



KONSEP PENGUKURAN OCTAVE

Dr. Muhammad Said Hasibuan

PERKEMBANGAN OCTAVE

Metode OCTAVE
yang dikembangkan
oleh Carnegie
Mellon Software
Engineering
Institute, Pittsburg.

Varian Octave

Metode OCTAVE (Operationally Critical Threat, Asset, and Vulnerability Evaluation)

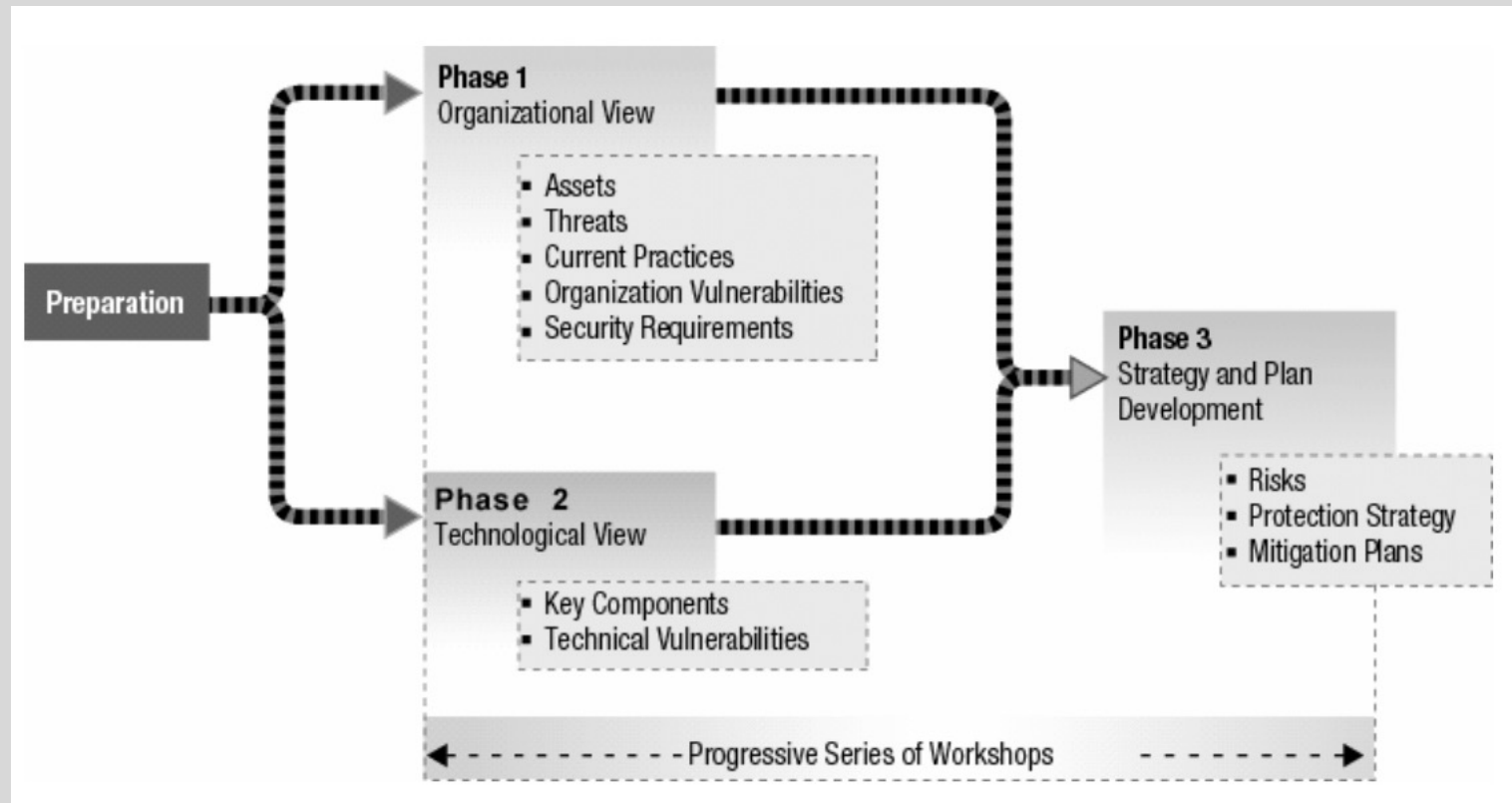
memiliki 3 varian, yaitu :

- OCTAVE,
- OCTAVE-S,
- OCTAVE Allegro

Date	Publication Title
September 1999	OCTAVE Framework, Version 1.0
September 2001	OCTAVE Framework, Version 2.0
December 2001	OCTAVE Criteria, Version 2.0
September 2003	OCTAVE-S v0.9
March 2005	OCTAVE-S v1.0
June 2007	Introduction of OCTAVE Allegro v1.0

TIMELINE OCTAVE

Phase Octave



Fase 1

- Fase ini merupakan tahap dalam mengidentifikasi aset yang dianggap kritis dan berpotensi memiliki ancaman.
- Dimulai dengan mengklasifikasikan aset yang penting bagi organisasi.
- Proses yang dikerjakan pada fase ini adalah identifikasi aset kritis, identifikasi ancaman aset kritis, identifikasi keamanan yang sedang digunakan dan identifikasi kelemahan aset kritis.

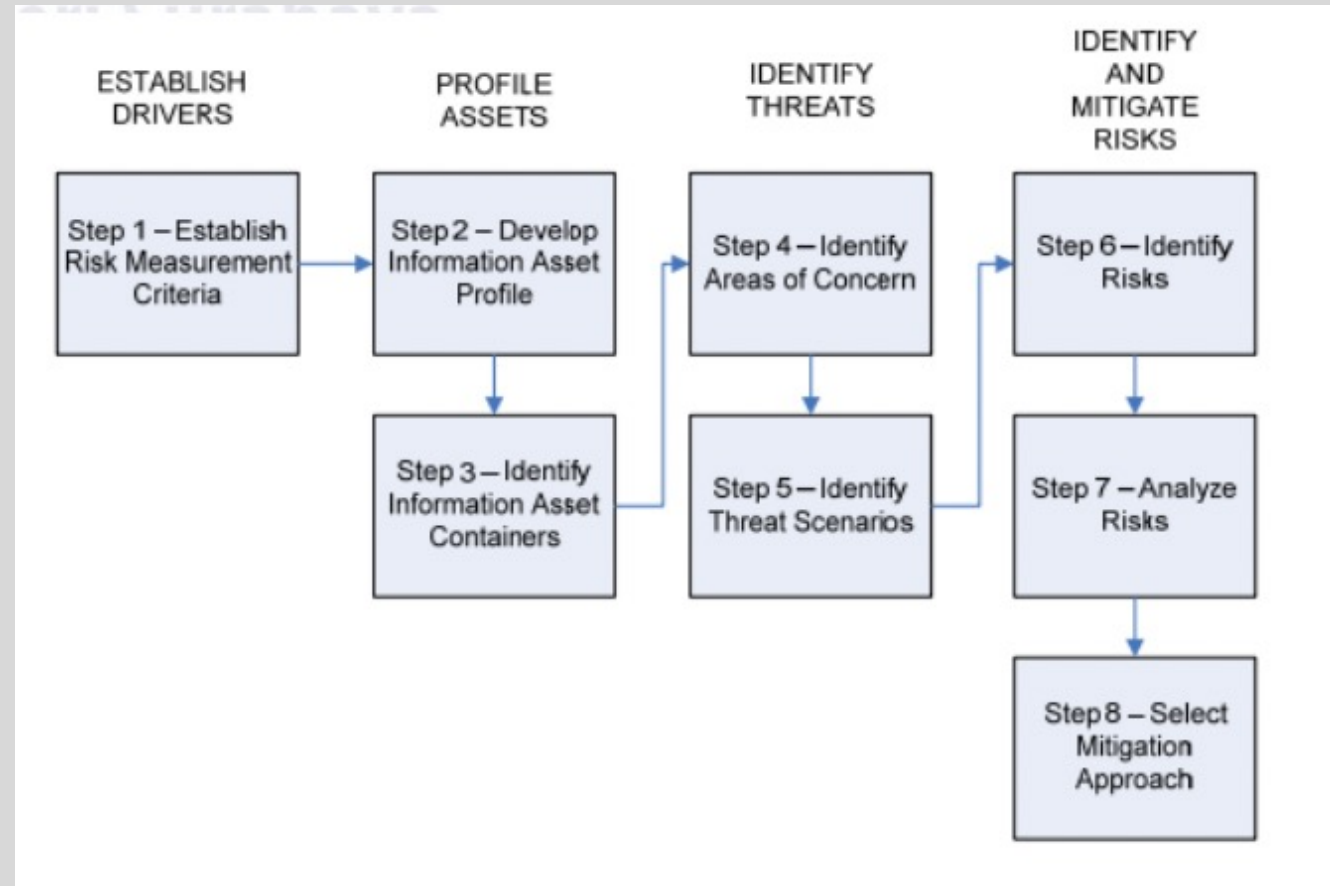
Fase 2

Fase ini merupakan tahap mengidentifikasi kelemahan pada teknologi yang digunakan. Proses yang dikerjakan pada fase ini adalah identifikasi komponen utama dan kelemahan teknologi yang ada saat ini.

Fase 3

Fase ketiga ini merupakan tahap akhir dari metode OCTAVE. Proses yang dikerjakan adalah identifikasi risiko pada aset yang ditemukan, membuat strategi perlindungan dan rencana mitigasi risiko.

8 Tahapan



Worksheet 1

Allegro Worksheet 1	RISK MEASUREMENT CRITERIA – REPUTATION AND CUSTOMER CONFIDENCE		
Impact Area	Low	Moderate	High
<i>Reputation</i>	Reputation is minimally affected; little or no effort or expense is required to recover.	Reputation is damaged, and some effort and expense is required to recover.	Reputation is irrevocably destroyed or damaged.
<i>Customer Loss</i>	Less than _____% reduction in customers due to loss of confidence	_____ to _____% reduction in customers due to loss of confidence	More than _____% reduction in customers due to loss of confidence
<i>Other:</i>			

Worksheet 2

Allegro Worksheet 2	RISK MEASUREMENT CRITERIA – FINANCIAL		
Impact Area	Low	Moderate	High
<i>Operating Costs</i>	Increase of less than _____% in yearly operating costs	Yearly operating costs increase by _____ to _____%.	Yearly operating costs increase by more than _____%.
<i>Revenue Loss</i>	Less than _____% yearly revenue loss	_____ to _____% yearly revenue loss	Greater than _____% yearly revenue loss
<i>One-Time Financial Loss</i>	One-time financial cost of less than \$ _____	One-time financial cost of \$ _____ to \$ _____	One-time financial cost greater than \$ _____
<i>Other:</i>			

Worksheet 3

Allegro Worksheet 3

RISK MEASUREMENT CRITERIA – PRODUCTIVITY

Impact Area	Low	Moderate	High
<i>Staff Hours</i>	Staff work hours are increased by less than _____% for _____ to _____ day(s).	Staff work hours are increased between _____% and _____% for _____ to _____ day(s).	Staff work hours are increased by greater than _____% for _____ to _____ day(s).
<i>Other:</i>			
<i>Other:</i>			
<i>Other:</i>			

Worksheet 4

Allegro Worksheet 4	RISK MEASUREMENT CRITERIA – SAFETY AND HEALTH		
Impact Area	Low	Moderate	High
<i>Life</i>	No loss or significant threat to customers' or staff members' lives	Customers' or staff members' lives are threatened, but they will recover after receiving medical treatment.	Loss of customers' or staff members' lives
<i>Health</i>	Minimal, immediately treatable degradation in customers' or staff members' health with recovery within four days	Temporary or recoverable impairment of customers' or staff members' health	Permanent impairment of significant aspects of customers' or staff members' health
<i>Safety</i>	Safety questioned	Safety affected	Safety violated

Worksheet 5

Allegro Worksheet 5	RISK MEASUREMENT CRITERIA – FINES AND LEGAL PENALTIES		
Impact Area	Low	Moderate	High
<i>Fines</i>	Fines less than \$ _____ are levied.	Fines between \$ _____ and \$ _____ are levied.	Fines greater than \$ _____ are levied.
<i>Lawsuits</i>	Non-frivolous lawsuit or lawsuits less than \$ _____ are filed against the organization, or frivolous lawsuit(s) are filed against the organization.	Non-frivolous lawsuit or lawsuits between \$ _____ and \$ _____ are filed against the organization.	Non-frivolous lawsuit or lawsuits greater than \$ _____ are filed against the organization.
<i>Investigations</i>	No queries from government or other investigative organizations	Government or other investigative organization requests information or records (low profile).	Government or other investigative organization initiates a high-profile, in-depth investigation into organizational practices.

Worksheet 6

Allegro Worksheet 6	RISK MEASUREMENT CRITERIA – USER DEFINED		
Impact Area	Low	Moderate	High

Worsheet 7

Allegro Worksheet 7	IMPACT AREA PRIORITIZATION WORKSHEET
PRIORITY	IMPACT AREAS
	Reputation and Customer Confidence
	Financial
	Productivity
	Safety and Health
	Fines and Legal Penalties
	User Defined

Worksheet 8

Allegro Worksheet 8		CRITICAL INFORMATION ASSET PROFILE	
(1) Critical Asset	(2) Rationale for Selection	(3) Description	
<i>What is the critical information asset?</i>	<i>Why is this information asset important to the organization?</i>	<i>What is the agreed-upon description of this information asset?</i>	
(4) Owner(s)			
<i>Who owns this information asset?</i>			
(5) Security Requirements			
<i>What are the security requirements for this information asset?</i>			
<input type="checkbox"/> Confidentiality	Only authorized personnel can view this information asset, as follows:		
<input type="checkbox"/> Integrity	Only authorized personnel can modify this information asset, as follows:		
<input type="checkbox"/> Availability	This asset must be available for these personnel to do their jobs, as follows:		
	This asset must be available for ____ hours, ____ days/week, ____ weeks/year.		
<input type="checkbox"/> Other	This asset has special regulatory compliance protection requirements, as follows:		
(6) Most Important Security Requirement			
<i>What is the most important security requirement for this information asset?</i>			
<input type="checkbox"/> Confidentiality	<input type="checkbox"/> Integrity	<input type="checkbox"/> Availability	<input type="checkbox"/> Other

Worksheet 9 a

Allegro Worksheet 9a		INFORMATION ASSET RISK ENVIRONMENT MAP (TECHNICAL)	
INTERNAL			
CONTAINER DESCRIPTION		OWNER(S)	
1.			
2.			
3.			
4.			
EXTERNAL			
CONTAINER DESCRIPTION		OWNER(S)	
1.			
2.			
3.			

Worksheet 9b

Allegro Worksheet 9b

INFORMATION ASSET RISK ENVIRONMENT MAP (PHYSICAL)

INTERNAL	
CONTAINER DESCRIPTION	OWNER(S)
1.	
2.	
3.	
4.	
EXTERNAL	
CONTAINER DESCRIPTION	OWNER(S)
1.	
2.	
3.	

Worksheet 9 c

Allegro Worksheet 9c	INFORMATION ASSET RISK ENVIRONMENT MAP (PEOPLE)	
INTERNAL PERSONNEL		
NAME OR ROLE/RESPONSIBILITY	DEPARTMENT OR UNIT	
1.		
2.		
3.		
4.		
EXTERNAL PERSONNEL		
CONTRACTOR, VENDOR, ETC.	ORGANIZATION	
1.		
2.		
3.		

Worksheet 10

Allegro - Worksheet 10		INFORMATION ASSET RISK WORKSHEET		
Information Asset Risk	Information Asset			
	Area of Concern			
	(1) Actor <i>Who would exploit the area of concern or threat?</i>			
	(2) Means <i>How would the actor do it? What would they do?</i>			
	(3) Motive <i>What is the actor's reason for doing it?</i>			
	(4) Outcome <i>What would be the resulting effect on the information asset?</i>	<input type="checkbox"/> Disclosure <input type="checkbox"/> Destruction		
	(5) Security Requirements <i>How would the information asset's security requirements be breached?</i>			
	(6) Probability <i>What is the likelihood that this threat scenario could occur?</i>	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low		
(7) Consequences <i>What are the consequences to the organization or the information asset owner as a result of the outcome and breach of security requirements?</i>		(8) Severity <i>How severe are these consequences to the organization or asset owner by impact area?</i>		
		Impact Area	Value	Score
		Reputation & Customer Confidence		
		Financial		
		Productivity		
		Safety & Health		
		Fines & Legal Penalties		
		User Defined Impact Area		