

Increase the ROI of Your SAP Investment

And Add Additional Profit Equivalent to 1-5% of Your Annual Revenue

River Logic Helps Deliver on The Need for a Bimodal Supply Chain

As noted by Gartner, the most successful supply chains are quickly [moving toward being bimodal](#). With Chief Executive Officers (CEOs) increasingly concerned about operational excellence, the Chief Supply Chain Officer's (CSCO's) primary role is becoming more bimodal in nature, now encompassing the roles of growth partner and operational caretaker.

According to Gartner Analyst Mike Burkett:

- "In mode one, Supply Chain must continue to focus on efficiency and operational excellence — the traditional operational caretaker."
- "In mode two, in parallel, you must be able to experiment, fail (fast), innovate and embrace new, crazy ideas. This needs different people, incentives and culture. You must hire data scientists and sociologists, experiment with drones and other smart machines, harness unstructured data and design e2e connected processes like never before. Analytics must become embedded and mainstream."

The SAP Suite is Limited in Its Ability to Enable a Bi-Modal Supply Chain

The traditional approach to implementing supply chain planning tools has been bottom-up, wherein companies first implement a system of record (SOR) and then try to expand the SOR to support additional capabilities. However, while this approach works well for Mike's "operational caretaker" modal, it has many limitations in driving innovation. SORs were designed to support well-defined problems that occur within functional silos, not for rapid prototyping and extensive what-if scenario analysis. Furthermore, they weren't built to generate optimal solutions that directly tie to shareholder value.

SAP's suite of products does an excellent job supporting the "operational caretaker" requirement through extensive SOR capabilities. SAP APO is top choice for a planning system of record by many companies. Now, SAP is transitioning their customers towards the SAP Integrated Business Planning platform on HANA, which provides a bit more analysis capability but still basically works like a SOR. It takes years to deploy either tool, whereas a system designed for experimentation and innovation should take just a few weeks to stand up.

Moreover, the SAP tools offer limited support of advanced analytics. They rely mostly on rules/heuristics — i.e., rules-of-thumb-based algorithms that are designed to do rapid and simplified planning — to generate plans. These rules are part of the reason SORs are not designed for rapid prototyping, as they take significant effort to set up. More importantly, they need constant maintenance to ensure the plans generated are actually feasible, since the rules rely on assumptions about product mix, volume, etc. Invariably, the rules eventually generate infeasible scenarios that drive risk and mislead managers.

By adding an expert business platform to traditional SOR approaches, a platform that offers prescriptive analytics, companies have the tools necessary for rapid prototyping and experimentation, thus enabling "modal 2" in Gartner's bi-modal supply chain. Through this approach, an application can be prototyped in as little as 4-6 weeks.

Furthermore, scenarios can be quickly evaluated so companies can arrive at not only feasible, but optimal results that tie directly into strategic business outcomes.

River Logic Adds value to SAP No Matter What Component/s You Utilize

River Logic has been recognized by Gartner as a compelling System of Differentiation. It is also recognized by Gartner as one of the leading Prescriptive Analytics platforms, leveraging a visually-driven platform that can be configured by business analysts without writing any rules or code. This provides a great combination of capabilities required to enable bi-modal supply chains in organizations.

With SAP’s suite being so widely utilized, River Logic complements SAP with a supply chain analytics and decision-making platform that overlays and works seamlessly with existing and future SAP infrastructure.

The value that can be unlocked is 1-5% of revenue in additional profit due to

- a) The unique ability to model an end to end value chain and the associated financials
- b) Ability to evaluate optionality around demand, product mix, supply chain and managerial policies, and
- c) Leveraging optimization to maximize a firm’s ability to meet business objectives and to uncover unique new insights from existing data.

A Deeper Dive into River Logic’s Value Add

There are three types of organizations that use SAP technology in the area of S&OP/IBP:

- a) Those with only SAP R/3 or ECC technologies and no APO
- b) Those with an ERP backbone and APO modules
- c) Those with an ERP backbone, APO modules and some aspect of SAP IBP (either implemented or in the process of being implemented)

Table 1. Identifies the capabilities of organizations with varying degrees of investment in SAP and the value-add of adopting River Logic in addition to SAP’s suite.

























Solution	Configure detailed model of business	Address multiple processes within one platform	Perform extensive what-If analysis	Quickly deploy and drive adoption	Perform scalable, high performance planning	Run prescriptive analytics/ optimization
SAP ECC						
SAP ECC + SAP APO						
SAP ECC + SAP IBP						
SAP + RL						

Table 1: River Logic Value addition to SAP

What Can Companies do Better by Adding River Logic to an SAP environment?

River Logic and any combination of SAP IBP / APO forms a 'better-together' solution that offers a wide range of additional features and benefits. Organizations are able to generate integrated plans and what-if capabilities across dozens of use cases.

Furthermore, by leveraging trade-off analysis that is combined with analytics around demand, companies can see when and where it makes more sense to short demand (vs. incur additional cost) or when to reshape demand generation or product portfolio policies. Below are some of the most popular use cases and the enhanced capabilities River Logic offers to an SAP customer.

Improved Demand Planning

Companies can use SAP APO or SAP IBP demand planning modules to generate demand forecasts. Ideally, these forecasts come with optionality around demand (i.e., prices, promotional campaigns, channel SLAs, etc.) such that they can be considered in innovation. Demand planning can then be enhanced by understanding demand elasticity as well as product and order profitability on average and on the margin.

- By understanding the marginal impact of demand, companies achieve improved demand shaping
- Understanding demand optionality leads to understanding the business and supply chain impact of demand generation initiatives. Thus, companies are better able to re-shape campaigns that are well aligned with company objectives
- Companies are able to achieve a stronger partnership with the commercial organizations

Enhanced Product Portfolios

Product portfolio: With River Logic, companies are able to model any combination of fulfillment modes including Make to Order (MTO), Make to Stock (MTS), Assemble to Order (ATO) and Engineer to Order (ETO). They're also able to model the demand and financials in order to evaluate the contribution of product portfolio towards achievement of business outcomes, including policies around MTS/MTO, bid/order profitability, SKU rationalization, etc.

Capacity Planning that Drives Greater Impact

Organizations can quickly and easily optimize key tradeoffs in making capacity decisions including sourcing, labor, OEE, inventory pre-build, third party suppliers and even capital expense projects.

Better Alignment of Supply Planning with Business Objectives

Companies are able to generate and evaluate supply plans against any business objective including maximize profit, minimize cost, maximize growth, increase ROIC, minimize cash use, etc. With the addition of River Logic, companies can rest assured knowing their plans are always feasible from both an operational and a financial perspective.

Improved Financial Forecasting Accuracy

Financial planning and re-forecasting is drastically enhanced for companies that adopt River Logic. A company's financial forecast accuracy significantly improves because River Logic automatically outputs financials. Therefore,

the numbers are intimately tied to every scenario and are both optimal and feasible. Companies are able to leverage two sets of information produced by River Logic:

- Profitability analysis: Companies have access to a forward-looking analysis of profitability by product, customer/channel type, order, etc. Profitability is separated into average vs. marginal to give companies deeper information on performance management vs. decision making. Furthermore, River Logic helps decision makers identify key bottlenecks (i.e., capacity constraints, maximum inventory constraints, etc.) and the financial impact of removing them.
- Financial forecasts: Companies can access financial forecasts, including P&Ls, Cash Flow and Balance Sheets in addition to a roll-up structure that includes transfer prices and eliminations. Because River Logic supports financial constraints during analysis, a firm’s financial targets and policies (e.g., working capital or debt constraints) are properly reflected and evaluated in the plans

Unlimited What-If Analysis

What-if analyses can be produced for any of the above either individually or as part of an integrated plan for the business (which yields higher value). A detailed list of use cases can be found in Figure 1.



Figure 1: River Logic IBP Use Cases

Summary: Leverage River Logic to establish an innovation capability alongside your SAP environment

Businesses derive tremendous value from their SAP SOR investments, but they’re unable to quickly and easily experiment and innovate with SAP’s suite alone. They lack features present only in analytics platforms that provide speed, ease of use and analytics capabilities required for Gartner’s “model 2” in the bi-modal supply chain analysis.

River Logic fills that gap by providing a solution that:

- Has companies up-and-running within four to six weeks by configuring to the exact needs of the business
- Offers companies the power of prescriptive analytics for the most extensive what-if scenario analysis against a more comprehensive model of the business

- c) Gives business executives and general managers a cloud-based, easy-to-use, sleek solution that offers increased visibility to major decision makers
- d) Integrates seamlessly with SAP applications

Because companies can see the value from a pilot that takes only four to six weeks to complete and the large potential value-add of River Logic to data already generated in SAP, the IT concerns of introducing new technology are significantly lower with River Logic. Those who move forward with River Logic position themselves to address Gartner's bi-modal requirements and are thus able to drive more innovation into their business, quickly outperforming competitors who remain uni-modal.