

# The State of Predictive Dialing in 2025

with Special Reference to the US

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#### 1. Introduction

This paper looks at predictive dialers in today's markets both in the US and also in other major territories around the world. Its purpose is to throw light on how dialers are designed, regulated and used. And in particular, our aim is to use these issues to set our own dialer, the Sytel AI Dialer, in context.

We focus on the US in particular, since it is a focal point for both regulation and also developments in dialer technology. What happens in the US sets a template for what happens in other countries around the world. We are going to consider telephony issues and also compliance issues, insofar as they apply to outbound calling only.

We aren't going to address wider issues, such as who may be called, when and how often. These are important issues and users of our predictive dialer can manage these through our real-time compliance engine.

There's a range of things that dialers do, such as call progress detection and allocation of live calls to agents, but the stand out function is how they dial and that's the subject of this paper.

Simply put, predictive dialers can dial multiple numbers per agent, enabling them to enjoy higher talk time per hour than otherwise. We will explore how this is done.

## 2. Some Dialer History

First, let's go back to predictive dialing roots in the US. This was particularly in Collections and Long Distance Winback in the 1990s. The typical live call rate<sup>1</sup> was in the range of 30%-40% and campaign sizes were usually 50+ agents. These kind of statistics are kind to dialers and you didn't need a first-class dialer design to get good predictive performance.

But the market was changing and consumers were getting fed up with answering the phone and either the caller hung up, or there was just silence. Around 1998, the US Federal Trade Commission (FTC) told industry, especially telemarketers who had

jumped on the bandwagon, to get their act together and stop the growing incidence of such calls.

Under pressure from the FTC, the US Direct Marketing Association (DMA) produced a code of conduct, which quickly was more honoured in the breach than in the observance. Reaction in the UK was similar. In the US, the FTC eventually brought in their own regulatory code of practice for telemarketers in 2002. The UK did likewise, but with a wider remit.

Usually when regulations are imposed in any industry sector in the US, regulators and

<sup>&</sup>lt;sup>1</sup> The number of calls answered by consumers per 100 calls dialed.

industry get together to agree on how product short-comings should be addressed, and then often set appropriate timelines for compliance. Take for example how car emissions standards have been set in the US. A period of time was given for industry to innovate and be in line with changing regulations. Such a coming together **never** happened in the dialer market in the US, or indeed the UK.

Because of past bad practice, the FTC had no love of dialers and happily took the industry at its word, when it claimed (erroneously) that it was operating at very low levels of abandoned calls. It made it easier for the FTC to set a 3% maximum for abandoned calls in its regulations (although there was little scope for a higher figure, since the State of California had already set a 3% limit).

Nevertheless, astonishingly, no one told the FTC that dialer vendors would struggle to dial efficiently at this low level of abandoned calls. Not that the FTC were interested! They didn't care.

Many dialer vendors and also the US Direct
Marketing Association, thought that because
of the years of bad practice, predictive dialing
would get banned. But instead the rate of 3%
became enshrined in the FTC Telesales Rule –

see Section 5 below. And dialers didn't get banned.

For reasons Sytel is not aware of, it was decided that the FTC regulations should apply to telemarketing activities only and not to other verticals such as collections and market research.

No vendor complained about the regulations, especially the 3%! Some vendors ostensibly took steps to try and improve their products – and then marketing kicked in with claims of being able to operate effectively under compliance!

For those interested, a transcript of the FTC proceedings that led to the Telesales Rule from the FTC can be found here:

http://www.sytel.com/wp-content/uploads/2021/11/tsrfrn.pdf

Sytel was actively involved as an invited advisor in these hearings.

Even as this note is being updated in 2025, there is still remarkably little informed discussion between the regulators in the US and vendors on what predictive dialers actually do. And there is still a wide gulf between what regulators expect on compliance and what many dialer vendors are able to achieve.

## 3. All About Dialer Design

In an earlier version of this paper we reviewed some of the other designs in the market. Insofar as we can tell, they are a mixture of manual and algorithmic controls. When outbound markets were more stable, they could do a reasonable job but

performance under compliance was often limited. We are happy to share our thoughts if anyone is interested, but the brutal fact is that markets where the live call rate is often around 20% or lower require a very different approach.

# 4. Sytel AI Dialer Design

The only way to provide effective dialing and keep nuisance calls<sup>2</sup> to a minimum is to automate, completely. The supervisor doesn't get to interfere! Sytel's approach is in stark contrast to other vendors, most of whom see the computation of the right dialing rate as, at best, an exercise in mathematical formulae, with a dose of human intervention when things go wrong!

The predictive dialing problem simply cannot be solved with an algorithm that takes a range of parameters or a dataset. It is Non-Polynomial (NP) complete.

We utilize advanced probabilistic modelling and learning techniques akin to those used in modern AI systems to deliver real-time, intelligent decisions on how to dial. All of the design techniques used are proprietary to Sytel and have been bult and refined over several decades.

The route to execution for all of this work lies in a specialist simulation engine, the Virtual Event Machine (VEM®). And its task is to make pacing decisions, with the challenge of providing the best possible performance for any set of campaign conditions.

All the user does is specify a maximum target for abandoned calls and VEM® does the rest. It then achieves, continuously, the maximum dialing efficiency for that rate of abandoned calls. The supervisor gets on with managing the campaign itself and just

ignores the dialer, which manages pacing with no outside interference!

Simulation of itself is necessary, but not sufficient. What really matters is what data is included in the simulation and how it is engineered.

VEM® continuously monitors all events that are involved in outbound campaigns; for example, dialing outcomes, call histories including callbacks, agent movements, all talk and wrap event times, ring no answer (RNA) times and times to answer/respond for all calls. VEM® runs constantly at a speed of tens of millions of calls a second updating the dialing rate for all active outbound campaigns, often many times per second.

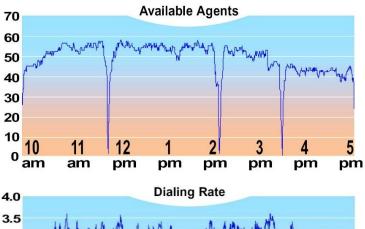
A quick note on the dialing rate: This can be thought of as the number of calls dialed, as agents become available to receive calls. It is constantly changing as the result of simulation and sometimes will lead to additional calls being made, even when no (further) agents become free to take a call.

<sup>&</sup>lt;sup>2</sup> The term *nuisance calls* is often used to refer to both calls abandoned by the dialer as well as calls that may be placed in a hold queue, also called silent calls.

Figure 1 graphs agent availability against the dialing rate, in a campaign run by a major BPO. The higher the number of the agents on a campaign, the higher the dialing rate, whilst the abandoned call rate was kept within compliance rules. As the dialing rate goes up, the dialer is effectively predialing not for an agent, but for any agent.

Note the three dips in agent numbers as they went on break and how the dialer immediately recalculated the correct dialing rate to avoid unwanted abandoned calls, the rate of which stayed at 2% of live calls throughout the campaign.

Instead of trying to dial for a specific agent, VEM® is much more ambitious and this explains the enormous amount of computing power required to do its job. It calculates dialing rates based on both the likelihood of any agent becoming available and also of dialled calls being answered, in the next second, two seconds and so on.



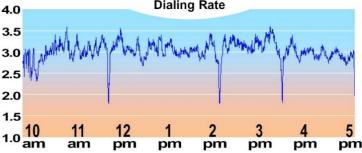


Figure 1. The Sytel AI Dialer at work

We are dealing with uncertainty and probabilities. Managing these effectively in respect of all data and events, and doing so using a completely automated process is the key to efficiency under compliance.

# 5. What is Dialer Compliance?

The telecom regulators in the UK and the US set the standard. There are three basic rules. You may dial multiple numbers in respect of each agent, subject to the following:-

## i. Early Hangups:

The scope for any productivity gain from this practice under compliance is extremely small, and the chances are that you are actually hanging up on a number that is already ringing. Early hangups should be avoided and cannot be made with the Sytel AI Dialer. When a number is dialed, it should be allowed to ring for at least 15 seconds, as per compliance rules. In today's markets, for calls to cell phones, there is a case for industry to suggest going back to a lower number. We are not aware of any pressure to do so.

#### ii. Abandoned Calls:

Some users calculate this measure as follows;

abandoned calls completed dials

This is an 'all calls' measure and has been rejected by all regulators. Some vendors encourage their users to adopt it on the basis that it sustains a much higher dialing rate. It does so only at the expense of a lot more abandoned calls (particularly these days). Take for example a campaign with a live call rate of say 20%, then the 'all calls' measure of say 3% translates into an abandoned call rate of almost 15% when the 'live calls' measure is used.

Use of the 'all calls' definition is not just wrong but very bad practice. And it's worth reminding ourselves that an abandoned call is one less consumer for your agents to talk to!<sup>3</sup>

# iii. Live Consumers Should Not be Held in Queue:

Non-compliance with this rule is certainly the biggest contributor to nuisance calls in all countries where predictive dialing is used. The point of the rule, as far as the regulators are concerned, is to minimise the nuisance by playing a message when no agent is available. For example, such as 'Oops we slipped up. We called you but don't have an agent available. We will call you back shortly and make sure that an agent will indeed be there to talk to you', or similar, and then hanging up and classifying the call as abandoned.

Instead of doing this, we see contact centers putting calls on hold, and either allowing dead air or playing a message asking consumers to hang on since an agent will be available shortly.

It perhaps takes a special sort of person who is happy to be treated in this way.

We conducted an experiment some years ago to understand consumer reaction and made 100 live calls on a random basis across the US. We asked our agent to say nothing and just record the point at which a consumer hung up on what they saw as a dead air call. And we also asked our agent to take a note of anything these consumers said – to the dead air line. Conventional wisdom is that people hang up early. Many of us say that is how we behave. We want to show that we have no truck with silent calls and that we kill them quickly.

It simply isn't true! When you call somebody, people genuinely want to know what is going on. Could be really good news. Or maybe they haven't talked to anyone today, so they hang on. In our test, the average hangup time was 13 seconds! Now dialer vendors know this and this is one reason why their own users are sometimes encouraged to use hold queues!

Playing a message such as "we will get to you shortly" instead of dead air, may

<sup>&</sup>lt;sup>3</sup> As an approximate measure to make the conversion to the 'all calls' rate, simply divide 100 by the live call % and then multiply the 'all calls' rate by this number.

make little difference. The people we contacted were very unhappy and subjected the person doing the test to some serious invective.

So, the point of all this is that to ring a consumer and keep them waiting is not

just a straight intrusion on their privacy; it's bad for the health of the campaign. Consumers resent it and it is certain to interfere with the quality of the call.

# 6. Compliance in Action

#### A Benchmark

If a user dials under compliance then the benefit they achieve, compared with progressive dialing, can be described as the Predictive Gain. See detailed explanation in Appendix 1. Predictive Gain also serves as a marker for comparing dialers in competitive situations.

#### i. Do Sytel Users Comply?

We mandate compliance in the UK only. This is because it is the only market with wall to wall compliance. In all other countries, there is an element of discretion, in at least part of the market, and we leave it to our users to decide whether they should comply.

Many of our users are inclined to dial within compliance limits, even if they are not bound by compliance in their particular vertical(s). One reason for this is that the major increases in performance come at very low levels of abandoned calls i.e. within compliance limits.

#### ii. Industry Views on Compliance

There has been no serious public debate as to whether dialers generally can dial effectively under compliance.

As noted earlier, the dialer community was essentially a 'no-show' when it came to deciding, for example, what a reasonable level for abandoned calls should be under the FTC Telesales Rule. And again as noted earlier, other vendors by and large haven't complained about compliance, publicly, but rather tend to support compliance rules and their adherence to them in their marketing!

Nevertheless, in Sytel's view, it is likely that Sytel almost certainly still has the only dialer that was built to deliver very good performance under compliance. And this matters because if a dialer wasn't built to do this then the only path to good performance is to dial outside compliance limits.

### iv. A Very Tough Challenge

As people don't answer their phones and live call rates have fallen, the challenge of dialing effectively under compliance has just got a whole lot harder.

To help understand this, imagine that you are running a predictive campaign where...

- just one in every ten calls is answered by a person, and
- you are working within a limit of 3% for abandoned calls, measured as a % of live calls (typical compliance setting)

What is the maximum number of abandoned calls you can make under compliance per 1000 calls dialed? The answer lies in the footnote<sup>4</sup> below. Don't look! Try and figure out the answer for yourself first. If you get the wrong answer, don't feel bad. Most people don't get it, because intuitively it just seems impossibly low.

The result is completely at odds with how dialers have been designed and thought of historically. Suddenly abandoned calls are not only the sole kind of nuisance call that a dialer can make, but they have also become a very scarce resource.

Unless predictive dialers have been designed from the ground up to cope instantly and precisely with any and all changes to campaign conditions and also deliver a dialing rate that works within a target call abandonment rate of say 3%, then they are unlikely to get far into the 1000 calls in our example, before having to revert to progressive dialing.

# 7. Performance Check on the Sytel AI Dialer

Apart from talking to our customers, there are several things that can be done to check out Sytel AI Dialer performance, especially against the competition:

- Trials are always available. The results should be clear very quickly and, in practice, there is no need to run these for more than a few days.
- Request a demo of Sytel's planning tool, Oceanic<sup>®</sup>. This can be used to

- show the extent of 'predictive gain' possible, for any outbound campaign.
- In addition, a side by side comparison can be run with any other dialer. Sytel has experience of such bakeoffs and can advise on setup, such that like is compared with like.

Without even doing a bakeoff, Sytel can do an analysis of logs produced by other dialers, carefully excluding any personal information, to show how they dial compared to Sytel.

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<sup>&</sup>lt;sup>4</sup> 10/100 x 3/100 = 3 per 1000

## 8. Dialer Challenges

Let's consider some typical challenges met by Sytel's AI Dialer on a regular basis:-

#### i. Live call rate less than 10%

Sytel has many customers, especially in the Collections market whose live call rates are very low. The 'predictive gain' can be 25 minutes or more in the hour.

For comparable dialing performance against other vendors, at this level of live calls it is not uncommon for the Sytel AI Dialer to be dialing at say 3% abandoned calls, when a competitor is well into double digit abandoned calls.

## ii. Significant patterns of bad data

Good dialing conditions are when users clean their lists so that all numbers are valid, and networks never get overloaded and/or return bad disposition codes. The real world is different and dialers not only need to highlight such data for user action, they also need to manage the dialing rate so that agents are still kept supplied with a constant stream of answered calls. The Sytel AI Dialer does this seamlessly, without user intervention, even when bad data rates are as high as 90%.

## iii. Constant changes in agent numbers

See Figure 1 above again. The most challenging job for any dialer is to cope with agent movements. As agents enter and leave campaigns, the dialing rate needs to be recalculated immediately, as happened here, in order to avoid abandoned calls.

#### iv. Sudden changes in talk/wrap times

Some campaigns may consist of discrete data sets, linked together. As the dialer moves from one list to another, the running history kept by the dialer will change suddenly. It will take some little time for the dialer to know that it is facing a permanent change in dialing conditions – and hence adapt the simulation. As noted in (ii) above, managing such inherent unpredictability is built into the dialer's design.

But better still is when users let the dialer know that the list type is changing, or that they are working with multiple lists. Then it can react immediately, including by running multiple simulations.

## 9. The TCPA in the US

For the past 6-7 years the US Federal Communications Commission (FCC) has got into the compliance game and has been trying to ban/restrict the use of predictive dialing for calling non-consenting cell phones in the US, bearing in mind that 75% of all calls to consumers in the US go to cellphones.

The FCC, for whatever reason, got their definitions wrong and the resulting dialing rules in their regulations, the Telephone Consumer Protection Act (TCPA), have been subject to constant and successful legal challenges. Suffice it to say that some actors, following recent court rulings, are back into unrestricted predictive dialing. Others, less

sure of the rulings, stick to a range of manual dialing methods. This creates a twotier market for the use of dialers and the FCC needs to resolve it.

In February and April 2025, Sytel published Comments on the FCC's Electronic Comment Filing System (ECFS) setting out its view as to how the FCC might clarify their dialing rules and create a level playing field that serves both business and consumers, without constant resort to legal processes. The papers can be found on the ECFS database. They are also available on request from Sytel.

## 10. A Global Perspective

The issues discussed in this paper have relevance across the globe. Not all countries have regulated along the lines of the US and the UK. But there is a common fundamental issue: How can dialers be deployed productively without causing lots of nuisance calls?

The number of people answering their phones everywhere has declined, and live call rates can be in single figures in Collections!

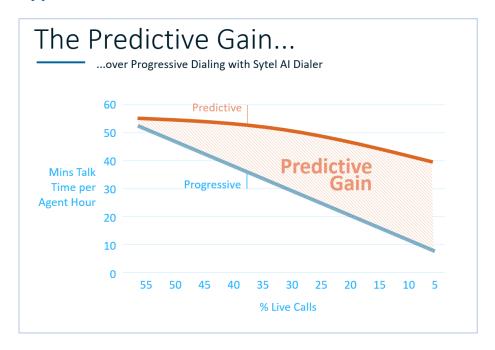
As noted elsewhere and as shown in

Appendix 1, this means that the scope for predictive dialers has increased.

But paradoxically, for most dialers in today's markets, good performance can only be achieved by high levels of nuisance calls; with answered calls either abandoned by the dialer, placed into hold queues, or cancelled before a decent ring time has been achieved.

The Sytel AI Dialer provides a solution to this problem. Almost certainly the only dialer that can provide excellent performance without resort to lots of nuisance calls.

# **Appendix 1 - Predictive Gain**



This graph shows how a predictive dialer can deliver enhanced performance compared with progressive dialing, which is defined as just one trunk being dialed each time an agent is available.

- The straight blue line is simple
   arithmetic. It is what progressive dialing
   does. So when the live call rate is very
   high, so too is talk time performance.
- The curved red line represents an approximation of performance by the Sytel AI Dialer under the conditions shown, for example a maximum of 3% abandoned calls measured as a % of live calls and just 25 agents.
- So if we consider the 15% live calls point on the X axis, we can measure the increased talk time per hour that the Sytel AI Dialer can bring, by referring to the vertical scale on the Y axis. In this case

- we can see that the difference (i.e. the benefit) is just over 25 mins in the hour.
- The height of the red line above the blue line is the only real test of predictive dialing capability i.e. how much predictive gain can be achieved, measured here against the Y axis.
- The graph shows clearly that the tougher the dialing conditions (i.e. low live calls), the greater the benefit brought by predictive dialing.

Virtually all dialers, in Sytel's experience, struggle to dial well at low live call rates, which means that they can't realise much of the potential predictive gain shown here as the live call rate falls. And that's all about design.

# Appendix 2 - A User Strategy for a Well-Designed Dialer

Many users are only too aware of the negative impact that nuisance calls have on their brand, and are now reverting to progressive dialing because their dialers can't deliver good performance without lots of nuisance calls.. From a productivity point of view, as can be seen in Appendix 1, this is not a good solution.

It is no wonder then that digital outreach strategies, excluding voice, are popular as users seek to reach their consumer bases via other means. But a lot of research shows that many consumers still welcome a well-conducted conversation.

For example in recent surveys Accenture found that 75% of consumers are open to receiving outbound calls if the purpose is relevant (e.g., appointment reminders, service updates, renewal offers). And even in sales contexts, McKinsey has found that high-trust segments (e.g., finance, healthcare, utilities) still get strong results from voice-based outbound — especially when tied to known customer history.

So imagine the following voice outreach commitment using the Sytel AI Dialer:-

- When we call you, we will have an agent ready to talk to you
- We will never place you in a wait queue while we look for an agent to talk to you

- We will also never hang up on a ringing call to you, because no agent is available to you, should you answer the call
- And in the very unlikely event that we can't talk to you, we will play you a message, apologising. Then we will be sure to have an agent available and have them call you back immediately.

Combined with a strategy of branding the name of the caller rather than number spoofing, this, in Sytel's view, is an excellent way of earning trust with consumers and seeing live calling rates rise. But it needs the power of a very well-designed dialer, like the Sytel AI Dialer to be effective!

Stop Press: As this update goes out in early 2025, news comes in that some of the leading banks in the US are using call branding to declare themselves, especially in first party collections. If they are doing progressive dialing, then that's fine but the campaign performance, in terms of agent talk time per hour, will be poor. If the banks are using predictive dialing to improve performance then the branding is almost certainly going to be under-mined by (too many) nuisance calls. Sytel is about to engage with customers in this market; for readers interested in this dilemma let us know and we will keep you updated.