



The Influence Engine

Influence Engine: Introduction

- Markets and societies are increasingly shaped by a vast army of bloggers, website authors and social media users that have created a massively complex 'online ecology' of opinion, content and debate.
- There is a growing recognition that some aspects of this online ecology, like social web activity, have an uncanny ability to reflect hidden patterns of relationship and behaviour within human activity.
- But perhaps even more surprising is the growing body of evidence that suggests the same online ecology can accurately predict (or at least pre-figure) the future of brands and markets.

Influence Engine: Introduction

- This isn't science fiction or some kind of digital voodoo, but a natural outcome of the latest complex systems science and network analysis technology.
- Dollywagon has been studying this phenomena and has used its Influence Engine to map the structure and patterns of social web activity within many different markets, communities and fields of interest.
- This case study presents our recent R&D efforts to investigate the ability of social web data to predict market and brand outcomes.

Can Twitter predict brand health and market momentum?

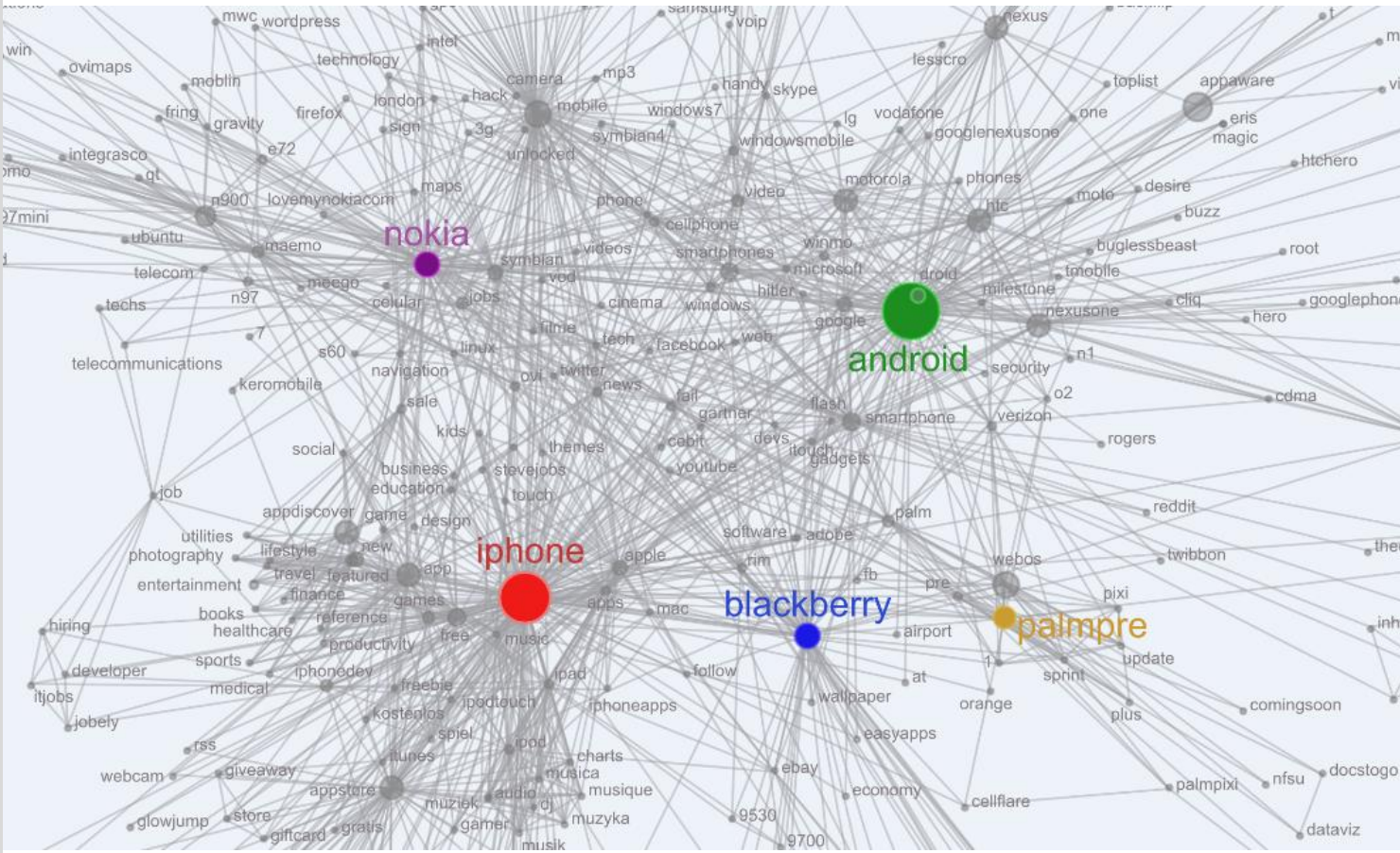
Smartphone market: Twitter case study

This is a hash tag network map representing debates and conversations about the subject of Smartphones on Twitter.

(note: this technique isn't limited to using just hash tags).

The data driving this image was collected back in April 2010 over a four week period. With the benefit of hindsight we've discovered it contains two key vectors of information that help us predict the future development of this market.

The most frequently used Smartphone-centric hash tags used on Twitter appear as the largest coloured 'nodes' on the map, with the two biggest being <iPhone> and <Android>.



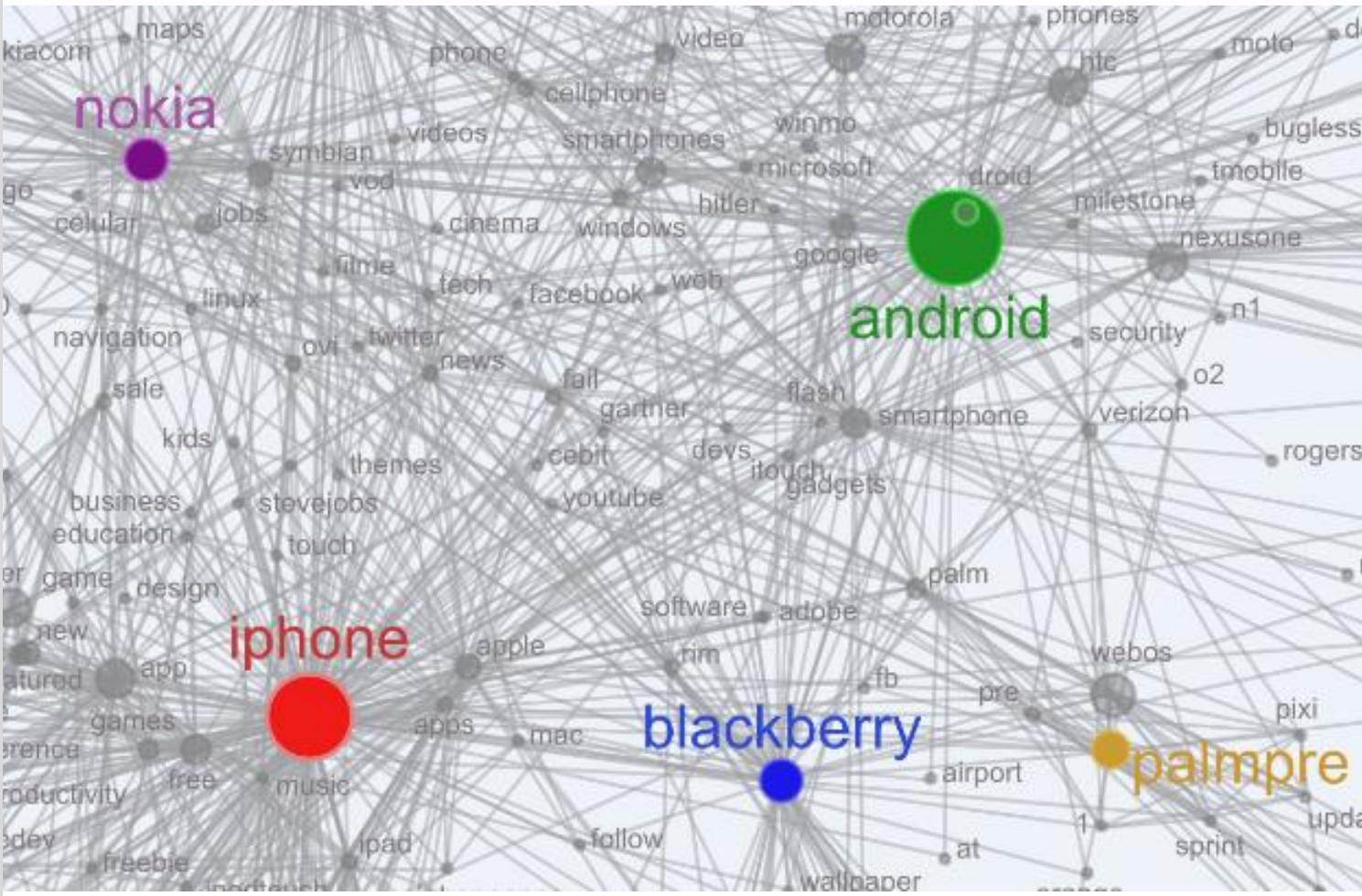
Can Twitter predict brand health and market momentum?

The size of a node in our image is the first key vector of information about future market direction and brand growth.

Back in April 2010 Android was still a pretty unknown development in mobile telecoms technology.

When we saw the size of this Android node we were surprised Google's new open source OS had made such a splash. Android's "share of dialogue" appeared to be comparable or even larger than the iPhone's.

The other surprise was that the node for Nokia (the current market leader in smartphone handset sales) was relatively small.



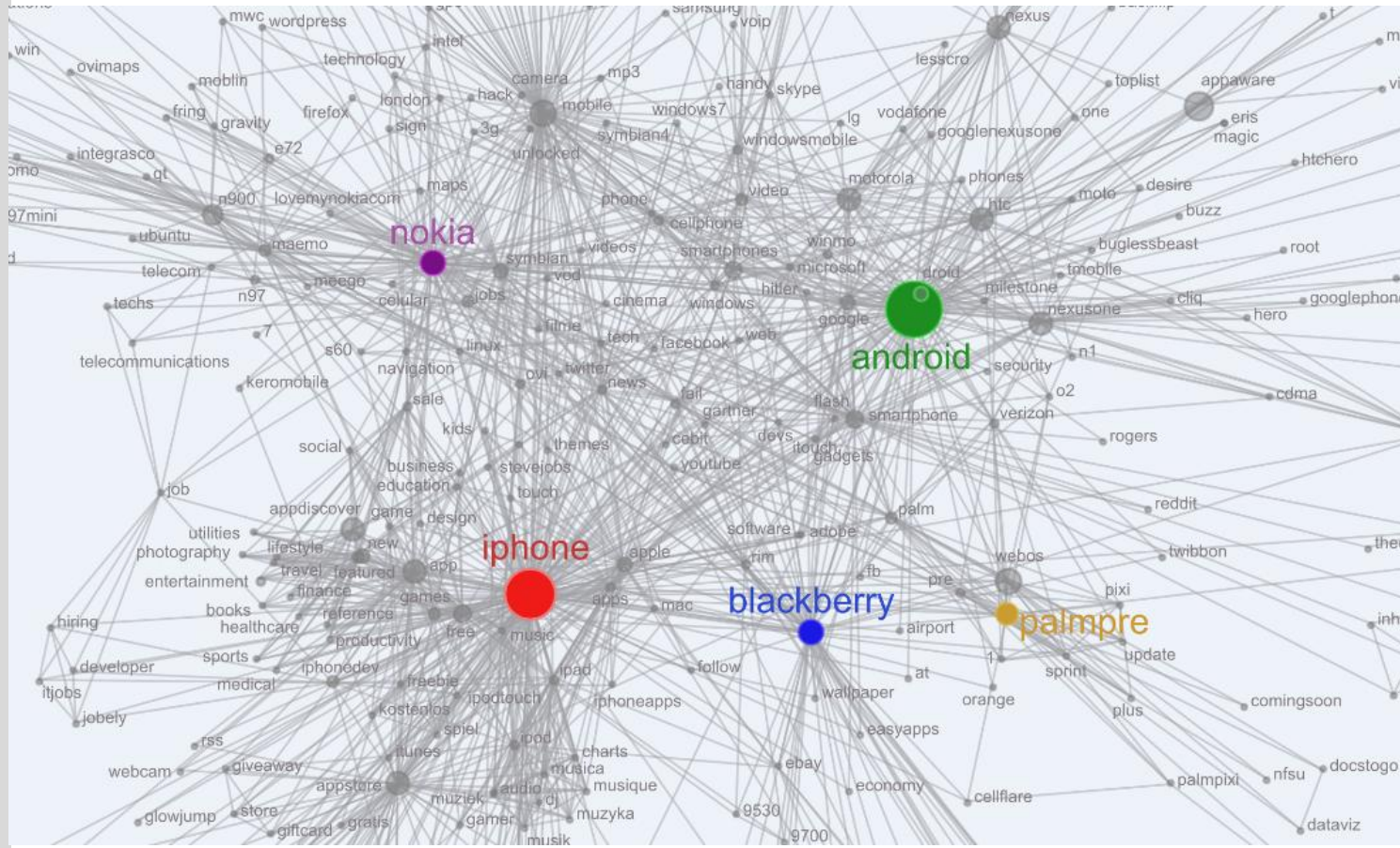
Can Twitter predict brand health and market momentum?

However, we also identified a second key indicator or predictor of brand health and momentum in this data

The vector is derived from the co-occurrence of hash tags in Tweets. If two hash tags regularly appear together in tweets this relationship is translated into one of spatial proximity. This means that hash tags that frequently co-occur with each other will appear close together on the map.

We can use this co-occurrence data to reveal the 'ecosystem' of conversation that surrounds each smartphone brand on Twitter.

For instance, when we looked at the 'ecosystem' of conversation surrounding the iPhone we noticed something pretty unique and important.



Can Twitter predict brand health and market momentum?

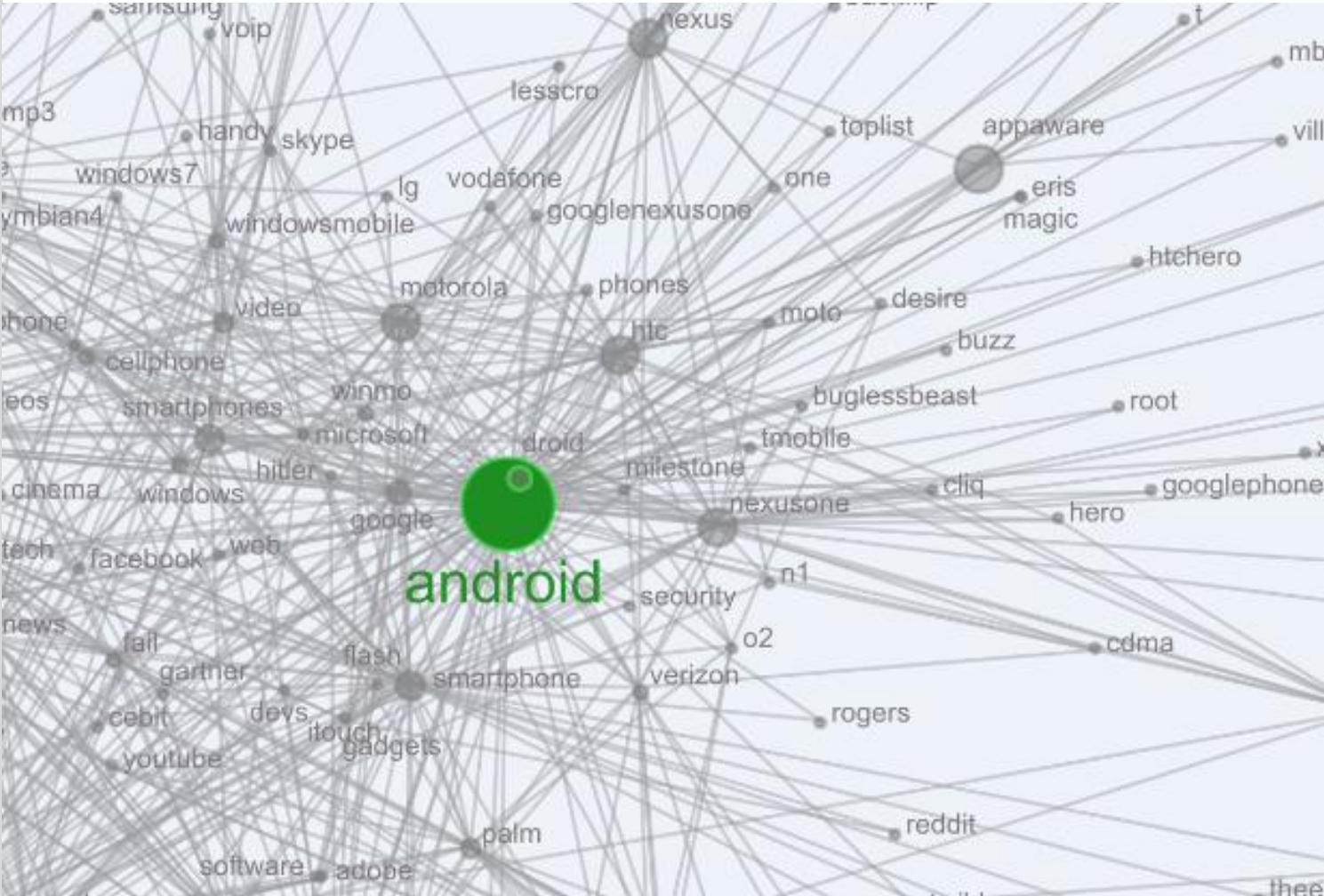
Summary

With the benefit of hindsight we can now see that properly configured Twitter data can predict, perhaps with up to 4 weeks notice, what direction a brand, its competitors and its market are travelling in.

Our research has identified two persuasive key indicators or predictors of brand health and momentum:

- 1. Share of <sector> dialogue
- 2. Local network density and diversity within a brand's conversation 'ecosystem'

If Android consolidates its growing share of dialogue it may well develop a richer and more diverse network of conversations around the brand. If this happens we would take it to be a strong positive predictor of Android's future market potential.



Contact details:

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