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# The key to agile and intelligent service delivery in the cloud era



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## SYNOPSIS

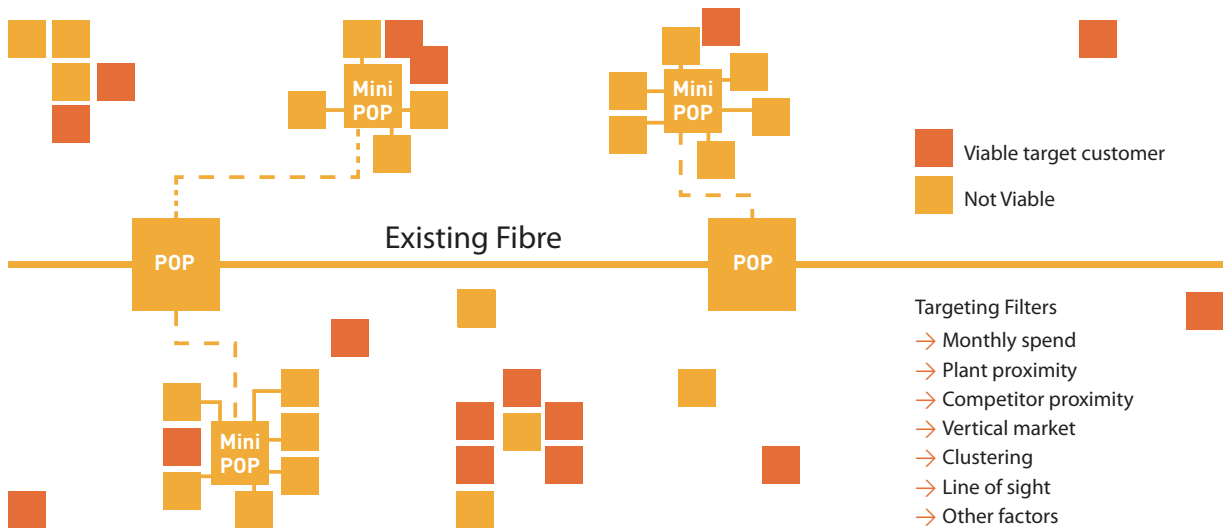
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In order for operators and service providers to realise their full potential in the cloud era, where data volumes are ramping up exponentially, the need to maximise return on investment while working to differentiate services has never been more apparent.

The question of maximising RoI for operators seeking to expand their businesses—and revenues—has traditionally created significant operational challenges. Fundamental obstacles need to be addressed as these carriers can risk substantial sums of investment capital when moving into new markets and regions. Historically, an inability to collate and leverage relevant, accurate and contemporaneous market and customer data has prevented expanding operators from accurately predicting RoI levels from existing and potential customers. This failure has, in many cases resulted in a flawed go-to-market strategy with operators building out fibre opportunistically to areas where demand potential was not at its maximum, at the expense of neglecting other pockets of demand where such build outs would be capable of generating faster RoI.

While these challenges remain, these issues are being addressed and the importance of emerging technologies such as GeoAnalytics (GA) are becoming increasingly well understood. In a world where services are increasingly standards-based, operators are waking up to the potential of such approaches to help maximise monetisation of core assets by allowing them to develop and deploy intelligent and agile go to market strategies that target their potentially most lucrative prospects.





Source: Ciena

**Fixed wireless extensions to connect supply with demand****MONETISATION: THE IMPORTANCE OF DEVELOPING AN INTELLIGENT GO-TO-MARKET STRATEGY**

Operators and service providers in mature markets are coming under increasing pressure to develop more intelligent go-to-market models. As with many industries, operators and service providers have traditionally employed an opportunistic go-to-market model, in that they have worked to target certain verticals. However, in terms of addressing and ascertaining who and where the most lucrative target customers are, there has typically been little 'active' intelligence applied. It's true that many service providers will have existing relationships with enterprise CIOs due to the fact they already supply connectivity, but in terms of predicting where their next customers will come from, there is still a heavy reliance on analyst and research materials combined with passive data analysis to work out potential target markets.

This is where the emerging technology of GeoAnalytics can help, by looking in a rigorous analytical way at specific enterprises and geographic areas that are the best target for a particular service.

This more strategic go-to-market model relies much more heavily on active analytics – essentially looking at a combination of information already locked into to the service provider's systems and third party data – allowing operators to create very tailored plans to ensure and maximise profitability, because they will have achieved greater clarity into identifying the customers that should be targeted. In this context GeoAnalytics examines factors including:

- How far customers are from the main fibre footprint?
- How much it will cost to reach that customer?
- What is the best technology to address them – i.e. should fibre be deployed or does the operator have the opportunity to

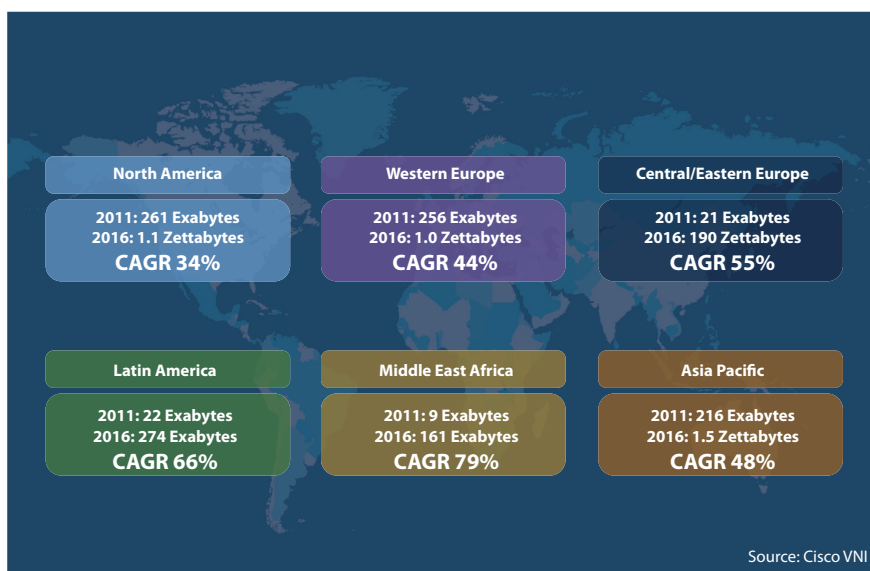
shorten this cycle to revenue by deploying an alternative such as microwave?

In this example context, using geo guidance, it is possible the operator could initially deploy microwave to be able to offer a service as fast as possible to a particular group of customers, but then to be able to then proactively monitor the subsequent uptake of services. Thus the operator can determine when there are enough customers in any given region that can be, or have already been, captured to justify the business case to build out fibre.

**NEW DEMANDS CREATED IN THE CLOUD ERA**

Cisco's 2012 Global Cloud Index, which forecasts the growth of global data centre and cloud-based IP traffic, predicts that annual global data centre IP traffic will reach 6.6 Zettabytes by the end of 2016. Overall, data centre IP traffic alone will grow at a compound annual growth rate (CAGR) of 31 per cent from





Cloud traffic growth by region 2011-2016

2011 to 2016. While annual global cloud IP traffic will reach 4.3 Zettabytes by the end of 2016.

So in light of these market developments it is clear that cloud is a vitally important phenomenon. However, there is still uncertainty regarding how service providers fit into the equation and increase their value in the chain. Is it worth acquiring data centres and investing in cloud assets, or better to go for a hybrid or outsourced approach? Regardless, it is important for these service providers to understand where they can focus. One such area is Infrastructure as a Service (IaaS) which can help services providers monetise data centre assets with rapid RoI. For providers that have chosen to invest in connectivity specifically for cloud services there is growing potential to target the IaaS market opportunity in particular regions where they can leverage existing optical service connectivity. It is also very important to be able to create the right type of services for the right type of environment and keep in line with cloud pricing methods.

#### GEOANALYTICS: HELPING OPERATORS TO TAILOR VALUE IN SERVICE PROVISION

GeoAnalytics as a service is something relatively new in the market.

Using GA service providers are able to think outside the traditional decision-making box when it comes to determining the financial viability and/or potential of specific clients or groups of clients accessing services through a specific core infrastructure.

At the moment, the traditional methods carriers use to build their go to market strategy depends largely on slicing up a market geographically. For example, when considering North America, Canada represents about ten per cent of that market and then Toronto again is about 30 per cent of Canada. From this top-level data it is possible to estimate an addressable market. But this approach does not give very much accuracy or any help identifying which enterprises would be the most lucrative prospects. The key difference with GA is that the approach is bottom up – it is about unlocking information that is available from

market research firms and stored in disparate locations within the service provider's own databases.

GA technology can help in two situations – in the strategic decision-making process in terms of determining the commercial viability of fibre expansion or deciding to create services in a particular area. Secondly, Geo Analytics can tell operators exactly in a particular geography which enterprises to target with which specific services or which areas to deploy mobile backhaul. The technology can filter out enterprises that spend for example, less than £1,000 per month on telecoms, if an operator intended to just focus on the larger enterprise vertical.

Indeed, many operators and service providers have existing databases on their customers but often these databases are in different organisations or even physical locations, and are not unified. This means operators are typically not able to take any real advantage of this data to help make strategic decisions. GA unlocks the value in this data, as well as externally available data, and turns an opportunistic go to market approach – such as finding new targets by going to local shows and networking – into something much more deterministic and analytical.

This sophisticated analytical functionality is a key feature of GA, allowing operators to accurately filter their addressable market and create a list of enterprises for sales forces to target and so create a much more accurate and profitable go-to-market plan. When operators use GA it is crucial that they know the type of service they are addressing because the way it works is to use these filters to help identify targets. For example if the operator in question has a service targeted at the Ethernet mid-market then the filter might be based on



spend of \$10,000 per year up to \$40/50,000. But if the operator was offering, for example, an optical wave service then the filters would be scaled up accordingly.

Such an approach can also increase agility to market. GA can shorten service roll out schedules. In the time it takes from a client to sign a contract to the time that services are enacted and the resultant revenue stream comes on line, the fibre construction is almost invariably the longest process. GeoAnalytics can shorten that time by predicting which enterprises are most likely to buy the service and helping service providers create the business case to pre-build fibre. Once fibre is available to the building location, a service can be turned up in much shorter time.

The result of this intelligent and analytical approach is a very tailored go-to-market plan where the service provider would be able to determine which clusters should be addressed first based on an estimate of their Rol potential.

The approach here is about connecting the demand from enterprises with supply in the form of the existing fibre footprint from the service provider. GA can calculate which class of enterprise would be profitable to address and which types of expansion to use from existing installed bases or could even advise the service provider to lease fibre from a local operator for example.

### GEOANALYTICS: REAL-WORLD ANALYSIS LEADS TO REAL-WORLD SUCCESS

Despite the fact it is an emerging technology, there are some strong case study examples that demonstrate the effectiveness of GA as a service. For example, a fibre-based service provider in the US Mid-Atlantic region recently needed to optimise its own strategy for Ether-

net services across some 25 potential service areas. The scale of the analytical challenge to identify and target which areas contained the best concentration of potentially lucrative customers was considerable as the regions contained a complex web of some roughly 88,000 companies with more than ten employees. These companies were housed in around 66,000 buildings, making the strategy in terms of fibre deployment even more complex.

In order to understand the real addressable market and potential demand, GA used a combination of multiple filters such as:

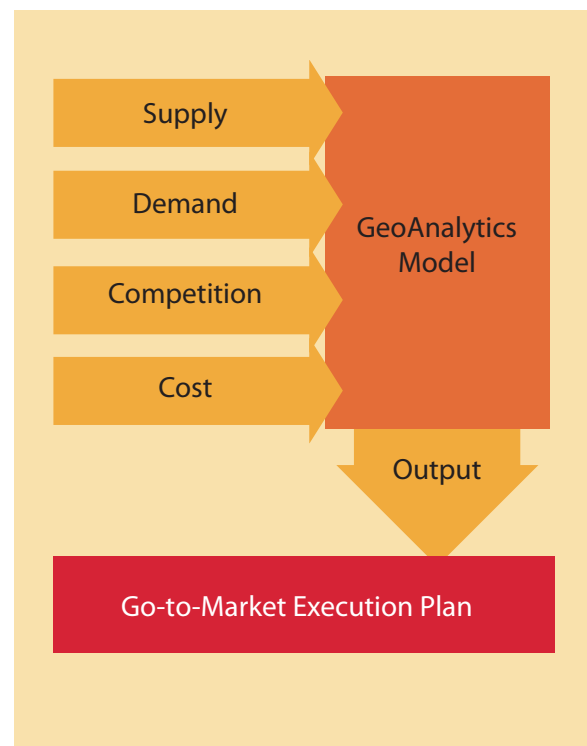
- Customers versus prospects
- Enterprise credit ratings
- Distance bands from fibre footprints
- Filter companies with data use of more than 1.5Mbps and annual data spend of more than \$10,000
- Filter companies with decision power in their respective territories.

The results of this GA operation were telling: the total annual data demand across the analysed region was estimated to be \$1.2bn, with a total bandwidth requirement of 255,862Mbps. In terms of segmentation by distance from fibre assets, some 37,576 (42.3 per cent of total) businesses were within only 0.25 miles of fibre. Some 91.5 per cent of firms were within ten miles of fibre. The GA exercise provided detailed segmentation by bandwidth consumption (under 10Mbps, 10-25Mbps, 25-150Mbps, 150-300Mbps and

over 300Mbps) helping the service provider create its go-to-market plan.

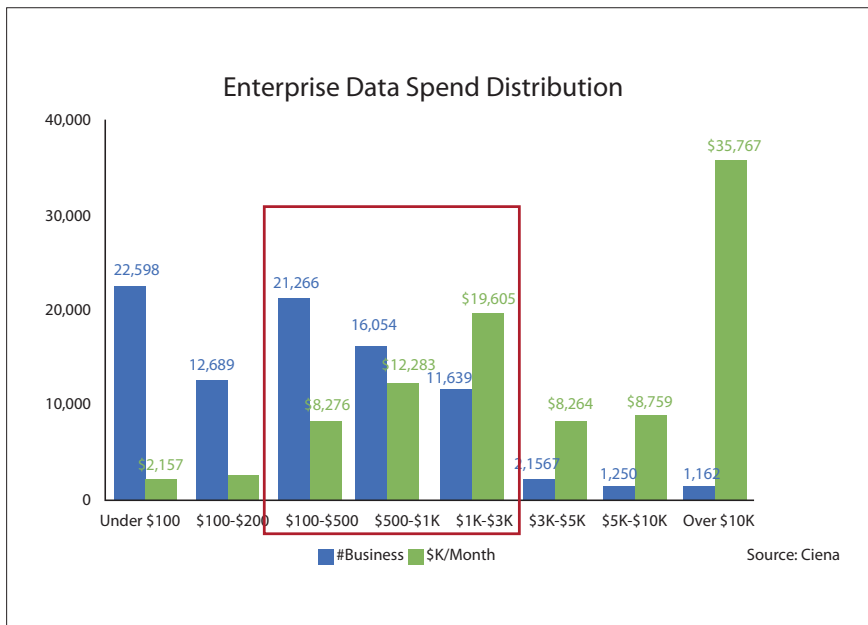
This GA data was then used to create demand maps per market, in addition to being overlaid on a Google Earth representation. Based on data telecoms spend from each enterprise and the distance from the existing fibre footprint the operator was able to understand its addressable market. Although it started with over 80,000 business records, in the end the viable addressable market was in the region of around 20,000 or about 70 per cent of the market value opportunity. In this way, no effort was wasted on the enterprises that did not represent the right target opportunity for that service provider.

This detailed analysis was undertaken considering multiple factors including the fibre footprint of the service provider; the



The GeoAnalytics service





**Enterprise data spend distribution in a typical metro (U.S. market)**

demand, i.e. the enterprise demand with information about geographical location and telecom spend; the competition in that region; and the cost of network expansions, to build an end-customer targeting plan.

According to the company GA has helped to transform the way in which it develops a go-to-market strategy, changing from an opportunity-based go-to-market approach to a geographical-based approach.

## CONCLUSIONS

For services providers in today's rapidly evolving market, the need to maximise monetisation across enterprise services has never been more acute. This requirement is compounded by the need to optimise the efficiency of the network as cloud-driven services and bandwidth are increasingly being consumed in a more on-demand fashion.

Building fibre is a big investment. Not only is the trench digging and physical cable laying costly, it brings a lot of risk if uptake is incorrectly estimated. Operators need to ensure they get RoI. Which is where tools such as GeoAnalytics come into play, enabling operators to differentiate their service delivery and improve go-to-market agility in these dynamic and mature services markets.

GA feedback helps diminish that risk by helping operators to address the market with cheaper alternative technologies such as microwave or millimeter, which are faster to deploy and mean service providers are more agile. Once a carrier has three, four or five customers in the cluster they can then offer additional services, because it's easier to build the case for rolling out fibre, for example, where there is an existing business case.

Because of the expense and time needed to locate and convert end customers

that can offer compelling and predictable return on investment, customer targeting must be done in an intelligent analytical process relative to a variety of factors, most notably fibre plant. GeoAnalytics has the power to facilitate the creation of such intelligent go-to-market strategies by allowing operators to:

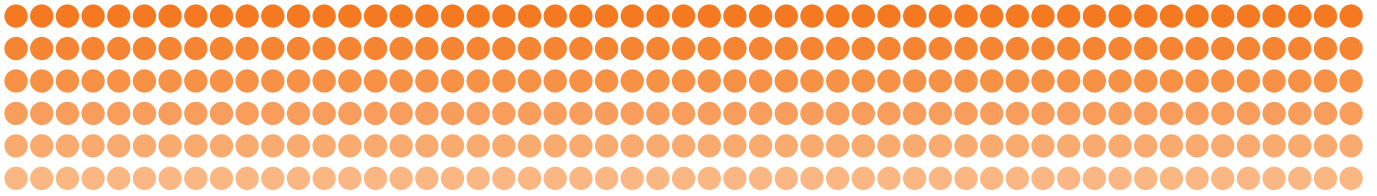
- Filter the enterprise opportunities to reduce the total addressable market (TAM) down to a target market (TM) that guides plant investment strategies and go-to-market plans.
- Allow for economically justified pre-construction to minimise service turn-up time.

Going forward, ignoring technologies such as GA could be a fatal omission for operators in an increasingly dynamic cloud-driven market where the pressure to maximise RoI, while simultaneously enhancing operational agility, is growing at an inexorable rate.

Moreover, these are the same issues felt across the board by all service providers and operators regardless of size. Big companies can use GA to get to the desired end result faster, while smaller companies tend not to have the inside or existing knowledge to put together a strong go-to-market plan.

The key in the GA approach is that it is bottom up – it's about unlocking information the carriers already have either in databases or in market research and making it much more accessible. While the service provider has to have in mind the desired end goal in order to be able to ask GA the relevant questions, the tool can turn an opportunistic go-to-market approach into something much more deterministic, analytical and geographic. This has the potential to change the game completely.





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