



Using AI text analytics to uncover hidden drivers of loyalty and churn in restaurants

When it comes to the restaurant market, along with the rest of the hospitality market, customer tastes can change and their expectations only grow. Every brand needs to stand for a memorable experience.

How we used public reviews to find hidden customer feedback

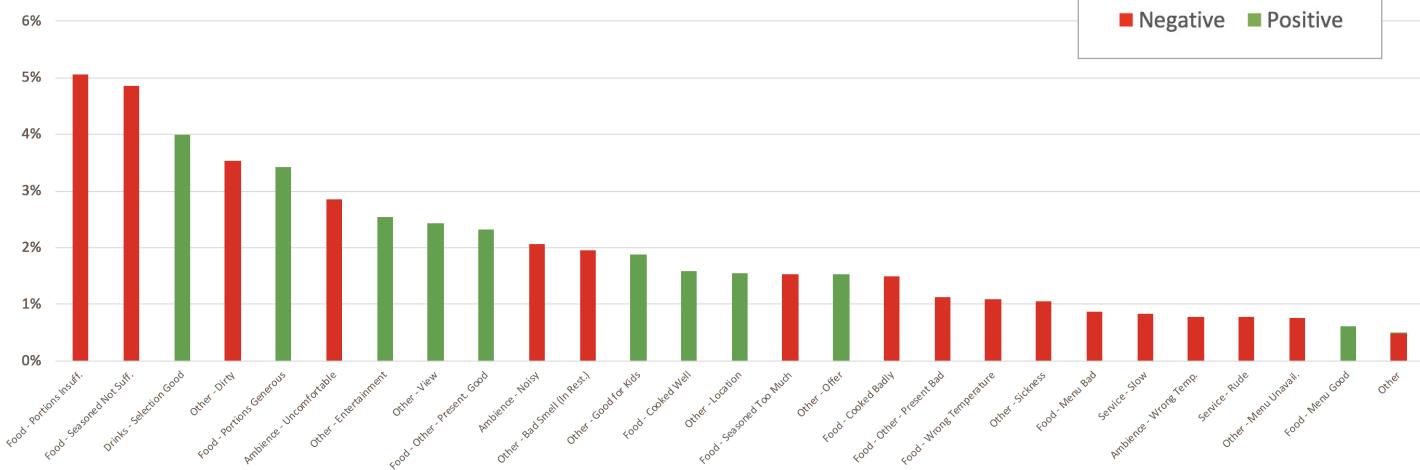
Warwick Analytics applied its PrediCX software to publicly available reviews, in particular TripAdvisor reviews for London restaurants.

The analysis was centred around use cases that would improve the profitability of restaurants including:

- Understanding the issues which drive churn, loyalty, yield and advocacy
- Operational early warning with granular analysis of issues
- Marketing effectiveness in terms of looking at voucher and campaign feedback
- Compare against the competition, by chain and by location

Second Level Concepts

Figure 1.



PrediCX is an automated machine learning platform that quickly and accurately generates models for text, using 'human-in-the-loop' technology i.e. it only needs minimum input from a non-data scientist. It took only a few hours to generate meaningful output, no matter how large the dataset, based on concepts instead of keywords and sentiment scoring.

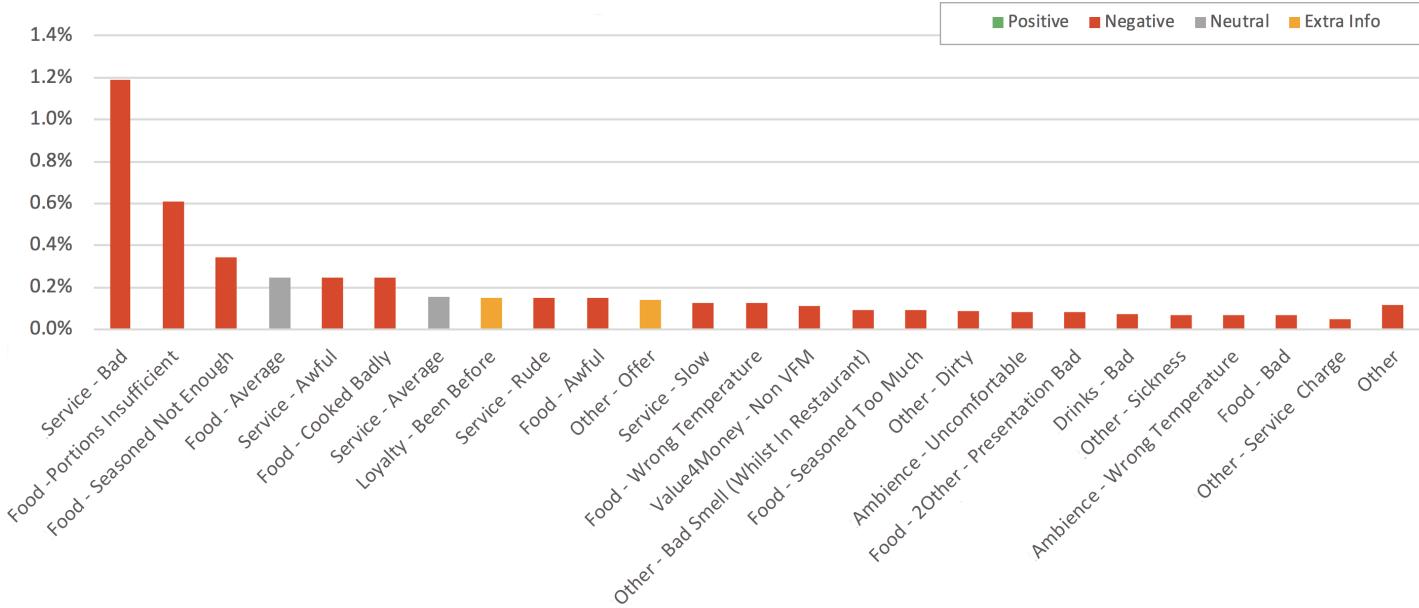
What PrediCX found

Figure 1 shows all of the second level concepts being talked about by diners in London, aggregated for all reviewed restaurants and normalised as a proportion of total reviews. It shows the concepts that diners talk about most frequently. The two most common issues are both negative – small portions and bland food – followed by a positive one – good drinks selection etc. This view can be aggregated in any way required: By geography, by branch, over time, segment, sector etc.

Drivers of Customer Churn

Figure 2 shows the aggregated view of topics causing customers to not return. Overall, bad service was the main driver of churn at Level1 and at Level2 – small portions, bland food, poor cooking and rudeness were the main causes. This could be used at the brand or branch level to set KPIs and ensure that levels are maintained appropriately.

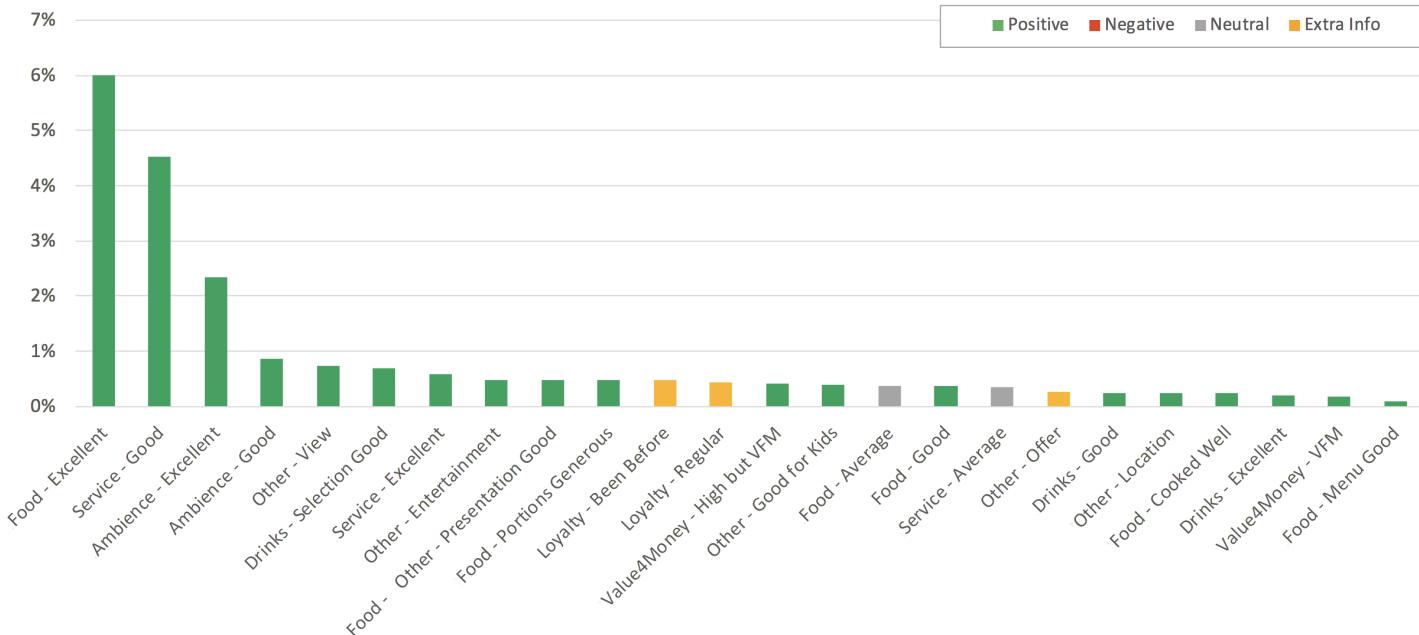
Figure 2.



Drivers of Loyalty

Figure 3 shows the aggregated view of topics customers cited whilst affirming their intention to return. At Level 1, excellent food and ambience were cited although excellent service was less essential. At Level 2, the view, drinks selection and entertainment were drivers.

Figure 3.

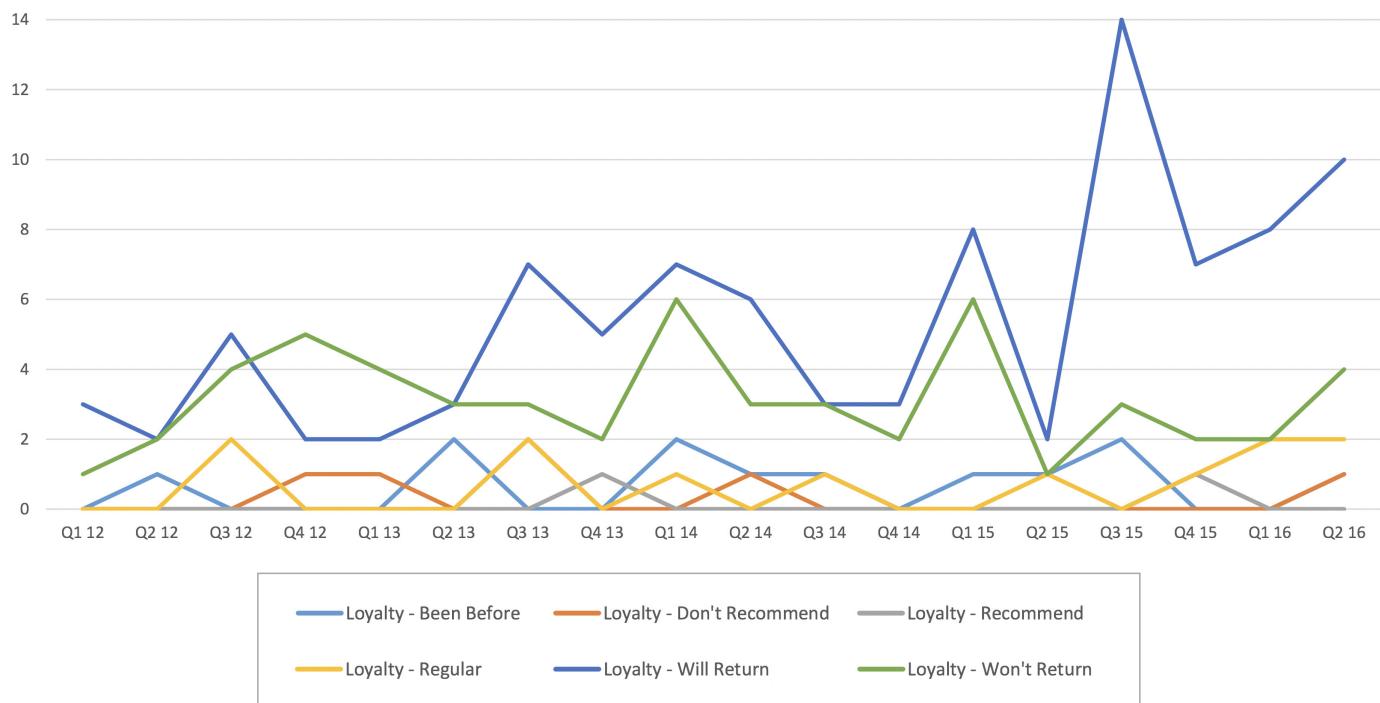


Similar analysis was conducted for positive and negative advocacy, and also regular customers. Good for kids was a noticeable Level 2 driver for regular customers.

Loyalty Per Site

Figure 4 highlights the loyalty markers over time for a particular restaurant (TGI Fridays in Covent Garden). It shows a positive trend for loyalty over the period.

Figure 4.



Loyalty Per Site Normalised

A ‘Loyaltygram’ can indicate the direction of loyalty (this is for the same store):

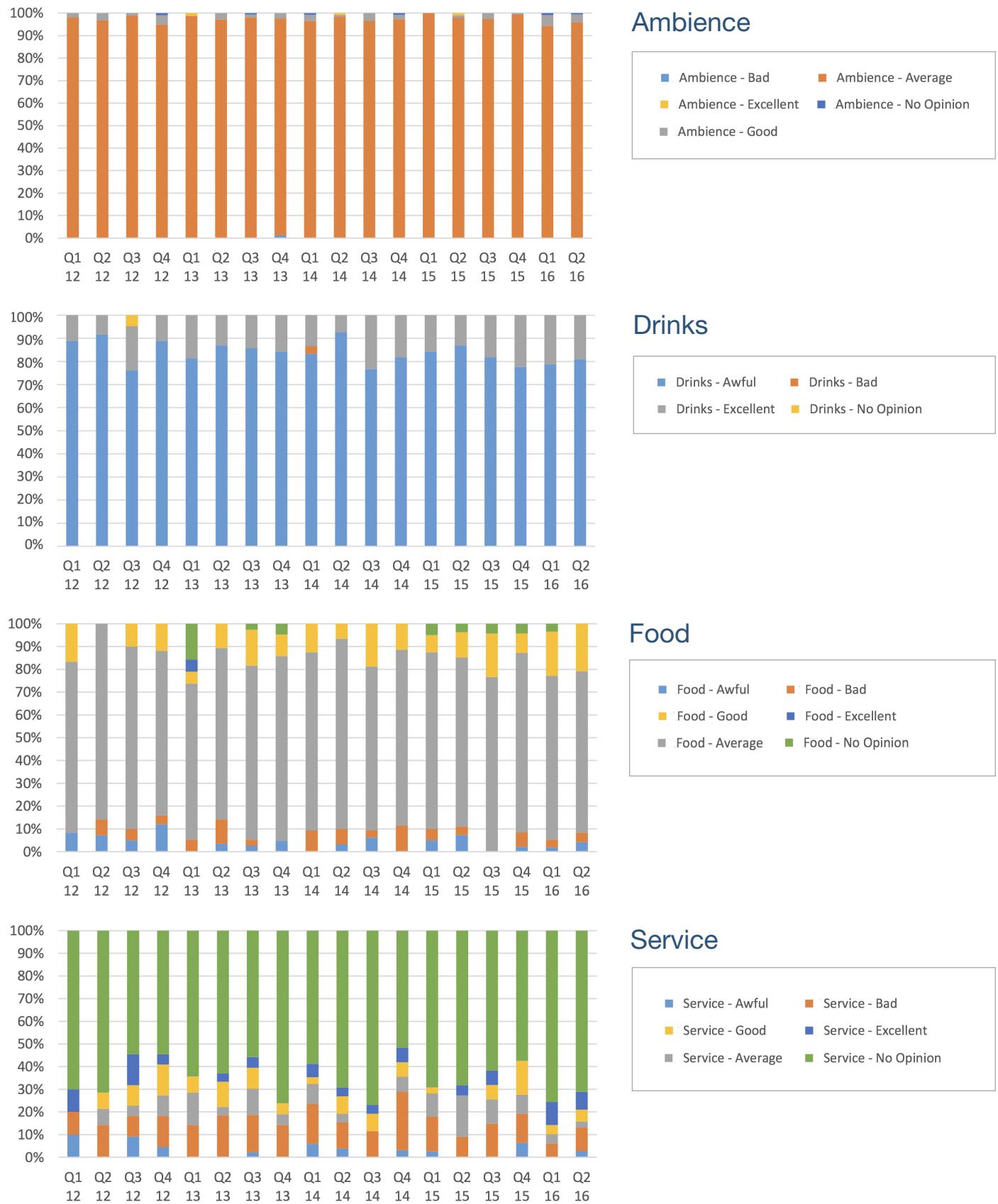
Figure 5.



First Level Concepts Normalised

This can help to identify any trends by site (this is for the same restaurant):

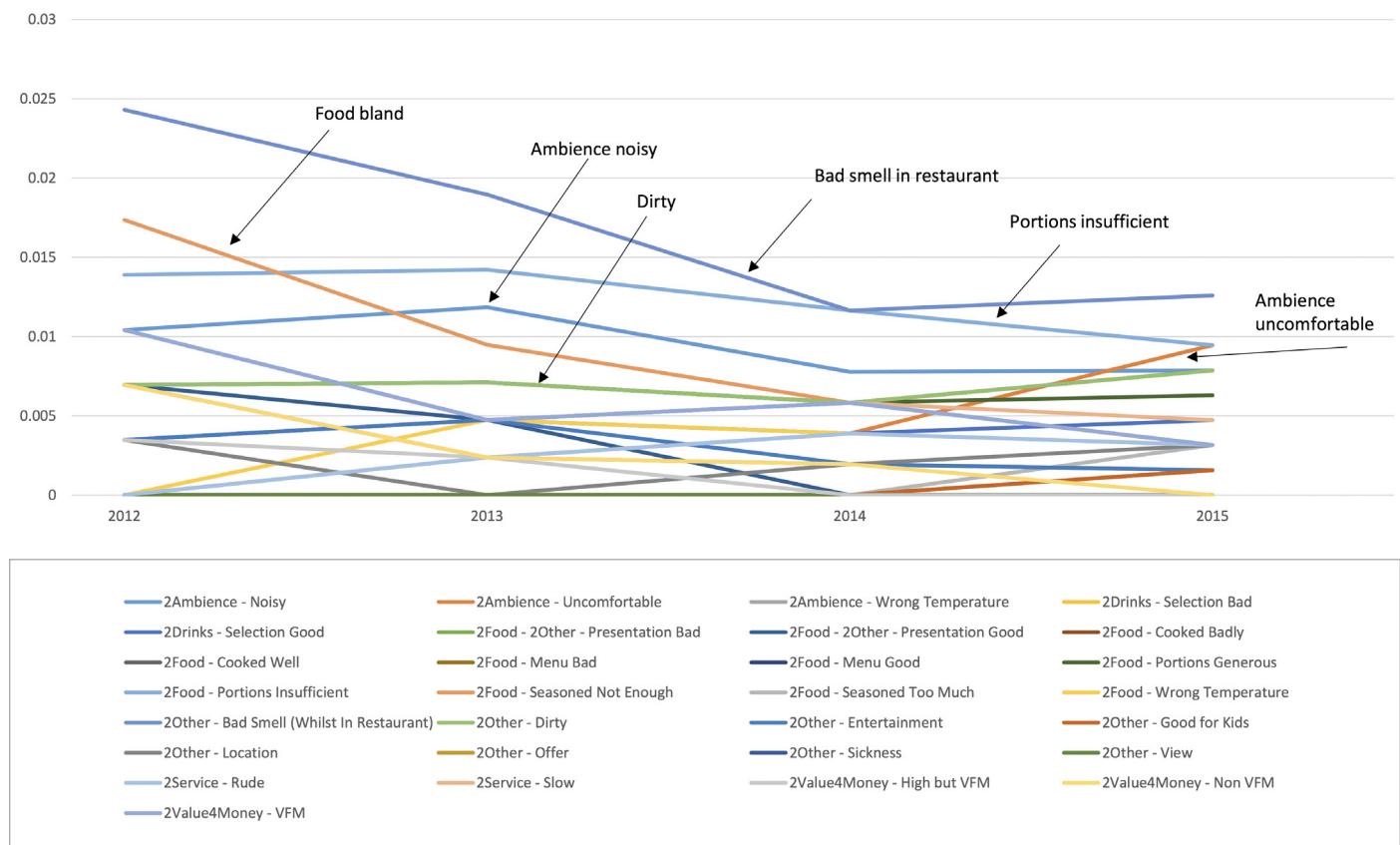
Figure 6.



Second Level Concepts Normalised

This can help to identify specific corrective actions (this is for the same restaurant):

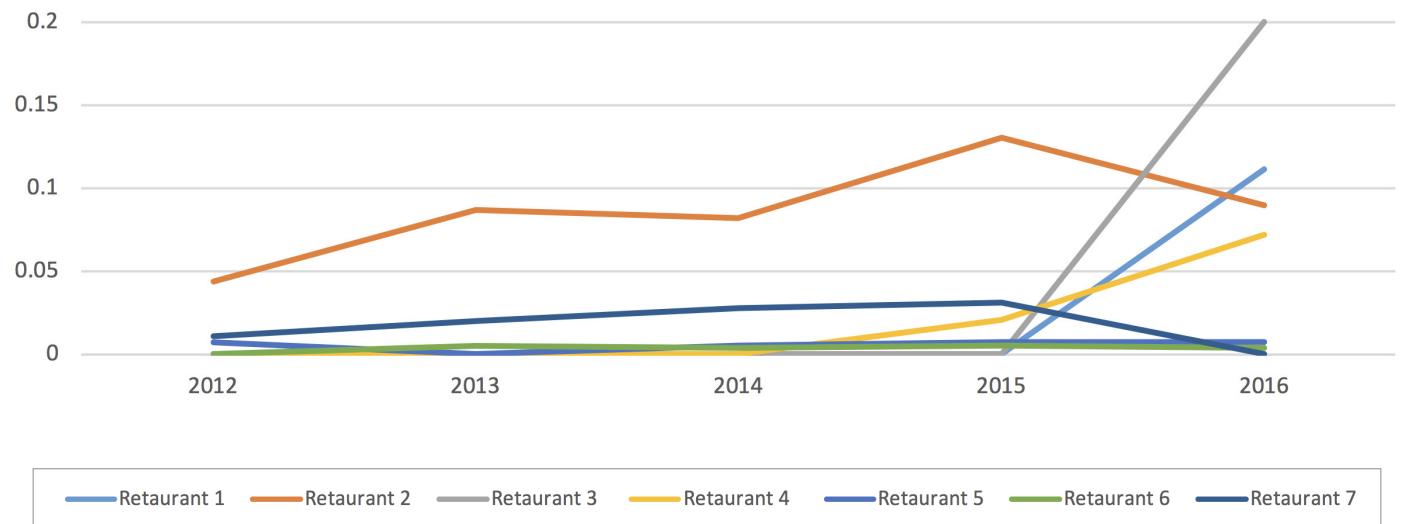
Figure 7.



Critical Factors Early Warning

Below are the normalised counts of customer reviews mentioning a critical factor i.e. sickness for a particular [anonymised] chain by some of their branches.

Figure 8.



Reducing churn

PrediCX can be used to pick up the reviews which contain concepts for churn, negative advocacy or the root causes of churn. They can be quickly intercepted by the restaurant to try to recover the customers with an appropriate message or offer, as well as decreasing the negative advocacy on the web. It can also be used for marketing effectiveness, e.g. picking up concepts of where people have used vouchers and the associated experience and loyalty.

Identify fake reviews

One of the bane of social media is the growing issue of fake, solicited and gamified reviews, the latter being where review sites work with companies to encourage or invite positive reviews and discourage negative reviews in a non-transparent way. There is no way to stop this entirely, but PrediCX can help to train on known fake reviews, remove suspicious or simply glib reviews such as: “everything” [5 stars], or “excellent” [5 stars]. Clearly more reliable data would come from a properly weighted survey, or from the CRM system.

Conclusion

Warwick Analytics is able to generate actionable insight at both a strategic and tactical level for of opportunity for any chain of restaurants, bars or other hospitality. It enables chains to maintain their brand promise whilst at the same time having the ability to react quickly to issues at an aggregate and even a specific customer level to optimise customer experience and maintain loyalty.

