

The World Cup

Germany wins, as predicted!

With the final of the World Cup having been played this morning, Germany proved too strong for Argentina and deservedly won the World Cup!

Congratulations to Germany! They have won three World Cups previously, with the last one being in 1990. Their win in 1990 just so happened to be a rematch of the 1986 World Cup where they lost to Argentina.

What happened to Brazil, the host nation and favourite? The Brazilians were nowhere to be seen after having suffered one of the most shocking defeats in World Cup history against Germany.

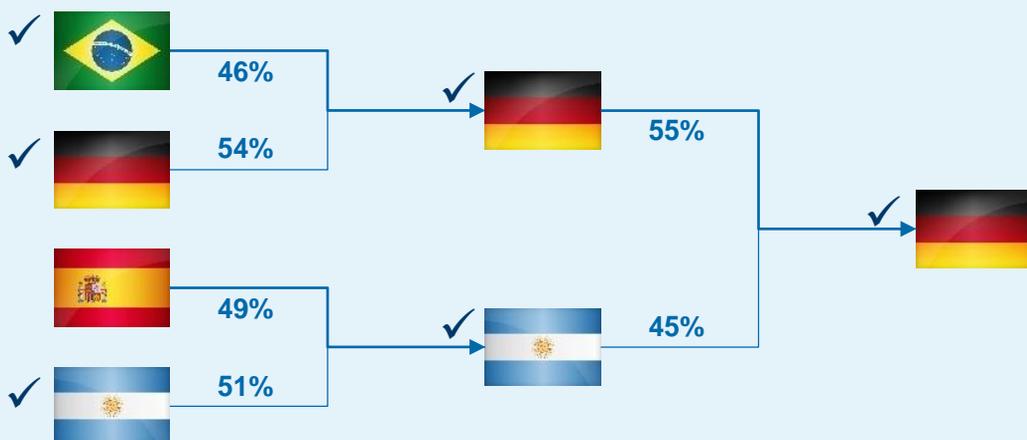
We are pleased to see our prediction model withstood the test of 64 games, and even outshone some of the high profile models out there, including the famous Nate Silver's. Whilst in the final stages of the World Cup, Germany may have looked a safe prediction, it was a fairly controversial call before the first kick-off of the tournament, and one that kept us awake on more than one occasion over the past few weeks as we settled in to watch each game.

[Click here to read the Fairfax media coverage of how we outclassed 'a host of zoo-based oracles'](#)

Model performance

As well as the eventual winner, our prediction back in June picked three of the four semi-finalists. The Netherlands proved that they had more class and determination than Spain (this in itself was something of a surprise given their win four years ago), not only progressing out of the group stage but essentially replacing Spain in our predicted top four.

KordaMentha's Prediction: The Likely Semi-Finalists



Most model predictions, including those of Nate Silver and the Predictaroo, assigned a huge premium to Brazil based on its home ground advantage, and ultimately predicted Brazil as the World Cup champions for 2014. We believed this to be a double-edged sword.

Fortunately, the results confirmed our decision to nullify the home ground advantage. Working with any data set, the challenge is often to remove any inherent bias, and to focus instead on what facts the data actually reveals.

We saw the fact that as host, Brazil's exemption from the tortuous qualifying tournament would actually serve to neutralise any home ground advantage, due to the lack of competitive match time.

Then there was the fever-like expectation of winning the cup at home. True enough, Brazil succumbed under pressure, leading to their spectacular defeat and the heartbreak of 200 million Brazilians.

Arguably, Brazil faltered due to the absences of Neymar and Silva, however, can the crumbling of the entire team in the semi-final really be attributed to this reason alone?



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Tipping competition

We invited "World Cup experts" Australia-wide to join our tipping competition in an attempt to outperform our model. We had a total of 56 tippers participate, and it proved to be an extremely close competition from the first kick-off to the final whistle.

In the end, our model outperformed all human participants (to our knowledge, none of the entrants reside in a zoo or aquarium). The model pulled ahead of the pack late in the typically unpredictable first round group stage, and maintained the lead thereafter.

The non-KordaMentha tipper with the highest score was "Ben D." (42 games). As our model is unlikely to ever make use of the \$200 prize we put up for the tipping competition, we have decided to instead award it to Ben D. The stellar performance of article co-author Jason Cheung (who ranked second on 45 games) is also worthy of commendation. All allegations of insider-tipping are denied!

Bookies vs KordaMentha model - how we did it

As we have a passion for data, we have of course been analysing our model's progress throughout the tournament, comparing its performance against the bookies.

We correctly predicted 47 match results, a 73% success rate, whereas the bookies predicted 61%.

Our model did particularly well when it came to the group stage as we correctly predicted the outcome of seven more matches.

	Matches Played	Bookies	KordaMentha Model
Group Stage	48	25	32
Round of 16	8	8	8
Finals	8	6	7
Total	64	39	47
% Accuracy		61%	73%

Unexpected events

Our model was used to predict only the outcome of each game. However, we could not have predicted some of the amazing and unforeseen events that unfolded in some of the games, which had even the most experienced of commentators reaching for the superlatives!

First round group stage

- First goal in the tournament was an own goal by Brazil – was this a sign of things to come?
- Cameroon's only goal was against Brazil.
- The Netherlands' 5-1 upset against the reigning World Cup champions, Spain.
- Costa Rica topping a group consisting of Uruguay, Italy and England.
- Germany thrashing Portugal 4-0, but only achieving a surprising 2-2 draw with Ghana.
- The powerhouses of Spain, Portugal and Italy not making it out of the group stage, however notable mentions go to Costa Rica, Greece and Algeria for progressing through to the round of 16.
- Not so unexpected, however, England did not make it out of the group and so was unable to improve its dubious penalty shootout statistics.



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Round of 16

- Chile and Brazil went down to the wire in a thrilling penalty shootout.
- The Netherlands' last minute comeback against Mexico.
- USA's Tim Howard making a record number of 15 saves in a match.
- Luis Suarez unleashing a vampire bite against Colombia.

Finals

- Costa Rica and Colombia appearing in their first-ever quarterfinals.
- Louis Van Gaal's stroke of genius in bringing on keeper Tim Krul for the penalty shootout against Costa Rica.
- Germany's 7-goal galore against Brazil.
- Miroslav Klose breaking the World Cup record for most goals scored, which was previously held by Brazil's Ronaldo.
- Germany becoming the first team to appear in four consecutive World Cup semi-finals.
- Brazil lost back-to-back home games for the first time since 1940, and conceded the most goals ever (14) for a World Cup host.
- Germany beat Argentina in the knockout stages for the third consecutive World Cup (2006, 2010, 2014).
- This World Cup equalled the record for the most goals, being 171.



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Who we are

KordaMentha is an advisory and investment firm that provides Restructuring, Turnaround, Real Estate and Forensic support for companies and their stakeholders.

Our team of data analytics specialists use a wide range of data analysis tools to transform your organisation's data into valued information for informed decision making.

The KordaMentha Forensic data analytics team comprises seasoned data analytics professionals, with backgrounds in accounting, finance, actuarial services and investigations. We have extensive experience across (amongst others) the retail, mining, infrastructure, transport and financial services industries in Australia and overseas.

The team has extensive experience in the application of data analytics to:

- Extract hidden insights from customer behaviour
- Identify revenue improvement and cost reduction opportunities
- Detect and quantify fraud
- Identify financial leakage and quantify loss
- Test systems and controls
- Resolve business process and database issues.

Our recent projects include:

- A tunnel operator was looking to gain a better understanding of their operations. We analysed two years of traffic and penalty data to profile customer behaviour. Whilst maintaining profits, our analysis found that the operator had been losing frequent users due to a price hike 12 months prior. As a result, we identified \$5 million of revenue opportunities through targeting these high value customers with a range of incentives through the use of a hybrid pricing model.
- An infrastructure company holds bi-annual reviews of their internal controls. To assist their review, we analysed two years of accounts payable and payroll data using KordaMentha Interrogate™, a proprietary analytics suite to identify potential fraudulent activities, financial leakages and process or control weaknesses. Fraudulent payments and revenue leakage amounting to more than \$500,000 were identified.
- A major transport company had conducted pallet count and identified a shortfall of approximately 60,000 pallets. The rental cost of the pallets was approximately \$60,000 a month with an associated contingent liability of \$1.7 million. Two years of data from three disparate data sources was analysed to assist the company in identifying the location of the 'lost' pallets for recovery. The company was able to recover 70% of the 'lost' pallets from 10 recipient customers.

About the authors



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"As an Argentina fan and predictor of Germany's win, I have successfully hedged my bet."



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"Australia didn't come last. They were ahead of Cameroon and Honduras!"



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"I missed the final as I was flying home from Brazil."