

Final Project. CS520. Week 7

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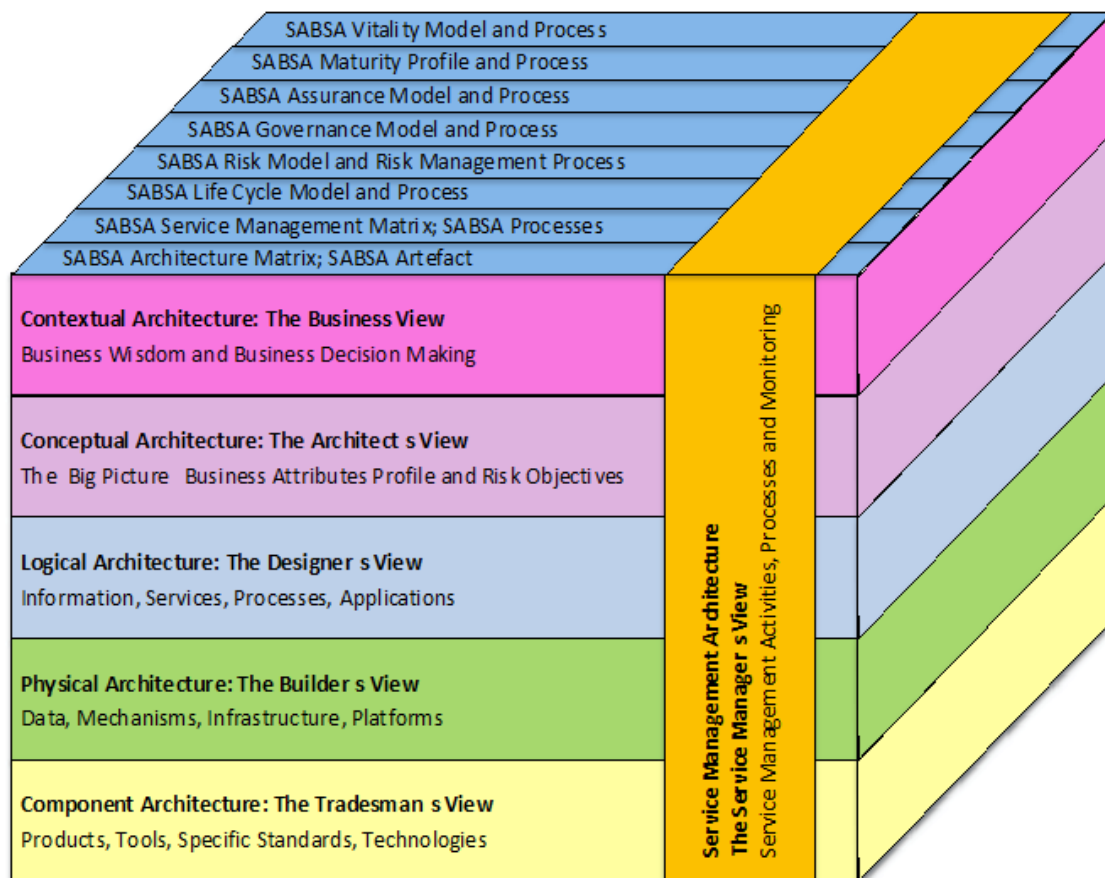
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In this paper we will examine design of an Enterprise Security System for Intergalactic Banking and Services Inc offered by Informatics Inc., specifically we will analyze Contextual Security Architecture layer of SABSA Model.

The following areas will be addressed in the analysis:

1. Business and Security needs of Intergalactic Banking and Services Inc.
2. Identification of deliverables for Intergalactic Banking and Services Inc.
3. Description of deliverable for Intergalactic Banking and Services Inc.

SABSA Model comprises six layers:



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Table 1 (SABSA, n.d.)

This is a holistic approach to an organizational security system development takes each layer as individual component in the mix overall holistic project as a whole. Business/contextual view aims to address business requirements of an organization to build a robust system to meet the requirements.

Business View or Contextual View is a description of the business context in which secure systems must be designed, built, and operated. (Sherwood, J., Clark, A. and Lynas, D., 2005).

Main questions to answer when building a secure systems architecture model are “what?”, “why?”, “how?”, “who?”, “where?” and “when?” We will be looking at assets, risk, processes, structure, geography and time schedule.

Contextual Security Deliverables constitute the following (Sherwood, J., Clark, A. and Lynas, D., 2005):

Business Model – drivers, assets, goals and objectives mapped to SABSA Business attributes

SABSA Business Risk Model – risk assessment matrix

Business Process Model

Business Organization and relationships model

Business Geography model

Business Time Dependency model

In order to collect business requirements to design the contextual deliverables, we undertaken the study of business assets, goals and objective, processes, functions and other factors based on the interviews of various business stakeholders. These are necessary for identifying drivers and risks to propose a Business Risk model.

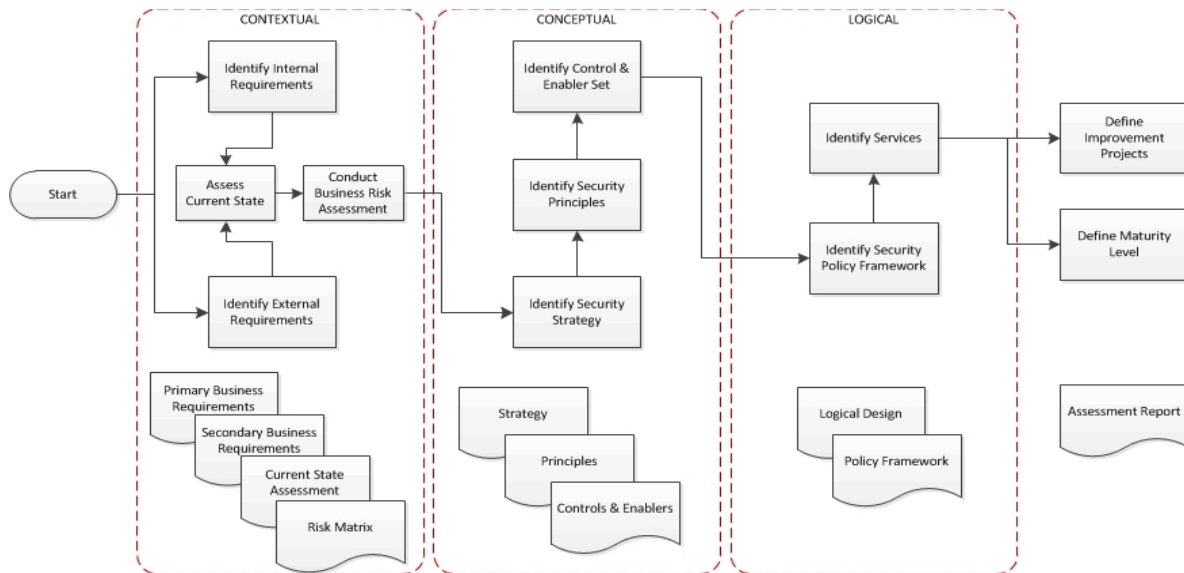


Table 1 Wood (2014)

Business of Intergalactic Banking and Services Inc. are in financial industry and mostly concerned with banking in both retail and corporate fields. It is also reaching in the fields of insurance, investments and trading.

It was identified that the business relies on purpose build in house infrastructure and as any on prem design experiences difficulties in integration with other platforms required for holistic operations. Ideally, Intergalactic Banking and Services Inc needs integration of all datapoints to share data and business intelligence for ease of consumption.

Along with the above challenge, customers of Intergalactic Banking and Service Inc. would prefer a smoother and friendly interface experience which would greatly benefit all stakeholders. From the security perspective a multi factor authentication and a federated organization of services under a SSO infrastructure would be beneficial.

Addressing complex compliance needs while operating in a highly scrutinized world of finances and commerce is also a priority of Intergalactic Banking and Service Inc.

SABSA Risk Assessment Method adopts qualitative measurements to classify risk in a series of bands. Business Drivers and Business attributes, the value of business we wish to protect; Treat Assessment by making a list of threat scenarios; Impact Assessment should threat materialize; Vulnerability Assessment of strengths and weaknesses of systems, processes and culture; Risk Category calculated directly from impact and vulnerability ratings; Risk Mitigation shows risk mitigated and controlled. (Sherwood, Clark & Lynas, 2005)

Business drivers based on the findings of stakeholder's interviews consist of Customer Service, Investor Confidence, Brand recognition, Continuity and Compliance.

4. 1	2	3	4
ID	Business Driver	Business Attributes	Business Requirements
BD01	Exceptional Customer Experience	Usability Protection	Secured operations
BD02	Investor Confidence	Cost Effective Vision for Profitability	Instill confidence in business operations
BD03	Brand Recognition	Reputation Credibility	Easily recognizable brand Adequate awareness of services provided
BD04	Business Continuity	Redundant Resilient	24/7 availability 99.9% SLAs
BD05	SOC Type II Compliance	Compliant	Comply with standards

1	2	5	6	7
ID	Business Driver	High Level Threat	Business Impact	Impact Value
BD01	Exceptional Customer Experience	Unavailability of service Lack of efficient security controls	Loss of Customer	H
BD02	Investor Confidence	Unpredicted rising costs Data Breach	Loss of stakeholders	H
BD03	Brand Recognition	Damage to reputation relating to public data disclosure	Loss of non-tangible value	H
BD04	Business Continuity	Unavailable services	Loss of Revenue	H
BD05	SOC Type II Compliance	Noncompliance	Fines Loss of business partners' confidence	H

1	2	8	9	10
ID	Business Driver	Potential High-Level Vulnerability	Green Field Vulnerability	Green Field Risk Category
BD01	Exceptional Customer Experience	Customer decides to leave	H	A
BD02	Investor Confidence	Investors decide to exit	H	A
BD03	Brand Recognition	Loss to Brand Value	H	A
BD04	Business Continuity	Unable to restore data	H	A
BD05	SOC Type II Compliance	Inadequate Control over Customer data	H	A

1	2	11	12	13
ID	Business Driver	High Level Control Objectives	Target Vulnerability Value	Mitigated Risk Category
BD01	Exceptional Customer Experience	Establish secure access to business platform, secure customer data in transit and rest	L	C

BD02	Investor Confidence	Establish secure access to business platform, secure customer data in transit and rest	L	C
BD03	Brand Recognition	Establish secure access to business platform, secure customer data in transit and rest, governance around 3 rd party partnerships	L	C
BD04	Business Continuity	Implement Redundancy and Risk Management Governance	L	C
BD05	SOC Type II Compliance	Implement and evaluate controls required for SOC Type II Compliance	L	C

Business functions and processes also need understanding to match them to appropriate security process implementations. Based on the interviews conducted processes requiring step by step implementation are in the areas of Identity, Authentication and Authorization review to protect all existing communication channels in order to comply with required standards. The area of exam includes but not limited to all financial transactions, information exchange and PII.

Organizational structure is also under the examination to develop a robust and functional RBAC and authentication procedures.

From geo location, Intergalactic Banking and Service Inc is considered to be an international organization, which bring a certain complexity associated with time zones, cultures as well as local compliance frameworks specific for those regions. It comes with an additional overhead of supporting business 24 hours with efficient transition from one operation center to another to support ongoing operation of the organization.

Time related consideration is imposed by regulated cut off times when it comes to transactions and may affect reconciliation associated with global tax consideration and accounting.

SABSA Model is focusing on addressing Enterprise Security System development process to create agile and resilient Business approach.

References:

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