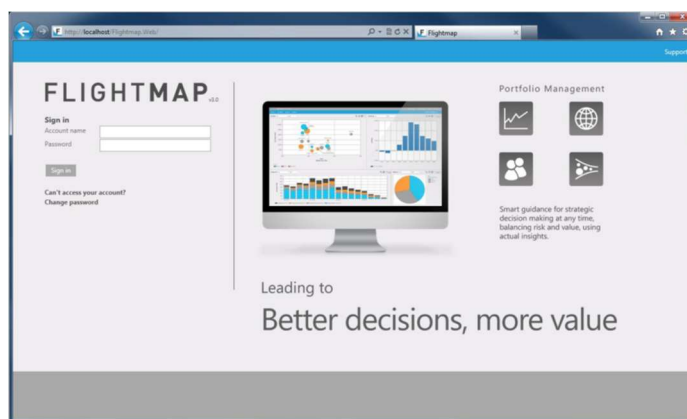


FUNCTIONALITY OF FLIGHTMAP

FLIGHTMAP is Bicore's software solution intended for Innovation Portfolio Management. FLIGHTMAP has functionality to gather, analyse, validate, track and store information for easy monitoring and better decision-making on innovation projects and portfolios.

Typical users of FLIGHTMAP are management board members, managers of R&D, marketing, strategy and new business as well as project leaders of innovation projects.

This data sheet summarizes the functionality of FLIGHTMAP release 5.0.



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| Function | Description | Benefit |
|--|--|---|
| Portfolio Composition  | Composition and comparison of portfolio alternatives from project outlines as well as detailed project plans. | A portfolio of high-value projects aligned with the organizational goals, based on solid business case input. |
| Project Input | Project input data entry by the project owner or assigned team members Input of project properties, project planning (timing, staffing, costs), risks, and benefits (which markets are addressed and how) Versioning of all input over time to incrementally capture new insights High-level actuals to monitor progress Integrated management of supporting documents and links Annotation of inputs for capturing comments Quick what-if updates for chosen key inputs | |
| Business Innovation Model | Project partnering configurations (costs, resourcing, as well as revenues are shared with external partners) Build-in support for initial and recurring revenues (with an installed base model) Mix of external and internal funding | |
| Goal Setting and Monitoring | Explicit definition of business goals and constraints, such as growth, profitability, maximum R&D costs, as well as non-financial targets such as sustainability improvements Management of portfolio balance requirements across different dimensions (stages, type of innovation, markets, etc.) Portfolio checks for contribution to these goals | |
| Portfolio Optimization | Choice of optimization goals and automatic generation of optimal portfolio compositions within constraints. Signalling of changes in optimal portfolio composition when project data changes Interactive adjustment and combination of portfolio compositions | |

| Function | Description | Benefit |
|---|--|---|
| Insight Analysis  | FLIGHTMAP offers powerful and relevant analyses of each project and of the full portfolio. | Address all what-if questions for the portfolio so consequences of decisions are clear. |
| Project & Product Analysis | <p>Full financial analyses (P&L and cash flow), including the financial forecasts over time (of the business case)</p> <p>Risk-adjusted financial analysis with proper inclusion of stage progress probabilities and launch success rate</p> <p>Key performance indicators (KPI-s) per project based on (a combination of) the plan and the actuals</p> <p>Analysis of value (NPV), strategic score, total cost, resourcing, and indicators for project status, data quality, project progress, and risk</p> <p>Sensitivity analysis on each KPI to identify project improvement areas</p> | |
| Financial and Strategic Portfolio Analysis | <p>Portfolio-level calculation of total financial and strategic impact</p> <p>Analysis of future revenues, profits, costs, cash flows (and their components) for each portfolio composition</p> <p>Strategic scoring mechanism for integrating strategic value in the portfolio analysis</p> <p>Strategic gap analysis and portfolio balance</p> | |
| Portfolio Resource Planning | <p>Dynamic resource forecasting for each portfolio alternative with proper inclusion of stage progress probabilities</p> <p>Resource demand and supply matching for pipeline management</p> <p>Interactive exploration of postponing projects, bringing in additional resources, and various partnering options</p> | |
| Portfolio Visualization | <p>Real-time portfolio composition visualizations in X-Y bubble plot, funnel chart, roadmap</p> <p>All resource and financial parameters over time (from revenue to cash flow)</p> <p>Tabular overviews of all projects and their KPIs (with export to Excel)</p> <p>Portfolio balance charts for determining contribution to value, costs, resourcing of individual projects and sub portfolios</p> | |


Reporting and exports

Standard user-defined export to Word, PowerPoint, and PDF document for project and portfolio inputs, analysis, and outputs

On-the-fly report construction during analysis

All numerical and financial analysis results one-click export to Excel

Customizable document templates (content and style)

| Function | Description | Benefit |
|--|---|---|
| Progress Monitoring  | On-going tracking of the status of running projects, to complement the planned input. | Include status of running projects as well as new proposals for integral portfolio-level decision making. |

Funnel Management


Funnel chart showing progress through stages and planned and actual risk reduction

Portfolio roadmap GANTT chart for quarterly planning

Activity Monitoring

Earned value based progress monitoring for projects versus their planning and signals deviations for re planning

Project history over versions in X-Y bubble plot with development of cost, risk, and value over time

| Function | Description | Benefit |
|--|---|--|
| Business Intelligence  | Use external market and logical developments as input for project and portfolio analysis. | Outside-in market and technology information is built into the decision-making process consistently. |

Market Intelligence

Explicit management of market trends (market size, customer value and profitability) with portfolio impact of trends


Consistent analysis of all projects targeting the same market, including market segmentation and grouping

Technology Intelligence

Technology roadmaps with forecasts of technology performance linked to product or service costs with impact of technology trends

Technology platform projects linking to derived projects

| | |
|-------------------|--|
| Partnering | Assign partners to projects indicating their contribution Manage partner data consistently across the portfolio |
| Scenario Analysis | Impact modelling with scenarios across markets, technologies, and portfolios |

| Function | Description | Benefit |
|--|---|--|
| Process Control  | FLIGHTMAP tracks data entry and verifies data quality | Decisions are based on information with a clear status and of sufficient quality |
| Roles and authorisation | <p>Project leader role: enters, updates, and owns project data, and analyses own project, assign rights to others for viewing or editing their project data</p> <p>Portfolio manager role: owns (part of) the portfolio, analyses alternatives, and captures the decision (by approving projects), assign rights to others for viewing or editing their portfolio</p> <p>General manager role: assigns portfolio managers to each portfolio</p> <p>Analyst role: checks project data by means of project and portfolio analysis, can set status accordingly and create and manage alerts</p> <p>Administrators manage the portal and the user accounts, users manage their own account settings (such as their password, e-mail notification, defaults)</p> | |
| Data Quality and Alerts | <p>Data quality visualization for tracking quality issues</p> <p>Interactive data quality checklist configuration for the analyst</p> <p>Automatic data quality analysis and reporting</p> <p>Built-in versatile alert mechanism to resolve data quality issues, remarks and actions</p> | |
| Workflow and Approvals | <p>Customizable workflow and approval mechanisms per project and portfolio, for staged approvals as well as budgeting and reviews</p> <p>Quick task overview per user for pending tasks in the workflow</p> <p>Task history for traceability and process performance statistics</p> | |
| Defaults configuration | <p>Administrator toolbox for default values, admin settings, user management</p> <p>Extensive configuration options for terminology and KPI selection, business logic, and process flow</p> | |

FLIGHTMAP has the following optional extension modules:

- FLIGHTHUB connectivity module for linking to other systems (including Excel, CSV, XML files)
- SSO module for connecting to a SAML 2.0 Single Sign On infrastructure
- Workflow Automation module for creating and managing custom workflows

Separate documentation is available for these extensions, which are not included in the base FLIGHTMAP configuration.

Technical requirements

Flightmap can be accessed on a computer with an internet connection through Chrome, Firefox, Internet Explorer, and Safari. Flightmap supports the current and prior major release of Chrome, Firefox, and Safari. For Internet Explorer we follow the browser-support policy of Microsoft. Currently Internet Explorer 9 and higher are supported (April 2016).