# Make Better Product Decisions by Integrating Internal Data with Broader Sources

Advanced analytics requires data; preferably well organized, validated data annotated with knowledge and insight from your employees. Knowledge management technologies help bioscience companies; capture, document, share and remember what they have collectively done and know. But increasingly that store of internal knowledge and expertise is insufficient for competitive advantage. Making better research and product decisions requires fusing internal and external data to create deeper insight. This often includes collaborating with academic and government labs, as well as other companies.

Within lab settings, LIMS (Laboratory Information Management Systems) are a critical building block to creating a more analytically sophisticated work process and culture. If knowledge and critical data are sitting on individual workstations, or worse in paper lab notebooks, remedial action is needed. Likewise, the plant floor needs to be properly instrumented and networked so that data does not solely reside in memory on the equipment but instead is centrally stored, managed and made accessible for analysis that spans multiple pieces of equipment and encompasses the whole of a manufacturing process.

In addition to more statistical and experimental approaches, modeling and simulation software bridges the gap between theory and practice. Many life science companies use molecular modeling as a pre-cursor or adjunct to experimental investigation. Skillful use of modeling and simulation software can rule out a whole branch of potential experiments as untenable on theoretical grounds, and guide experimental efforts toward more theoretically plausible solution spaces.



internal sources

academic sources

government sources

other companies

Integrating internal and external data sources with the appropriate processes to curate and manage the information leads to improved data modeling, theory development and ultimately better decision making.
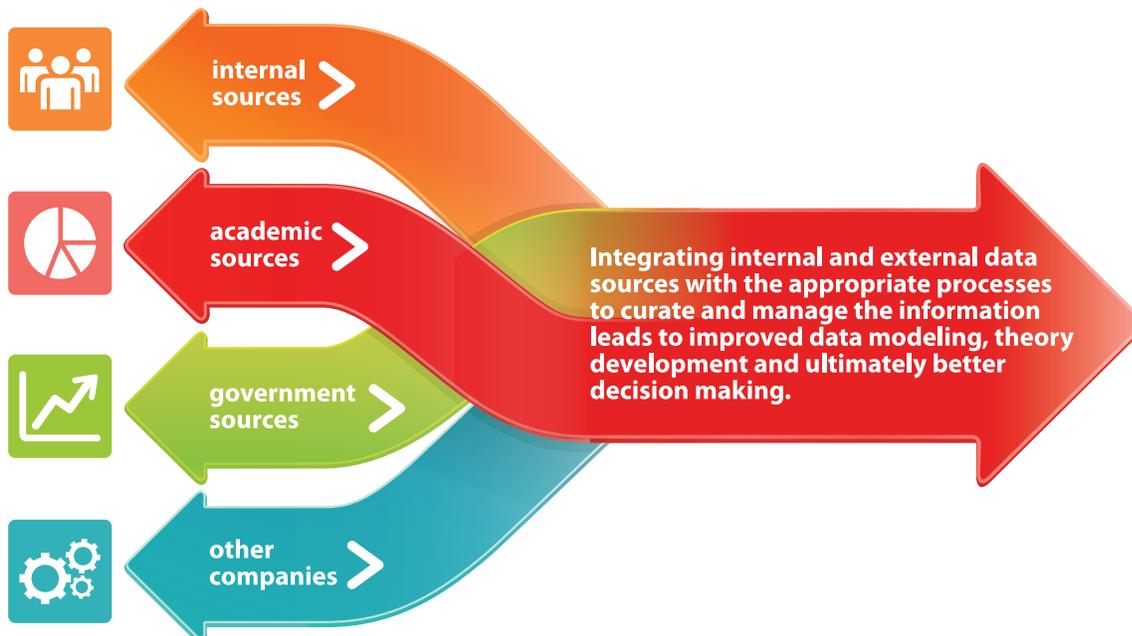
Regardless of where you are on the spectrum of advanced data analytics LifeScale Analytics can assist. Our services range from strategic and architectural consulting to determine the ways an investment in advanced analytics can help your business, to implementing and training your staff on the right solutions. We can even deploy an outsourced analytic toolbox tailored to your specific data analytic requirements. Whatever the analytics related need is in your organization LifeScale Analytics can help.