do we ensure that technology serves human good? In addressing loneliness, this means designing systems that are not only efficient but also attentive to human needs—systems that create trust, enable social connection, and respect the dignity of those they serve.

I invite you to read this report not only as an analysis of a pressing social problem, but as a call to action. Loneliness is not inevitable. By reimagining the role of organizations and the technologies they deploy, we can build futures in which human connection, value, and trust is not an afterthought but central design principles.

Executive Summary

Loneliness is as deadly as smoking and more harmful than obesity - and it is on the rise [1]. Once seen as a private struggle, it has become a global crisis, now recognised by the World Health Organization as a serious public health concern.

Loneliness poses serious risks to both physical and mental health, with consequences that extend beyond the individual. It affects communities, undermines prosperity, cohesion, and public safety, all of which strongly depend on social connections and well-being [2].

In Australia, the economic toll of loneliness is significant: it is estimated to cost the country \$2.7 billion annually through increased healthcare use, additional strain on the social care system and reduced economic productivity [3]. These costs are projected to rise, particularly among women and older adults (aged 55+), who are disproportionally affected by loneliness [4].

To date, most responses to loneliness in Australia have focused on individuals or have been framed through national policy initiatives. However, the role of organisations in tackling loneliness remains largely underexplored. Among these, one particularly overlooked yet promising organisational touchpoint is the contact centre. Though typically perceived as transactional, contact centres facilitate frequent human interactions. With the right mindset and design, they can be reimagined as meaningful hubs for connection, playing a quiet but potentially powerful role in addressing loneliness.

Our research shows that the burden of loneliness is already evident in contact centres, but so too is the opportunity to respond. Customers experiencing loneliness often engage in distinct ways: calling more frequently, staying on the line longer, or asking questions they already know the answers to. While typically labelled as 'inefficiencies', such behaviours can signal unmet emotional and relational needs that are often recognised by staff.

In the absence of clear protocols on how to respond, these interactions drive up call volumes, emotionally burden frontline staff, and weaken customer relationships. In this light, unaddressed loneliness emerges as a hidden operational cost - eroding trust, straining frontline teams, and heightening reputational risk.

Drawing on a real-world case study, this white paper explores how reimagining the role of the contact centre can open new pathways for detecting and responding to everyday experiences of loneliness. Our focus is not on acute mental health cases, but on the more common, low-intensity forms of loneliness that, if left unaddressed, can gradually escalate into more serious conditions.

The approach we outline is grounded in practical, real-world insights and proposes data-informed methods for identifying behaviours, recognising subtle signals of loneliness, and proposing potential solutions, which enable timely, compassionate responses that benefit both customers and contact centres.

This whitepaper outlines a practical approach to addressing loneliness that offers a threefold return for contact centres and their clients.



1. Relational Care and Customer Trust

Addressing loneliness is not only about improving customer experience; it is about recognising and responding to emotional and relational needs, especially for those who are vulnerable. Small, emphatic moments can build meaningful connections and signal that customers are seen and valued. These acts of care foster trust, deepen relationships, and contribution to an organisation's broader social impact.



2. Operational Resilience & Workforce Sustainability

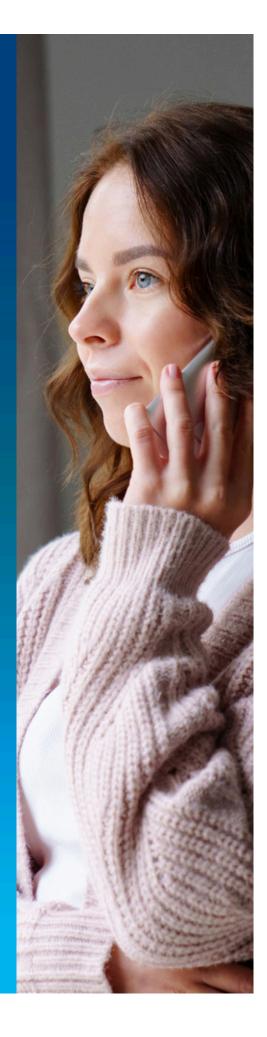
Integrating loneliness-sensitive practices enables better triaging, reduces call fatigue, and improves service flow in contact centres. It also supports frontline staff, equipping them to respond with empathy while avoiding emotional burnout. Over time, this strengthens operational resilience by reducing turnover, improves staff engagement, and ensuring more consistent high-quality service delivery.



3. C-Suite Responsibility in Digital Transformation

As organisations accelerate digital transformation, contact centres often become the last human touchpoint; yet they are too increasingly digitalised. For leaders, addressing loneliness offers a blueprint for leading their digital transformation journey responsibly: thinking critically about the ripple effects and societal impacts and designing systems where technology serves people, rather than replacing them.

In short, addressing loneliness is **not** a **moral consideration**, **but a strategic opportunity**. By leading with care, organisations can differentiate their services, strengthen customer loyalty, and build lasting trust in an increasingly automated and impersonal world.







Introduction

We are in the midst of a growing crisis that is difficult to see and even harder to measure. Across Australia, and around the world, more people are experiencing loneliness: a deeply subjective condition marked by the sense that one's social connections are insufficient, unavailable, or unfulfilling [5]. Recent national research reveals that one in four Australians experience feelings of loneliness, with rates even higher among female young adults and older adults (55+), and those in marginalised or isolated circumstances [6]. Globally, loneliness is now recognised as a public health priority by the World Health Organization, given its strong links to physical health decline, psychological distress, and early mortality [1,2].

As populations age and service systems strain, the impacts of loneliness on wellbeing and healthcare demand have become increasingly difficult to ignore. And yet, our response remains limited. Most loneliness interventions are localised, resource-intensive, and reactive [7,8]. Interventions for loneliness often depend on individuals recognising their own distress, reaching out for support, and being able to access the right kind of help. At the same time, stigma around loneliness discourages many from speaking up, often due to a perceived sense of personal failure and shame [9]. As a result, a significant number of individuals remain unseen and unsupported.

Loneliness often surfaces subtly, long before clinical thresholds are crossed [10] and can be difficult to detect, particularly through traditional mental health screening methods. However, signals surface often across everyday life, in places and situations not usually associated with emotional or relational needs.

One of the most overlooked spaces is the contact centre. Every day, thousands of people speak to staff in service organisations across government, health, community care, housing, and finance. For some individuals, these brief interactions can significantly impact an individual's sense of loneliness.

This white paper proposes that contact centres – traditionally merely viewed as transactional service environments - can be reimagined as low-stigma, high-volume touchpoints for early loneliness detection and light-touch response. Drawing on our research, we explore how organisations can utilise their contact centres to deliver scalable, low-effort strategies that help combat loneliness. Our aim is not to create a new intervention, but to better use existing resources by reframing routine service interactions as moments where small, intentional changes can make a measurable difference.

What is loneliness and why does it matter?

Loneliness is what someone feels when they do not have enough meaningful social connection, even if they are around other people. It is about their personal experience of feeling disconnected [5]. This is different from social isolation, which is defined by someone actually having very few or no social contacts, regardless of how they feel about it. Individuals can feel lonely even when surrounded by others, and conversely, some may be socially isolated without experiencing loneliness [11].

Recent data indicate that loneliness is a significant and growing concern in Australia. A 2024 report by Relationships Australia found that 24% of Australians, approximately 5.1 million people, reported feeling very lonely, an increase from 20% in 2022 [9,12]. Loneliness is linked to early death, diminished physical functioning, and a lower quality of life. Its health impacts rival those of smoking and are greater than those associated with obesity or inactivity [1]. Among older adults, its prevalence escalates significantly, with nearly half of those aged 85 and over being affected [13]. Despite this, loneliness often goes undetected in part due to the persistent stigma associated with acknowledging it, reportedly leaving individuals feeling like a failure or ashamed [14].

Current detection methods rely heavily on self-disclosure. Individuals are typically expected to contact dedicated services - such as loneliness helplines or social prescribing services - or complete formal assessment instruments like the UCLA Loneliness Scale [15] or the ALONE scale [16]. While widely used, these tools present several challenges. Multi-item questionnaires can be physically or cognitively demanding, particularly for older adults with health conditions or people living with disability. More critically, their effectiveness is dependent on the assumption that individuals will openly recognise and disclose their loneliness - a step many are reluctant to take due to the stigma associated with loneliness.

This creates blind spots. Many individuals experiencing loneliness may not openly self-identify as lonely or seek out targeted services. Instead, they may engage with non-medical healthcare staff, social workers, or other kind of customer service agents - without ever articulating their underlying emotional or relational needs. These routine interactions represent missed opportunities for early detection and intervention of loneliness.

The cost of doing nothing

Loneliness is more than a personal hardship - it is an economic liability: Loneliness is estimated to cost the Australian economy \$2.7 billion annually (or more than \$1,550 per person per year) through increased demand on health services, productivity losses, and additional strain on social care systems [6].

These figures are conservative, given emerging evidence linking loneliness to higher rates of chronic illness, prolonged hospitalisation, and increased primary care utilisation.

Why contact centres?

To address loneliness in a holistic and meaningful way, we must go beyond clinical settings and crisis points to include everyday interactions that are already taking place. Organisations must ask:

Where can we intervene early, at scale, using systems we already have?

Contact centres - whether accessed by phone, live chat, or other digital channels - are one of the few environments where individuals routinely engage with a human representative while seeking information, support, or assistance. These are not therapeutic spaces, but they are relational ones. Each interaction, no matter how brief, holds the potential for meaningful connection.

What distinguishes contact centres is not only their breadth of reach, but their frequency and continuity. They provide a sustained channel of interaction across time, allowing patterns to be noticed and relationships to be built. Staff often gain intuitive insights into a person's tone, demeanour, or emotional state - especially when contact is frequent or prolonged.

But contact centres are also undergoing rapid change. To reduce costs and meet rising expectations, many organisations are accelerating digital transformation, such as adding chatbots and virtual agents, apps, and self-service portals. In Australia, 42% of contact centres now offer self-service options [17]. Accelerating digital transformation may promise efficiency gains, but it also reduces human interaction, often without considering the broader ripple effects on individuals and communities.



What's lost is more than just a 'personal touch' - it is the ability to notice when something isn't quite right. In everyday conversations, subtle cues such as early signs of loneliness can emerge and be acknowledged. As more services migrate to digital channels that lack the capacity to detect these human nuances, these early warning signs are easily missed. The result is greater vulnerability - not just for individuals, staff, as well as the communities they belong to.

Digitalisation, then, is not just a technical or cost decision – it is a question of social and digital responsibility. C-suite leaders must confront the consequences of how they deliver service interactions. The challenge is not whether to digitalise, but how to do so responsibly. This means combining operational efficiency with social awareness, not trading one for the other.

The next section highlights the case of Anglicare Southern Queensland, which together with researchers from QUT and UQ, are responding to this challenge by reimagining its contact centre not merely as a cost centre, but as a strategic channel for human connection, care, and long-term trust.

Contact centres: where **trust is built** at scale

Contact centres present a promising opportunity to support early, non-clinical responsiveness to loneliness. Their existing infrastructure provides a strong foundation for delivering lowintensity, relational interventions at scale.



Scalable reach

Contact centres handle thousands of interactions each day, connecting with individuals across diverse ages, regions, and circumstances. This makes them one of the few settings where subtle signs of loneliness can be detected at scale.



Familiar point of contact

Contact centre services are regularly accessed by older adults, carers, people with disabilities, and others undergoing transitions or experiencing stress. For many, they serve as trusted and familiar entry points into complex service systems.



Low barrier and low stigma

Engagement with contact centres is typically framed around practical or administrative issues - not mental health or personal vulnerability. This allows for relational engagement without requiring individuals to label themselves as lonely or in distress.



Upskilling an existing workforce

Contact centre staff are already trained in listening, empathy, and managing complex interactions. With targeted training and support, they can be further equipped to identify and respond to loneliness in ways that benefit support both clients and the staff.



Detection through existing infrastructure

Ongoing interactions with the same service provider creates opportunities to notice subtle shifts in tone, mood, or frequency of contact - allowing for early signals of disconnection to emerge. Crucially, it also allows organisations to detect and respond using systems and processes already embedded within their services.





Case Study

Anglicare Southern Queensland's blueprint for enhancing client-staff interactions

Anglicare Southern Queensland (ASQ) is one of Queensland's largest and longest-serving not-for-profit social service organisations. With a 150-year legacy, ASQ provides care and support to more than 49,000 people each year. Its services span aged care, mental health, homelessness, foster and kinship care, counselling, and disability support. Guided by values of dignity, hope, and inclusion, ASQ aims to improve wellbeing and connection across all stages of life. ASQ's contact centre manages approximately 30,000 calls per month, supporting more than 900 aged care clients across Queensland.

The opportunity: addressing concealed loneliness in everyday interactions

ASQ's contact centre is a critical touchpoint for older Australians accessing aged care services. Staff assist with a wide range of practical needs, from scheduling appointments and coordinating in-home care to answering service-related enquiries. These interactions are typically time-sensitive and transactional, managed across a high volume of daily calls.

However, over time, staff began to notice a shift. Some clients were calling more frequently. Conversations were becoming longer. Periodic spikes in contact volume were observed during high-stress periods, such as public holidays or natural disasters (e.g., Queensland's anticipated Cyclone Alfred).

More broadly, the expansion of digital self-service options seemed to reduce opportunities for human connection, prompting some clients to seek out more relational engagement through the contact centre.

At the same time, staff became more attuned to emotional patterns emerging across repeated interactions. With sustained contact and growing familiarity, they began to notice when a straightforward request would move into more personal conversation, with clients sharing stories from the past, moments of grief, or simply checking in without a specific service issue. Thus, many clients are not just seeking help with tasks; they are also seeking human connection.

ASQ was recognising the impact of these calls on call centre operations, and this led to cooperation with the research team. With call centre staff approximating 30% of 30,000 monthly calls being socially driven, call centre KPIs were impacted, and less experienced staff often felt uncertain about how to respond. This was not only a matter of emotional capability but also of lived experience; for instance, younger staff members, while understanding the severity of a situation, may struggle to respond appropriately to the loss of a spouse, as one staff member shared in interviews with the research team.

This left them emotionally burdened, as they wanted to support their client but felt ill-equipped to do so. In response to this, we explored how loneliness could be identified through everyday client interactions with the goal to develop data-driven solutions to address loneliness in contact centres, improve operations, and lift burden from staff. The project combines semi-structured interviews and workshops, with contact centre staff and the senior leadership team as well as observation of contact centre staff interactions with clients. These data sources enabled the research team to build a rich understanding of how loneliness cues surface during routine service exchanges.

Insights from the research reveal that the need for connection rarely presents itself directly. Clients do not use the word "lonely," nor did they always appear distressed. Instead, loneliness surfaced through subtle behavioural patterns - repeated calls with minimal requests, lingering small talk, clients apologising for taking up time, repeated early-morning contact, or gently prolonging conversations that might otherwise be brief. These cues are quiet but consistent. Experienced staff were quick to pick up on these signs, often drawing on personal rapport with clients and a strong sense of care. Yet the contact centres, typically designed for efficiency, responsiveness, and service coordination, are not set up to recognise or respond to relational needs.

This is not unique to ASQ; across the sector, contact centres lack formal processes, flexibility, training, and tools to help staff to identify cues and to create space for appropriate responses, follow-up, or escalation when a client's emotional needs become apparent.

This lack of formal recognition created two overlapping challenges:

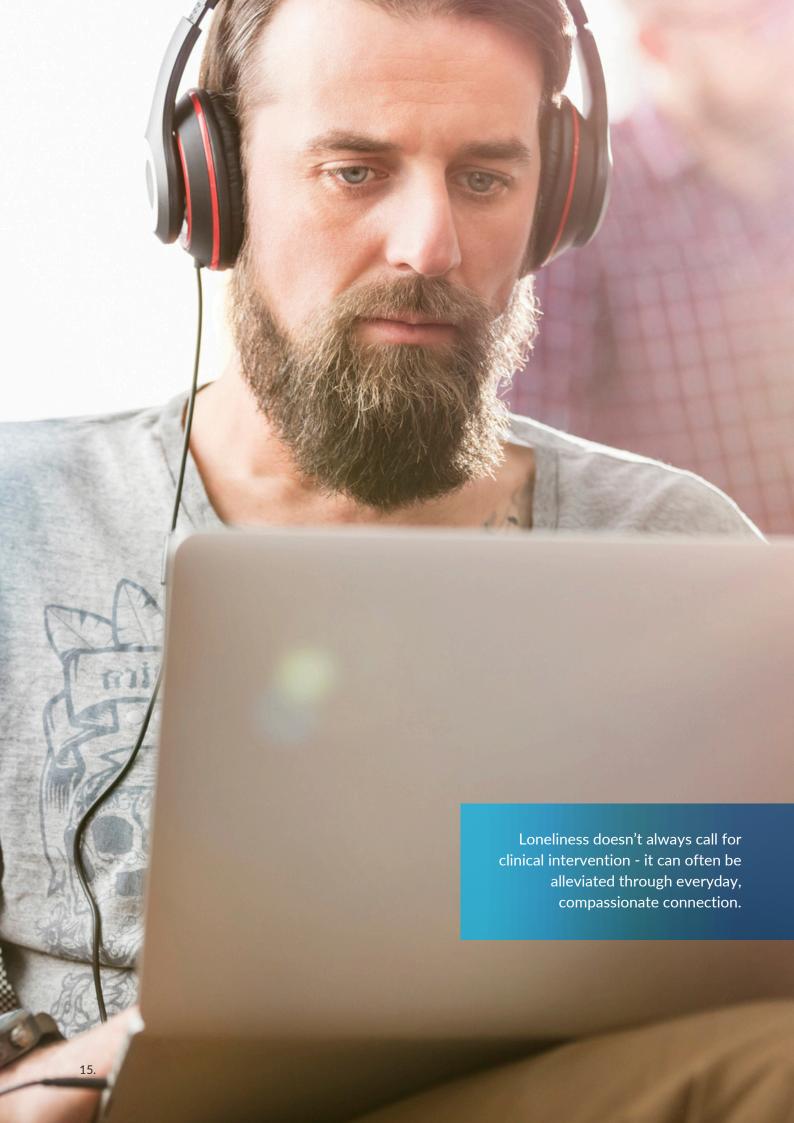
For Anglicare Southern Queensland, the issue extended beyond unmet the emotional needs of their clients. It also has operational costs. Extended conversations with some clients led to longer average call times, creating delays for others in the queue. Without a clear way to identify and address these patterns, it became harder to balance responsiveness with fairness and KPIs across the client base.

For staff, the absence of formal protocols meant relying heavily on instinct and compassion to navigate emotionally charged interactions. While leadership was supportive, some staff experienced emotional strain over time – unsure how to manage conversations that felt important but fell outside their defined role.

Our shared ambition

Through our joint research we identified recurring behaviours and characteristics, such as frequent low-need calls, prolonged conversations, subtle emotional cues in voice and speech, and overly apologetic behaviour, that serve as early indicators and, in combination, can suggest the likelihood of clients experiencing loneliness today. For ASQ, this raised a key question: how can frontline intuition be translated into intentional, scalable practice—without compromising operational efficiency?

To explore this, it is not important to understand how loneliness presents in everyday service interactions, but to map the solution space: what is possible now using existing staff capabilities, infrastructure and service models, and what might become possible in the future through thoughtful use of technology, and especially artificial intelligence. This partnership laid the foundation for co-designing approaches to detecting and responding to loneliness in contact centres.



Solution space

Once loneliness is recognised – whether through explicit disclosure or subtle signals during service interactions – the next challenge is knowing how to respond. Not every expression of loneliness requires clinical treatment or specialist referral. Many instances can be addressed through timely, relational engagement integrated into everyday service delivery. To support this, organisations need a flexible response model that aligns the nature of the intervention with the severity, persistence, and context of the loneliness observed.

This section introduces a intervention spectrum, distinguishing between human, augmented, and automated responses developed through workshops with contact centre staff and senior leadership of ASQ.

These are not hierarchical nor mutually exclusive but operate along a continuum that can be tailored to the needs of individuals and the capacities of the service environment, staff, and existing processes.

Happening today

Difficult to scale and systemise across contact centres



Examples

Casual conversations during routine calls Empathetic listening based on staff intuition

Considerations

Builds connection without requiring explicit disclosure of loneliness Depends on individual staff capacity and consistency



Examples

Operational: triage system to help staff identify potential loneliness

Emotional: Al-supported detection of emotional cues (e.g. tone, language)

Cognitive: recommendation engine to guide low-intensity responses and referrals

Considerations

Enhances human empathy with real-time, data-driven support

Scales without replacing human touch

Happening today

May unintentionally reinforce disconnection; high competition



Examples

Chatbots simulating conversation and check-in routines Virtual companions to provide available interaction

Considerations

Offers scalable, stigma-free support Risk of reinforcing isolation

Figure 1: Intervention Spectrum for Addressing Loneliness

Human interventions



At one end of the spectrum are interventions based entirely on human presence. These responses prioritise empathy, trust-building, and relational care.

In contact centres, this might involve pausing to ask how someone is really feeling, acknowledging distress, or providing continuity across interactions. This aligns with research showing that people seek moments of genuine connection not only in personal settings, but also during everyday service experiences.

For example, studies on social shopping and service encounters highlight that customers value empathy, recognition, and emotional attentiveness – even in routine transactions [18, 19].

The above-described behaviour reflects a broader societal shift: human connection is now expected in institutional and business contexts, including contact centres. Yet most organisations are not equipped to meet this demand. Human-led responses are resource-intensive, reliant on the emotional labour of staff, require extensive training, and are difficult to scale for consistent delivery. Without structured support, it is challenging to identify when and how to respond meaningfully. This underscores the value of augmented approaches - to preserve the human strengths while enabling more scalable, guided responses.

Augmented interventions



In the middle of the spectrum are interventions that retain human contact but are enhanced through technology, data, or structured guidance.

These might include real-time scripting prompts that help staff explore wellbeing during a routine call, dashboards that highlight repeat contact patterns, or digital tools that surface indicators of loneliness. We propose that augmented interventions in contact centres can take on three distinct, yet complementary forms - each supporting staff in a different way:

Operational augmentation involves tools such as triage dashboards, client flags, or workflow prompts that help staff identify and prioritise callers showing potential signs of loneliness, such as frequent repeat contact or extended call durations. These systems enhance situational awareness, creating visibility around emerging patterns that might otherwise go unnoticed in high-volume service environments.

Emotional augmentation helps staff remain attuned to the affective state of the caller. This may include real-time tone analysis, sentiment flags, or prompts that encourage staff to pause and check on wellbeing when subtle emotional cues are detected. These tools focus on supporting empathy and emotional presence, particularly when staff are under time pressure or emotional fatigue. The goal is to elevate emotional sensitivity without demanding additional cognitive load.

Cognitive augmentation provides decision support during the interaction itself. This includes conversation prompts, contextualised phrasing suggestions, or recommended referral pathways tailored to a caller's needs. Unlike emotional augmentation, which focuses on perception and empathy, cognitive augmentation targets reasoning and judgement - enabling staff to make confident, consistent, and context-appropriate decisions in moments of uncertainty.

Together, these forms of augmentation serve different but interlocking purposes: operational tools highlight who may need attention; emotional tools assist in understanding how someone is feeling; and cognitive tools guide what to say or do next. Augmented interventions do not remove human judgment, they strengthen it. By reducing the emotional and cognitive load on frontline workers, these tools support relational care in high-volume settings. They are especially useful for generalist staff and can be scaled across teams with relative ease. When implemented thoughtfully, augmentation enables light-touch but meaningful responses that uphold human dignity, ensure early recognition of social disconnection, and support equitable service delivery.

Automated interventions



At the other end of the spectrum are automated interventions, delivered entirely through digital systems without human involvement.

These include chatbot companions, SMS-based wellbeing check-ins, self-referral prompts, or interactive digital platforms offering connection suggestions. In contact centre settings, automation may involve outbound messages, conversational AI handling basic needs, or digital agents providing reassurance or companionship-style dialogue. These solutions offer clear benefits in reach, availability, and consistency. They are scalable, available 24/7, and do not rely on staff capacity. They can also lower the threshold for engagement, offering low-stigma entry points for individuals reluctant to speak directly about loneliness. However, fully automated interventions have limits.

While they may mimic the form of social interaction, they often lack the depth and authenticity required for meaningful connection. There is also a risk of reinforcing social isolation, by creating artificial loops that substitute, rather than supplement, real human contact.

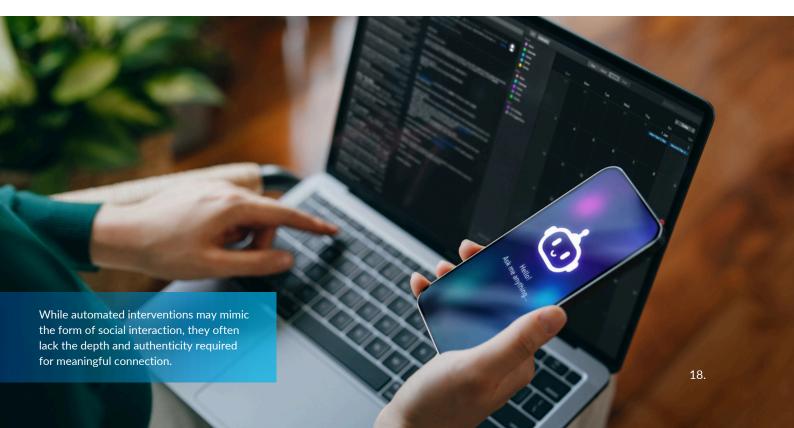
For these reasons, automation plays a valuable role in low-touch or preventative engagement strategies, but is most effective when embedded in a broader system that includes human and augmented options. Without this, automation risks addressing loneliness in form, but not in substance.

Summary

It is easy for contact centres to default to doing nothing - relying on the intuition and compassion of individual staff to manage loneliness as it arises. But this approach is neither sustainable nor equitable. Over time, it places emotional strain on employees, increases burnout and turnover, and leads to inconsistent outcomes for clients. Structured responses, whether human, augmented, or automated, offer a better way forward.

They reduce staff pressure, support more consistent and confident service delivery, and ensure clients receive the right level of support at the right time. The payoff is not only operational, but it also strengthens customer trust, loyalty, and advocacy.

After all, if you heard that a company genuinely cared for a vulnerable loved one, wouldn't you be more inclined to trust it yourself?





Organisations that want to respond to loneliness do not need to create new services. Instead, they can make small but purposeful changes to how existing services notice and respond to signs of social disconnection. The steps below offer a practical starting point for designing an early detection approach that is relational, scalable, and low stigma.

Recognise the opportunity in everyday interactions

Reframe service touchpoints, especially those in contact centres and other high-volume environments, as moments where social connection can be fostered. Even short, routine interactions can offer relational value when staff are supported to recognise subtle signals of disconnection.

Introduce augmentation tools thoughtfully

Incorporate operational, emotional, and cognitive augmentation technologies that support, rather than replace, human judgment. Start small, such as piloting triage dashboards, tone analysis, or guided scripts in targeted teams. Ensure staff are engaged in design and feedback processes to promote adoption and trust.

Monitor and measure impact responsibly

Track changes in call duration, repeat contacts, or client feedback to assess the effects of relational interventions. Use these insights not only to evaluate outcomes but to identify where relational efforts may be relieving pressure on more intensive services.

Upskill the frontline workforce

Equip staff with lightweight training to help them notice, interpret, and appropriately respond to early signs of loneliness, similar to protocols for domestic violence. This includes helping them distinguish emotional cues, manage conversations with empathy, and use escalation pathways where appropriate, without shifting their role into clinical or therapeutic domains.

Embed protocols for follow-up and referral

Develop clear, low-burden pathways for staff to flag potential loneliness concerns and connect individuals to appropriate services or community programs. Avoid over-formalisation; lightweight flags or warm referrals are often sufficient to make a meaningful difference.

Foster a culture of relational care

Leadership plays a critical role in signalling that human connection is a priority. Foster an internal culture where small acts of empathy are valued, emotional labour is acknowledged, and relational outcomes are celebrated alongside operational metrics.



Call to collaborate

Addressing loneliness is not the sole responsibility of healthcare or social services - it is a shared societal challenge that spans all sectors. While contact centres served as the initial focus of our case study, the insights and approaches outlined here are relevant to **any customer-facing environment**. Everyday service interactions - whether digital or inperson - can be designed to do more than resolve problems; they can also build trust, foster empathy, and cultivate a sense of social belonging.

This is especially critical now, as contact centres undergo rapid digital transformation. As self-service tools, automation, and AI increasingly shape service delivery, the opportunity - and responsibility - to embed relational care into these environments becomes more urgent. The challenge is not whether to digitalise, but how to do so responsibly: ensuring that speed and efficiency are not achieved at the cost of trust, empathy, and social wellbeing.

This potential, however, cannot be realised in isolation. We invite industry, technology providers, researchers, and service professionals to collaborate with us in co-designing and scaling interventions that are both human-centred and operationally viable. Our aim is to help organisations in embed relational care into their everyday processes - consistently, ethically, and at scale - while aligning with core business priorities.

Looking ahead, we recognise the growing significance of Al-driven solutions and synthetic social interaction - and how they are reshaping the landscape of customer engagement. While these technologies offer significant potential, they also demand thoughtful scrutiny. If we want a future where digital services continue to feel genuinely human, now is the time to act.

We invite collaboration with forward-thinking partners who are committed to shaping the next generation of contact centre experiences - where connection, care, and responsibility are embedded at the core.

References

- [1] Holt-Lunstad, J. (2017). The Potential Public Health Relevance of Social Isolation and Loneliness: Prevalence, Epidemiology, and Risk Factors. Public Policy & Aging Report, 27(4), 127-130.
- [2] World Health Organization (2025). WHO Commission on Social Connection. URL: https://www.who.int/groups/commission-on-social-connection
- [3] Duncan, A. S., Kiely, D., Mavisakalyan, A., Peters, A., Seymour, R., Twomey, C., & Vu, L. (2021). Stronger Together: Loneliness and social connectedness in Australia. Bankwest Curtin Economics Centre, Focus on the States Series No. 8/21.
- [4] Australian Institute of Wealth and Welfare (2025). Social Isolation and Loneliness. URL: https://www.aihw.gov.au/mental-health/topic-areas/social-isolation-and-loneliness
- [5] Peplau, L. A., & Perlman, D. (1982). Loneliness: A sourcebook of current theory, research, and therapy. Encyclopedia for Mental Health, Academic Press, 571-581.
- [6] Groundswell Foundation. (2022). Connections Matter: A report on the impacts of loneliness in Australia. URL: https://www.groundswellfoundation.com.au/post/connectionsmatter-a-report-on-the-impacts-of-loneliness-in-australia
- [7] Lasgaard, M., Løvschall, C., Qualter, P., Laustsen, L., Lim, M., Maindal, H. T., Hargaard, A., & Christensen, J. (2022). Are loneliness interventions effective in reducing loneliness? A meta-analytic review of 128 studies. European Journal of Public Health, 32.
- [8] Morrish, N., Choudhury, S., & Medina-Lara, A. (2023). What works in interventions targeting loneliness: a systematic review of intervention characteristics. BMC public health, 23(1), 2214.
- [9] Ending Loneliness Together. (2023). State of the Nation Report: Social Connections in Australia 2023. https://endingloneliness.com.au/wp-content/uploads/2023/10/ELT_LNA_Report_Digital.pdf
- [10] Wang, J., Mann, F., Lloyd-Evans, B., Ma, R., & Johnson, S. (2018). Associations between loneliness and perceived social support and outcomes of mental health problems: a systematic review. BMC psychiatry, 18, 1-16.
- [11] Hawkley, L. C., & Cacioppo, J. T. (2010). Loneliness matters: A theoretical and empirical review of consequences and mechanisms. Annals of Behavioral Medicine, 40(2), 218-227.
- [12] Relationships Australia. (2024). Loneliness in Australia: Findings from the 2024 National Survey. https://www.relationships.org.au/wp-content/uploads/RI-FactSheets-loneliness-2024_FINAL.pdf
- [13] Pinquart, M., & Sorensen, S. (2001). Influences on loneliness in older adults: A meta-analysis. Basic and applied social psychology, 23(4), 245-266.
- [14] Ogrin, R., Cyarto, E. V., Harrington, K. D., Haslam, C., Lim, M. H., Golenko, X., Bush, M., Vadasz, D., Johnstone, G., & Lowthian, J. A. (2021). Loneliness in older age: What is it, why is it happening and what should we do about it in Australia? Australasian Journal on Ageing, 40(2), 202-207.
- [15] Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA Loneliness Scale: concurrent and discriminant validity evidence. Journal of personality and social psychology, 39(3), 472.
- [16] Deol, E. S., Yamashita, K., Elliott, S., Malmstorm, T., & Morley, J. (2022). Validation of the ALONE scale: a clinical measure of loneliness. The journal of nutrition, health & aging, 26(5), 421-424.
- [17] PwC (2025). The 2025 trends set to shake up the Australian service industry. https://www.pwc.com.au/consulting/customer-transformation/2025-trends-set-to-shake-up-the-australian-service-industry.pdf? sfmid=eyJzZm1jaWQiOiJjaHJpc3RvcGhlckBraWNrZXJjb21tcy5jb20ifQ==
- [18] Cachero-Martínez, S., & Vázquez-Casielles, R. (2021). Building consumer loyalty through e-shopping experiences: The mediating role of emotions. Journal of Retailing and Consumer Services, 60, 102481.
- [19] Lee, E.-J. (2016). Empathy can increase customer equity related to pro-social brands. Journal of Business Research, 69(9), 3748-3754.

Acknowledgements

ABOUT ANGLICARE SOUTHERN QUEENSLAND

For over 150 years, Anglicare Southern Queensland has been walking alongside Queenslanders, offering care, support, and dignity to those who need it most. Guided by values of dignity, hope, and inclusion, ASQ aims to improve wellbeing and connection across all stages of life. By providing a range of support services, including aged care, foster care, family support, homelessness services, youth support and counselling, our mission is to make a lasting impact by fostering hope, independence, and inclusion.



ABOUT THE CISCO CHAIR IN TRUSTED RETAIL



Dr Nadine Ostern holds the Cisco Chair in Trusted Retail position at QUT where she leads a team of post-doctoral research fellows and PhD students. Nadine is deeply dedicated to establishing trust, especially through technology, enabling individuals to focus on what truly matters. With nearly a decade of experience, Nadine leads a passionate team of researchers dedicated to crafting modern, technology-driven trust experiences for businesses and their clients. Her work is particularly centered on emerging technologies, including generative Al and blockchain, as well as fostering trust within human-algorithmic relationships. Nadine's extensive international background encompasses roles in Germany and Switzerland, prior to her current

position as the Cisco Research Chair in Trusted Retail at QUT. In her various roles, she has collaborated with leading brands like Commerzbank, a top-25 European bank, and Mercedes, among others, to uncover techdriven opportunities in trusted machine-to-machine communication. At the forefront of the intersection of technology and trust, Nadine's work serves as a compass for professionals, illuminating how trust-building can confer a competitive advantage to businesses and the resulting opportunities for employees, customers, and society as a whole.

ABOUT CISCO'S NATIONAL INDUSTRY INNOVATION NETWORK

The National Industry Innovation Network (NIIN) is an alliance between industry and universities driven by one goal: to realise digital opportunities that can benefit the lives of all Australians. Membership to the NIIN connects all universities and industry partners for national scale, diversity of thinking and innovation impact. Cisco created the NIIN in response to business needs to drive greater university-industry collaboration to accelerate digital skills and transformation.



ABOUT QUT'S CENTRE FOR FUTURE ENTERPRISE

The authors of this paper are part of QUT's Centre for Future Enterprise (CFE). The purpose of CFE is to provide capabilities that matter for future enterprises. The Centre's focus is on those emerging attributes of organisations, and their leaders, that have not seen sufficient professionalisation. Dedicated to demand-driven, rigorous research exploring and testing possible futures for enterprises of all sizes, CFE works closely with industry partners across various sectors. Based on the hypothesis that an increasingly opportunity-rich environment will require new enterprise capabilities, CFE research focuses on four themes and the nexus between these: the trusted enterprise, the paradoxical enterprise, the algorithmic enterprise and the robust enterprise.





Connect with us

Research opportunities and industry partnerships

The Centre for Future Enterprise

research.qut.edu.au/centre-for-future-enterprise future.enterprise@qut.edu.au







