# Maximizing Profits of LNG Midstream Operations with Three Key Steps

Since the beginning of the century, the LNG market has seen a rapid change, owing especially to a surge in its demand.

## Increase in complexity of distribution network

| | |
|---|---|
| Global LNG demand growth | High increase in LNG importing and exporting contries |
| Shift away from long-term contracts | Destination flexible contractes |

Industry forecasts show that new projects will have a lower share of capacity on longer-term contracts, thus leading to a rise in the number of shorter-term and lower-volume contracts. The result is that companies are faced with larger and even more complex distribution planning problems involving significant uncertainty.

This creates a need for an advanced decision support solution to quickly create plans that maximize profit by optimal utilization of fleet capacity to fulfil contractual commitments and take advantage of market opportunities. Such solutions need to ensure an optimal portfolio wide offtake and dispatch schedules by creating robust plans contributing not only to a planned profit, but also a realized increased profitability with minimized need for sourcing of third-party cargoes, vessel chartering etc.

Let’s outline three key steps towards achieving an optimal LNG Cargo Management solution.

## Step 1: Implement KPI-Driven Planning

Manual planning, as well as algorithms, should be governed by configurable KPIs and operational constraints. For planners, KPIs should be displayed and easy to compare for multiple scenarios. Highlighting constraint breaches make the planner aware of any violations. This also helps bridge the gap between planner and algorithm, which in many cases can be a big challenge.

## Step 2: Manage Spot Market Opportunities

The solution should be capable of managing opportunities in the spot market and include any scenario to evaluate the effect on the plan and profitability if incorporated. This can either be done manually or automatically, assigned by algorithms.

## Step 3: Maintain Transparency

Make plans, data and assumptions transparent to all stakeholders, reducing friction and time wasting, caused by multiple versions of data and assumptions held by different stakeholders. This enables managers and planners to consistently make quicker and better decisions maximizing the profit of the operations.

Leveraging these traits, Quorum software, through EC (Energy Components solution), have created an integrated LNG Cargo Management system, this through collaboration with and implemented by several midstream organizations globally. The system is used before, during and after the negotiation process to create an optimized ADP (annual delivery program). This ADP is used as the basis for achieving the short-term planning process. During these processes the management and planners are supported by easy-to use EC graphical user-interface and powerful optimization algorithms.

**energy components**

Energy Components (EC) is Quorum software's flagship solution for integrated hydrocarbon management. EC strengthens upstream and midstream businesses by offering fully-integrated functionalities to support hydrocarbon accounting, integrated asset modeling, optimization, forecasting and decision support. With the experience of installing 600+ licenses in close to 55 countries, a significant percentage of the world's production of hydrocarbons is today managed with EC.

quorum software

Quorum Software powers growth and profitability for energy businesses by connecting people, workflows, and systems with decision-ready data.

For more information or to request a demo, visit quorumsoftware.com or email info@quorumsoftware.com.