HP Enterprise Maps

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Windows and Linux Operating Systems

Concepts Guide

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Chapter 1: Understanding HP Enterprise Maps

HP Enterprise Maps (HP EM) systematically constructs enterprise architecture models aligned with projects, and enables you to capture and use information from various tools and across multiple locations. You can use HP EM tools to manage your architecture model and establish a solid baseline for making informed decisions about your IT assets and infrastructure.

HP EM is designed according to principles and recommendations defined in TOGAF and other modern enterprise architecture frameworks as a web-based enterprise-ready repository application and collaborative environment. The core functionality that HP EM provides includes:

- A model repository enabling revisioning and versioning of artifacts
- Synchronization of HP EM models with Extension for Sparx Systems Enterprise Architect
- Impact and dependency analysis from model as well as from instance points of view
- Architecture principles compliancy checks, harmonization and governance
- Lifecycle and contract/consumption management
- Smooth integration with external IT systems
- Document management

You can use HP EM to answer the following types of questions:

- How is my business connected to applications and IT?
- How is my IT infrastructure compliant with corporate standards?
- What dependencies in our Enterprise Architecture cross business, application and technological concerns?
- How do changes in applications affect business?
- How do changes in the IT infrastructure affect applications and business?
- What costs can I save by optimizing an application portfolio?
- Which applications are going to be available tomorrow or in the next 3 months?
- Which products do I need to buy?
- What custom solutions must be developed?
- Whether to transform existing applications in clouds, how and why?

- Is the current state of the IT infrastructure and application deployments matched with our architecture?

The following concepts are described in this guide:

- "Business and IT Alignment Strategy and Goals" on page 9
- "Enterprise Architecture Data Source Integration" on page 16
- "Enterprise Architecture Repository" on page 18
- "New Business Capability Delivery Support " on page 19
- "Business Alignment Viewpoints" on page 20
- "Shortcut Solutions" on page 23
- "Enterprise Architect and Solution Architect Roles" on page 26
- "Modeling the Business Architecture " on page 27
- "Modeling Application Architecture " on page 29
- "Modeling Technology Architecture " on page 30
- "Architecture Management" on page 31
- "FinPlanner - Case Study" on page 34
- "FinPlanner Case Study Tutorials" on page 40

Chapter 2: Business and IT Alignment Strategy and Goals

In today's dynamic environment, business success requires the coordination of strategic business objectives with prioritization of investment and information technology transformation. Business and IT alignment enables business managers and IT leaders to align business goals and IT projects thereby making better and quicker decisions based on understanding IT impacts on planned business objectives.

Objectives of business alignment include:

- Ensure IT investment priorities are aligned with business strategy
- Make Demand Management transparent
- Achieve effective and efficient IT delivery
- Maintain a transparent view of IT support

Correct and quick decisions cannot be adopted without complete, high-quality, and accessible information. Instead of using outdated and incomplete enterprise architecture information as stored in such common sources as diagrams, spreadsheets, or slide decks, HP EM provides the following advantages for achieving business alignment:

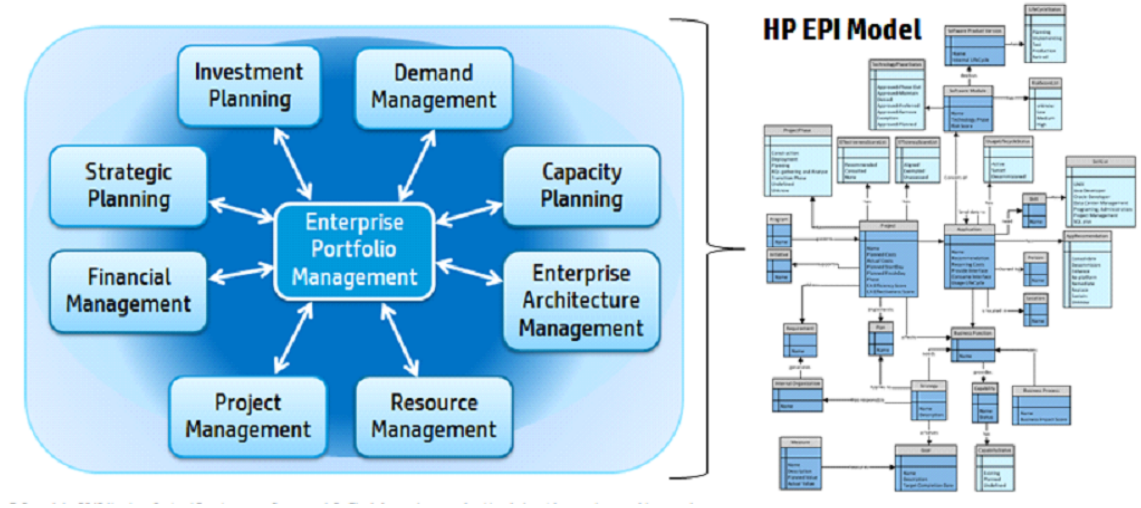
- **Comprehensive information:** structured data contains all the information for each area of Business Alignment (Business Capability, projects, requirements, application, etc.)
- **High quality information:** continuously updated information that is mutually semantically consistent
- **Available information:** information that is centrally stored, managed, and available for analysis, planning, and control purposes.

After ensuring that your information is comprehensive, high-quality, and available, the next step to achieving business alignment is to implement according to the right process, one that meets the goals of the business alignment strategy.

Enterprise Portfolio Management and Business Alignment Implementation

Enterprise Portfolio Management (EPM) implements the business alignment strategy based on an information model called the Enterprise Portfolio Information Model (EPI Model). The model consists of about 17 information entities. The rest are codebooks. It is therefore not extremely complex and at the

start of implementation can be generated as a generic design and later be modified according to customer needs.



Enterprise Portfolio Management and Enterprise Portfolio Information Model

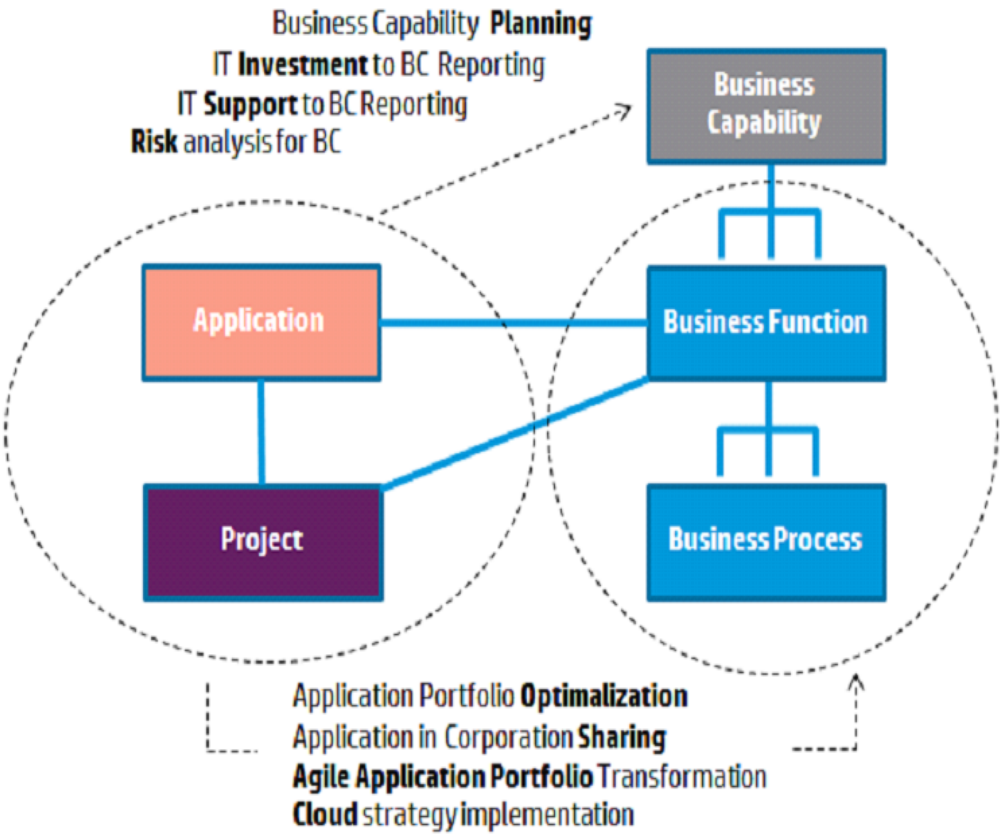
The EPI model covers all areas falling under Enterprise Portfolio Management. In addition to the enterprise architecture, it includes associations with business strategy, business capability, business requirements, and projects.

Business Capability

The primary place for aligning business and IT goals is to define an organizational model's business capability. Business capability is defined in a list of necessary organization skills available for actualizing business plans, regardless of whether or not they are supported by IT assets or infrastructure. Planning the development of business capability is the first level of implementing the strategic business objectives of the enterprise.

The definition of business capability for your organization should include the following:

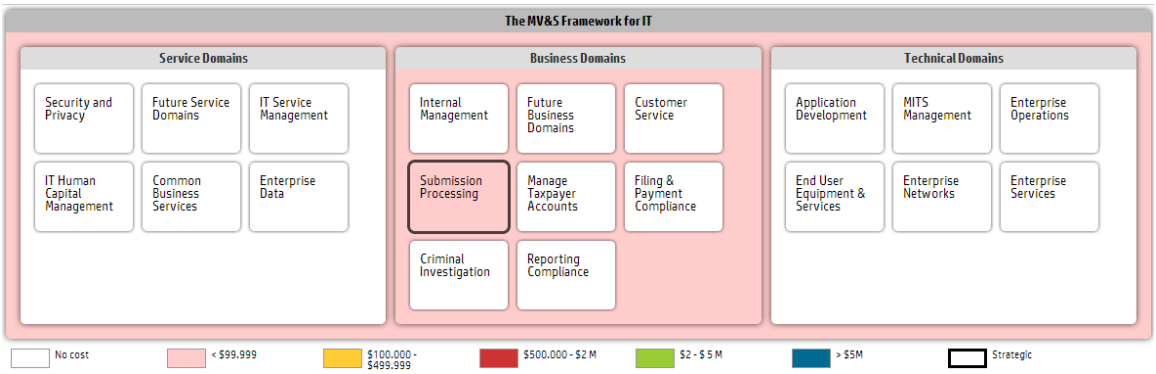
- How to capture the business's interests
- What are the building blocks of the business
- How to represent stable business functions
- Are they unique and independent from each other
- Are they abstracted from the organizational model



Basic EPI Entities, Relationships, and Business Alignment Areas

Business Capabilities and Structure Maps

A summary diagram of business capabilities for the business segment is represented by a business structure map. This map provides a comprehensive view of all the necessary business skills grouped into higher architectural segments (for example, Sales and Marketing, Risk Management, and so on.). Each industry segment has its own business structure map that covers all businesses within that segment. Enterprise Maps (HP EM) helps you to prepare for and implement business alignment strategies by providing a generic business structure map that you can use.



Structure Map Showing Business Capabilities of Finance Organization

Business Alignment Assessment

The first step in business alignment is a diagnostic phase that focuses on critical IT gaps as defined by the organization's business components. The baseline state is shown diagrammatically and in tabular form and both report types can be used to drive discussion of results with senior management. After this baseline reporting on the current state is complete, the next step is to specify appropriate Key Performance Indicators (KPIs) and metrics and to set the initial settings of your enterprise portfolio management process and associated procedures.

The task flow of the business alignment assessment process is:

1. Identify mandatory assets in Enterprise Portfolio Information (EPI)
2. Specify business capabilities (both current and planned)
3. Analyze and import existing EPI
4. Map business capabilities to IT resources, assets, investment and strategy, etc.
5. Deliver the first business alignment assessment
6. Define KPIs and metrics for improvement

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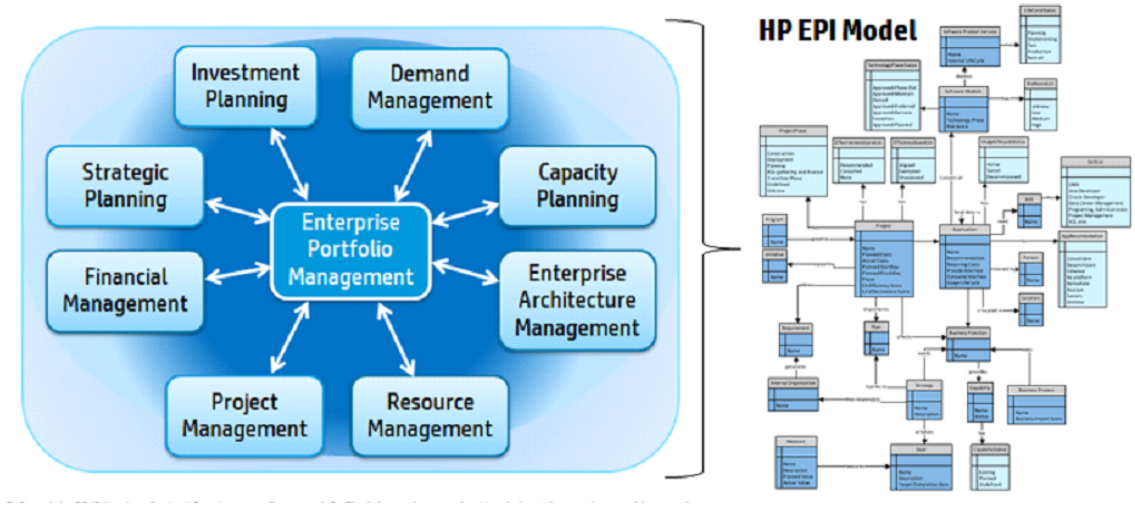

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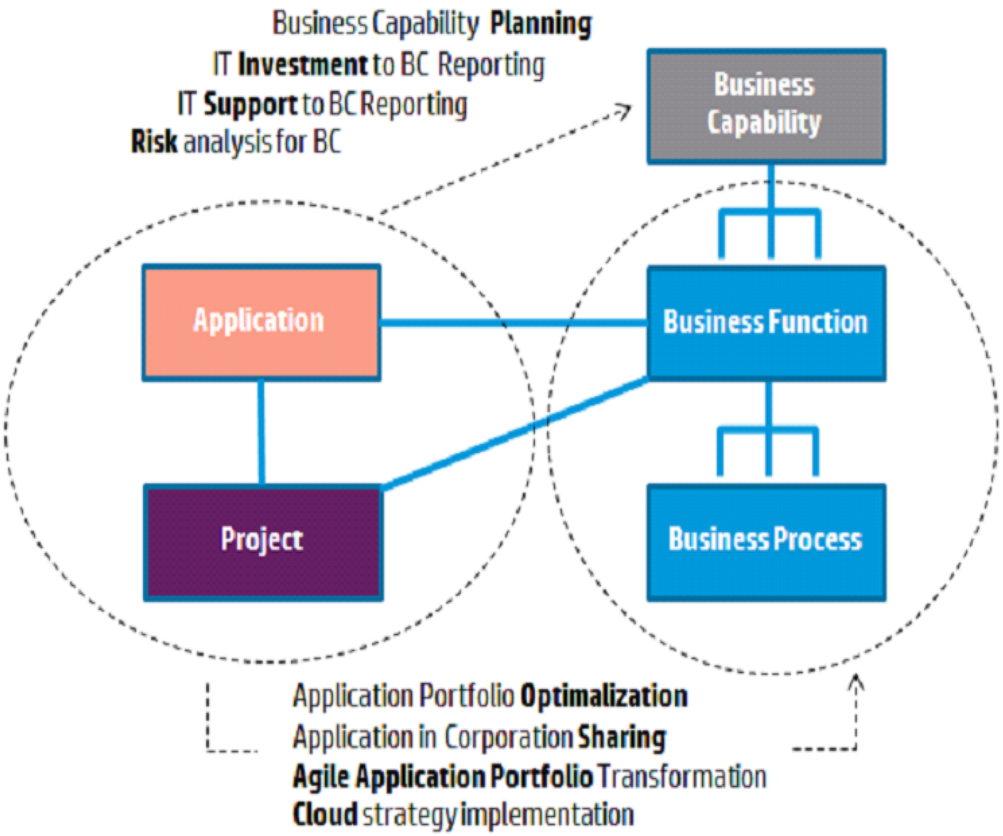

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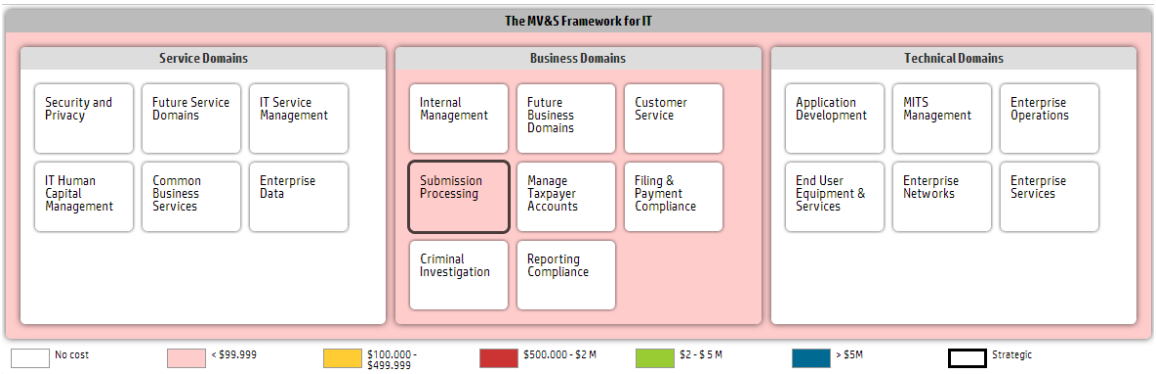

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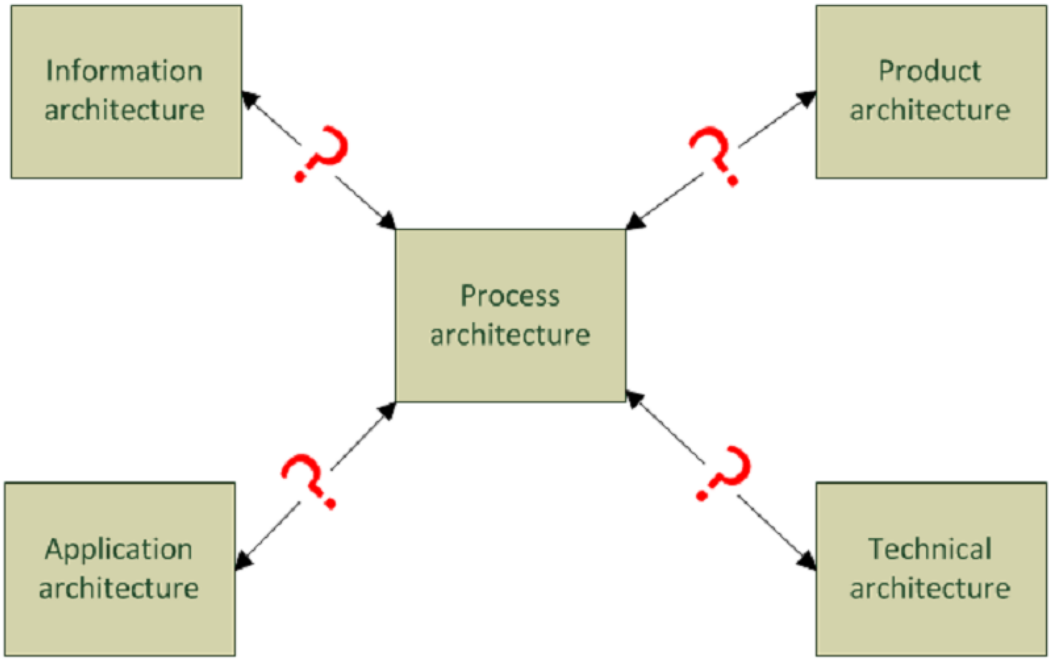
Chapter 3: Enterprise Architecture Data Source Integration

Enterprise architecture comprises a wide range of information across the whole organization. This list contains details of software applications, models of various architectures in specific domains, business process, and details of organizational structures. Information sources are in multiple formats and distributed across multiple locations. One of the main tasks of managing the enterprise architecture is to unify and integrate these separate sources of information and to maintain consistency across all sources.



Heterogeneous Architecture Domains

Enterprise Repository and Viewpoint-Oriented Architecture

The Enterprise Maps (HP EM) enterprise repository enables you to build a viewpoint-oriented architecture to manage your enterprise architecture. This repository contains the architectural description with inputs from multiple viewpoints and created for various stakeholders and their concerns. Architecture viewpoint strategy has become a very productive method of managing enterprise archictecture and is also an important part of the TOGAF architecture framework. TOGAF defines a recommended list of architecture views for stakeholders.

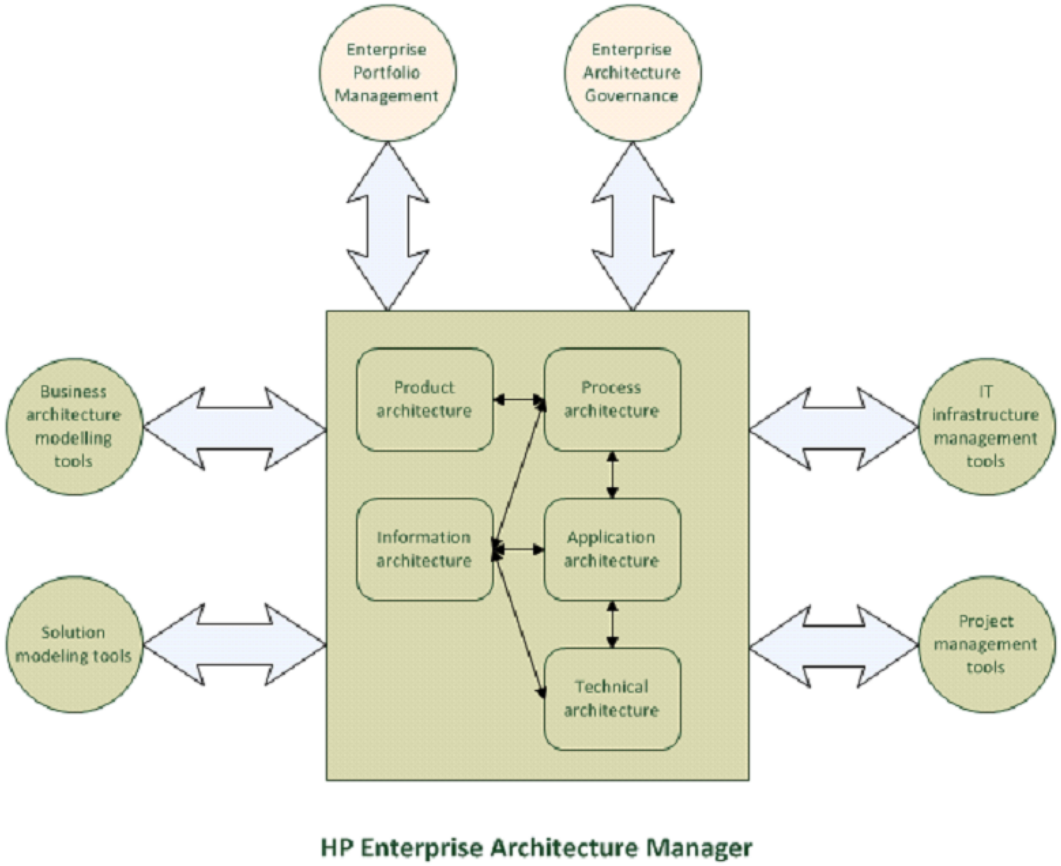
HP EM provides the following list of basic ArchiMate Enterprise Architecture Viewpoints out of the box:

- Organization Viewpoint
- Actor Cooperation Viewpoint
- Business Function Viewpoint
- Product Viewpoint
- Service Realization Viewpoint
- Business Process Cooperation Viewpoint
- Business Process Viewpoint
- Information Structure Viewpoint
- Application Cooperation Viewpoint
- Application Usage Viewpoint
- Application Behavior Viewpoint
- Application Structure Viewpoint
- Infrastructure Viewpoint
- Infrastructure Usage Viewpoint
- Implementation & Deploy Viewpoint

Chapter 4: Enterprise Architecture Repository

The Enterprise Maps repository is compliant with the ArchiMate 2.0 architecture description language and provides tools to manage your enterprise architecture and integrations with widely adopted enterprise modeling tools. You can use HP EM enterprise portfolio management tools to generate models, tables, and lists that are required for management.

You can use HP EM architecture governance tools to aid in policy record keeping and rule enforcement or escalation. HP EM also provides optimizable and modifiable integration interfaces based on standard modeling tools like Sparx Systems Enterprise Architect, and out-of-the-box integration with HP Project and Portfolio Management (PPM), HP Application Lifecycle Management (ALM), and HP Universal Configuration Management Database UCMDB.



HP Enterprise Maps Conceptual View

Chapter 5: New Business Capability Delivery Support

Enterprise Maps (HP EM) enables the enterprise architect to provision future states of an enterprise architecture in order to evaluate new solution architecture designs. This enables the Enterprise Architect to maintain a view of shared IT assets and to make decisions regarding asset sharing through the approved solution design of a new project. The ability to create consolidated future views in selected time slices is made possible through the export of a new solution design layout to the HP EMrepository during the Solution Architecture Design phase.

Chapter 6: Business Alignment Viewpoints

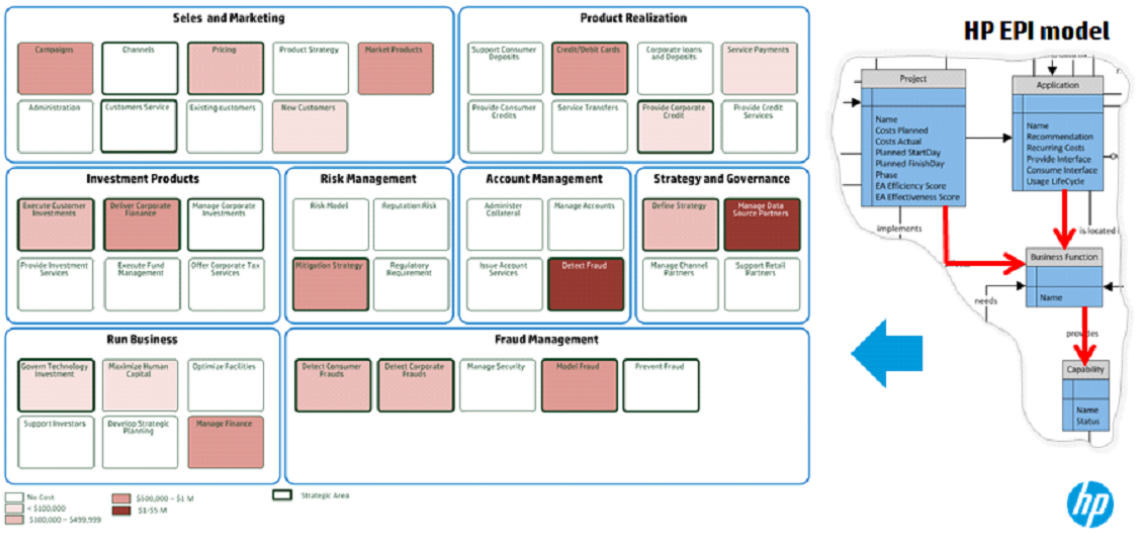
By using the Enterprise Maps (HP EM) extension of selected EPI Model entities, you can automate the generation of views for the needs of the business strategy implementation and the support of the enterprise portfolio management process. Many business alignment views are provided out-of-the-box. With others it is necessary to specify the details through the implementation process.

The following are examples of supported business alignment views:

- Goals and Strategies Summary
- Strategic Alignment
- Capability Status
- Capability Details Report
- Capability Investment Analysis
- Capability Risk Map
- Capability Roadmap
- Capability Cost Summary
- Business Function Investment Alignment Report
- Spend Alignment Report
- Applications by Business Process
- Applications by Business Function
- Application Usage Roadmap
- Application Rationalization
- Application Assessment
- Services Agility Map
- Services Reuse Map
- Demands Summary Report
- Application Deployment Roadmap

Capability Investment Analysis

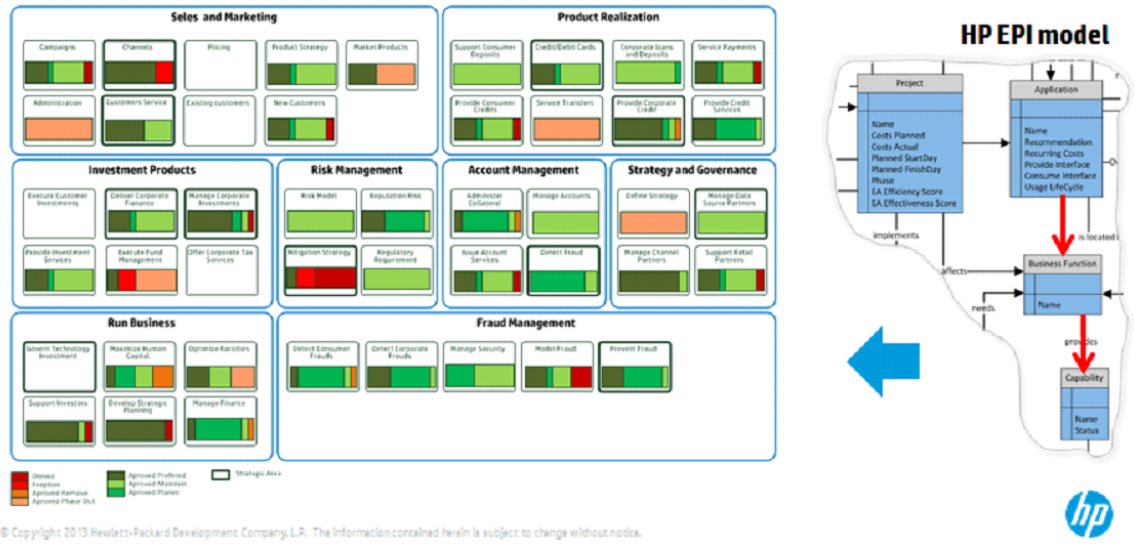
Capability investment analysis requires many steps to complete and the diagrammatic view allows senior management to easily see the measures of investment conformity to the project (shown as shaded colors) and strategically important capabilities (shown as highlighted areas). You can then provide drilldown to a list of concrete projects by a given capability. For more information, see *User Guide*, section *Structure Map Reports* under *Reports*.



Diagrammatic View of Capability Investment Analysis

Capability Risk Map

The capability risk map or structure map presents a summary of applications within individual capabilities that are being evaluated for further support, exception, or dependency or other architectural risks. Red shades show the measure of risk for a given capability. Strategic capabilities are highlighted and you can generate background data for deeper analysis. You can then provide drilldown to a list of concrete projects by a given capability.



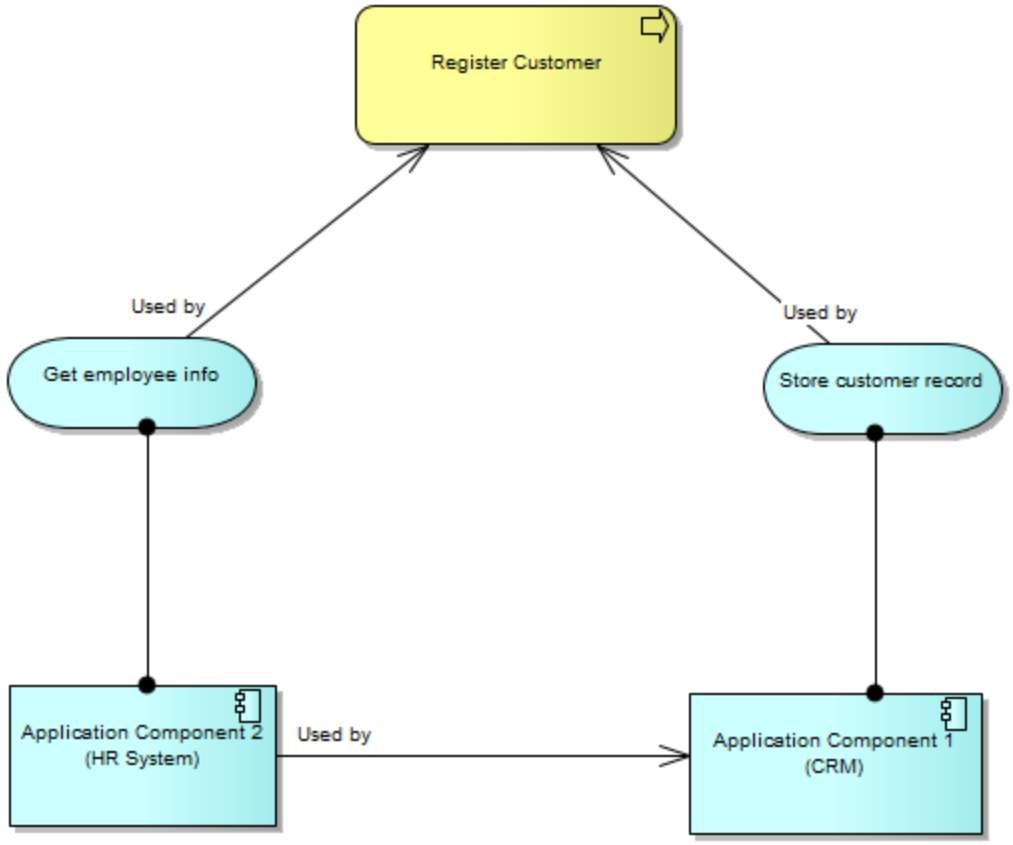
Capability Risk/Structure Map

Chapter 7: Shortcut Solutions

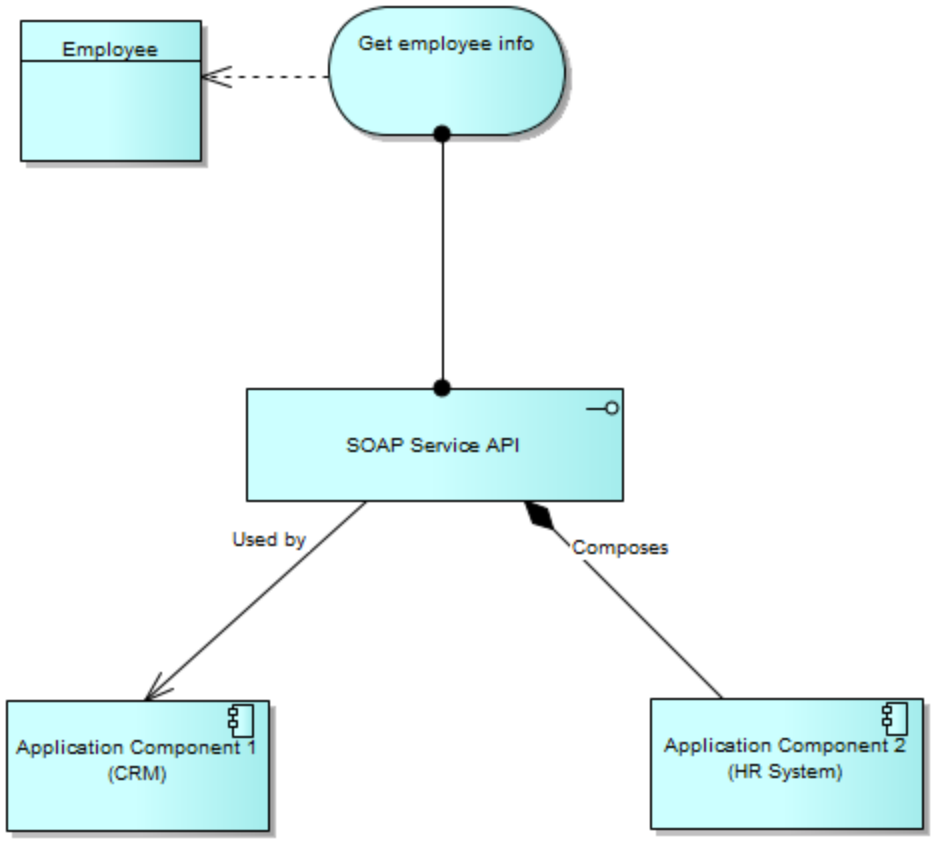
Information about enterprise architecture is stored in multiple places as each data source describes the architecture from different viewpoints. Each viewpoint is mostly associated with the role of the user who enters the information often leaving out information that could be vital for another such role.

The data source could be diagrams created using Archimate modeling tools by different users from different viewpoints. Upon consolidating the data into a single system several inconsistencies arise amongst relationships of entities, specifically with compliance of entities and their relationship with the canonical model.

The illustration below elaborates an instance of one such inconsistency.



Business View of HR and CRM Components Integration



Application Architect View of HR and CRM Integration

After consolidating the two diagrams above to the same system, the system has to figure out that the relationship between the application components is a 'shortcut' only, represented by the complete HR System path composed of SOAP Service API which is used by CRM. Similar issues arise with other data sources like excel sheets, SQL databases and XML files.

Shortcut solution introduces a data model that allows to :

1. Store the data cleaned to comply with the canonical model
2. Import the information about such "shortcuts"

These records are clearly marked to distinguish them from the relationships that comply with the canonical model.

Shortcut solution also introduces a functionality that can resolve the Shortcut by finding the missing intermediaries either automatically or manually with the help of a user interface. Besides that, with Shortcut solution, the complement to the shortcut for data that has been entered in canonical form into the database is calculated and stored in the database as well.

You can define a report that just references the shortcuts and its evaluation does not depend on whether you have entered the data into the system in the canonical form or by using shortcuts.

To conclude, Shortcut solution enables seamless integration of data gathered from different data sources. Moreover, the quality of data can be measured (the number of shortcuts in the data) and controlled.

Chapter 8: Enterprise Architect and Solution Architect Roles

The enterprise architect must be able to guarantee that the new design solution will conform to the accepted and endorsed principles of enterprise architecture governance and work with the solution architect to drive successful solution delivery. The key activities of the enterprise architect role in the process of new business capability delivery are:

- Develop concept
- Assess alignment and impact
- Build into solution architecture approach (with vendor selection and contract negotiation as key subtasks)
- Develop solution architecture (after the solution architect defines development methodology)

The enterprise architect‘s focus is the business and IT alignment and the successful execution of a common approach to building enterprise architectures across the whole organization. The solution architect’s focus is on the methodology and details of a new solution and on solution delivery. Both roles are critical to the new business capability delivery process.

The enterprise architect’s activities guarantee the establishment of a solution concept that conforms to EA governance rules as well as business needs, and defines the architectural approach. The control function of the enterprise architect can also be shown by visualizing an individualized architectural solution.

Chapter 9: Modeling the Business Architecture

The goal of modeling the business architecture is to create a comprehensive list of the following:

- Roles and Actors
- Business Services and Processes
- Business Objects
- A list of application services, which will be needed by business processes
- Create relationships between these elements

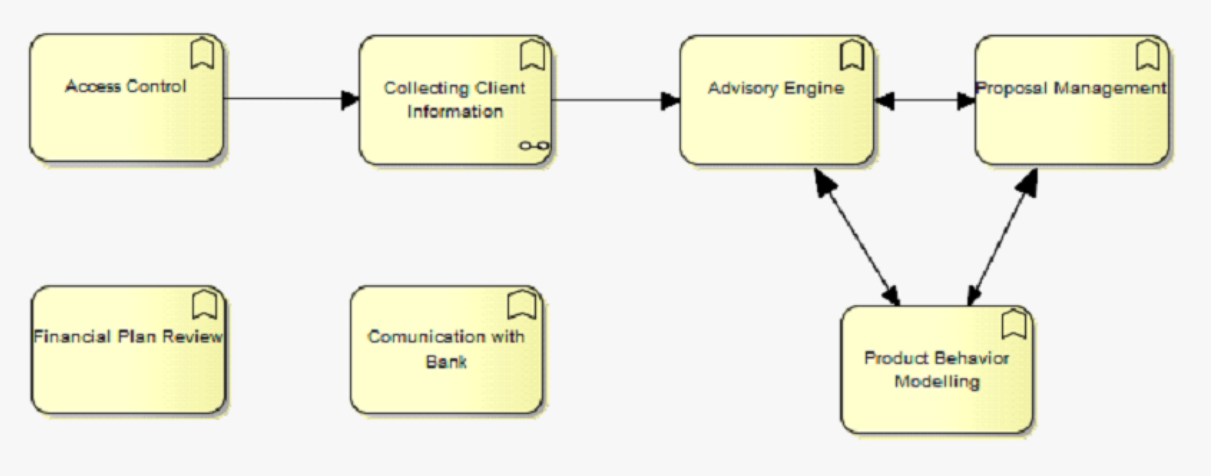
A list of business objects and their relations as an information model is created incrementally. In the high-level design layer only a core list of business objects and their relations is created. It is only in the phase of detailed modeling of business processes that the attributes are filled in with the help of BPMN. This approach also applies for the detailed specification of service integrations.

The business architecture in the FinPlanner case study was designed based on the client's documentation. Workshops with user groups followed. The users participated directly in creating the business architecture model.

Defining Core Business Functions

To create the high-level design, begin with defining your core business functions, and then continue with a specification of business services. This must respond to the customer‘s vision and include the definitions of services by role that will be used to create the business capability list. In this phase, you can go into more detailed or revised specification of deliverables.

In the FinPlanner case study, in the area of collecting client information and facilitating web services for the business service definition, questions aredeveloped and a dialog with the customer conducted to collect the required information. For example, the customer responded that the application must be able to manage the client’s investment portfolio and update personal data. Information collected on roles and related services also helps to define the core business functions.



High-level Design of Business Functions

Once the core business functions are created in the high-level design, you will see the described functional areas in the design model.

Defining Application Services Integration

Apart from the business architecture components there is also the creation of the integration requirements of a new solution with the existing application architecture. These requirements emerge gradually and become more precise over time, eventually creating a detailed specification of the IN and OUT parameters of the service integration. On a high-level design, only the service names are detected. These are then filled in with parameters on the detailed process description level (BPMN). At the end of the specification process, you will have a detailed service integration specification that corresponds to all application processes and all business contexts in which they are called.

The high-level design of application services and integration must constantly be updated so that it can serve as an actual view of the target solution. The high-level design diagram provides a consolidation space for all parts of the business architecture, including the integration layers and the information model.

In the FinPlanner case study, a single application service can be called in the context of a number of business processes. For example, the “Get Finbank products owned by client” application service is called within multiple business process contexts, including the Collecting Client Information business process (shown) and two additional business process modules (partially shown). The model shows the relationships between application services and business processes and conforms to Governance in the area of service design, concretely displaying definitions at a level of meaningful granularity.

Chapter 10: Modeling Application Architecture

After approving the high-level design model of the business layer, the next step is to create the application architecture model. The order of operations and required content at each step is designed according to the principles and recommendations of the TOGAF and other enterprise architecture frameworks. The goals for the design of the application layer architecture model are:

1. Transform the requirements into integration services
2. Create instructions for the realization of the required integration services
3. Fill in the existing application components, which will supply services to the business processes and the functioning new application, in the high-level design diagram.
4. Fill in the application component(s) in the high-level design diagram.
5. Inside of the application component, create the basic decomposition on the level of application functions.
6. Create relations between the application components and the application services.
7. In cooperation with the business architect create the relations between the application services and business process and functions.

Just as for the business layer, on the application layer, the requirement to provide constant updating through a gradual process of specifying an architecture solution leads to a stronger enterprise architecture model.

Chapter 11: Modeling Technology Architecture

The goal of the technology layer is to describe the runtime environment of the application represented by the elements of the ArchiMate 2.0 technology layer. The main building block is the node. It is a combination of a hardware device and system software. This represents an environment for execution artifacts, which are installed on a component node. The artifact represents a concrete physical software product element (application source code, source files, scripts, databases, etc). The task of a senior programmer is to gradually specify the technology layer model, with the key component being a detailed list of all artifacts that will be installed on a single node.

In the FinPlanner case study, you can see the first increment of the FinPlanner application's technology layer. Since the FinPlanner case study includes a classic three-tier architecture, the technology layer contains three nodes: database server, application server, and presentation layer.

The design of the techology layer must correspond to all the nonfunctioning requirements of the FinPlanner application and must be in accord with the enterprise architecture governance rules and policies.

Chapter 12: Architecture Management

Architecture management is designed to offer cohesive business solution to stakeholders for their business needs. The objective is to provide a structure which is transparent, encourages wider involvement from those concerned with architecture changes, enable better control, and facilitate interoperability. The structure acts as a catalyst in bringing together the enterprise resources and reorganize them to present a less complicated, more logical structure. One that leads the organization towards a more efficient and systematic approach in realizing the business goals.

The HP architecture management provides a robust architecture keeping the entire business in focus. It integrates business strategies, architecture and projects by covering and managing the requirements, successfully negating the effects of a weak project planning present in other models.

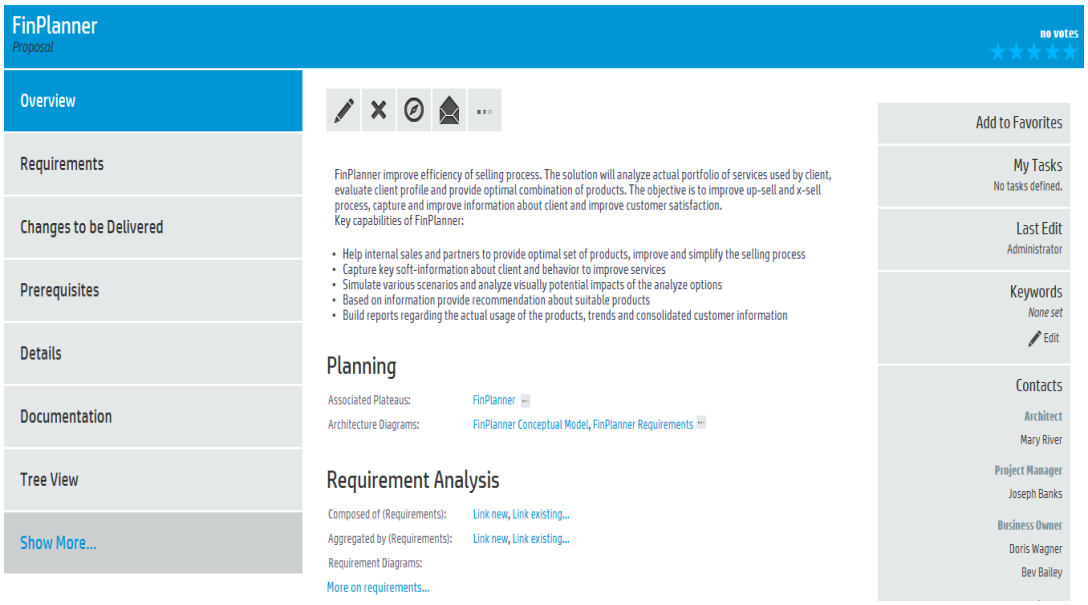
IT related project issues are minimized with the help of proper standards of governance, smoother cross project inter-dependencies and clear cut road-map. These measures result in saving time and money, thereby improving the organizational efficiency by leaps and bounds.

Proposal is created as an integral part of architecture management to capture and cover the organizational demands of the users more effectively. In doing so, proposal offers a comprehensive solution which clearly defines the project, and provides a definite and logical course of action with a clear structure.

Proposal comprises of work breakdown structure involving - initiating plans, setting milestones and executing projects. Proposal is split across requirements for better manageability. The proposal architecture can be created manually or auto generated through a defined template.

The proposal architecture essentially consists of the following elements:

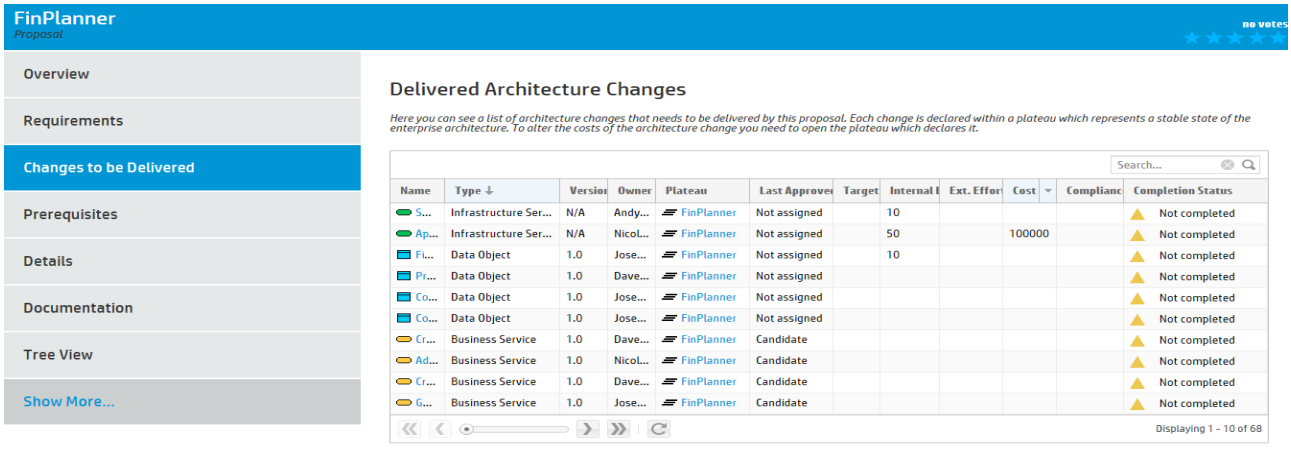
- Package: created to deliver clear business value, linked to the proposal representing a program, project, milestone or task. This package can be auto generated with links to diagrams and plateaus.
- Diagrams: created to describe the proposal architecture state modeled as diagrams showing the baseline and to-be architectures.
- Plateaus: created to show aggregate of elements marked with financial data expressing cost and effort. The elements of plateau are mapped to the requirements so the information of how a requirement is fulfilled is traceable in the architecture. It includes Changes to be Delivered which are the goals or objectives in terms of the task or project.



Once the architecture is created user can build upon it further by adding Target Architecture Changes, and Delivered Architecture Changes, through Plateaus and Changes to be Delivered as described above in HP EM UI directly. Alternatively the changes can be modeled in SparX tool in the following manner:

1. Import data from HP EM
2. Model the architecture in SparX tool (building or designing diagrams)
3. Export data back to HP EM

Users can manage the cost of the architecture changes and enter the costs through Plateaus or Changes to be Delivered in EM UI. This helps speed up the evaluation process assisting the stakeholders make some key decisions.



From proposal high level managers get an overall view of the following aspects :

- Requirement structure and other elements of the proposal on a single page.
- Project health of the proposal by reviewing the completion status.
- Planned architecture devised by other proposals or projects.
- Architecture changes to be delivered.
- Compliance status of architecture changes based on policies.
- Total cost, efforts of architecture and their details.

To conclude architecture management enables:

- The flexibility to create proposals rather quickly and efficiently: either directly in the EM UI; or by integrating with PPM system; or by importing from CSV or other resources.
- Consolidating requirements of the proposals and managing their coverage.
- Creating architecture from proposals.
- Supporting of SparX extension tool that can be used to model architecture changes on top of Archimate 2.
- Artifacts to be linked as requirements and financial data of modeled architecture to be attached.
- User control as they can have an overall view of the complete architecture from a single page. Financial data can be decomposed, weaker estimates can be re-worked and over budgeting can be monitored.

Chapter 13: FinPlanner - Case Study

The content of the Case Study section is a project called FinPlanner. FinPlanner is a banking application, which, through the means of an internet application, will empower clients to contract out their financial or investment aims.

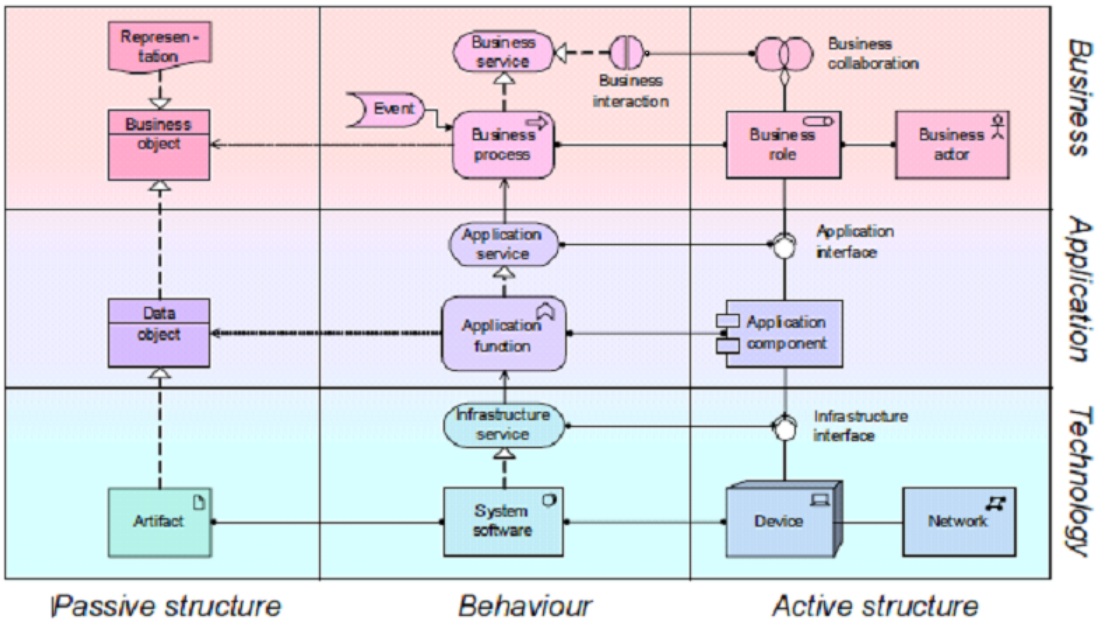
This case study will show one approach, which matches the principles of building an agile enterprise architecture (New Business Capability Delivery Process Support), while simultaneously markedly reducing project risk connected with the definitions of scope, delivery strategy, delivery deadlines and costs.

Case Study Objectives:

- Demonstrate the approach to building an agile enterprise architecture
- Show the role of the Enterprise Architect in this process
- Show the means of working out high-level design solutions.
- Show the support of the EA Manager application in working out a design solution
- Recapitulate the benefits for the project
- Recapitulate the benefits for the whole Enterprise architecture.

FinPlanner Solution Design Case Study

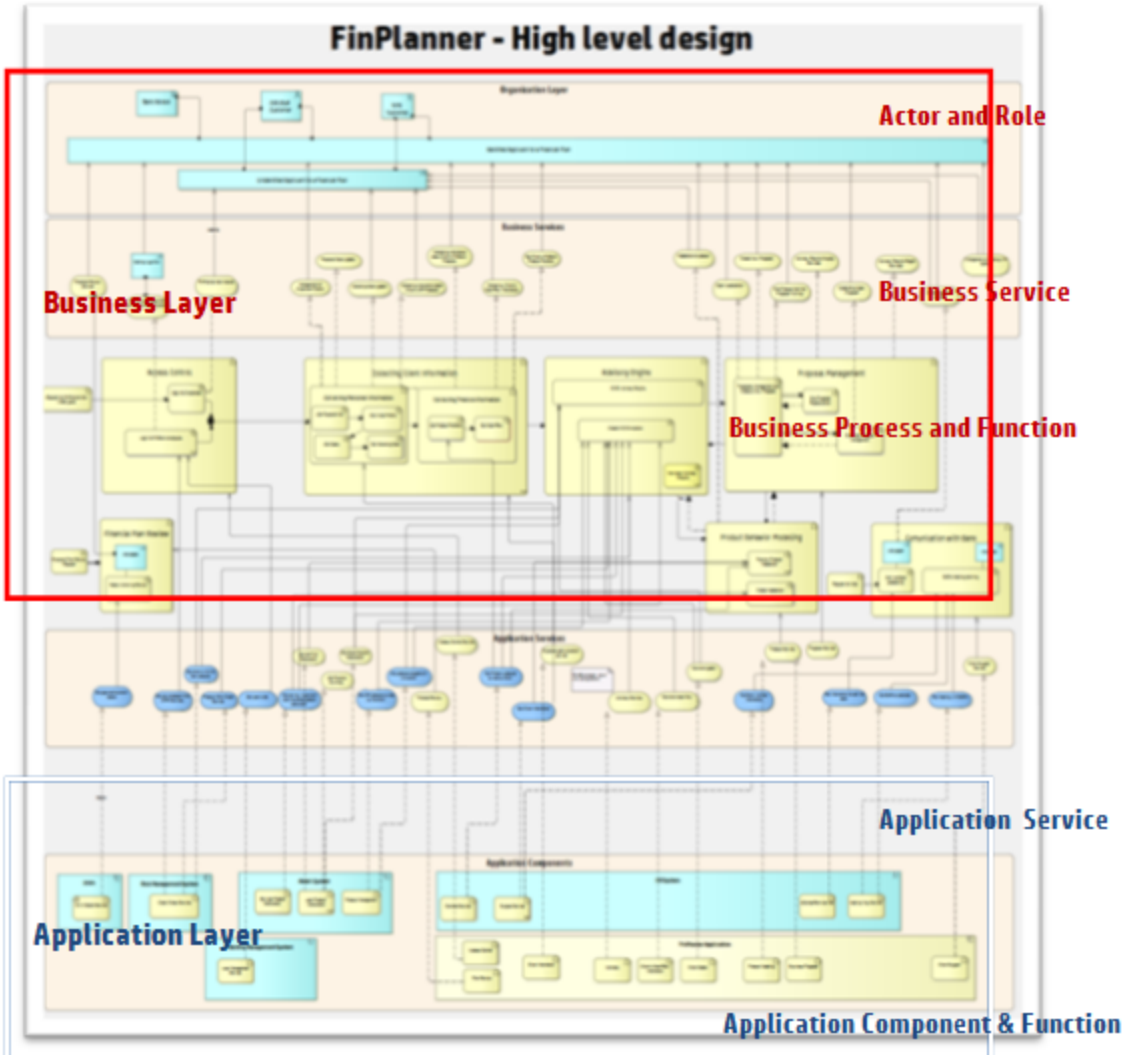
High-level design layers that are descriptive of the future solution design enable the enterprise architect and solution architect to create a list of component solutions as well as descriptions of their mutual relations and interfaces. For the FinPlanner case study, high-level design is created in layers using ArchiMate 2 notation, through the use of a strictly defined set of elements and relations that are also precisely defined. You can find more details about the ArchiMate meta-model in the ArchiMate® 2.0 Specification. The enterprise architecture has three layers: Business, Application, and Technology. The concept of services, when they are being furnished on individual layers and that are consumed through various interfaces forms the basis.



Basic List of Elements on All Layers and Relations

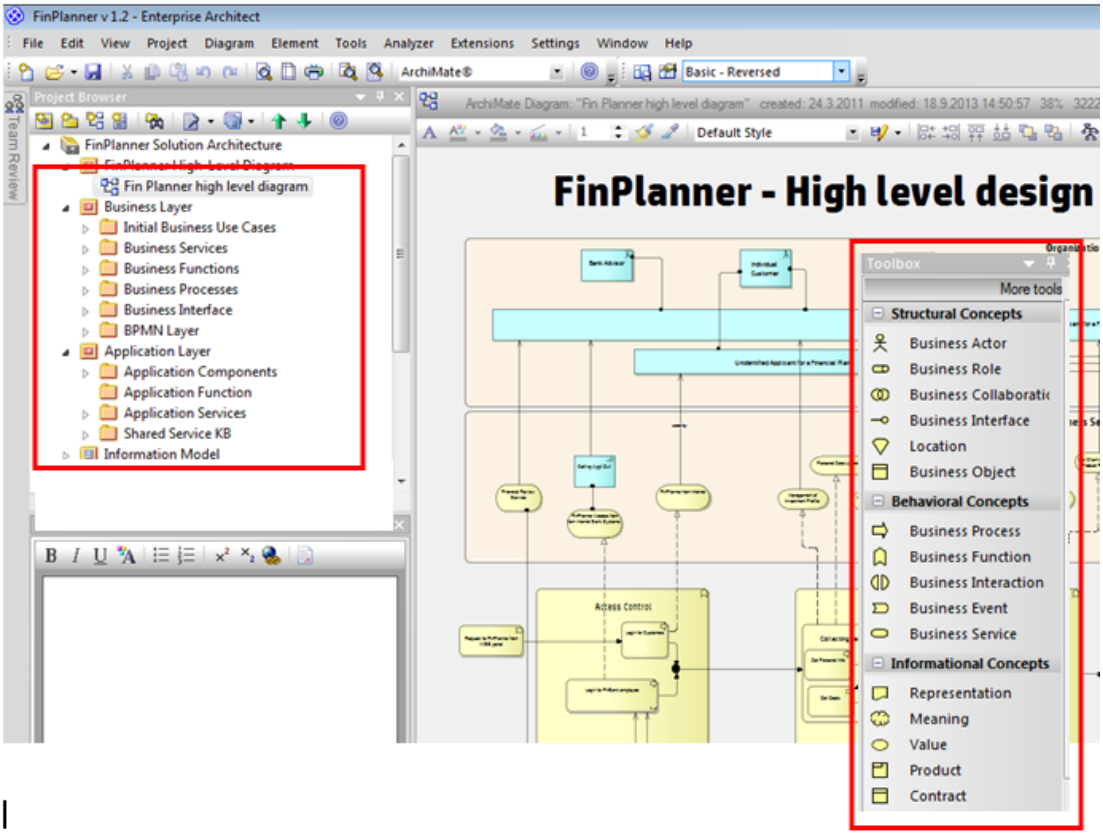
FinPlanner Case Study High-Level Design

The FinPlanner high-level design is shown without a technological layer because it simplifies the diagrammatic view. Sparx Systems Enterprise Architecture version 11 is used as a modeling tool and incorporates the ArchiMate 2 toolbox. The diagram serves as an end-to-end view of the architecture of the future solution. The business architect creates the business layer and the integration architect the application layer. The solution architect works on the solution design as a whole and the enterprise architect works on the architectural design aspects. The technological layer (not shown) falls under the competence of a senior programmer.



Although the FinPlanner case study high-level design is created in Sparx Systems Enterprise Architect version 10, you can also create high-level designs using other modeling Archimate2-compliant tools. For more information about tools for modeling in ArchiMate2, see the publication Mastering ArchiMate in the ArchiMate 2 documentation set.

The FinPlanner high-level design model organization corresponds to the ArchiMate layers and element groups. This simplified view aids in synchronization with the enterprise architecture repository. For customizing the model, the ArchiMate2 toolbox is used. In the view area, elements of the business layer are shown. The toolbox also contains relational concepts for you to use in creating relationships between layout elements. Extension for Sparx Systems Enterprise Architect does not contain any control of language rules, which means that a strong practical understanding of the modeling language is key. As a good starting point, it is recommended that you study existing modeling patterns and that you and your team work through the high-level design model.



FinPlanner Case Study Results Summary

By using Enterprise Maps (HP EM), the approach to delivery of the FinPlanner application yields noticeable benefits both as a discrete project and in managing the architecture of the enterprise. The following benefits are achieved:

High-Level Design Benefits

- A top-level view exists in the enterprise architecture language, including:
  - Effective exercise of the enterprise architect role,
  - Realization of enterprise architecture governance,
  - Implementation of a Business Alignment strategy,
  - Synergy between the enterprise architect and the solution architect,
  - Alignment with the enterprise architecture strategy.
- Export planned new IT assets to the enterprise architecture repository for future architecture capability, including:

  - Enterprise architecture management,
  - Project synergy,
  - Enterprise architecture planning,
  - Updating the output for managing business alignment.
- Import the existing current state of the enterprise architecture so that solution proceeds from the real current enterprise architecture state.
- The solution automatically assumes shared IT components and adds new shared components to the architecture, which:
  - Raises the reuse factor,
  - Cuts delivery time,
  - Lowers deliver price,
  - Improves the quality of the delivery,
  - Reduces the complexity of the enterprise architecture.

Project-Level Design Benefits

- Import the existing current state of the enterprise architecture
  - The solution automatically assumes shared IT components, which
    - Cuts delivery time,
    - Lowers delivery price,
    - Improves quality.
  - Quick and effective definition of requirements on the integration layer.
- Semantic control of the model and design quality.
- Simple and timely scope fixation.
- Provides sponsors with a readable breakdown of the business architecture.
- Transparent mapping of requirements in the solution design.
- Logical and intelligable definition of work packages, which provides a transparent project management and delivery strategy.
- Timely and precise detection of integration layers, which lowers the risk associated with solution integration into the existing application architecture.
- More precise cost planning.

- Simple project coordination through parallel development.
- Top-down approach.

Chapter 14: FinPlanner Case Study Tutorials

Following are FinPlanner tutorials:

- "FinPlanner Case Study Tutorial: Initial Installation and Setup " below
- "FinPlanner Case Study Tutorial: Shared Application Services " below
- "FinPlanner Case Study Tutorial: Shared Application Components" on the next page
- "FinPlanner Case Study Tutorial: Standards Compliance " on the next page

FinPlanner Case Study Tutorial: Initial Installation and Setup

To set up the FinPlanner case study, first a local installation of the Sparx Systems Enterprise Architect version10 modeling environment was made, and then an HP EM instance in an organization‘s private cloud was set up. To access the HP EM application all that is needed is a standard web browser. Follow the instructions given in *User Guide* under section *Extension for Sparx Systems EA*.

A high-level view includes the following steps:

1. Install Sparx Systems EA, and then install the HP EM Extension for Sparx Systems EA. After you finish the installation, the import and export functions are available in Extension for Sparx Systems EA.

2. Import the current architecture from HP EM into Sparx Systems EA. After you finish the import, all elements from your current architecture are available for modeling high-level design and relationships. The elements are shown in layers corresponding to the ArchiMate 2.0 language. This availability accelerates the possibility of reusing existing IT artifacts.

FinPlanner Case Study Tutorial: Shared Application Services

An important part of the solution design of a new application is its integration into the current application and information architecture of the organization. Underestimation in this area is frequently a reason for the failure of an entire project. Shared integration services (in the Service Oriented Architecture framework) are a subset of all application services and are likewise a part of the import from the HP EM repository to the modeling environment. The business architect user of the FinPlanner application can use the instant view of integration services, including their input and output parameters and their data types.

The business architect user can also immediately evaluate the FinPlanner application needs within the existing integration services, insert a concrete integration service into the application services layer, or create relations between the service and a given business process or business function. If a need arises, the business architect can create a request to modify an existing service or to create a design for a new service. HP EM will dynamically update in response to these requests, thereby providing guaranteed integration of services. This simplifies and improves the quality of the draft application design and automatically increases shared IT assets.

FinPlanner Case Study Tutorial: Shared Application Components

Just as in the case of shared application services, after import from the HP EM repository, the architect has immediate access to all existing enterprise architecture application components. These elements then can be used directly in the design layer of the application architecture.

Components of the shared application layer can even include future components, which arise as a part of other projects. This makes it possible to evolve and plan shared IT assets even when they are not part of the current architecture.

FinPlanner Case Study Tutorial: Standards Compliance

Maintaining defined architectural principles and standards greatly impacts the effectiveness of enterprise architecture management. You can use HP EM to define the principles that govern compliance and to automatically enforce adherence to related rules and policies.

In the case of FinPlanner, in synchronization with the HP EM repository, the case study arrived at a control for maintaining principles and standards, which are also a part of the control of the ArchiMate language rules. In cases where language rules are not adhered to, elements that are not in compliance are flagged in red in the high-level diagram.