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WHITE PAPER

Social Interaction Readiness Scoring (SIRS)

A Science-Based Model
for Measuring B2B Conversation Readiness on LinkedIn

May 2026

VANGATES GmbH, Frankfurt am Main

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Abstract

The **Social Interaction Readiness Score System (SIRS)** is a quantitative model for the real-time measurement of **conversation readiness in a B2B context**. Rather than inferring purchase intent—an assumption that cannot be empirically substantiated—SIRS captures 21 distinct LinkedIn interaction signals, weights them across four psychological dimensions, and aggregates them into a time-decaying score.

The model is grounded in the Mere Exposure Effect (Zajonc, 1968), the Principle of Reciprocity (Cialdini, 1984), and Authority Bias (Milgram, 1974).

Executive Summary

B2B sales teams face a timing problem: outreach happens too early (without context), too late (after interest has faded), or based on public signals that every competitor sees at the same time. Intent data models promise a solution, yet they rely on a multi-step inference chain with a cumulative accuracy rate of less than 2.2%.

The **Social Interaction Readiness Score System (SIRS)** takes a fundamentally different approach: rather than inferring purchase intent, it measures **conversation readiness**—an observable and operationalisable variable. The model captures 21 distinct LinkedIn interaction signals, weights them across four psychological dimensions (Central Executive, Relational Aggression, Personal Control, and Social Dominance—see p. 10), and aggregates them into a time-decaying score.

Outreach is initiated only when a **three-factor trigger** is met: a score of ≥ 32 , at least one Tier 2 signal, and positive momentum. In the modeled case study (Sarah Müller, COO, ICP match: 94%), the score reaches 47.34 points after seven signals over a period of 21 days—well above the threshold.

Key finding: SIRS focuses outreach on the point of maximum conversation readiness. Its scientific foundation (Mere Exposure Effect, Principle of Reciprocity, and Authority Bias) is peer-reviewed and has been replicated extensively. The decay parameters and weightings are based on empirical estimates within the DACH B2B context and are configurable.

Chapter One

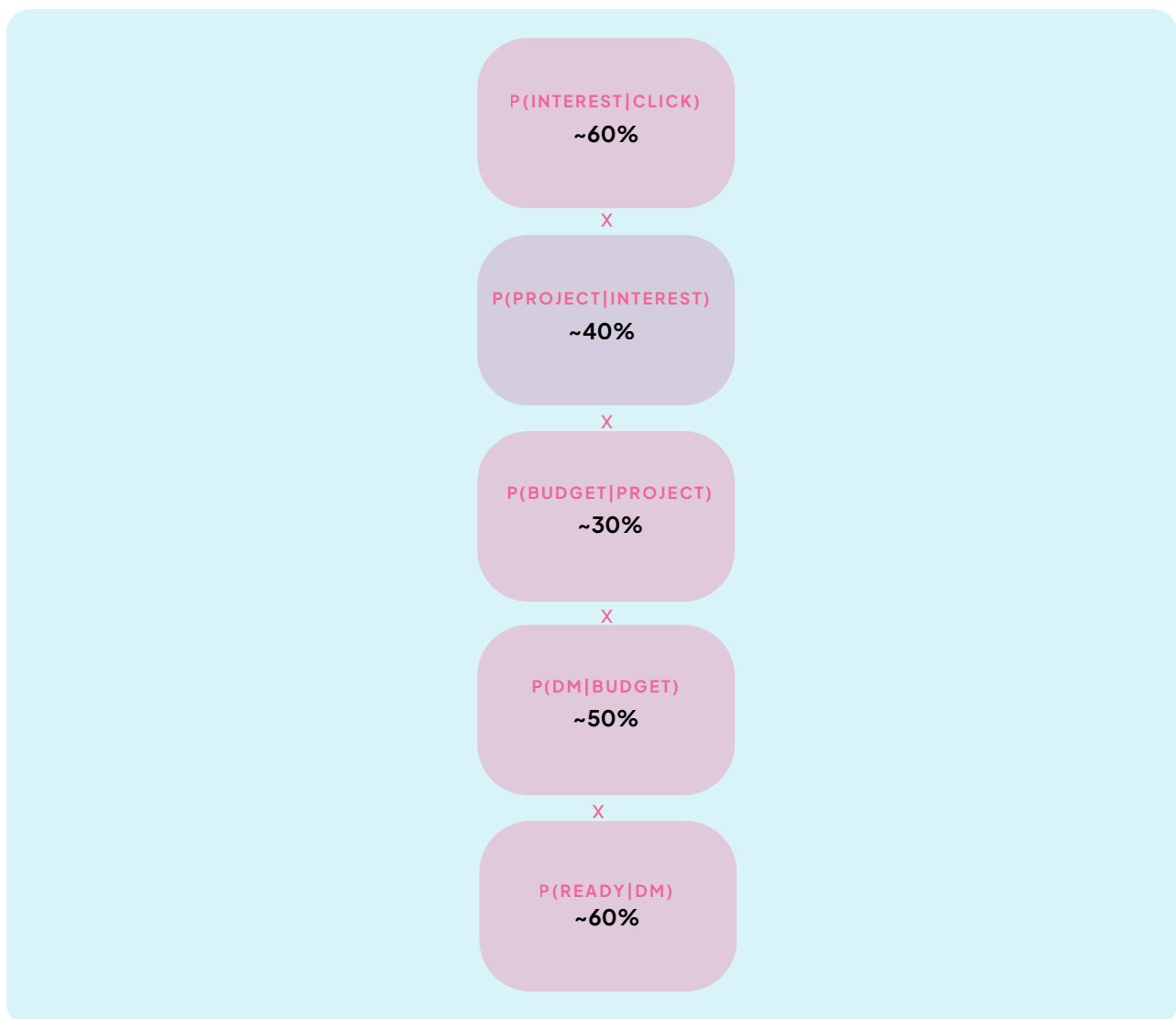
The Problem with Intent Data

Intent data models claim to measure purchase readiness before the first contact takes place. In practice, however, they rely on a **multi-step inference chain** in which each step represents an unproven assumption. The cumulative error rate of this chain renders the promise unsustainable.

The Five-Step Inference Chain

Intent data operates through inference: a person consumes content on a particular topic—therefore, they are interested. Interest implies an active project. An active project requires budget. Budget implies a decision-maker. And the decision-maker is “ready to buy.”

Each of these five steps is an assumption with its own error rate:



Cumulative Accuracy Rate: $0.6 \times 0.4 \times 0.3 \times 0.5 \times 0.6 \approx < 2.2\%$

Even under optimistic assumptions for each individual step, the overall probability remains below 3%. In other words, intent data generates a false signal for 97 out of every 100 identified prospects.

The Public Availability of Signals

Intent data signals—job changes, funding rounds, technology installations—are **publicly available**. Every vendor has access to the same data points. The result: a COO who changes jobs may receive 47 LinkedIn messages on the same day from vendors who have identified the same “intent.” There is no exclusivity, no differentiation, and no first-mover advantage.

The Timing Problem

A new COO does not approve budget in week one. The real decisions are made between weeks 8 and 24. Intent data alerts every vendor at the same time—at precisely the wrong moment. Intent signals do not answer the question of “whether someone will ever buy,” let alone “whether someone is ready for a conversation right now.”



“Intent data measures market noise, not individual readiness.”

The SIRS Counterposition: SIRS does not infer—it observes. When Sarah responds to our comment, that is a fact, not an interpretation. There are no inference leaps. The signals are private and one-to-one; no competitor can see them. And the time-decay mechanism ensures that the score always reflects the **current** state of conversation readiness.

Chapter Two

Theoretical Foundations

The SIRS model is based on three empirically established psychological principles, supplemented by three additional dimensions that are incorporated into the signal-weighting framework. All primary sources are peer-reviewed and have been replicated multiple times.

The Mere Exposure Effect **Zajonc, 1968**

In his seminal 1968 study, Robert Zajonc demonstrated that the mere repeated exposure to a stimulus—in his case, Chinese characters—is sufficient to positively influence participants' attitudes toward that stimulus. Participants consistently rated more frequently presented characters more favorably than those shown less often, **despite never having consciously processed the stimulus.**

Bornstein's (1989) meta-analysis examined more than 200 replications of the effect and found an average effect size of $r = 0.26$ —a small to moderate effect, yet one of the most consistently replicated findings in social psychology.

LinkedIn Application: Regular comments and reactions within a prospect's feed create repeated visibility. The prospect becomes aware of us—even without consciously processing the interaction. Over time, this creates a positive underlying disposition that lays the groundwork for future outreach.



"Mere repeated exposure of the individual to a stimulus is a sufficient condition for the enhancement of his attitude toward it."

— Zajonc, R. B. (1968). Attitudinal effects of mere exposure.
Journal of Personality and Social Psychology, 9(2, Pt.2), p. 1

Principle of Reciprocity **Cialdini, 1984**

In Chapter 2 of **Influence: Science and Practice**, Robert Cialdini describes the Principle of Reciprocity as one of the most powerful social norms: **those who give first create a social obligation to reciprocate.** The core mechanism is asymmetrical—the return often exceeds the value of the original gesture.

Regan (1971) demonstrated the effect experimentally: participants who had previously received a complimentary soft drink from a research assistant subsequently purchased twice as many raffle tickets from that individual as participants in the control group. The initial favor was small, yet the reciprocal response was disproportionately large.

LinkedIn Application: A professionally valuable comment on a prospect's post represents a "give first" gesture—we invest time and expertise without expecting anything in return. When the prospect later engages with our content, reciprocity is at work. SIRS measures precisely this reciprocal response.



"The rule says that we should try to repay, in kind, what another person has provided us."

— Cialdini, R. B. (1984). *Influence: Science and Practice*. Allyn and Bacon, p. 17

The Authority Bias **Milgram, 1974**

Stanley Milgram's landmark obedience studies, published in **Obedience to Authority** (1974), demonstrated the profound influence of perceived authority on human behaviour. People respond to signals of expertise—often without conscious reflection.

LinkedIn–Application: Professionally informed comments position the sender as an expert within the prospect's field of perception. These signals of expertise build trust **before the first direct interaction takes place**. By the time outreach occurs, the sender is no longer a stranger but a voice perceived as knowledgeable and credible.



"The essence of obedience consists in the fact that a person comes to view himself as the instrument for carrying out another person's wishes."

— Milgram, S. (1974). *Obedience to Authority: An Experimental View*. Harper & Row

Additional Dimensions

Cognitive Effort (Kahneman, 2011): Daniel Kahneman's distinction between System 1 (fast, automatic) and System 2 (slow, deliberate) in **Thinking, Fast and Slow** forms the foundation of the CE dimension. A standard like (System 1, $w = 5$) requires less cognitive effort than a professionally informed comment (System 2, $w = 20$). The differentiated weighting reflects this difference in effort.

Commitment & Consistency (Cialdini, 1984, Kapitel 3): Public commitment—such as a comment or repost—increases the likelihood of consistent follow-up behavior. Individuals who have publicly expressed a view on a topic are more likely to engage in a conversation about it. This principle is reflected in the PC (Personal Control) dimension of the signal-weighting framework.

Social Penetration Theory (Altman & Taylor, 1973): The layered model of relationship development describes how relationships deepen through increasing self-disclosure—from superficial exchanges to more intimate dialogue. In the SIRS context, this forms the basis of the SD (Social Dominance) dimension: a profile visit (superficial) versus a DM response (deep/private) represents different levels of social penetration.

Chapter Three

The SIRS Signal Model

Signal Taxonomy: 21 Signal Types

The SIRS model captures 21 distinct signal types across three categories: 8 Tier 1 response signals (passive and active), 9 Tier 2 response signals (reactive), and 4 exposure signals (our activity).

Example: Response Signals — Tier 1 (Prospect-Initiated) → Us, w < 18)

#	SIGNAL	EVENT-TYPE	W	T (D)	TIER	CAT.
1	Visited profile	they_visited_profile	3	2	T1	passive
2	Liked a post (standard)	they_liked_post_standard	5	5	T1	passive
3	Liked a post (insightful)	they_liked_post_insightful	8	7	T1	active
4	Liked a comment (standard)	they_liked_comment_standard	8	6	T1	active
5	Follow	they_followed_profile	9	14	T1	active
6	Liked a post (emotional)	they_liked_post_emotional	8	7	T1	active
7	Newsletter Subscription	they_subscribed_newsletter	10	21	T1	active
8	Liked a comment (insightful)	they_liked_comment_insightful	10	7	T1	active

In addition, we have implemented an exposure cap: increased activity does not automatically result in a higher score, thereby preventing manipulation through excessive activity.

Weight Derivation: The Four Scoring Dimensions

Each signal weight (w_i) is based on the sum of four psychologically grounded scoring dimensions, each measured on a scale of 0–5 and calculated using a weighting formula:

CE

Central Executive

0–5

How much mental effort does the action require?

RA

Relational Aggression

0–5

To what extent does the signal activate a sense of reciprocity?

PC

Personal Control

0–5

How public and commitment-oriented is the action?

SD

Social Dominance

0–5

How deep is the level of social connection?

Half-Lives (τ)

The half-life (τ) determines how quickly a signal loses relevance. Five groups reflect different signal characteristics:

$\tau = 2d$

Transient
profile visit —
may be Incidental

$\tau = 5-7d$

Moderate
Likes —
intentional, but non-committal

$\tau = 10-14d$

Engagement
mention, repost,
follow

$\tau = 21d$

Max. Decay
DM-Reply —
direct communication

$\tau = 21d+$

Continuing
connection,
meeting

The Score Architecture

SIRS combines multiple interaction signals into a single Readiness Score. The architecture is built on several coordinated scoring mechanisms, including exponential decay, diminishing returns, contextual modifiers such as the Cluster Bonus and Sequence Bonus, and a DACH-calibrated Activity Multiplier. Together, these mechanisms ensure that the score reflects a prospect's current level of conversation readiness as accurately as possible.

At the core of the model are the prospect's responses to a company, not the company's own activities. The architecture has been designed to make genuine interest visible while preventing artificial score inflation.



The Core Formula

$$\text{SIRS}(t) = \alpha \cdot R(t) \cdot \text{Activity Multiplier} + \beta \cdot E(t) + \text{Seq}(\text{bonus})$$

The score is based 85% on actual interactions and 15% on visibility and familiarity. In addition, current activity and characteristic interaction patterns that indicate increasing conversation readiness are incorporated into the calculation.

SIRS = Interaction (85%) + Familiarity (15%) + Activity + Sequence Bonus

Time-Based Weighting of Signals

The model incorporates both response signals and visibility/exposure signals. Response signals are weighted more heavily because they provide a stronger indication of conversation readiness. At the same time, older signals gradually lose relevance, ensuring that the score always reflects the current situation rather than being dominated by historical activity.

Quality Over Quantity

In addition, SIRS evaluates the quality and progression of interactions. Different signal types occurring within a short period of time, as well as increasing depth of engagement, are considered particularly strong indicators of growing interest. Repeated instances of the same behavior, by contrast, are deliberately discounted to avoid distortion.

Context Over Volume of Activity

In addition, the model takes a prospect's overall activity level into account. This allows the significance of individual signals to be evaluated within their specific context and makes them more comparable across prospects. An integrated exposure cap further ensures that increased activity on our side does not artificially inflate the score. As a result, SIRS primarily measures the prospect's readiness—not the company's activity.

The Trigger Model

SIRS does not generate a contact or outreach recommendation based on a single threshold value. Instead, the model combines multiple independent conditions that must be met simultaneously. This ensures that not only sufficient interaction signals are present, but also that there are indications of genuine interest and a current positive trajectory.

	STATUS	DESCRIPTION
	ACTIVATION	All trigger conditions have been met. The outreach sequence is initiated.
	COOLING	The score has already passed its peak value, and interest is showing a clear decline.
	INACTIVE	No response signals despite repeated visibility over an extended period.

Quality and Dynamic of Signals

In addition to the achieved Readiness Score, the trigger model considers the quality of the underlying interactions. A high score alone is not sufficient, as it could also result from a large number of weaker signals. For this reason, the model additionally verifies whether at least one stronger, deliberate interaction signal is present. At the same time, it evaluates how the score evolves over time.

Detection of Engagement Phases

In order to identify changes in a prospect's behavior, the model uses Trajectory Flags. These indicate different phases of engagement—from active conversation readiness and declining engagement to persistently absent responses. As a result, the current trajectory of a relationship can be assessed at a glance.

Calibrating the Optimal Time to Reach Out

The trigger model is based on a configurable threshold that can be adjusted to different use cases. The goal of this calibration is to identify the optimal moment for outreach while maintaining the right balance between reach and relevance.

Chapter Six

Case Study Sarah Smith

The following example illustrates the complete calculation process using a realistic DACH B2B scenario. All figures are fully reproducible.

PROSPECT PROFILE	VALUE
Name	Sarah Smith
Position	Chief Operating Officer (COO)
Company	Hoffmann Maschinenbau GmbH
ICP-Match	94%
Level of activity	Active (M = 1.0)

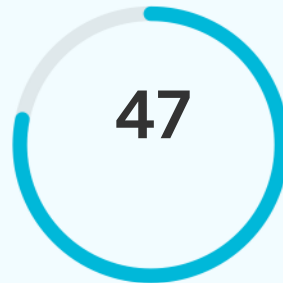
Event Timeline (21 Days, 7 Events)

TAG	EVENT	W	T	TIER	CAT.
3	Visited profile	3	2	T1	passive
7	Liked a post (standard)	5	5	T1	passive
10	Liked a comment (standard)	8	6	T1	active
14	Liked a post (insightful)	8	7	T1	active
17	Replied to a comment	22	12	T2	reactive
19	Liked a post (emotional)	9	7	T1	active
21	Accepted connection request	18	∞	T2	reactive

LEAD · HOFFMANN MASCHINENBAU GMBH · ICP 94%

Sarah Smith

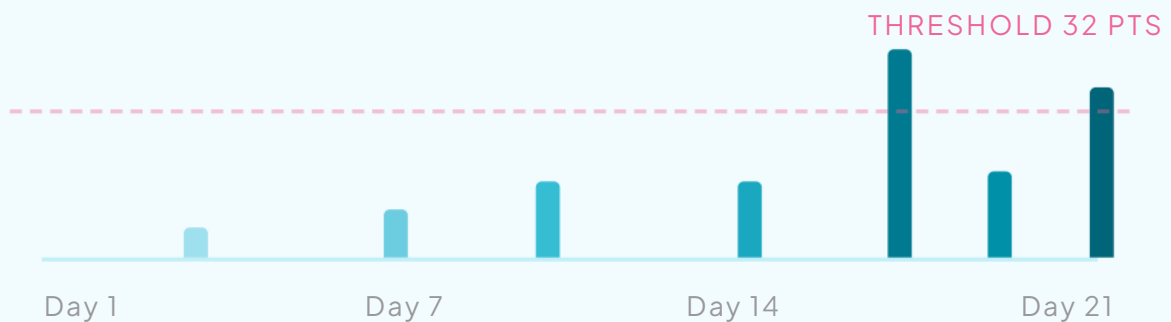
Chief Operating Officer



▲ TRIGGER FIRED

21-DAYS-SIGNAL-TIMELINE

7 events · 21 d



SCORE

47 Pts

TRAJECTORY

▲ **FIRING**

NEXT STEP

Individual Briefing

STRONGEST SIGNAL

Reply (37% of score)

Alternative Scenarios

SCENARIO A

No Reply (Day 17 falls away)

≈ 32.5 Pts

Just above the threshold. $R(t) = 32.35$, including a +5 Sequence Bonus. The trigger would still activate, primarily due to the connection event on Day 21.

SCENARIO B

Quiet Profile (Activity Multiplier = 1.2)

≈ 55.8 Pts

18% higher than the baseline. For a quiet profile, each signal is proportionally more valuable.

SCENARIO C

Frequent Poster (Activity Multiplier = 0.85)

≈ 41.0 Pts

15% lower. Still above the threshold, but significantly dampened by a signal-saturated environment.

Chapter Seven

Engagement Seeding

SIRS is not a passive monitoring tool. It requires an active process: Engagement Seeding—the systematic creation of visibility and interaction opportunities within a network of qualified prospects.

The Four-Step Process

1

Identification

ICP Match Identified. A target prospect with a high Ideal Customer Profile (ICP) fit score has been selected.

2

Seeding

Commenting within their network, focused on prospects with a high Ideal Customer Profile (ICP) fit score.

3

Measurement

Every response is captured: profile visits, reciprocal likes, replies, and new connections.

4

Trigger

Score ≥ 32 + Tier 2 Signal + Positive Momentum → Outreach Begins

Bidirectional Tracking

The SIRS model tracks interactions **in both directions**: response signals (Prospect → Us, 85% of the score) and exposure signals (Us → Prospect, 15% of the score). This asymmetric weighting ensures that the score is driven primarily by the prospect's behavior.

The **exposure cap of 6 points** prevents score inflation through our own activity. Even if we leave 50 comments on a prospect's posts, the exposure contribution to the total score is capped at $\beta \cdot 6 = 0.9$ points. The score increases only **when the prospect responds**.

AI-Supported Outreach

When the FIRING trigger activates, no standardised template is launched. Instead, an individualised, AI-supported outreach process begins. The data accumulated during the observation period forms the foundation of a prospect-specific briefing that tailors the contact strategy to the individual prospect. Sequencing is adaptive, based on real-time feedback rather than a linear series of predefined steps.

The Midas Principle: Persistent Data Collection

The SIRS system follows a strict persistence principle: **every API call stores the complete payload** — reactions, comments, feed posts, profile updates and connection status. Over the entire observation period, this creates a cumulative interaction profile that extends far beyond simple score calculation.

The persisted data forms the foundation for subsequent personalisation. While the score distills activity into a single number, the briefing system has access to the **complete interaction history** — including temporal patterns, content themes and behavioural changes.

ACCUMULATED DATA SOURCE	EXAMPLE DATA POINTS	USE IN BRIEFING
Profile data	Position, Company, Industry, Headline Changes	Contextualisation, Industry Context
Engagement timeline	All Likes, Comments and Replies with Timestamps	Pattern Detection, Timing Optimisation
Post content	Prospect's Recent Posts	Affinity with Topic, Talking Points
Engagement patterns	Reaction Types, Timing and Frequency	Engagement Pattern Classification

Based on the accumulated signals, the system classifies the prospect's **engagement pattern** into one of four categories:

ESCALATING

Signals strengthen over time. Highest outreach priority.

CONSTANT

Consistent engagement throughout the observation period.

BURST / SINGLE SIGNAL

Concentrated engagement within a short time frame or a single high-value signal.

Individual Outreach–Briefing

When the FIRING trigger activates, the AI generates a **prospect-specific outreach briefing**. Unlike static sequence templates, this briefing is based on the complete accumulation of data gathered during the observation period. It serves as the operational bridge between quantitative signal analysis and qualitative outreach strategy.

Briefing Input Dimensions:

Profile data:

Position, company, industry and seniority — enabling context-appropriate outreach.

Engagement timeline:

All accumulated signals, including timestamps and weighting.

Post content:

Up to five recent posts — providing topical conversation starters.

Engagement pattern:

Escalating, consistent, burst or single-signal engagement.

Briefing Output Elements:

BRIEFING-ELEMENT	DESCRIPTION
Opening Message	Personalised opening message based on observed interactions
Connection Hook	Shared connection point (topic, industry or post reference)
Talking Points	3–5 Key talking points derived from post analysis and profile data
Icebreaker	Conversation opener based on prospect activity
Risk Assessment	Identified risk topics with anti-pattern recommendations
Recommended Channel	DM, InMail or comment — depending on connection status
Optimal Timing	Based on the prospect's observed activity patterns
Tone of Voice	Based on prospect's communication style

A core design principle is **anti-pattern detection**: in addition to positive recommendations, each briefing includes explicit "avoid this" guidance supported by evidence from the observed data. If a prospect posts critically about AI hype, the system will recommend avoiding generic AI promises.

Case Study — Sarah Smith (Score 47, FIRING): The system generates an individual briefing based on her escalating engagement pattern, her posts on digital transformation and her critical stance towards AI hype. Recommended tone of voice: formal and technical. Icebreaker: reference to her reply on predictive maintenance (Day 17). Anti-pattern: no generic AI promises, no buzzwords — Sarah has criticised “AI washing” in two of her posts. Recommended channel: DM, as a connection already exists (Day 21).

Adaptive Sequencing

Instead of following a linear sequence of predefined steps, SIRS implements a **decision tree** that adapts dynamically based on real-time feedback. Every response — or lack of response — influences the next step. The sequence is not a script, but an adaptive process.

A core element of the adaptive control logic is **DM sentiment analysis**: each incoming response is classified by AI and determines the next course of action:

CLASSIFICATION	SIRS-POINTS	SEQUENCE-ACTION
Meeting Intent	+30 Pts	Sequence ends → meeting mode. Account manager takes over.
Positive / Neutral	+8 Pts	Sequence continues → next adaptive step
Negative	0 Pts	immediate stop. No further actions. → prospect is flagged.

Learning Loop: Each interaction within the sequence feeds back into the score recalculation. Positive DM sentiment increases the score and influences momentum, while negative sentiment results in immediate deactivation. This feedback loop ensures the system self-corrects and does not continue outreach activities after negative signals.

AI-Generated Comments

Comments within the sequence are generated by AI: technically sound, tailored to the specific post content and never generic. The positioning is that of a thought leader, not a salesperson.

Human-in-the-loop: each comment is based on the prospect's ICP and personality profile — derived from the accumulated data — and undergoes manual review before publication to ensure that only relevant, high-quality content is posted.

Daily Limits & Auto-Pause

LinkedIn safety is built into the architecture. Daily limits prevent behaviour that could appear unnatural or suspicious:

EVENT	DAILY LIMIT
Reacts (Likes)	50
Comments	30
Connects	25
DMs	30

Auto-Pause on reply: As soon as a prospect responds within a sequence, the sequence is **immediately paused**. No automated follow-ups are sent after a genuine response. The human account manager takes over the conversation.

Limitations & Outlook

Every model has limitations. Transparency about those limitations is a sign of quality, not a weakness. The following limitations should be considered when interpreting SIRS results:

#	LIMITATION	EXPLANATION
1	Conversation Readiness ≠ Purchase Readiness	SIRS measures whether a prospect is ready to have a conversation — not whether a purchase decision is imminent. The conversion from conversation to deal depends on factors that lie outside the scope of the model, including budget, timing and organisational decision-making processes.
2	LinkedIn-only Data Source	SIRS captures LinkedIn interactions exclusively. Offline contacts, email communication, website visits and activity on other platforms are not included in the score. As a result, a prospect's readiness to engage in conversation may be higher — or lower — than the score suggests.
3	Empirical Parameter Estimates	The decay parameters (τ), signal weights (w) and trigger thresholds are based on empirical observations within the DACH B2B market rather than peer-reviewed research. Calibration is performed iteratively using real-world data and should be regarded as a starting point, not a universal truth.
4	No Causal Claims	SIRS identifies correlations between interaction patterns and conversation readiness. The model cannot prove that engagement seeding causes conversation readiness — it can only measure that readiness is observed more frequently following seeding.

Outlook: Future iterations of the model will refine parameter calibration using larger datasets, evaluate cross-platform signals and quantify the predictive validity of the score through retrospective analysis.

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