ClickFox Analytics White Paper

A technical white paper about Customer Behavior and Experience Analytics

Version 1.1

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1. Executive Summary

ClickFox, a pioneer in Customer Behavior Intelligence, enables organizations to see how their customers actually interact across a variety of systems, such as IVR, Web, CRM, Agent Desktops, Point of Sale and Interactive Kiosks. By creating a visual map of the system and overlaying it with customer interactions, ClickFox quickly pin-points bottlenecks in transactional flow, identifies causes of costly drop-offs to live agents, and uncovers opportunities for extending automation, cost-savings or increasing revenue. Customer behavior is a window into customer experience and satisfaction. The power to understand what drives customers from one channel to the next creates the ability to identify and change behavior maximizing your most efficient channels while improving your customer's success and satisfaction. ClickFox provides the power to know what to improve and then quickly confirm that your customer service channels are effective and successful.

Customer Behavior Analytics allows an enterprise to understand, through the use of technology, what behavioral patterns emerge from their customers' interactions across all interaction touch-points. It is an all-encompassing methodology that can follow the customer experience from one interaction channel to another and show the complete experience and its effect on enterprise business indicators.

Through the use of ClickFox's Customer Behavior Analytics tools enterprises can:

- Increase self service containment rates
- Improve 1st contact resolution rates
- Increase successful self service completion rates
- Decrease agent transfers
- Decrease customer churn
- Increase customer satisfaction (CSAT)
- Reduce the number of repeat calls
- Shorten and optimize the customer experience
- Find new up-sell / cross-sell opportunities
- Detect and alert about possible external and internal fraud activities
- Reduce misroute of calls
- Reduce the adoption time when modifying interaction channels
- More...

Some of the unique capabilities of the ClickFox solution are:

- Cross Channel Capabilities
- Ability to Track High Level Completed Task Paths
- Behavioral Mapping (Traffic Viewer)
- Analyzing User Behavior Based on Speech Input
- Ability to identify and analyze Repeat Caller Behavior
- Capability to understand and improve First Contact Resolution
- Tailored Comprehensive Dashboard for Daily Management Review
- More…

For a detailed explanation of these features and capabilities, please see appendix A.

2. ClickFox Analytic Approach

ClickFox has developed a unique approach that allows an enterprise to analyze any interaction with its customers at any interaction touch-point. Our solution is platform, channel and technology independent and delivers a true total customer experience in and across all self service, contact center, retail and other channels.

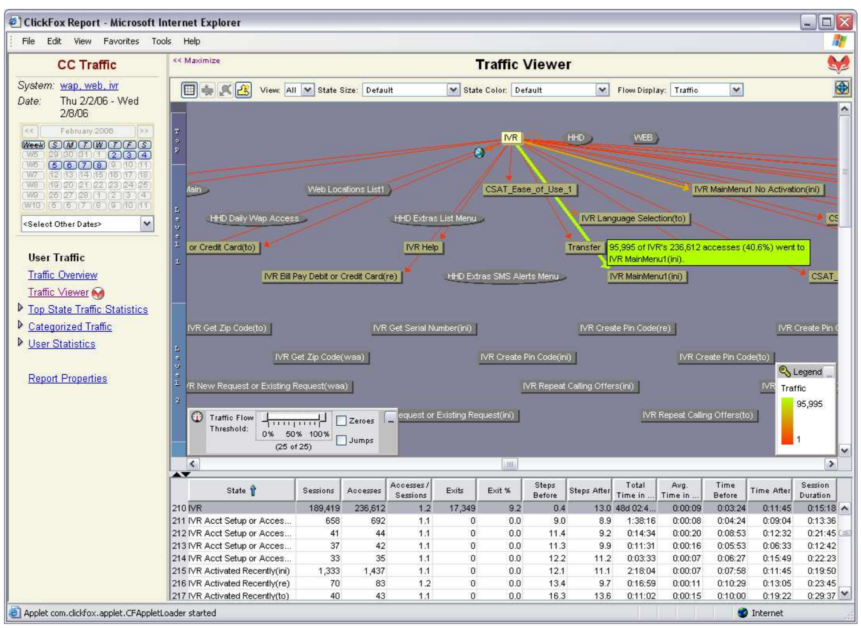
ClickFox primarily utilizes raw standard system logs from the various interaction channels. We gather these system logs and through our patented technology reconstruct the original customer sessions and create a robust interactions database. This database is the basis for our analytics process and is used to create a visual blueprint of customer behavior and their paths through the system.

ClickFox can also incorporate other customer information from various sources such as customer data warehouses, churn databases, CSAT surveys, etc. This information can be used to make the system model more robust and allows for extensive segmentation capabilities.

3. Visualization of Customer Experience

3.1 Traffic Viewer

The default report that is automatically generated in ClickFox is Traffic Viewer:



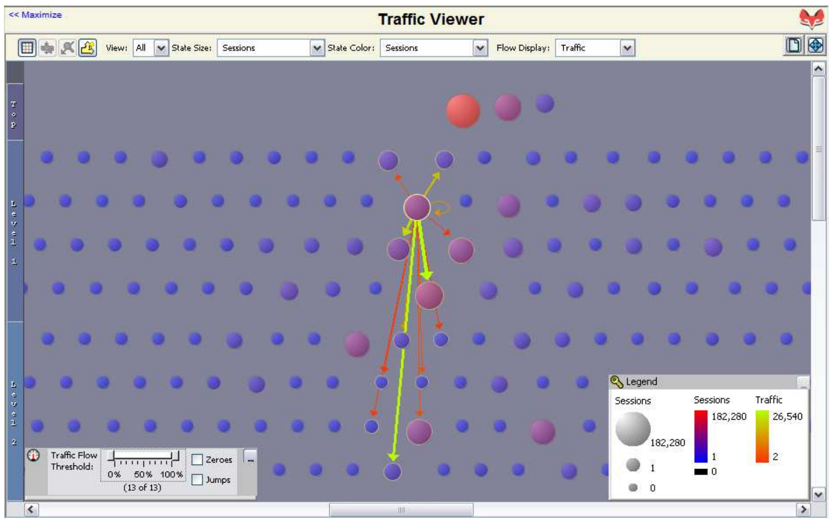
Traffic Viewer enables the analyst to see all the links between the system states and is the starting point for initial discovery into customer behavior. The links are then color coded with actual traffic that flows between the states, allowing to easily see which next steps are more popular and how are the customers actually using the system.

Are the top destinations utilized more often? Are there areas of the application that are not used very often? What are customer's preferences?

From Traffic Viewer it is easy to drill down to areas of interest and view all associated information that has been gathered in the system through the State Details and Flow Details views. During the model creation process we also attach the state documentation to each one of the system states to easily enable the analyst to read through and understand what are the prompt types, available actions, required conditions and dialog module wording (IVR). In a web environment we will attach a snapshot of the webpage to each one of the states.

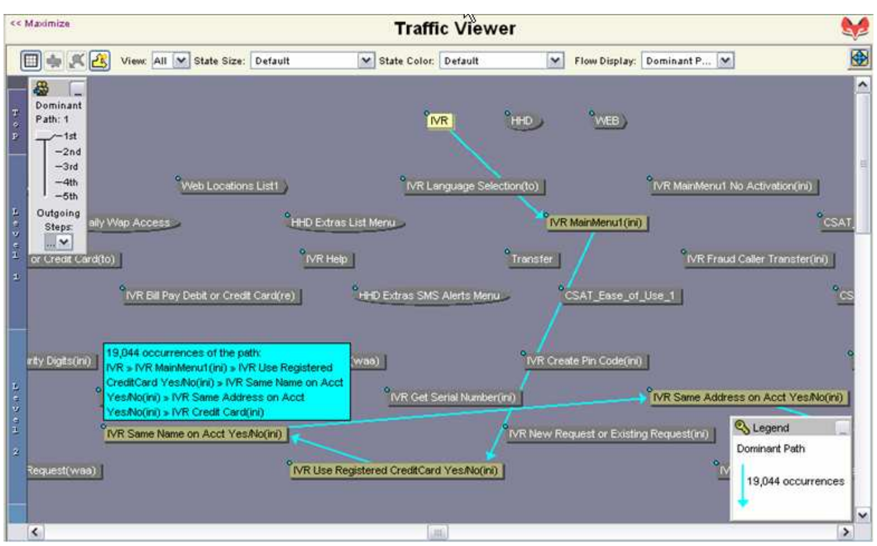
3.2 Session Volume

The Traffic Viewer has several views that simplify the discovery process and make it easier to find trends and customer behavior and preference. One of these many views is the Session Volume. By showing the state size based on the number of sessions that passes through it and then color coding the states, ClickFox can generate an easily understandable traffic view to allow the analyst to quickly focus on the most used areas of the application:



3.3 Dominant Path

One of the other views available in Traffic Viewer is Dominant Path. This view combines the single step traffic links into the most dominant paths that customers chose to navigate through the system. This view allows the analyst to compare customer preferences and see whether they were impacted by menu structure, system design, confusing sections that caused them to repeat or fail, etc.



4. Flow Analysis

There are several ways to generate Task Flow reports in ClickFox. The easiest method is to open the Task Editor in Traffic Viewer. A task can include any number of steps and all that is required is to drag & drop the required steps into the folders at the bottom of the screen. From here, the task can be further defined to include traffic information, direct or indirect connections between the steps and a multitude of additional filters that can be based on basic information provided in the system logs or external segmentation data that has been added to the model from data warehouse system, CSAT surveys or other data sources. Some of the commonly used filters are the time and state filters.

4.1 Filter Settings – Segmented Reports

There are additional filters that help include or exclude specific users or groups of users based on previous task results or imported lists. By utilizing a unique user identifier in the model, ClickFox can track these individual users and even provide valuable information about repeat customer behavior.

One of the most powerful filters is the customized segmentation data filter. This filter enables the analyst to track behavior patterns of different customer segments and gain insight into their preferences and experiences. By correlating segmentation data with behavioral patterns, the analyst can start to define targeted self service application flows for each customer segment.

4.2 Automated Reports

Task Flow reports, once generated, can be set to automatically run and create daily, weekly and monthly reporting slices. This enables the analyst, business owners and senior management to track trends and changes in their key business objectives and indicators.

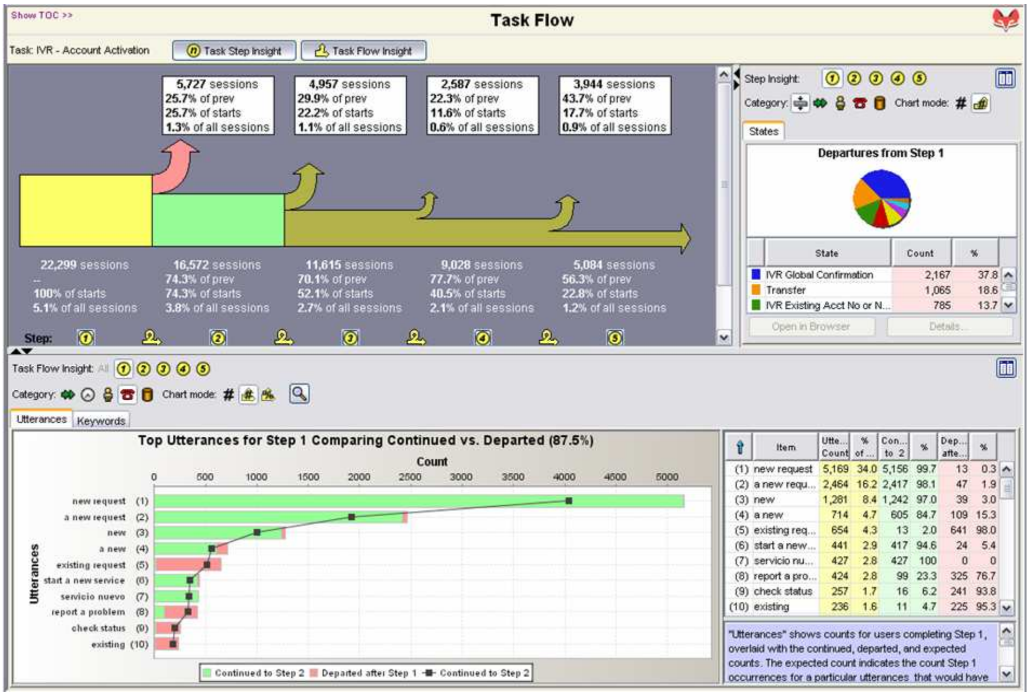
4.3 Ad-hoc Reports

While automated reports are set to run without intervention, the analyst can also create and run ad-hoc reports at any time, if necessary (complaint management, event tracking, etc.)

Depending on the complexity of the report and filtering, results can be available within several minutes. If a complex report is about to be run, the analyst can decide to use a smaller sample size of the data to validate the results before moving forward with the full report.

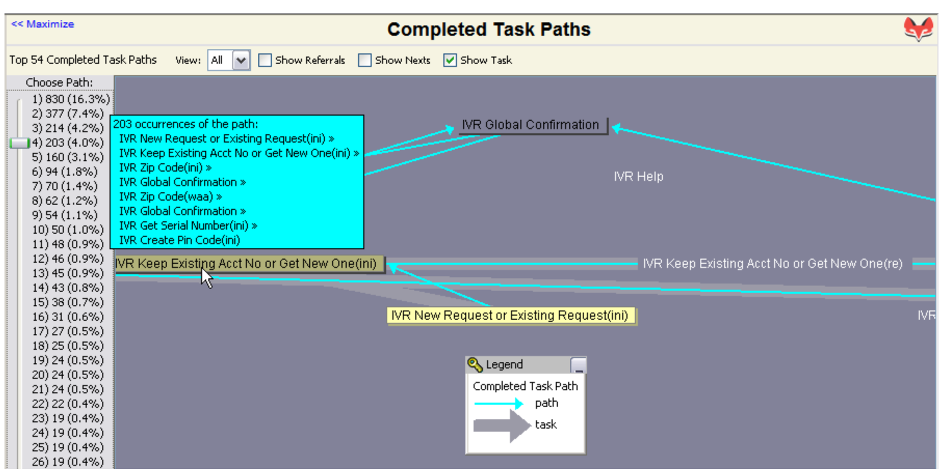
4.4 Task Flow Report Results

The resulting reports show a complete customer experience (positive or negative) and allow for a granular understanding of the customers' behaviors and experiences. Successful task completions are easy to quantify, while unsuccessful attempts allow the analyst to dive deeper into the reasons leading to a negative experience. A multitude of additional information is available, such as departure points, customer identification, geographical segmentation, and custom segmentation information. A step-by-step analysis of continuing customers versus departing customer makes it easy to get to the root cause of customer issues:



4.5 Completed Task Paths

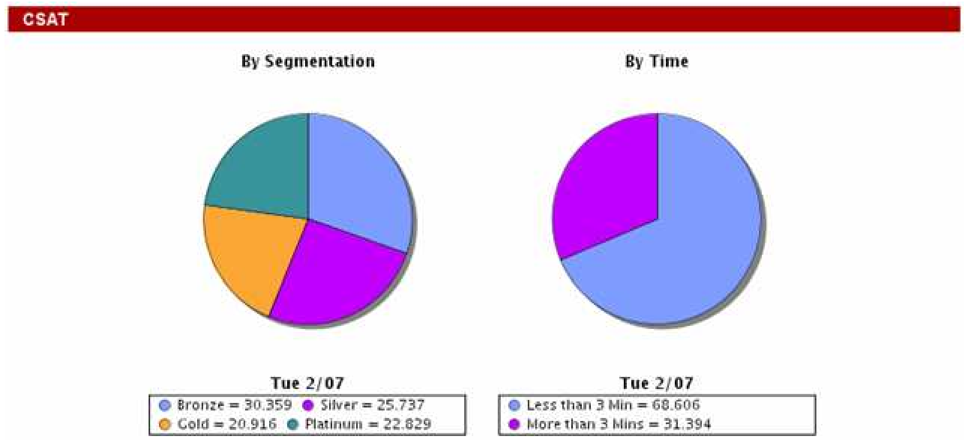
One of the ways to analyze ideal versus no ideal way to complete a specific task flow is by understating completed task paths. ClickFox aggregates all the different ways that customers went through the system in order to complete a certain task and displays them in order of most number of completions. By analyzing the completed task paths it is easy to see whether or not the task is easy for customers to follow, are they experiencing difficulties along the way, are they following the ideal path or are they going through extra unnecessary steps?



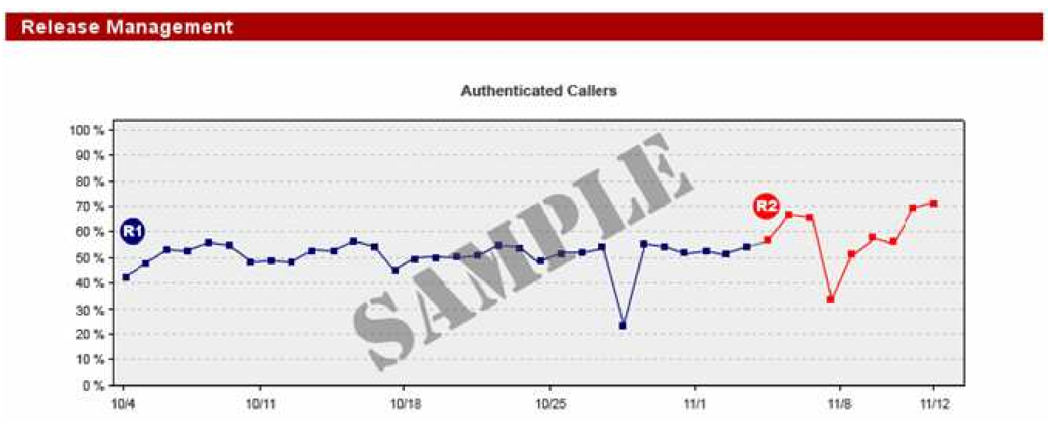
5. Dashboards

All of the analytic data generated in Traffic and Task Flow reports may be used to populate the high-level trended dashboards. These highly customized dashboards keep track of all the key performance indicators, essential business flows, self-service completion rates, customer segment behavior and much more.

CSAT and Churn trending reports will show previous behavior that has led customers to have poor experiences and eventual churn. By understanding these past behaviors, ClickFox can filter out existing customers who are going down the same paths that may lead to customer dissatisfaction and try to prevent and avoid future customer churn.



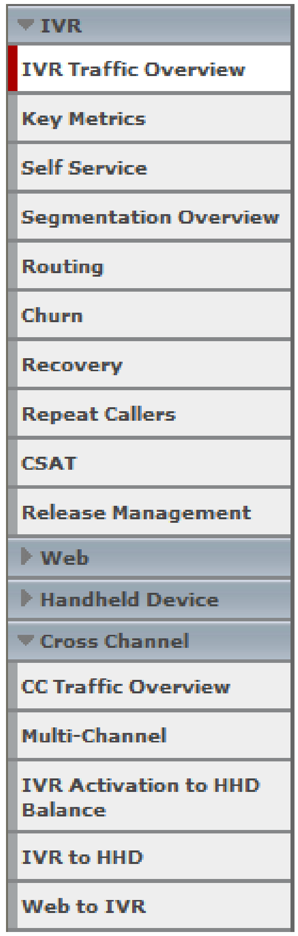
An important dashboard feature is the ability to track and understand the impacts of changes that have been made to the analyzed environment through the Release Management tab. The changes are easy to view in the trended reports and allow immediate visibility into the impact they have on customer behavior. This allows the system designers to approve the changes after a trial period or revert back to and older design if they notice performance degradation.



Every data point in the dashboard graphs is clickable and will allow drill-down into the originating report. The appropriate Task Flow or Traffic Viewer report will open up in a new window and allow the analyst to get a better understanding of what happened and why.

Dashboards also have the capability to define thresholds and alerts. In case a threshold has been crossed the system will automatically send e-mail or text messages to the responsible parties.

Separate dashboards can be created for different parts of the enterprise each with their own reports and viewing privileges. Thus KPIs and score card values can be easily tracked.

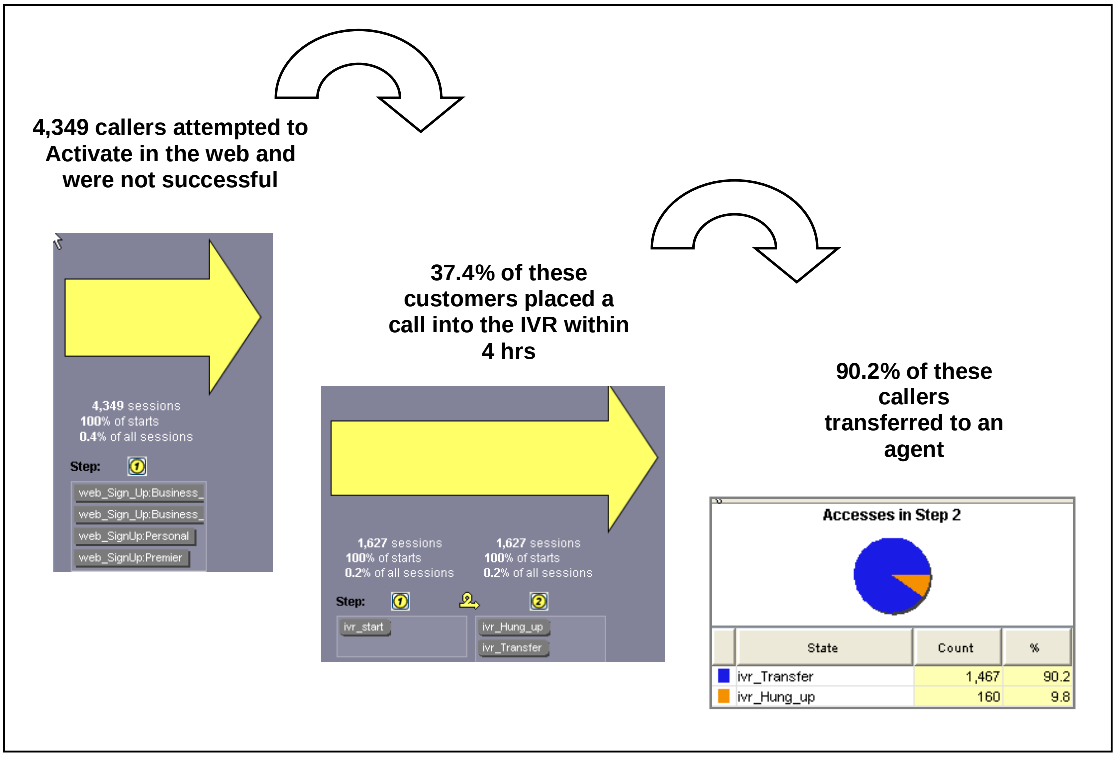


6. Cross Channel Analysis

One of ClickFox's unique abilities is to track customer behavior across multiple interaction channels. Linking the channels is performed during the data processing and modeling stage. ClickFox will link the sessions by associating unique user IDs from different systems. Once the links are in place complete customer behavior across channels is available for analysis.

By analyzing multiple interactions channels, ClickFox can help determine how one channel impacts another, how many customers utilize more than one channel to accomplish their tasks, what are the leading causes for channel abandonment, etc.

Cross Channel Example – Web to IVR:



6.1 Analyze channels in any order

Channels can be analyzed in any order and the time between interactions is flexible for each task performed. By understating how each channel impacts the others a complete picture of the customer experience emerges and ClickFox can deliver visibility to the entire enterprise across all interaction touch points.

6.2 1st Call Resolution per channel chosen

The ability to analyze multiple channels enables the analyst to expand beyond first call resolution and look at a much broader definition of first contact resolution. When analyzing each separate channel in a silo it is difficult to know whether that single interaction was the only one performed by the customer. If a customer called the IVR, did they previously attempt to do something on the website? After being transferred to an agent, did the customer go back to a retail location or a website for more help? These questions can easily be answered by looking at the complete customer experience with ClickFox.

Cross Channel Dashboard Example: Web Sites causing calls to the IVR

	Sun 2/4	Mon 2/5	Tue 2/6	Wed 2/7	Thu 2/8	Fri 2/9	Sat 2/10
Percentage of Web Section to IVR							
Help	0.8%	1.2%	1.2%	1.2%	1.3%	1.2%	0.9%
Contact Us	3.0%	4.6%	4.3%	4.2%	4.4%	4.3%	3.2%
Account Overview Pages	0.4%	0.8%	0.8%	0.8%	0.9%	0.8%	0.5%
Profile Pages	1.3%	2.3%	2.2%	2.2%	2.4%	2.2%	1.2%
Technical Support	2.0%	3.5%	3.7%	3.7%	3.8%	3.7%	2.1%
Make Payment	0.5%	0.8%	0.8%	0.7%	0.9%	0.8%	0.5%
Activation	0.5%	0.9%	0.9%	0.8%	0.9%	0.8%	0.4%

6.3 CTI Analysis

Another way to bridge the gap between the call center and other interaction channels is to include CTI logs as part of the analysis. These logs will allow ClickFox to track not only how calls are routed internally in the call center but also what paths did customers chose before reaching an agent. This allows the analyst to look for reasons for misroutes and multiple agent transfers.

Tracking agent behavior through cross channel analysis helps understand agent performance as it relates to cross promoting other interaction channels. How many agents successfully promoted a follow-up web session? How many customers, when put on hold by the agent, tend to try to resolve their issue by self-serving on the website? Fraudulent agent behavior can also be detected and tracked.

7. Predictive Analysis

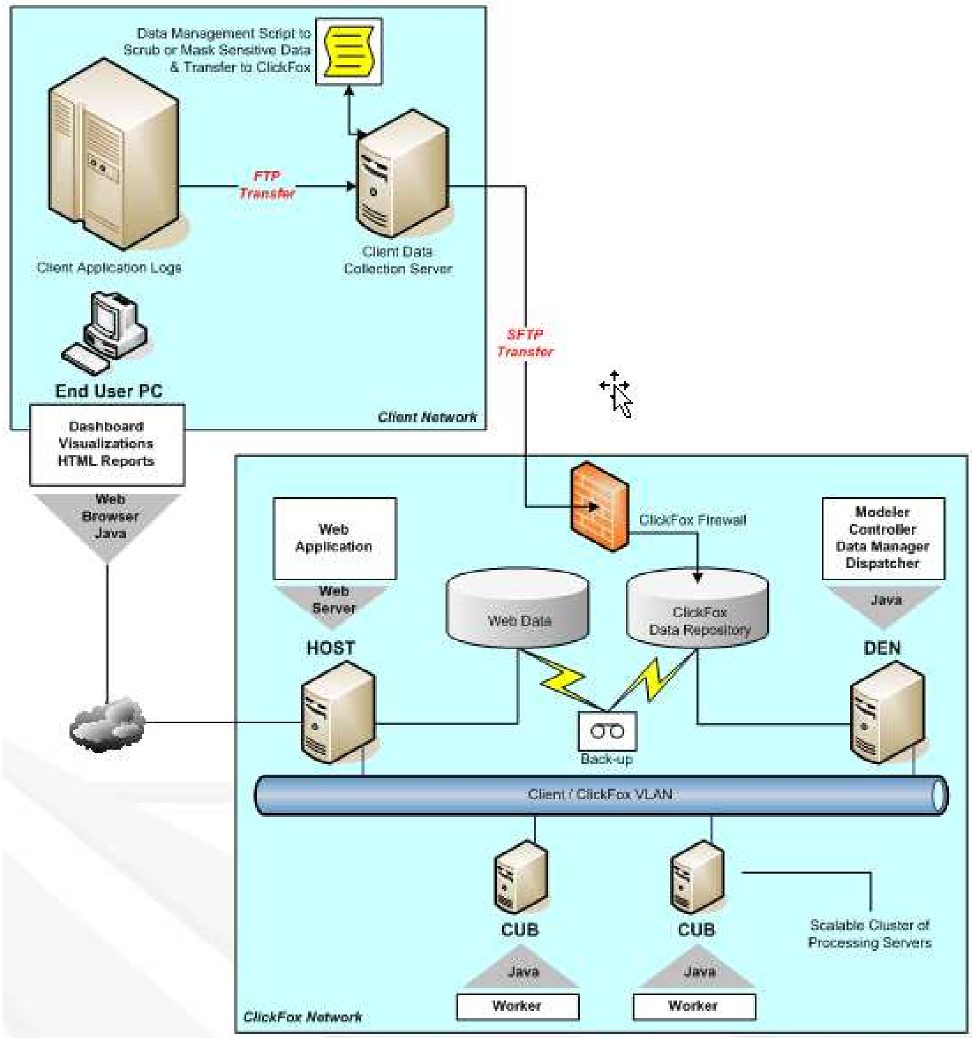
By analyzing the past behaviors of customers, it is now easy to predict other customers' future behavior. ClickFox can analyze historical information that lead to a certain result. By understanding these behavioral patterns it is no easy to filter out the existing customers who tend to fall into these same patterns. If these patterns lead in the past to negative results, such as poor satisfaction scores or even customer churn, it is now easy to predict which current customers are heading towards the same fate. This allows the enterprise to take pro-active measures to fix the problem, improve the customer experience and avoid customer defection.

8. Architecture

There are two ways to deploy a ClickFox solution.

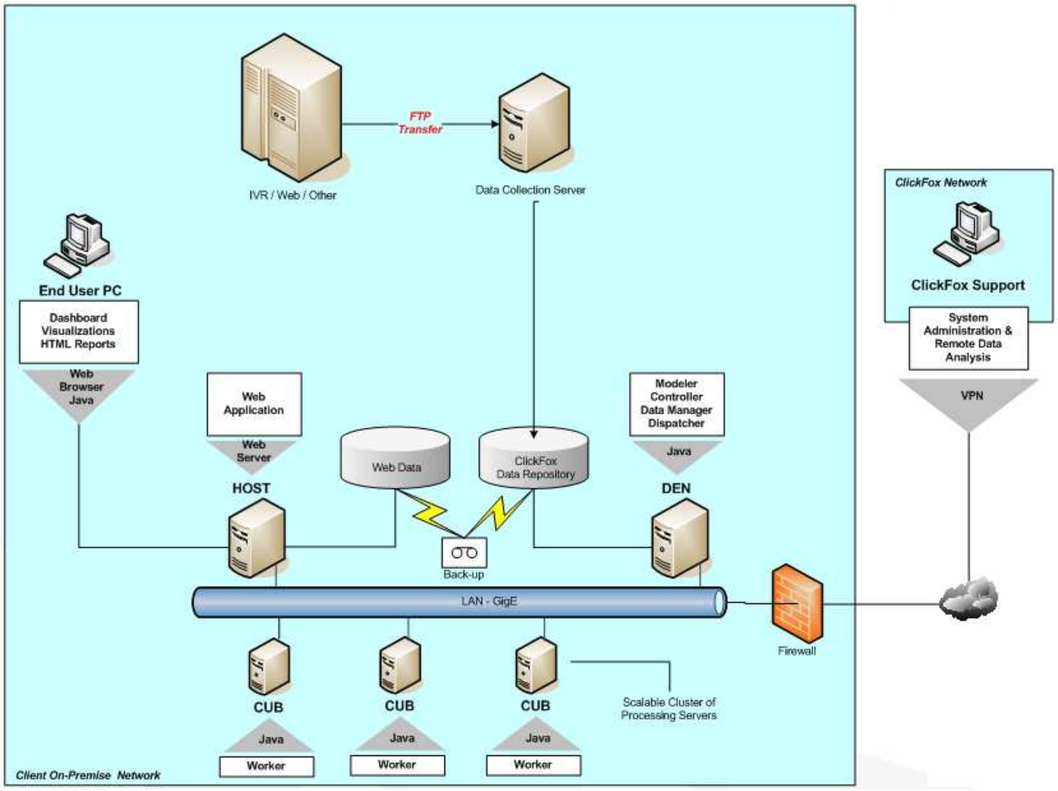
8.1 Hosted Deployment

A ClickFox hosted solution receives data from the client site and securely transfers that data to the ClickFox hosting facility where it is processed and analyzed:



8.2 On-Site Deployment

A customer hosted solution where the entire system resides at the customer's data center:



The ClickFox architecture consists of several components. Logs and other data extracts are collected in their raw format and fed into the data repository. From there a set of workers process the raw data and construct the sessions database and report results. The results are hosted on a web server that is then accessed by the application users through a standard web browser.

The system processes and modules are updated with new versions and releases on an ongoing basis. Since the analysts access the system through a web browser they don't need to upgrade anything on their end. In a customer hosted deployment, ClickFox will require VPN access to be able to perform these updates from time to time.

When utilizing multiple data sources, ClickFox can either receive the data from each source separately or use a data collection server to consolidate all the data prior to transferring it. When database extracts are used, from a customer data warehouse, CSAT or churn information, only the required information is extracted and sent to ClickFox. This is done in the same manner as the raw system logs that are used for analysis purposes.

Appendix A: The ClickFox Advantage

A.1 How the ClickFox Solution Can Contribute to the Enterprise:

- **Increasing the Self Service Containment Rate**
  By finding the core reasons why customers fail when trying self service and providing recommendations how to correct it.
- **Improving Customer Satisfaction (CSAT) scores**
  By tracking customer behavior and connecting it the low or high satisfaction scores identifying the drivers and opportunities for improvement.
- **Improving First Contact Resolution**
  By finding the real reasons why customer failed to complete their transactions during their first interaction and identify where improvements can be effectively applied.
- **Increasing the Self Service Completion Rates**
  By identifying the true sources of the unsuccessful interactions and recommending action items to improve it.
- **Reducing the number of Repeat Calls**
  By tracking repeat calling behavior and analyzing the first and the subsequent repeat sessions to find the cause for repeat calls in short intervals of time.
- **Reducing Customers' Churn**
  By identifying and understanding what was customer behavior before they churned and provide the insight to influence that behavior to prevent additional lost customers.
- **Shortening and optimizing the Customer Experience**
  By understanding the overall behavior and experience of the customer and whether they were successful or satisfied the design and goals of the self service application can be tuned and optimized for the overall customer benefit and experience.
- **Up Sell / Cross Sell Opportunities**
  By understanding what behaviors over time have resulted in successful sales and upgrades and identifying the type of information customers were using during those session. Combined these factors allow changes to maximize exposure to the customer who is demonstrating a buying behavior.
- **Detecting and Alerting about Possible External and Internal Fraud activities**
  By detecting behavior that caused abnormal activities made externally by customers or internally by agents and establishing ongoing reporting displaying when, who and how many customers are exhibiting these activities.
- **Reducing Misroute of calls**
  By connecting cross channel experiences to identify if a customer was successful or satisfied after being routed and if there was a problem identifying what were the root causes and what action can be taken to prevent repeats. Typical behavior and preferences of the customers can be determined overtime to identify the preferred route choice for customers to greatly improve the ability to connect with the right agent group.
- **Reducing the adoption time when modifying interaction channels**
  By running a "what if" scenario with a simulated call data log, the enterprise can get a clear view of possible mishaps before it officially releases the modification to the public.

A.2 Unique Capabilities of the ClickFox Solution:

- **Cross Channel Capabilities**
  – ClickFox is log file agnostic and can receive data from multiple channels, compare them, connect them and show an enterprise view of the complete user experience with all service touch points.

- **Ability to Track High Level Completed Task Paths**
  – ClickFox enables the creation of high level queries that show completed task paths rather than defining a specific path for the users to follow.
  – ClickFox enables the analysts to easily test their hypotheses about true customers' experience.
- **Behavioral Mapping (Traffic Viewer)**
  – ClickFox's default report allows for quick discovery and analysis of inefficiencies and problems in the analyzed application.
  – Dominant paths to and from a specific state allow the analysts to quickly track user behavior based on real customer experiences.
- **Analyzing User Behavior Based on Speech Input**
  – ClickFox combines what the caller "said" with where they went in the application.
  – Task flow insight allows the analysis to determine at each step in the task flow, what were the user actions that caused them to continue or depart from the application.
- **Ability to identify and analyze Repeat Caller Behavior**
  – ClickFox enables the segmentation of callers who have called back and are either trying again or attempting new transactions.
  – Insight into what is driving the repeat call by connecting it to prior and ongoing behavior over time.
  – Ability to filter out caller based on business and application rules to zero in on the true repeater and the true driver.
- **Capability to understand and improve First Contact Resolution**
  – Identify and segment customers who are truly experiencing your application for the first time or are making their first attempt to resolve an inquiry.
  – Insight into what the first experience really was and whether or not it was successful.
  – Understand the drivers and causes that prevented success and enable targeted actions to prevent them from re-occurring.
- **Tailored Comprehensive Dashboard for Daily Management Review**
  – ClickFox prepares special dashboard which meets each enterprise's unique requirements.
  – The dashboard can compare activities in different channels.
  – The dashboard can combine activities of customers in different channels to show a complete view of the cross channel experience.

Appendix B: ClickFox Outputs

Time Statistics
Average Amount of Time Spent at Each Step
Total Time Spent at Step for All Callers
Average Time Spent Before Step
Average Time Spent in Step
Average Time Spent After Step
Average Call Duration for Callers Visiting Step
Step Statistics
Numbers of Callers that Visited
Total Number of Accesses
Average Accesses per Call
Hang-Ups from Step
Hang-Up Percentage from Step
Average Accesses Before Reaching Step
Average Accesses After Reaching Step
Relative Popularity of Step
Speech Statistics
Utterances / Keywords by Step
Utterances / Keywords at Step that Resulted in Callers Continuing to Another Specified Step
Number of Callers Recognized
Average Recognized Confidence
Number and Percentage of Callers Rejected
Number of Barge-In by Step
High Level Statistics
Total Number of Callers
Number of Callers by Week/Day/Hour
Unique Callers
Repeat Callers
Average Unique Callers per Day
Total Accesses
Average Accesses per Call
Relative Comparison of any Available Step Statistic [Hang-ups, Hang-up Percentage, Barge-In, etc.] for all Steps
Relative Comparison of any Two Available Step Statistics for all Steps
Ranked List of Top 50 Steps by Call Volume
Ranked List of Top 50 Steps by Accesses
Ranked List of Top 50 Steps by Hang-Ups
Ranked List of Top 50 Steps by Hang-Up Percentage
Ranked List of Top 50 Steps by Highest Average Accesses Before
Ranked List of Top 50 Steps by Highest Average Accesses After
Ranked List of Top 50 Steps by Total Time Spent in Step
Ranked List of Top 50 Steps by Average Time Spent in Step
Ranked List of Top 50 Steps by Average Time Spent Before Step
Ranked List of Top 50 Steps by Average Time Spent After Step
Application Structure - Steps per Level
Total Number of Steps
Total Actions (Links Between Steps)
Calls, Accesses, Steps per Day / Week / Month / Hour / Day of the Week
Calls by Number of Steps

Completion Statistics for Business Experiences
Completion Rates for Experiences
Detailed Success / Failure Rates at Each Point in Experience
Use of Help / Retry / Time-Out / Confirmation Steps in Experience
Key Drop-Off Points in Experience
Key Paths for Callers who Complete Experience
Amount of Time it Takes at Each Step in Experience
Average Time to Complete Experience
Average Number of Steps to Complete Experience
Top Referring Steps to Experience for Callers at Any Step in Experience
Top Referring Steps to Experience for Callers Departing at Any Step in Experience
Accesses at Each Step in Experience (Which of Option Steps Did Caller Visit)
Immediate Next Steps for Callers Departing Experience
Caller / Session IDs at Any Step in Experience
Caller / Session IDs Departing at Chosen Step in Experience
Top Utterances / Keywords at Given Step for Callers in Experience
Top Utterances / Keywords for Callers Departing Experience at Specified Step
Any Statistical Information for Callers Who Complete Experience
Experience / Step Completion Percentage by Time Statistics (Day / Week / Hour / Date)
Experience / Step Completion Percentage by Referring Step
Experience / Step Completion Percentage by Utterance / Keyword
Experience / Step Completion Percentage by Caller ID
Number and ID of Callers who Completed Experience in Direct Manner (No Side Trips)
Percentage Likelihood for Callers to Complete Multiple Scenarios in Single Session
Identification of Steps that Lead to Direct Transfer to Representative
Repeat Caller Statistics
Number of Callers Making X Calls
Top 50 Callers by Accesses / Calls / Call Duration
Repeat Caller Information
How Many Times Did One Caller Complete a Task Over Time
View a Caller's Nth Session (User Specified)
View Callers with Respect to a Baseline Event (X then Y)
* For callers who performed X, how many called back within Y hours and what did they do?
* For callers who performed X, how many had prior sessions, and what did they do in prior session?
Filtering and Segmentation
Filter Any Report for Seasonality - by Hour / Day / Week / Month
Filter Any Report for Individual Callers or Groups of Callers
Filter Any Report for Steps that a Caller Visited or Did Not Visit
Filter Any Report for Other Activities the Caller Completed
Filter Any Report Based on Results from another Report
Filter Any Report Based on Customer Defined Segmentation

Appendix C: Frequently Asked Questions

C.1 General – Data + Security

- **What types of logs are required? I have a proprietary log format, can we use that?**
  ClickFox can work with logs from virtually any system type, even proprietary. As long as the log contains a minimum amount of data (session ID, states visited, and time stamps), ClickFox can use the data. Additionally, the format or layout of the logs are not important, as ClickFox evolves the data into its preferred format as part of the import.

- **If I want to integrate outside data sources, can I do that?**
  Yes. In addition to the logs from the core system (i.e. IVR), ClickFox can additionally integrate data from other sources. Typical examples include segmentation databases or tables that give additional information about the customer that is non-interaction in type (i.e. relationship information, segmentation, etc.)

- **How much data do you typically store?**
  ClickFox typically stores up to 13 months of data in order to show yearly and seasonal trending.

- **Can I export ClickFox data?**
  Virtually all of the data presented in ClickFox can be exported into data/word processing applications (Ex: data warehouse, Excel, Notepad, etc.). Data can also be exported to the clients fully customizable executive dashboard to track and trend data over time.

- **Can I have different levels of access for different employees?**
  Yes. ClickFox levels of access are determined based on login name and password, and the views are customized based on an employee's need and level as specified by the administrator

- **What is the security around the application?**
  1) ClickFox client data is secured on dedicated machines protected behind the ClickFox firewall.
  2) All users login individually with a user ID and encrypted password
  3) All data is transferred to ClickFox using secured protocols and we can customize our encryption/decryption process of data handling to the customers standard

C.2 Product Questions

- **If I want to see instances of networks/hosts being down, can I see that?**
  Yes, ClickFox would show this in three possible ways.
  1) First, thresholds and violation alert notifications indicate when performance in any specified area changes outside an acceptable range. These violations would identify that a change had occurred.
  2) Many of our customers logging contains information highlighting host transactions and host responses. During initial configuration, in most cases customers request that that logs showing host failures or system outages be included in the ClickFox view of the system.
  3) ClickFox shows every behavior that is measured across the hours of the day, and an outage would be very different visually in every report during the hours it occurred.

- **Dominant Path – What if I want to see more than 5 steps/5 top paths?**
  This attribute is configurable to show more than 5 steps. There is also another area of ClickFox that highlights the behavior information that users are typically looking for in excess of 5 steps (Completed Task Paths)

- **How do I see exactly what callers do in the steps that they do it in an indirect report?**
  The Completed Task Paths viewer displays detailed information about the paths callers follow to complete a task. ClickFox aggregates all of the various paths taken and displays them in rank order by volume/percentage. You can reach this view by clicking on "Completed Task Path" in the Task Overview view or following the link on the table of contents.

- **Customization of Traffic Viewer**
  Renaming states
  State/Node names are fully customizable and can be renamed to whatever makes sense to the client
  DB transactions/system states
  DB lookup states/nodes can be added to the model wherever clients would like to see results of critical DB transactions.

- **Can I do ad hoc reporting or will I need to contact ClickFox or a partner to do that for me?**
  ClickFox offers training on the tool as well as analytics methodology to allow users to create and run their own reports. ClickFox also offers a full suite of Professional Services for those customers who would like to supplement their analytics resources or do not currently have an analytics team in place.

- **On the dashboard, can I see any report?**
  The Dashboard is completely customizable. You can request to have any report on the dashboard. You can then link to any report that is trended on the dashboard. Likely, you will also have reports that do not need to be visible on the dashboard. The entire repository of all reports can be found in the Report Organizer which can be accessed from the dashboard. Dashboard data can also be exported to the clients fully customizable executive dashboard to track and trend data over time.

- **Can I update the dashboard myself?**
  ClickFox will work with you on customizing the initial setup of the dashboard. As updates are needed, you can request for ClickFox to make these changes on the dashboard. A future release of ClickFox will include the ability to update the dashboard individually.

- **What do you use to create repeat caller/cross channel reports?**
  Repeat Caller: ClickFox uses a Visitor Key, such as ANI, phone number, account number, etc. This Visitor Key is defined during the initial setup of the ClickFox model.
  Cross Channel: ClickFox looks for common user IDs accessing both channels within a specified time period. This ID typically means a customer has authenticated in both channels.

- **What is the ClickFox release cycle/process?**
  ClickFox has 1-2 major releases per year. Periodically there will be minor releases. At each release the client will be given the option to upgrade. The upgrade process takes place over a weekend with client model being fully functional the following Monday morning.

- **How do you handle my (client's) releases and system changes? Do I need to tell you about changes?**
  If you know of any change to your application, it is ideal if you communicate this change to ClickFox as far in advance as possible (we prefer 2 weeks). This way, the modeling team can alter their scripts and the date the change occurs, the client data is processed automatically as usual. If a change is not communicated, the ClickFox data conversion routines have exception reports built in to automatically alert ClickFox to any changes. When the modeling team is alerted, they will alter their scripts and rerun the data with the new changes.

- **How is this priced?**
  ClickFox is priced on a tiered basis by number of applications and number of sessions per application. Always refer a client to the CLICKFOX sales representative for specific pricing.

C.3 Deployment and Pilot Process

- **How many resources will I need to stack against this project (pilot)?**
  In a standard engagement ClickFox will need a single point of contact with knowledge of the log file locations, design documentation, call flow diagrams and some understanding of the system.

- **What are the tasks that my resources will need to perform?**
  In a pilot the resource will need to:
  - Determine initial report and dashboard requirements
  - Participate in data audit review meeting to discuss any data variances or log gaps
  - Provide general Q&A support of data audit findings
  - Provide guidance on focus areas for analytics

- **Do I have to stand up hardware for this?**
  For a pilot or Proof of Concept we will always host the application in our data center. For a production system you can choose between a premise or a hosted deployment. The majority of ClickFox customers (70%) appreciate the comfort of a hosted service.

- **How many servers will I need?**
  Based on the amount of data to process, time to process, number of reports, number of users running ad-hoc reports and a few additional parameters, ClickFox will determine the number of servers required. Standard systems up to Tier 3 volumes (5 million sessions per month) will only require 4-5 servers. We can give you detailed hardware requirements once we have your volume and data information

- **How secure will my data be?**
  The data will be hosted in a secure location and ClickFox will adhere to any data security requirements provided by the customer. In addition, ClickFox can work with the customer to sanitize or scrub confidential data.

- **How long will the process take?**
  ClickFox can turn around a working pilot in a 6 week time frame. To turn around a pilot to a productive environment will take another 2-4 weeks.

- **How long will it take to train users/what is involved to educate?**
  There is a standard training program for ClickFox deployments. The program consists of a 2-3 day training class where attendees learn the basics of ClickFox all the way up to advanced analytics methodology. This program can be customized to the individual training needs of each client.