

EFFICIENCY & LEAN AUDITS

STEFAN VERSTRAETEN
BELGIAN FEDERAL
TREASURY DEPARTMENT

Minneapolis, Minn.
F.T.A. Annual Meeting
Jun. 15-18 2015



ence

Internal Auditor @ Belgian Federal Ministry of Finance (1999 – present)

Ph.D. researcher @ Faculty of Applied Economics – University of Antwerp (1996 – 1999)

Education

Ph.D. in Comparative Tax & Fiscal Policy - Harvard University – JFK School of Government, Cambridge, MA

B.A. – University of Antwerp (B)

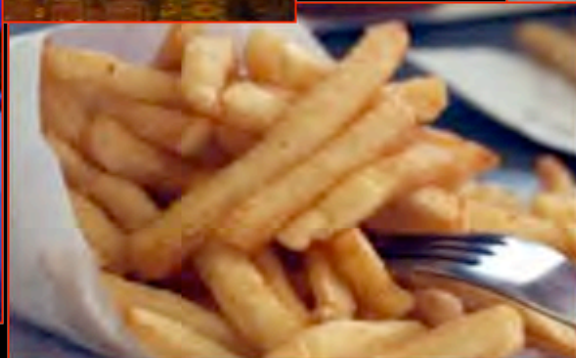
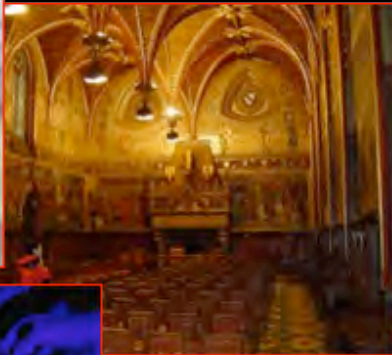
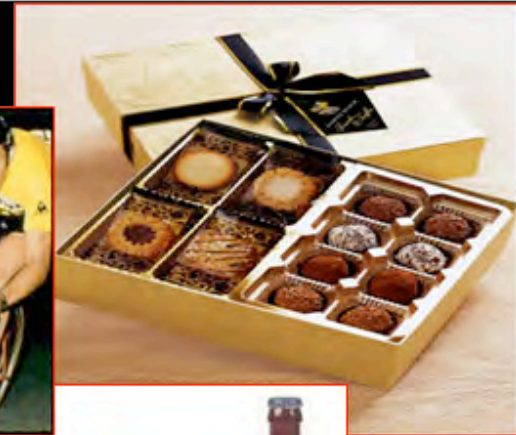
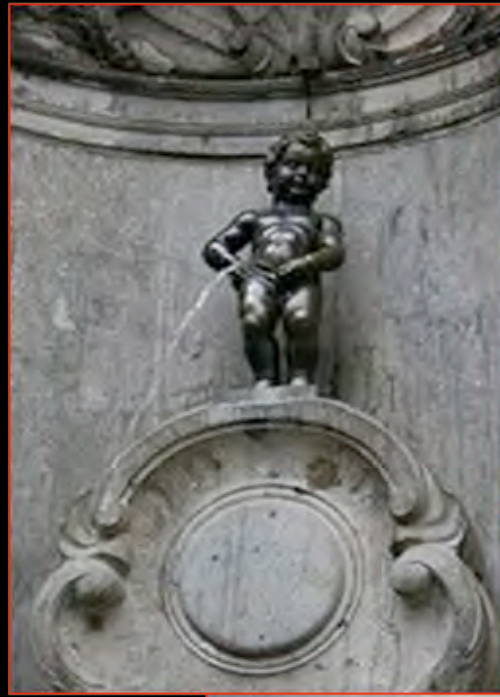
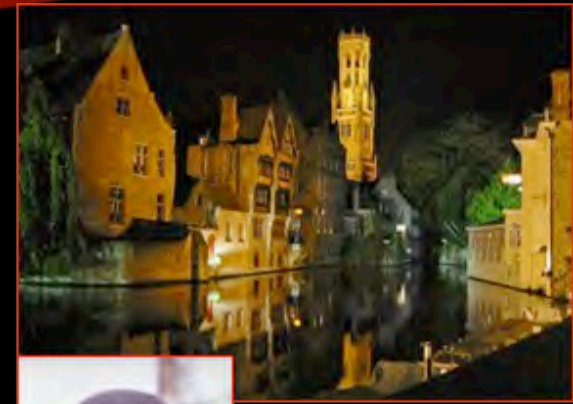
Master of Laws – University of Ghent (B)

Publications

Strategy Deployment for Government – The Brookings Performance Institute, Washington DC (forthcoming)
CGAP – Institute of Internal Auditors



Yes, I'm from Belgium



It's movietime...



Our core business.

Direct taxation

- Personal income tax (**mixed** – 43%)
- Corporate income tax (federal – 10%)
- Legal entities income tax
- Withholding tax on real estate (**regional** – 4%)
- Withholding tax on earned income & advance payments (**mixed** – 48%)



Indirect taxation

- Value added tax (**mixed** – 24%)
- Registration duties, mortgage duties & court fees (**regional** – 3%)
- Estate duties (**regional** – 2%)
- Miscellaneous duties & taxes (federal – 1%)
- Custom procedures upon importation, exportation & transit (european – 1%)
- Excise duties (federal – 6%)
- The packaging charge & the environmental charge (federal – 1%)
- Taxes assimilated to income taxes (**regional** – 2%)

Scope of this presentation

Government needs to be more efficient & effective

Question : More specific please? Do we speak the same language? All at once or step by step?

More and more Government agencies implement 'LEAN' as management technique

Question : LEAN implementation => higher exposure to risk ?

How have we addressed this question in Belgium (Federal & State Level)



Oct. 10th 2014 :

Government Statement of the Prime M

apter on “The modernization of public administration”

management : A greater management autonomy, linked to the development of internal audit

eration : Emphasis on (cost) efficiency, customer focus and innovation. The work processes are
rewed from a LEAN philosophy.

sonal remarks

at do these words mean & what domains do they cover ?

he ‘mindset’ the same in the heads of politicians & government managers (commissioners e.g.) ?

w do we measure we’re (still) on the right path to success ?

at’s the ‘taste’ when we ‘mix’ internal audit with LEAN ?



A picture is worth a thousand words

A word cloud centered around the theme of internal audit. The central and largest text is "Internal audit". Other prominent words include "INDEPENDENT review", "Guidance", "Reputation", "Cash flow", "Implementation support", "Compliance", "Risk", "Provide insight", "Control", "Assurance", "Profitability", "Encourage accountability", "Could practices compromise our reputation?", "Are we controlling what we need to control?", "Forward looking", "Follow up", "Opportunity", "Culture", "Cash flow", "Reputation", "Catalyst for improvement", "Do procedures support our strategy?", "Information useful & reliable?", and "Unnecessary Motion".

A word cloud centered around the theme of lean industries. The central and largest text is "Lean". Other prominent words include "PROCESS", "INDUSTRIES", "Overproduction", "Inventory", "Waiting", "Over-pro", "transportation", "Unnecessary Motion", "Defects", and "Over-pro".

Internal Audit & LEAN.... friendship, love or “ it’s complicated

Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organisation's operations. It helps an organisation accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

It focuses on the 3 E's (ECONOMY, EFFICIENCY & EFFECTIVENESS)

Role of Internal Auditors)

Internal Audit & LEAN....
friendship, love or “ it’s complicated

LEAN system is a production system which is steeped in the philosophy of "the complete **elimination of all waste**" covering all aspects of production **in pursuit of the most efficient methods**

Toyota Production system)

in session => Washington State training on LEAN !!!!!!!

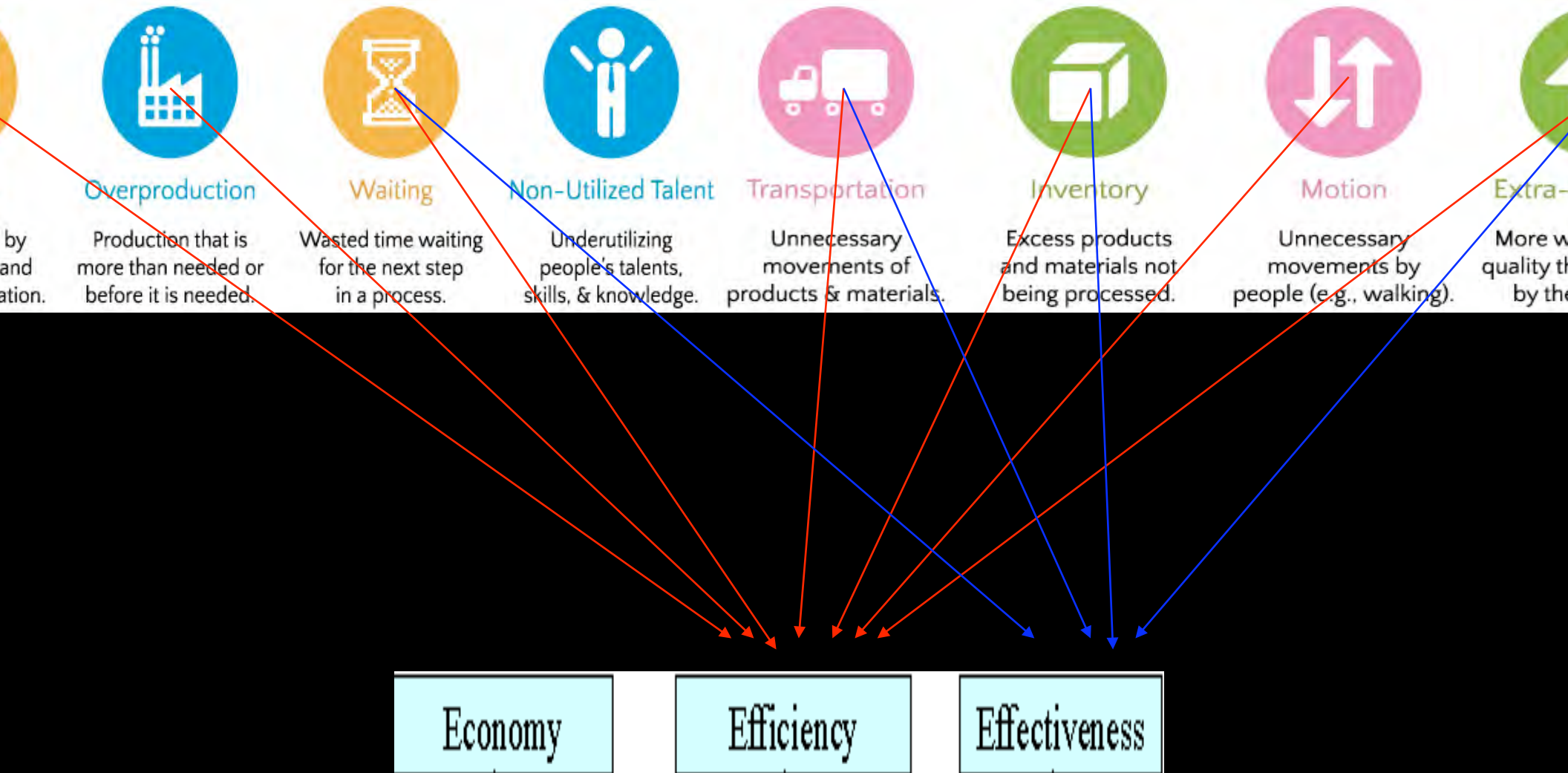


**Internal Audit & LEAN....
friendship, love or “ it’s complicated**

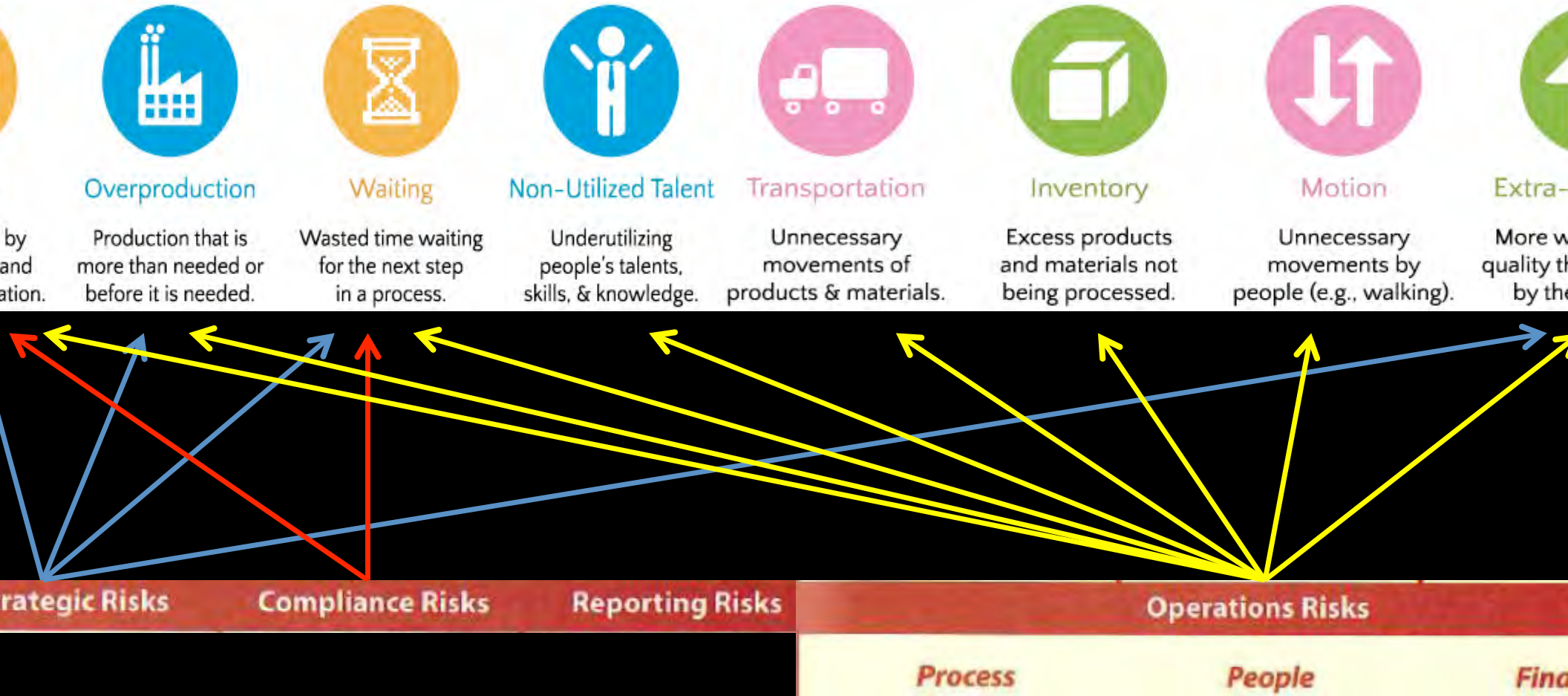
ns logical...but what does these words REALLY mean ?

ver...everybody uses these words but the meaning can
y different, depending on who’s talking !

Let's match LEAN & INTERNAL AUDIT



Let's match LEAN & INTERNAL AU



Efficiency		Effectiveness		Economy
International Audit Organisations (and local subsidiaries)				
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them spending less)	INTOSAI	The extent to which objectives are realised and the relationship between the intended impact and the actual impact of an activity (spending less)	INTOSAI	Minimising the cost of resources, taking regard to the appropriate audit (spending less)
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	Pacific Association of Supreme Audit Institutions	The extent to which objectives are realised and the relationship between the intended impact and the actual impact of an activity	Pacific Association of Supreme Audit Institutions	The relationship between the audit, in terms of goals, services and the results, and the resources used to produce them
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	Government Accountability Office	The extent to which the program is achieving its goals and objectives	Government Accountability Office	The costs and resources used to achieve program results
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	ISSAI	The extent to which objectives are realised and the relationship between the intended impact and the actual impact of an activity	ISSAI	Administrative effectiveness in accordance with sound administrative principles and practices, and management policies
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	ISSAI	The extent to which objectives are realised and the relationship between the intended impact and the actual impact of an activity	ISSAI	Minimising the cost of resources used to achieve its objectives and the appropriate quality, taking into account the impact of the intended results
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	ISSAI	The extent to which objectives are realised and the relationship between the intended impact and the actual impact of an activity	ISSAI	Minimising the cost of resources, taking into account the impact of the intended results
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	IIA - Global Chapter	The degree (including quality) to which intended objectives are achieved	IIA	Minimising the cost of resources, taking into account the impact of the intended results
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	IIA - Global Chapter	Measuring the extent to which intended objectives are achieved	IIA - Global Chapter	Measuring the extent to which intended objectives are achieved
COSO				
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	COSO	Providing a valid foundation for determining the degree of assurance provided to stakeholders		Measuring the extent to which intended objectives are achieved
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	COSO	Measuring the extent to which intended objectives are achieved		Measuring the extent to which intended objectives are achieved
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	COSO	Measuring the extent to which intended objectives are achieved		Measuring the extent to which intended objectives are achieved
Non-audit International Management Standards				
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	COBIT	Measuring the extent to which intended objectives are achieved		Measuring the extent to which intended objectives are achieved
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	ITIL	Measuring the extent to which intended objectives are achieved		Measuring the extent to which intended objectives are achieved
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	ISO	Measuring the extent to which intended objectives are achieved		Measuring the extent to which intended objectives are achieved

Two remarks....
 -common words but so different meanings
 -why is 'economy' uncharted territory

		Effectiveness		Economy
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	OECD	The extent to which intended objectives are achieved	OECD	Ensuring the necessary resources (financial, human, etc.) to meet the needs of the business
Europe				
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	Lelidraad Organisaatiebeheer en Vlaamse Overheid	Measuring the extent to which intended objectives are achieved		Measuring the extent to which intended objectives are achieved
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	Rijksoverheid	Measuring the extent to which intended objectives are achieved		Measuring the extent to which intended objectives are achieved
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	Instituut voor Financiële en Financiële Services van Engeland & Wales	Measuring the extent to which intended objectives are achieved		Measuring the extent to which intended objectives are achieved
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	University of Cambridge Registrar's Office	Measuring the extent to which intended objectives are achieved	University of Cambridge Registrar's Office	Measuring the extent to which intended objectives are achieved
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	Ministry of Finance - Slovak Republic	Measuring the extent to which intended objectives are achieved	Ministry of Finance - Slovak Republic	Measuring the extent to which intended objectives are achieved
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	UK National Audit Office	Measuring the extent to which intended objectives are achieved		Measuring the extent to which intended objectives are achieved
United States of America				
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	Texas State Auditor	Measuring the extent to which intended objectives are achieved	Texas State Auditor	Measuring the extent to which intended objectives are achieved
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	Illinois State Auditing Act	Measuring the extent to which intended objectives are achieved	Illinois State Auditing Act	Measuring the extent to which intended objectives are achieved
Australia				
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	Australian Government Audit Board	Measuring the extent to which intended objectives are achieved	Australian Government Audit Board	Measuring the extent to which intended objectives are achieved
India				
Efficiency Definition (Impact, in terms of goals, services and whether the resources used to produce them)	Institute of Cost Accountants in India	Measuring the extent to which intended objectives are achieved		Measuring the extent to which intended objectives are achieved

Any common ground for ECONOMY ?

Economy	Remarks
minimizing the cost, having regard to the appropriate quality	...And how long do I have to wait for it?
resources available in due time, in and of appropriate quality and quantity and at the best price	Pretty good, now let's make it sMart
the resources have been used economically, and if the quality and the quantity of the inputs are optimal and suitably co-ordinated	...And how long do I have to wait for it?
acquiring the necessary resources (finance, staff, buildings, equipment, etc.) to carry out an activity at the least cost	...So we forget for example the quality aspect?

Any common ground for EFFICIENCY ?

Efficiency	Remarks
relationship between the output & the resources used to produce	Measured in what way ? In ALL ways ?
the costs & resources used to achieve a result	How does quality fit in here ?
<p>whether the same output could have been achieved with fewer resources...or...</p> <p>if the same resources could have been used to achieve better results (quantity & quality)</p>	<p>First part too much focused on COSTS</p> <p>Second part looks back AFTER the damage is done</p>
doing it with fewer resources	Not only a rope tied around the neck...but what about quality ?
the most productive & economical use of resources	Not only limited to \$ because of the link with being productive, but what about quality standards ?
achieving the objective with the minimum amount of time, money, people & other resources	Cost driven is one thing, but safeguarding quality...

Any common ground for EFFECTIVENESS ?

Effectiveness	Remarks
the relationship between the intended impact & the actual impact	Good starting point, but how will this be measured ?
achieving the goals and objectives	Too vague, could be a rope tied around the neck if the objectives are not defined SMART enough.
the cost of the outputs of an activity...and... the conformance of those outputs to a specification or need	Too much focus on costs. Is there a quality checklist too?
delivering a better service or getting a better return for the same amount of expense, time or effort	Beware of the 'scope creep'...the baseline should be about achieving a policy. Avoid the 'isolated' question if 'we could have done better' !
measuring the results against objectives and resources spent to achieve those objectives	At any cost? And what if you 'got some help' from f.e. a growing economy?



Let's try to redefine the

economy

ent to which resources are available to meet the
eed quality in the agreed amount, at the agreed t
at the best price.



Let's try to redefine the

efficiency

...ent to which resources are used to produce output
...ch comply with the agreed quality, in the agreed
...ount, and at the appointed time.



Let's try to redefine the

effectiveness

ent to which anticipated objectives and policy
ects are realized as a result of its activities and
puts, and that unintended effects are avoided.

Wrap-Up



Effectiveness

Objectives

Measurable effects & outcome

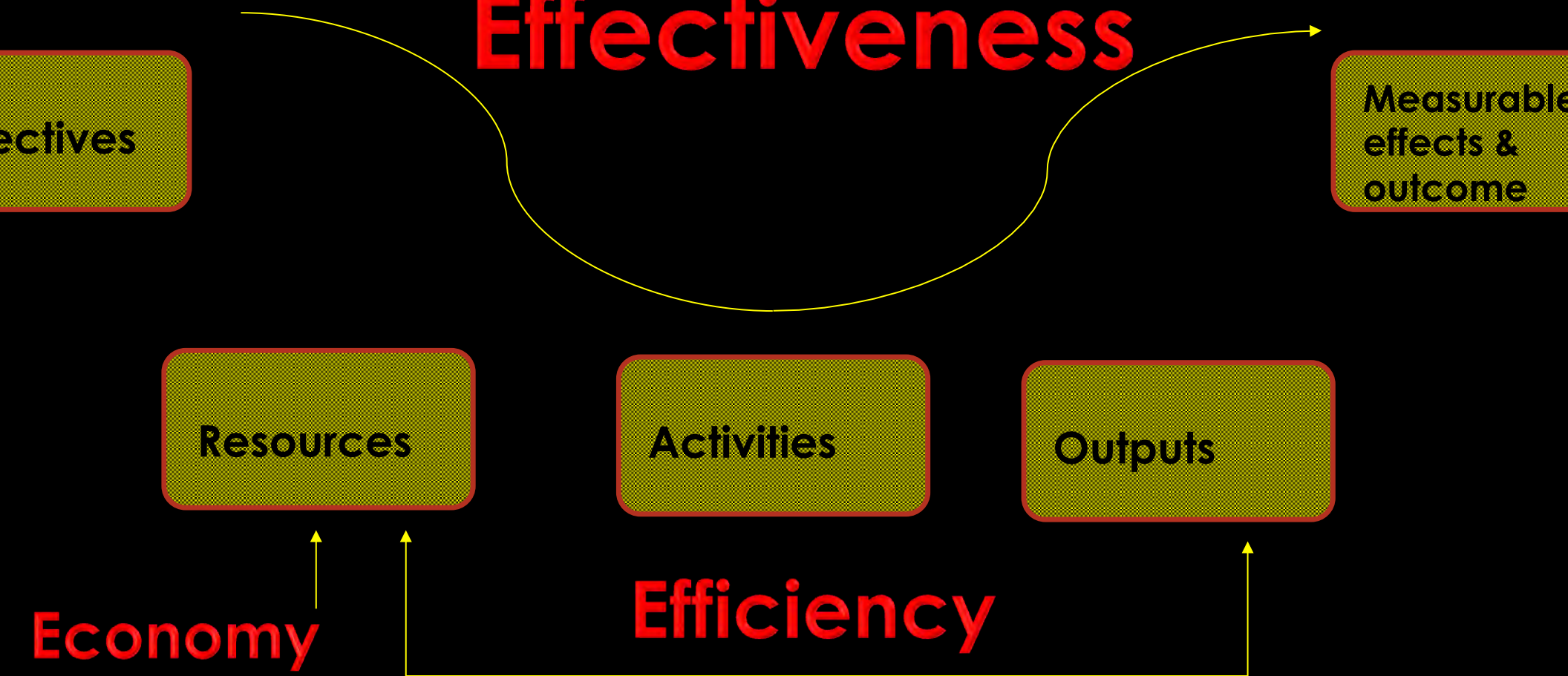
Resources

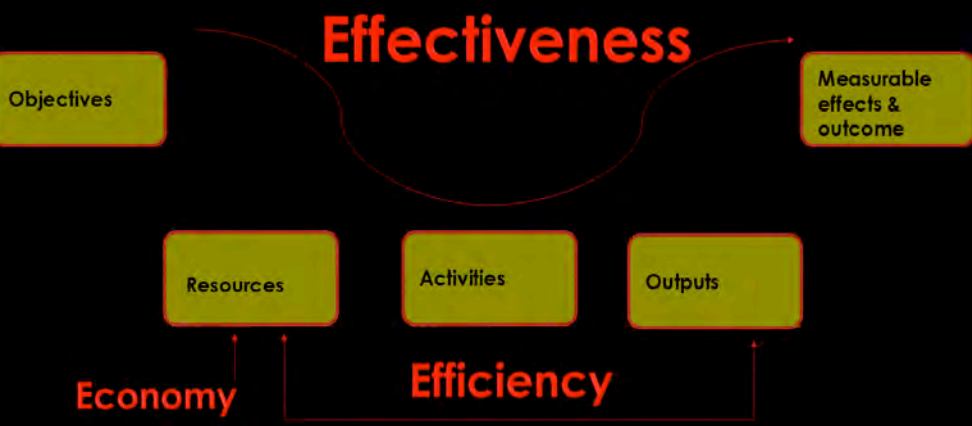
Activities

Outputs

Economy

Efficiency





Economy

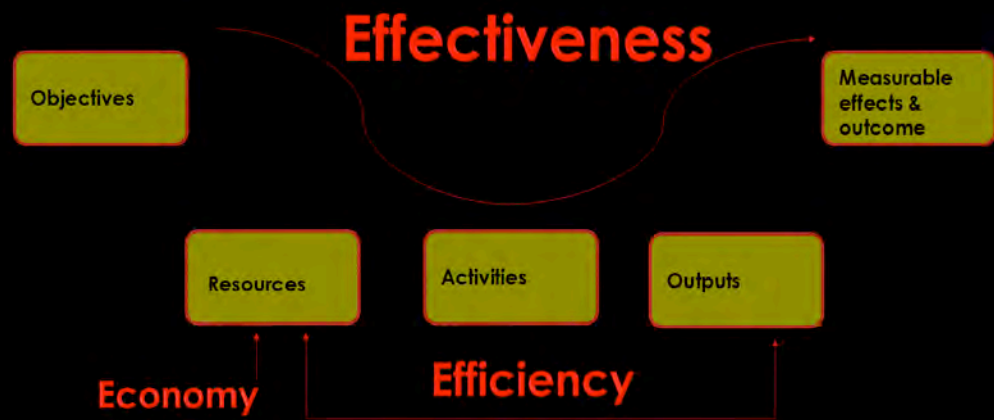


Dimension	Does not meet the dimension	Implications for waste	Basic Business Risk	Example
Time	The resource is available earlier than agreed (too soon)	Inventory / Overprocessing	Process	Office utilities
Time	The resource is available but not deployed	No extra activities	People / Process	Balance people work
Time	The resource is available later than agreed (too late)	Waiting / Overprocessing / Motion	Compliance / Process / People / Financial	Hiring temporary
Time	The resource is not available when it's needed	Waiting / Overprocessing	Compliance / Process / People / Financial	'Red tape'
Quality	The deployed resource satisfies more than agreed	Overprocessing	Financial	? Less but more people?
Quality	The deployed resource does not meet the requirements	Defects	Strategic / Compliance / Process / People / Financial	Datamining contracts inside Government
Amount	The resource is available in a larger quantity than agreed (too much)	Waiting / Overprocessing / Transport	Financial	Ask 100 to get 1000
Amount	The resource is available in a lower quantity than agreed (not enough)	Inventory / Overprocessing	Process / People / Financial	Budget restriction Shutdown
Price	The price of the resource is too high	No extra activities	Compliance	Sometimes no option than out
Price	The resource can be replaced by a cheaper alternative	No extra activities	Strategic	Long term Government contracts

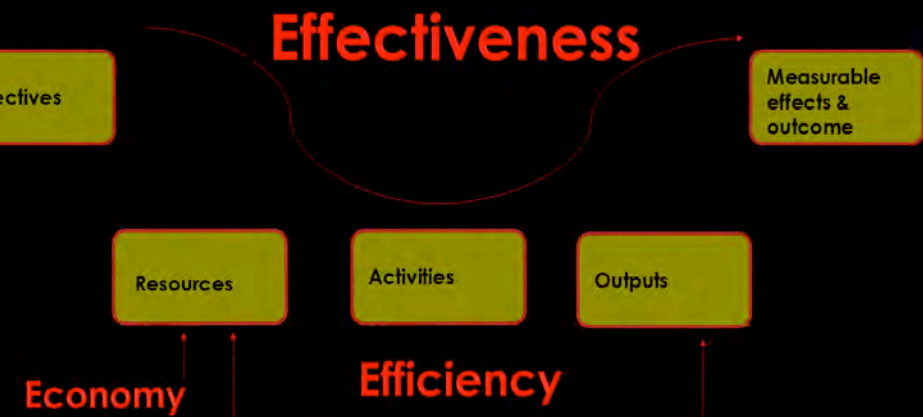
What are resources ?



	resources	Economy (availability)	Efficiency (use)
-01	Inputs	X	X
-02	Consumables	X	X
-03	Utilities	X	X
-04	ICT-applications	X	X
-05	Other resources	X	X
-06	Contributors	X	X
-07	Channels	X	X
-08	Legislation		X
-09	Instructions	X	X
-10	Workplaces	X	X



Dimension	Explanation	Basic Business Risk	Example
Waste	Deployment of resources that were not asked for / necessary	Process / People / Financial	Long term contracts changing world (IT e
Speed	Number of outputs in function from the norm	Strategic / Operational	Legal requirements
Scale effects	More outputs => fixed cost per output unity lowers	Strategic / Operational	Insourcing' the activi related activities
Learning effects	More outputs due to increasing experience from the performers	Strategic / Operational	Employee retention / v. Management care
Different method	Different method of working	REVIEW ALL RISKS !!!	New legislation, miss



Code	Dimension	Further refinement	Basic Business Risk	Example
ffec-01	Proposed results & policy effects	Define them SMART	Strategic Risks	Assertive citizens with good political intentions
ffec-02	Results & policy effects	Demonstrate designate measurements Extent to which the expected results and policy effects are achieved Results and policy effects are the result of one's own activities and outputs	Strategic Risks	Higher compliance rate when the economy is doing well

2 specific topics for
the die-hard fans...



Efficiency & Economy in a 'LEAN' world

Category	Subcategory	Action	More specific
Efficiency	Transportation	Transporting from to	
Efficiency	Inventory	Keeping in stock	...things that are out of order / are not used anymore
Efficiency	Waiting	Waiting for	
Efficiency	Overprocessing	Assigning	
Efficiency	Overprocessing	Searching for	
Efficiency	Defects	Repairing / fixing	
Efficiency	Interferences	Encountering nuisance	...while working
Economy	Too early	Making available	Earlier than agreed
Economy	Too soon	Making available	Later than agreed
Economy	Not available	Not being available	...on moments when needed
Economy	Available but not deployed	Making available	...capacity that is not deployed
Economy	Quality too high	Making available	...with a higher quality than agreed
Economy	Quality not conform requirements	Making available	...which not meet the requirements
Economy	Quantity too much	Making available	...in a quantity higher than agreed
Economy	Quantity too low	Making available	...in a quantity lower than agreed
Economy	Price too high	Making available	...at a price that is too high
Economy	Cheaper alternative	Making available	...where a cheaper alternative is also available

Government & Data

7 wastes of Mitsuhiko Ohno (LEAN)	Action	Object	More specific
Transportation	Transporting	Data	
Waiting	Waiting for	Data	
Processing	Retrieving / Accessing	Data	...from the citizen/client that is also available at third-parties
Processing	Retrieving / Accessing	Data	...from the citizen/client that is also available internally (at another service)
Processing	Retrieving / Accessing	Data	...from the citizen that is not used afterwards
Processing	Tracking & managing	Data	...that is not considered as an authentic source
Processing	Tracking & managing	Data	...that is not used
Processing	Tracking & managing	Data	...with higher requirements than agreed
Processing	Tracking & managing	Data	...that not meet the requirements
Processing	Checking	Data	
Processing	Converting	Data	...from paper to electronic...
Processing	Approving	Data	...because the manager HAS to do something, even if/when w... with approved pre-filled data...
Processing	Copying / Scanning / Typing over / Printing to	Data	...from paper to electronic...
Processing	Searching for	Data	
Defects	Correcting	Data	

Assessment framework (work in progress)

	Strategic risks	Compliance risks	Reporting risks	Operation Risks	LEAN - Risk assurance
Defect	X	X		X	Continuous auditing
Overproduction	X			X	Intense auditing
Waiting	X	X		X	Continuous auditing
Non-utilized talent				X	Medium / Low auditing
Transportation				X	Medium / Low auditing
Inventory				X	Medium / Low auditing
Motion				X	Medium / Low auditing
Extra-processing	X			X	Intense auditing

	Medium / Low auditing
	Intense auditing
	Continuous auditing

Don't put **PROCESS CONTROLS** in the backseat when driving more **LEAN** process...designing **LEAN** with control considerations does not mean "putting up with fat" ...

Design 4 types of control strategies in the **LEAN – Process – Redesign**

ACCESS CONTROLS

Physical access (badges & security) but also access to ICT (identification, authentication and logs)
EXAMPLE : one type access (read, write, delete) and a "last activity only" log-type

REGISTRATION CONTROLS

Strong validations & permissions
EXAMPLE : non or partial existence of a well documented/modelled business process

REGULATING FUNCTIONS

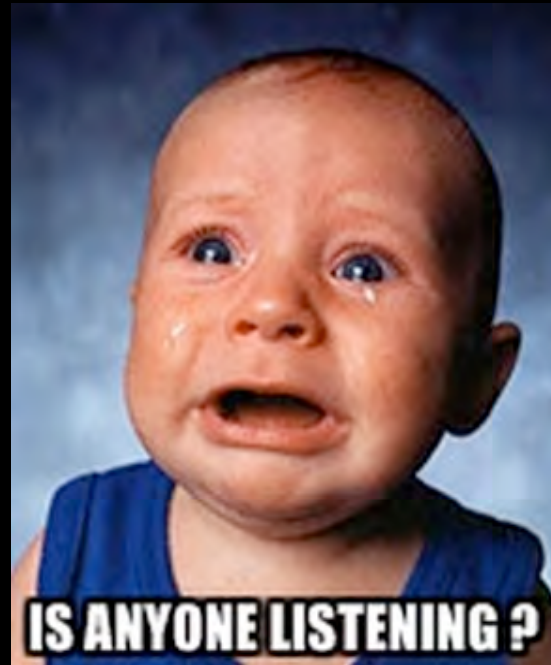
Separate **AUTHORIZATION – PROCESSING – ASSET CUSTODY – ASSET RECORD** (reduce theft risk)
EXAMPLE : 2 different passwords (validation / payment) but all linked to ONE agent

REGISTRATION CONTROLS

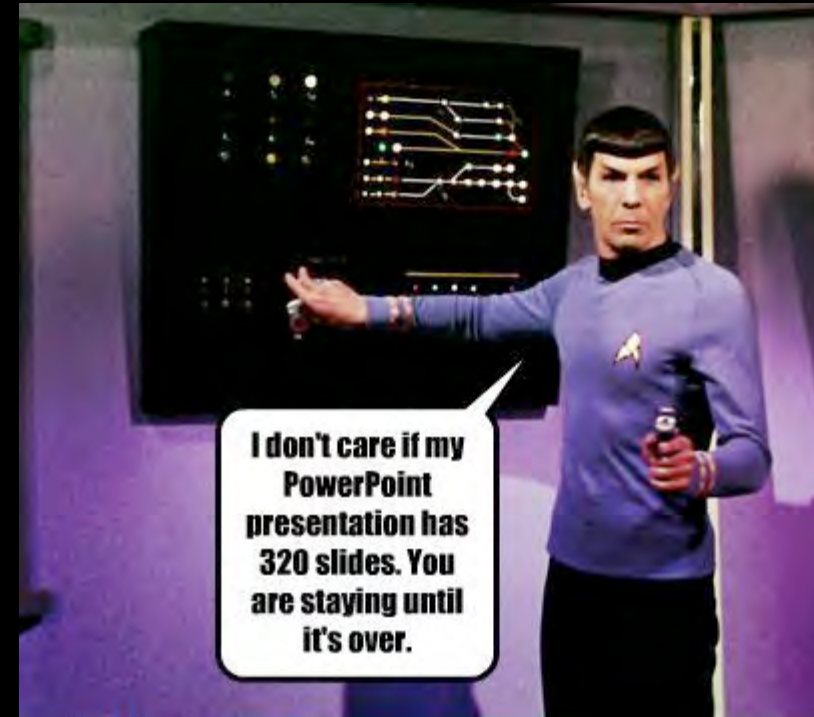
Limit drop-down boxes and/or pre-formatted or pre-filled data (reduce fraud & error risks)
EXAMPLE : belgian social security number



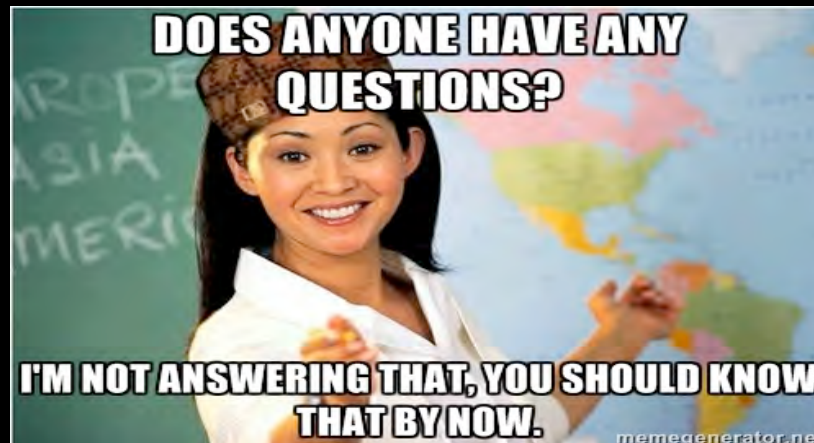
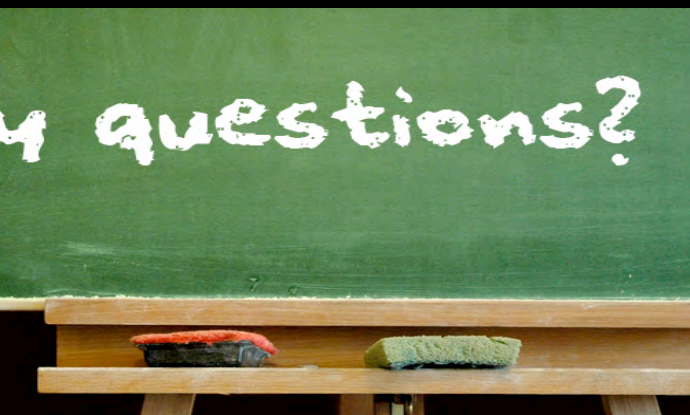
Math by PowerPoint



IS ANYONE LISTENING ?



I don't care if my PowerPoint presentation has 320 slides. You are staying until it's over.



DOES ANYONE HAVE ANY QUESTIONS?

I'M NOT ANSWERING THAT, YOU SHOULD KNOW THAT BY NOW.

memegenerator.net



Anyone who says there are no stupid questions has never been in the meetings I've been in.

manCards



stefan.verstraeten@minfin.fed.be



www.facebook.com/verstraetenstefan



<https://be.linkedin.com/pub/stefan-verstraeten/bb/a/99>



