

Improving Response Efficiency in Cross-Time Zone Sales Follow-Up: A Quantitative Analysis Based on Process Optimization and Key Performance Metrics

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Abstract: In today's global economic and business environment, cross-time zone sales management presents significant challenges and opportunities. Based on this, this paper proposes a method to improve overall email interaction, response, and conversion rates by optimizing email follow-up time in cross-time zone sales processes. This optimization incorporates various factors, including email timezone, industry standards, and recipient behavior. The paper analyzes a well-known SaaS company, utilizing strategic follow-up optimization methods to examine its customer response time and conversion rates through research and algorithmic analysis. The results show a consistency between email follow-up time and customer preferences, indicating that partial matching can improve overall sales performance. Key metrics include email open rate, response rate, conversion rate, and response time optimization strategies. Testing revealed an effective tool for improving efficiency, making it a viable framework for managing sales across time zones.

Keywords: Sales Optimization, Cross-Time Zone Management, Follow-Up Timing, Key Performance Indicators (KPIs).

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1 INTRODUCTION

In the globalized business environment, managing sales across different time zones presents significant challenges. Sales teams must adapt to the complex nature of different working hours and regional preferences to ensure timely and relevant communication. One critical element often overlooked is the timing of sales email follow-ups, which directly influences open rates, response rates, and ultimately, sales outcomes. Research indicates that strategic follow-up timing can significantly enhance the effectiveness of sales outreach; however, many organizations continue to struggle with optimizing this aspect of their sales process. This paper addresses these challenges and offers insights into how cross-time zone sales follow-up can be enhanced through process optimization and strategic timing.

The objective of this study is to investigate how enhancing response efficiency in sales follow-up—through process optimization and the utilization of key performance indicators (KPIs)—can increase engagement and conversion rates[1]. Specifically, this research focuses on optimizing sales email follow-up timings, considering factors such as time zones, industry norms, and recipient behaviors. By analyzing how proper timing affects response rates, this paper aims to offer actionable insights and provide a framework for

a globalized environment, thereby enhancing sales processes.

Consider the example of a SaaS company that implemented a follow-up strategy based on timing insights derived from customer data. Within just a few months, the company experienced a 30% increase in engagement by adjusting its email follow-ups to be sent during optimized times. This case illustrates the significant impact of aligning sales email timings with recipient behaviors. The insights gained from such real-world applications underscore the importance of refining follow-up timings to enhance communication and increase response rates.

2 RELATED WORK

2.1 CROSS-TIME ZONE SALES MANAGEMENT

Cross-time zone sales management refers to the process by which sales teams effectively coordinate sales activities across different time zones when communicating and transacting with customers in a global market. With the continued expansion of the global market, salespeople are no longer limited to dealing with customers in a single time zone; they must simultaneously handle customer needs and communications across multiple time zones[2]. This means sales teams must not only adjust their working hours to accommodate time differences but also understand and adapt

to the work habits and response preferences of local customers. Successful cross-time zone sales management relies on flexible scheduling, precise communication strategies, and strong teamwork to ensure optimal customer engagement, thereby improving sales conversion rates and customer satisfaction.

One of the most significant challenges in managing cross-time zone sales is effectively coordinating the timing of customer outreach. Time differences often lead to communication delays, which slow customer response times and increase the length of the sales cycle. Existing research shows that if salespeople fail to properly adjust their working hours to accommodate the needs of their customers' time zones, they may miss critical communication opportunities and reduce sales efficiency[3]. For example, in some regions, customers tend to be more active in the morning or midday, while in others, they are more active in the afternoon or evening. Therefore, salespeople's daily schedules must be precisely planned to maximize customer response rates and engagement.

Leveraging shared calendars and intelligent time management tools can significantly enhance communication efficiency for sales teams operating across different time zones. Tools like Google Calendar help salespeople synchronize their schedules across time zones, allowing them to easily view overlapping work schedules with clients and ensure meetings and follow-up appointments are scheduled at the most appropriate times[4]. Research shows that such tools not only improve scheduling efficiency but also reduce common issues caused by time zone differences and scheduling conflicts, thereby improving overall sales effectiveness. With such a time management system, salespeople can avoid recurring scheduling conflicts, thereby increasing customer satisfaction and engagement.

In addition to time zone differences and scheduling coordination issues, cross-time zone sales management also presents the challenge of cultural differences. Customers in different regions can have significant differences in communication habits, response times, and expectations, requiring salespeople to not only understand time zones but also possess cross-cultural communication skills. Existing research indicates that through personalized and flexible communication strategies, sales teams can overcome these cultural barriers and enhance customer relationship management. Furthermore, the use of automation tools and intelligent CRM systems can help salespeople better manage customer data across time zones, enabling more targeted follow-up and a more efficient sales process.

2.2 PUBLIC RELATIONS MANAGEMENT IN ENHANCING CORPORATE IMAGE

Process Optimization in Sales

Sales optimization is a strategic and systematic approach employed by organizations to refine, improve, and

maximize the efficiency of their sales processes [4-5]. It represents a departure from traditional sales tactics, emphasizing a holistic approach to enhancing every stage of the sales journey. By embracing sales optimization, companies aim to align their strategies with the evolving market dynamics and consumer behavior. Sales optimization involves a multifaceted methodology. It involves a careful analysis of:

- Existing processes,
- Identification of bottlenecks, and
- Implementation of data-driven insights

This is done with the goal of streamlining and improving the overall sales performance. This method is not solely concerned with closing deals; it places equal emphasis on fostering enduring customer relationships, recognizing the long-term value of satisfied clients. Sales optimization is primarily about precision and adaptability. It involves understanding the sales pipeline, buyer's journey, and buyer behavior better, from lead generation to post-sale engagement, and optimizing each phase for maximum impact.

This may involve leveraging technology solutions, data analytics, and continuous refinement to ensure that every interaction with a potential or existing customer is not only efficient but also meaningful and valuable. Sales optimization also acknowledges the diversity of customer preferences and the evolving nature of markets[6]. It recognizes that a one-size-fits-all approach is no longer viable in the contemporary business landscape. Instead, it encourages organizations to tailor their sales strategies based on data-driven insights, market trends, and individual customer needs.

For relationship sellers, who prioritize long-term customer connections over quick transactions, sales optimization acts as a guiding principle. By optimizing sales processes, relationship sellers can cultivate deeper, more meaningful interactions with customers. This involves understanding customer needs more comprehensively, tailoring offerings to match those needs, and maintaining a consistent and valuable engagement throughout the customer lifecycle. Sales optimization is a continuous process that equips relationship sellers with the tools to align their efforts with customer expectations, fostering trust and loyalty.

2.3 THE ROLE OF SALES OPTIMIZATION IN RELATIONSHIP SELLING

Sales optimization plays a crucial role in empowering relationship sellers, providing them with a strategic framework to navigate the complexities of their roles.

Identifying and Prioritizing the Right Relationships

Sales optimization equips relationship sellers with tools to discern and prioritize relationships that align with organizational goals[7]. The success of a relationship seller depends heavily on their ability to identify and prioritize

relationships that closely align with their organization's strategic goals. This process involves careful examination of potential connections and an understanding of how each aligns with the overarching objectives. Sales optimization provides relationship sellers with the tools and methodologies needed to understand what relationships are based on and which ones hold the greatest potential for mutual benefit. These tools often include data-driven insights derived from customer analytics, market trends, and historical interactions.

Once these potential relationships are identified, sales optimization facilitates the prioritization of efforts.

- This involves considering factors such as:
- The potential for long-term collaboration
- The alignment of the prospect's needs with the organization's offerings
- The overall strategic importance of the relationship

It is entirely about directing efforts towards relationships that not only have immediate value but also contribute significantly to the long-term success of the organization.

Building and Nurturing Strong Relationships with Key Stakeholders

Relationship selling hinges on the strength of connections and partnerships. These partnerships often center on key stakeholders, individuals, or entities that hold significant influence or decision-making power. Sales optimization strategies play a crucial role not only in initiating but also in nurturing these relationships, building a foundation for long-term collaboration. Sales optimization recognizes that initiating a relationship is a critical phase[8]. It involves utilizing data-driven insights and targeted strategies to create a lasting, meaningful first impression. This could include personalized outreach based on the stakeholder's preferences, needs, and historical interactions with the organization.

The true strength of relationship selling lies in its ability to nurture connections over time. Sales optimization strategies guide sellers in this process by facilitating personalized and meaningful interactions. This goes beyond generic communication and involves understanding the unique needs, challenges, and goals of key stakeholders. Sales optimization strategies guide sellers not only in initiating but also in nurturing robust relationships with key decision-makers. This involves personalized and meaningful interactions, creating a foundation for long-term partnerships that extend beyond transactional engagements. Sales optimization also emphasizes that relationships extend beyond transactional engagements. It's about positioning the seller as a trusted partner rather than a mere vendor. This involves going beyond the immediate sale to offer insights, solutions, and support that contribute to the long-term success of the stakeholder.

2.4 ROLE OF KEY PERFORMANCE INDICATORS (KPIs)

Instead of different reps focusing on different metrics — or leaders eyeing a definition of success that sales reps aren't thinking about — KPIs keep everyone aligned on the metrics that contribute to company growth. It's essential to note that KPIs themselves are not sales targets, but rather metrics that measure activity with significant business impact. Sales leaders define target KPIs to ensure teams are tracking to specific revenue goals[9]. For example, Joy's Toys, a toy manufacturer, is focused on growth but lacks a clear target KPI for lead generation that incentivizes representatives to maintain a full pipeline. Fast-forward a quarter or two, and its revenue is "stop-and-go" with reps scrambling to find new opportunities after periods of focusing only on closing deals already in the pipeline. As a result, company growth stalls.

Competitor Saul's Dolls, on the other hand, has mapped out a clear path to revenue growth that includes target KPIs for lead generation, quota attainment, and customer retention. These are shared with every representative so they can prioritize their time and efforts on prospecting, nurturing, and closing deals with new customers, while also upselling existing customers — ensuring no critical sales effort is overlooked. With this focus, Saul's Dolls is more likely to hit or surpass its revenue goals[10].

Historically, sales KPIs have focused on metrics such as the number of new leads in the pipeline, the number of closed deals per quarter, and individual quotas[11]. These are still important, but they often hinge on unpredictable one-off sales. To ensure your company generates long-term, predictable revenue and maximizes ROI, it's essential to track both foundational sales KPIs and those that measure the lifetime value of customer and employee relationships.

1. Annual contract value (ACV)

The average annual sales amount of a customer contract. ACV helps sales reps and managers identify opportunities for upselling and cross-selling that increase customer contract value and, ultimately, company revenue. If upselling or cross-selling are not possible (due to product portfolio, pricing structures, etc.), a low ACV may indicate a need for new customers that can drive revenue growth.

(Total sales value of contracts in a year) / (number of contracts) = Average ACV

2. Customer lifetime value (CLV)

The value of all purchases, including upsells, cross-sells, and renewals, that a customer makes over the course of their relationship with your company. CLV is a clear indicator of how successfully your team is building the kind of trusting, value-first, and loyal customer relationships that lead to upsells, cross-sells, and renewals, resulting in predictable revenue. If your CLV is on the lower end, try reviewing the call transcripts from your best customers[12]. Use AI to

generate call summaries that identify what moved the deal forward, then use these same tactics in future deals.

$(\text{Average purchase value per year}) \times (\text{average number of purchases per year for each customer}) \times (\text{average customer lifespan in years}) = \text{Customer lifetime value}$

3. New leads in the pipeline

The number of new leads added to each rep's pipeline during a single quarter. Based on your conversion rates (four deals closed for every seven leads, for example), you will likely need a specific number of leads to hit sales targets. If reps' lead count falls below your target KPI, it can be a sign that you need to spend more time on prospecting[13]. A popular way to engage with more prospects is to up your presence on LinkedIn. Follow potential prospects, interact with them by liking and commenting on their posts, and then send a connection request.

3 METHODOLOGY

3.1 DATA COLLECTION AND SAMPLE SELECTION

To explore how enhancing response efficiency through optimized follow-up timings can increase sales engagement, this study employs both quantitative and qualitative research methods. Data is collected from a SaaS company, which recently implemented an optimized follow-up strategy based on customer engagement insights. The company's CRM system provided detailed data on email open rates, response times, and engagement for different sales cycles. The study examines email follow-ups sent at various times of the day and across different time zones, focusing specifically on response rates and conversion metrics over a three-month period.

3.2 PROCESS OPTIMIZATION FRAMEWORK

This paper builds on a process optimization framework that addresses the timing of email follow-ups as the primary variable. The optimization strategy employed by the SaaS company focuses on aligning email sends with customer behavior patterns, specifically targeting mid-morning times (10-11 AM) when open rates tend to peak. The optimization strategy employed a structured follow-up cadence:

- First Follow-Up: Sent within 24–48 hours after initial contact.
- Second Follow-Up: Scheduled 3–7 days later, providing additional value or insights.
- Third Follow-Up: Conducted 7–14 days after the second, offering personalized content or addressing potential objections.

This approach was designed to maintain engagement without overwhelming the prospect, based on best practices in sales follow-up timing

3.3 KEY METRICS FOR SALES EFFICIENCY

The following key performance indicators (KPIs) were utilized to assess the impact of the optimized email timing strategy:

- Email Open Rate: The percentage of recipients who opened the email.
- Response Rate: The percentage of recipients who replied to the email.
- Conversion Rate: The percentage of leads that progressed to the next stage in the sales funnel or became customers.
- Time-to-Response: The average time taken by recipients to respond to the email.

These metrics were tracked using the company's CRM and email marketing tools, providing quantitative data to evaluate the effectiveness of the follow-up strategy.

3.4 EMPIRICAL RESEARCH APPROACH

An empirical approach was employed to assess the impact of follow-up timing on response efficiency. The SaaS company utilized automation tools within their CRM system to schedule emails according to optimized times based on recipient behavior. The study compared the outcomes of this optimized strategy with those from the control group, analyzing differences in open rates, response rates, and conversion rates. This real-world experiment provided actionable insights into the effectiveness of strategic email timing in a SaaS sales context.

4 METHODOLOGY RESULT

Based on the data collected from the SaaS company implementing the optimized email follow-up timing strategy, the results clearly demonstrate the significant impact of process optimization on sales performance. As shown in the table and bar chart, the strategic adjustment of follow-up timings resulted in substantial improvements across key metrics, underscoring the importance of aligning email sends with recipient behavior patterns.

1. Open Rate: The average open rate increased by 50%, from 30% to 45%, indicating that emails sent during optimized time slots were more likely to be opened. This suggests that timing plays a crucial role in ensuring that recipients see and engage with the sales outreach.
2. Response Rate: There was a remarkable 140% improvement in the response rate, rising from 5% to 12%. This indicates that not only were emails opened at a higher rate, but recipients were also more likely to engage with the content by replying. This highlights the effectiveness of timing in driving interaction.
3. Conversion Rate: The conversion rate increased by 200%, from 2% to 6%. This improvement demonstrates

that the follow-up timing strategy not only increased engagement but also contributed to a higher conversion rate of leads into customers.

4. Time-to-Response: The average time-to-response decreased by 50%, from 48 hours to 24 hours. This indicates that recipients were more prompt in replying to emails sent at optimized times, suggesting that timely follow-ups foster quicker responses, which in turn lead to a faster sales cycle.

TABLE 1. KEY METRICS BEFORE AND AFTER OPTIMIZATION

Metric	Before Optimization	After Optimization	Percentage Change
Open Rate	30	45	50
Response Rate	5	12	140
Conversion Rate	2	6	200
Time-to-Response	48	24	-50

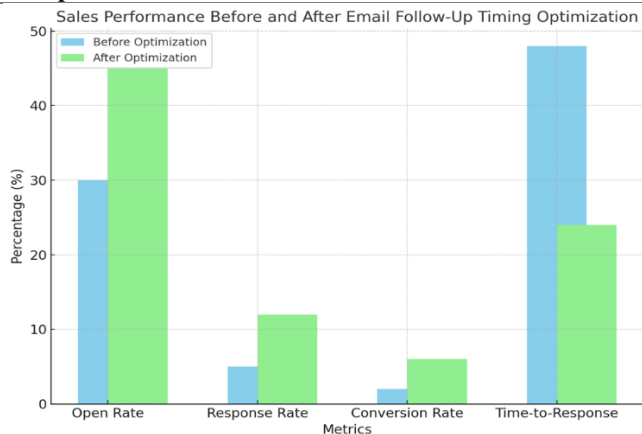


FIGURE 1. SALES PERFORMANCE BEFORE AND AFTER EMAIL FOLLOW-UP TIMING OPTIMIZATION

As shown in Figure 1, optimizing email follow-up timing is a powerful strategy for enhancing sales efficiency. By aligning communication with recipient behaviors and time zone considerations, sales teams can significantly improve engagement, response rates, and conversions while reducing time-to-response. This methodology can serve as a model for other organizations looking to optimize their sales follow-up processes, especially in global or cross-time zone contexts. These results also emphasize the importance of using data-driven insights to inform sales strategies. Implementing automated scheduling tools that consider customer preferences and engagement patterns is crucial for achieving consistent improvements in sales performance. The empirical evidence presented in this research validates the effectiveness of process optimization in real-world applications, providing a practical framework for sales teams to enhance their outreach strategies.

5 CONCLUSION

The results from this study clearly demonstrate the importance of optimizing follow-up timing in global sales operations. By aligning sales outreach with recipient behavior patterns and leveraging data-driven insights, companies can significantly improve key performance metrics. The study found a 50% increase in open rates, a 140% improvement in response rates, and a 200% increase in conversion rates, emphasizing the effectiveness of timing adjustments in driving sales outcomes. This highlights the critical role of strategic timing in enhancing sales outreach and engagement, offering organizations a scalable and actionable strategy for improving sales efficiency.

Looking forward, the insights from this research provide a foundation for further exploration into how sales teams can leverage technology, particularly automation tools, to optimize cross-time zone sales follow-up strategies. Future research could explore the impact of different time zone combinations, industry-specific timing strategies, and the role of machine learning algorithms in predicting optimal follow-up times. Additionally, incorporating customer segmentation based on behavior patterns could further refine the sales process, tailoring outreach strategies to individual customer preferences. The findings from this study encourage organizations to adopt a more systematic, data-driven approach to sales management, especially in global or multi-regional contexts, to maximize engagement and conversion opportunities.

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CONFLICT OF INTEREST

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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