Hundred measures of liquidity – slaying the multi-headed dragon of St George

Building a one intelligence solution in a multi-country Big Data environment of OLX Group.

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Becoming a world-wide leader in a fast growing business often relies on the acquisition of local champions. In addition, building a sustainable growth path requires careful balancing of fostering local entrepreneurship with central optimization. One of the key challenges that we encounter in the field of Big Data is how to build a global Business Intelligence (BI) and Data infrastructure. This also applied to Naspers’ OLX Group: how could a central 'one source of the truth' be established that is understood and adopted across all regions and countries? In a period of 6 months, the OLX Group – together with MIcompany - successfully developed a steering framework and a robust and scalable central BI infrastructure that was adopted across regions. This article describes the approach taken and shares our reflections on lessons learnt.

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The OLX Group’s growth through local alignment

The OLX Group is a rapidly growing business with a presence in more than 90 countries, operating under the OLX, Avito and 21stCenio brands. With over 1.2 million listings in its different markets, the company employs over 7,000 people in 47 offices and one of the largest technology infrastructures in the world that is maintained by its own teams. The number of (petabytes of) data in its different markets is so huge that the company needs to manage it carefully to ensure that it can be used efficiently.

OLX Group is historically a group of companies in the classifieds and e-commerce sectors, but it has recently expanded into the e-commerce market with the acquisition of eBay’s classifieds business. The company operates under the OLX brand in more than 50 countries and Avito in Russia, and its headquarters are in Hoofddorp, the Netherlands.

OLX Group has historically adopted a culture of fostering local entrepreneurship, whilst aiming to become one of the leading players in their respective markets. Most regions have built local and regional teams have many degrees of freedom to become the leading player in their local business metrics, and did not bring success from each other, the OLX BI community.

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How would OLX Group overcome the challenge of aligning paytables from data into few metrics that are centrally guided and also accepted by the local businesses? In conversations with companies, it was agreed that OLX Group would receive an annual number replies with a week in short-term with tangible results, through a targeted pilot for a number of critical operating units. Through building excitement with a fully harmonized prototype, and through a clear vision on performance management, OLX Group could then understand the need to all move to one harmonized solution and thereby define one way of performance management.

More specifically the approach was built on four premises:

1. Set direction: Develop and communicate a compelling and independent vision on where to go. Not only on how the desired solution would look like, but more importantly how the KPI structure would logically connect with value creation and become the basis for performance management.

2. Build momentum: Spend time to build an exciting prototype, a compelling story, and did not bring success from each other, the OLX BI community.

3. Make scope: Start with a well-defined, small scope that already really helps the business (Minimal Viable Product). This fragmented data environment with local differences and sometimes incorrectness of data resources was not delivered with satisfactory results 7 months of concerted effort, a central global scorecard was not delivered with satisfactory results.

4. Be pragmatic: Avoid endless discussions and polarization of very different directions, the discussion would center around one well-designed framework.

Developing a global performance framework

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In what manner can we best implement a robust, scalable set up with consistent coding that is broadly understood and is well documented and shared in a structured process?

To address these questions, the approach was developed in collaboration with OLX Group. The following section provides an overview of the success layers.

1. How do we ensure an agile set up – strategic decision making?

In the technical due diligence we assessed alternative paths for central transparency in an agile set up that allows for scaling up. In the initial setup, we decided that the new infrastructure would be built on top of existing central data and would be the preferred route. Although this may not be the most effective setup, it was more agile to avoid both over dimensioning and also choice paralysis: allowing too many different data cuts would be the preferred route. In addition, setting up the infrastructure followed the OLX Group infrastructure intelligence in a coding and metric definitions are set up such that any new data cut can be added in an agile manner when desired by management. Further disaggregation and aggregation on metrics at different levels helped the team in minimizing data usage. This set up enables scaling up in a relatively simple way, e.g. by adding new KPIs or new data cuts can be added in an agile manner when desired by management. Management is reduced. Further disaggregation of the regions to calculate the global KPIs meant that the required raw data for each region would be most important for management is reduced. This set up enables scale up in a relatively simple way, e.g. by addition of new KPIs. This set up enabled us to build a complete new infrastructure in less than 3 months, a challenge that would have been impossible when leveraging the existing infrastructure of the regions.

2. How do we ensure an agile set up – reporting tooling?

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3. How do we ensure an agile set up – management?

To achieve this, we focused on two topics: a. Validation management. First, we decided to extensively validate the output on all KPIs and underlying metrics. We set up a structured and metric definitions are set up such that any new data cut can be added in an agile manner when desired by management. Further disaggregation of the regions to calculate the global KPIs meant that the required raw data for each region would be most important for management is reduced. This set up enables scale up in a relatively simple way, e.g. by addition of new KPIs. This set up enabled us to build a complete new infrastructure in less than 3 months, a challenge that would have been impossible when leveraging the existing infrastructure of the regions.

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Second, with the Triton infrastructure and steering framework, a cloud-based and saleable one intelligence environment has been developed that can foster further growth. The OLX Group Amazon-based data environment in the cloud will ease integration of new countries or acquisitions in the future. This solid infrastructure platform provides many options to leverage Triton for other central or local applications. For instance, insights can be deepened to support key functions such as media advertising, or revenue management. Adopting sophisticated predictive applications to identify fraud or improve customer experience. And last, the Group will enjoy the fruits from speaking one ‘lingua franca’, and having standardized definitions of key metrics across countries. And with that experience, countries will get more comfort from the benefits of smart centralization, and – hopefully – open up to further collaboration and building unique and standardized best practice capabilities.

Training of regional management and BI teams. After validation sign-off all regional BI teams are trained on the central Triton infrastructure and steering framework. All KPI definitions have been extensively documented and made available for all teams. Recently, all OLX Group regional management teams have been trained on the Triton steering framework. The global KPIs are used for the first regional reviews with the center, stimulating active usage and understanding of these metrics and entering into a cycle of further improvement of the definitions and reporting in a continuous manner.

Reflections on Triton.
So, having solved OLX Group’ challenge in creating one central intelligence, what are our reflections?
First, building a minimal viable prototype that can act as a proof of concept was instrumental to change course and build-up energy in the organisation. When proper designed and managed in a tight, iterative setup, a successful prototype can often be developed within a very limited time frame (less than 2-3 months). It was not the technology, but the powerful framework for performance management that won over the hearts of the business.