4 Vital Elements to Building a Solid Data Infrastructure for Digital Marketing

To get the most out of data collected from different arms of business, data infrastructure should be a number one priority. Think about it like this; company A uses a number of third-party sources and software -- employees find themselves having to go into data management areas to hand calculate metrics. Company B uses a single third-party cloud service for their data gathering and processing, they have dedicated data modeling software, and employees to specifically handle that task.

If Company A were to bring in a consultant to map out their data infrastructure, they would find that it would more closely resemble a pile of pick-up-sticks than any type of structure at all. In the case of Company B, their data infrastructure model is much more streamlined. Having a solid, streamlined data infrastructure allows internal teams to easily make changes anywhere along the data gathering and processing pathway. This enables company B to analyze metrics better and implement new ideas.

When working to strengthen and streamline data infrastructure a company needs to consider the following:

- Goals
- Collaboration
- People
- Quality

It's All About the Goals

Any company that has a website, large or small has a certain amount of digital data coming in. In working to solidify a sound data infrastructure, a company needs to start identifying what they can and will be using data for. Besides a website, continuous data input can come from many sources and can be used to determine digital marketing metrics on multiple levels.

One way to identify goals and data needs is to create a goal hierarchy that may look something like this.

1. Increased Sales
2. Increased Exposure
3. Customer Acquisition
4. Customer Retention
5. Etc.

The next task will be to identify where data points can be collected to measure the success of different campaigns and the methods used to reach an audience. Doing this will yield a list of clear-cut achievable goals that marketing and IT can work with to identify the importance of different datasets.

A Marketing Team and IT Must Collaborate

Once marketing clearly defines what needs to be achieved through data collection, it is important that they can work side by side with IT. This relationship will garner the successful implementation of marketing's goal list.

The need for collaboration comes down to the simple fact that marketing knows what metrics the company needs to look at and IT knows how to get them. The facilitation of a good working relationship here will ensure that everyone always understands what they are doing, this results in less "hiccups" in workflow and happier employees.

Another reason to put a priority on these relationships is to increase the general knowledge base of both teams so that the company can be better served. For example, computing or data issues may be found by the marketing team when they understand they are looking at erroneous data. On the other side of the coin, IT may have a few new ideas on how to use data points the marketing team might not have considered.

Hire Someone to be in Charge of Data Point Output

A person in this position will effectively act as an intermediary between marketing and IT – or in the case of smaller companies, marketing, and third-party data services. The data point or data integrity supervisor will be in place to catch abnormalities in processed data. They will also be the person to work with the IT team on solving data integrity issues.

Putting someone in this position allows a company speed and agility to change metrics and obtain new data points as strategies change or new campaigns are launched. Ultimately, having a person in place to catch data quality issues will be a huge time saver for any department making use of data output.

Make Data Quality a Priority

Errors in data collection and processing can happen at any point in the workflow. A company looking to streamline its data infrastructure needs to concentrate on putting analytics in place to be sure that all points in the workflow are operating smoothly.

If a company uses third-party vendors for gathering and processing, the person in charge of data point quality and control should also be in charge of analyzing quality assurance reports from the vendor. They will also need to be able to interact with vendors when problems are identified.

Companies that create their own data gathering and processing infrastructure should be aware that data quality throughout the process is going to have to be assessed. As new data streams are brought in, systems to ensure high-quality data that cleanse and flag issues should be put into place.

Choosing to ignore the quality of data being processed and released for analysis renders that data unusable. All the effort and money put into data collection, and processing then becomes wasted. Planning, processing, checking, and analysis should be an iterative process, wherein each round improvements are made resulting in a better overall data infrastructure and the attainment of goals.

Conclusion

No matter the size of the company, data infrastructure should be carefully considered at every stage of growth. If this is done properly from the beginning, scaling up as a company grows will not be a disruptive event. At each growth stage, a company should consider exactly what they want out of their data, have collaboration between teams, employees dedicated to the output of high-quality data, and systems in place to produce the data output.

Remember, if your data structure resembles a pile of pick up sticks, you may need to spend some time reorganizing it. Harmonious, well-covered data acquisition will help your marketing team and business to achieve goals faster.