
Crafting An Offering

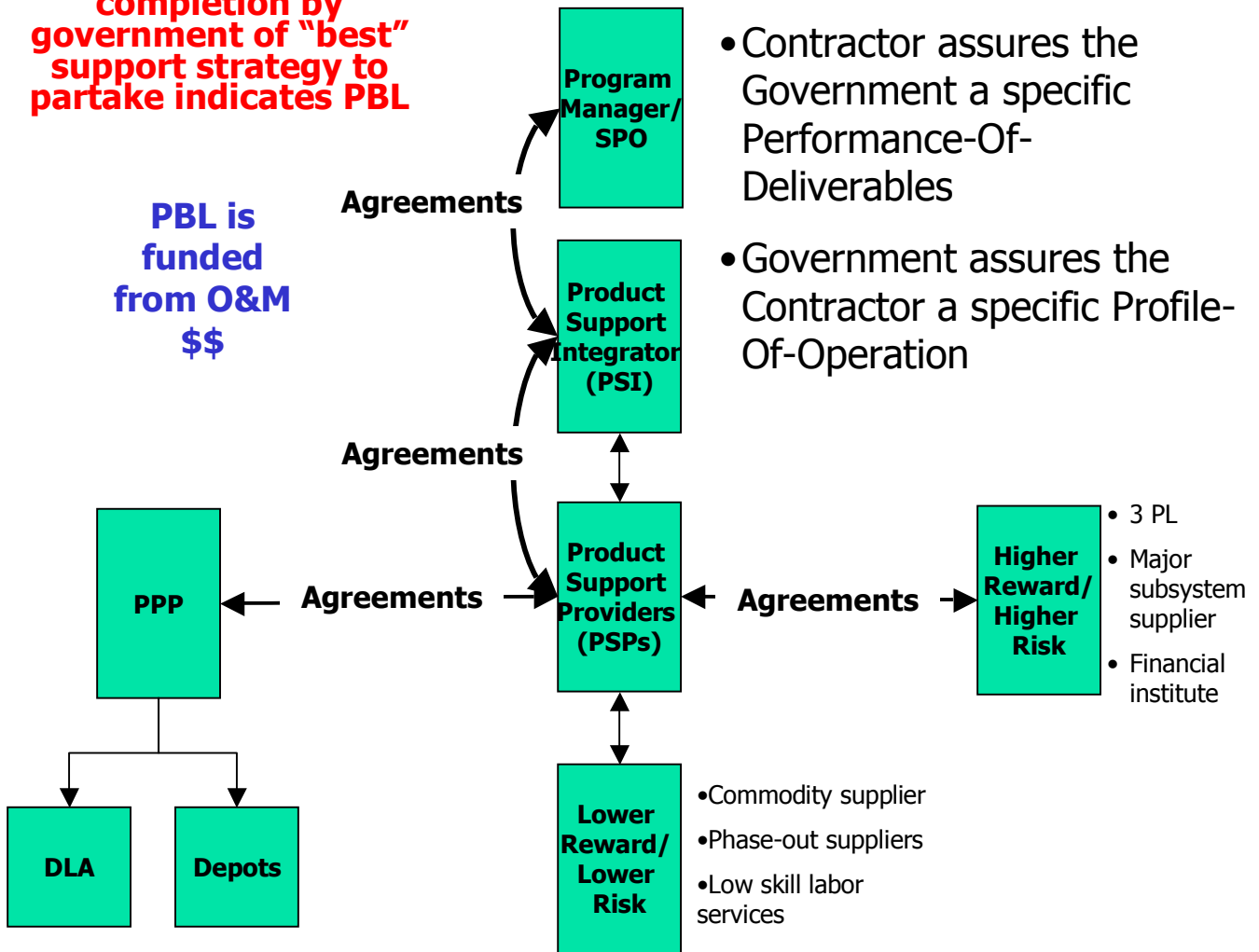
Crafting An Offering

- PBL Is Supported By A Web Of Agreements In Which Risks Are Shared...Or Not
- Craft Contractor Performance-Of-Deliverables
- Craft Government Profile-Of-Operation
- Craft Recurring Processes
- Craft Initialization Processes
- Identify Direct & Indirect Expenditures
- Forecast Direct Expenditures
- Align Processes & Resources Employed
- Forecast Process Activities
- Forecast Resources Employed Per Process Activity Forecast
- Forecast Resources Employed
- Define PBA Lifecycle Pricing Strategy
- The Balanced Scorecard Is Used To Ensure A Systemic Approach
- Subjective Probability: Managing For Unfavorable Risks
- Actual Data Input And Metric Variance Analysis
- Populating Indexes With Actual Data

PBL Is Supported By A Web Of Agreements In Which Risks Are Shared...Or Not

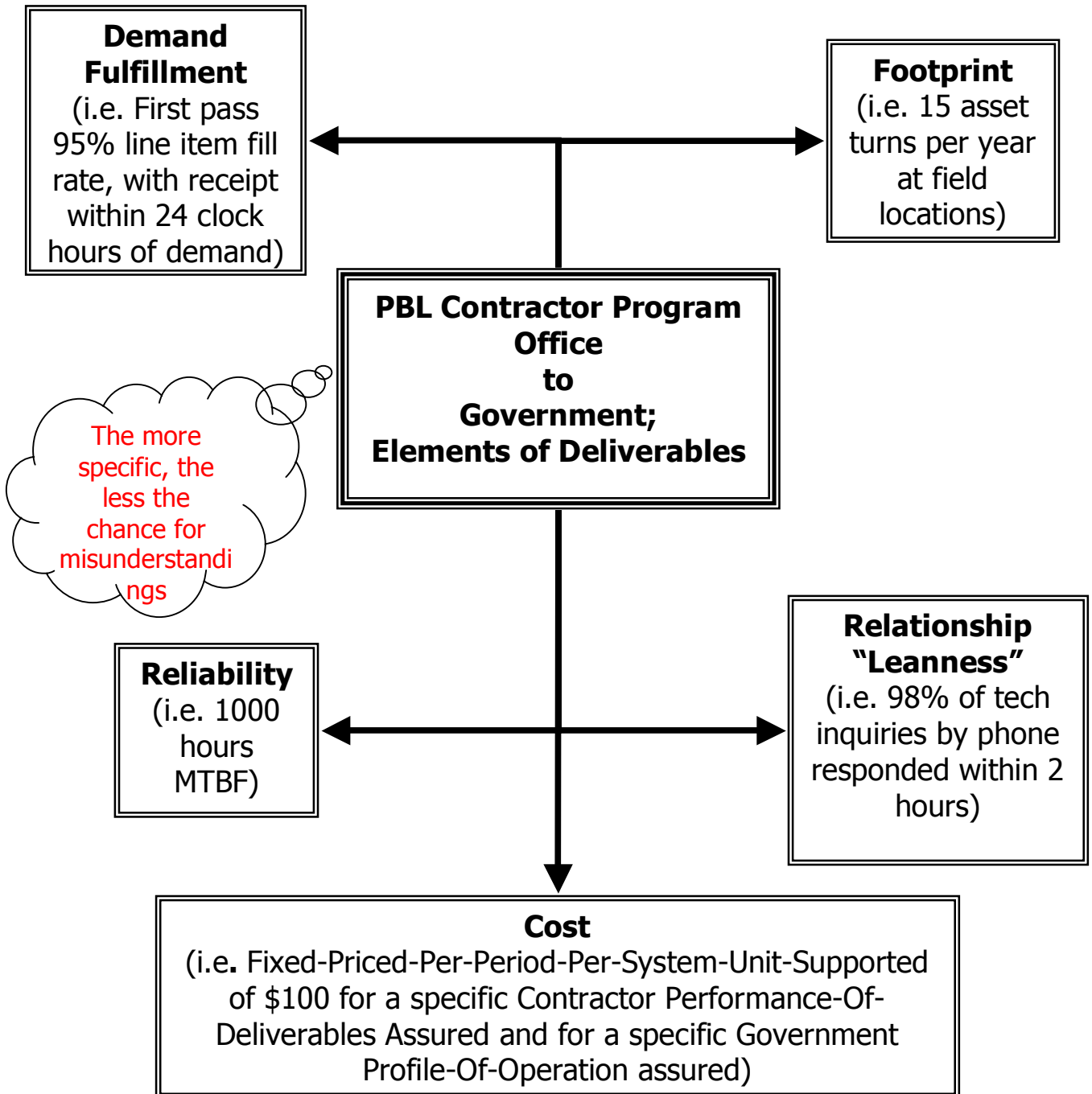
...Only after BCA completion by government of "best" support strategy to partake indicates PBL

PBL is funded from O&M \$\$

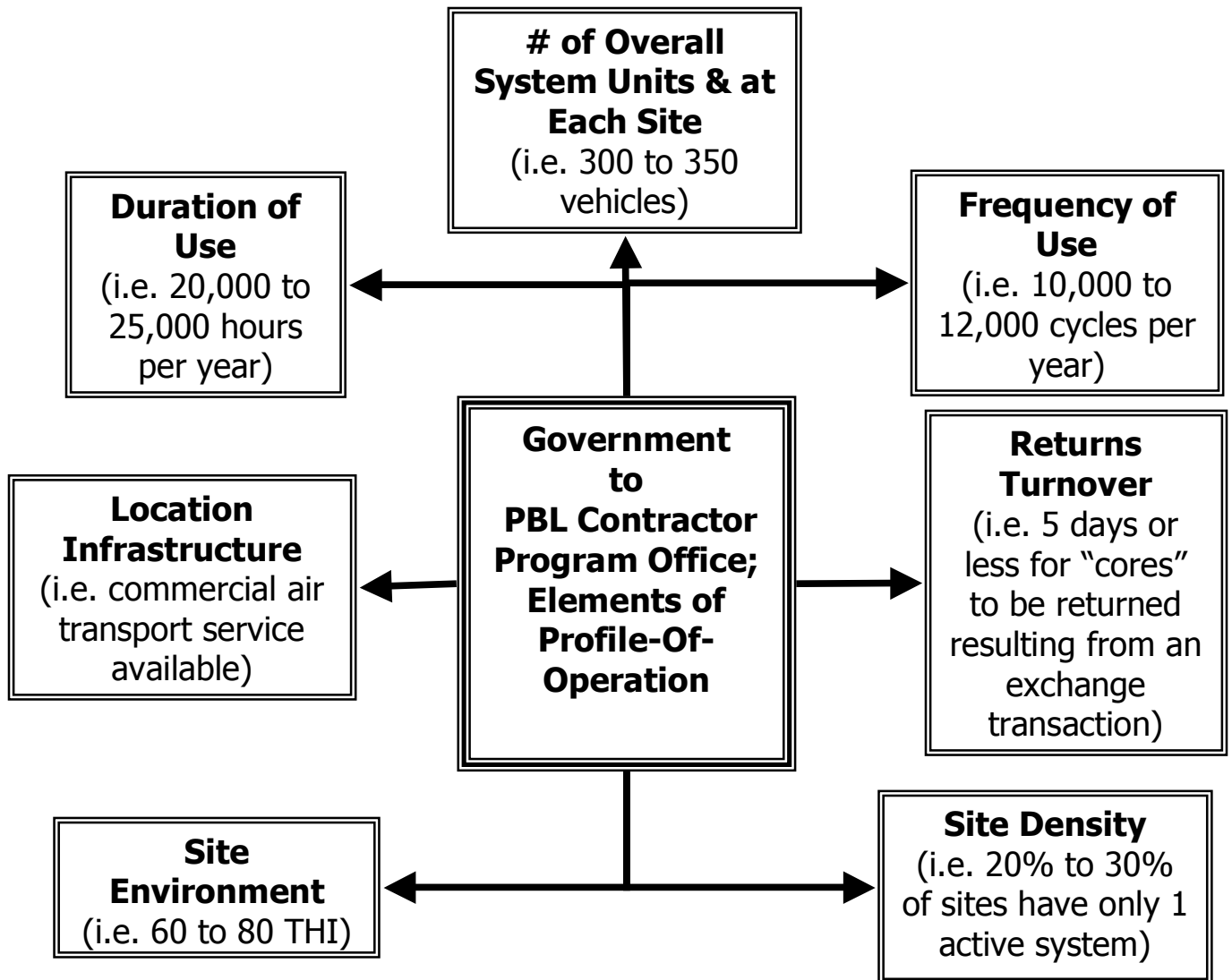


"A Web Of Relationships Of Self-Interests Provides Vigilance Against Complacency," by Ron & John

Craft Contractor Performance-Of-Deliverables



Craft Government Profile-Of-Operation



The more specific,
the less the
chance for
misunderstandings

Note: Broken into 4 profiles

1. CONUS Garrison profile

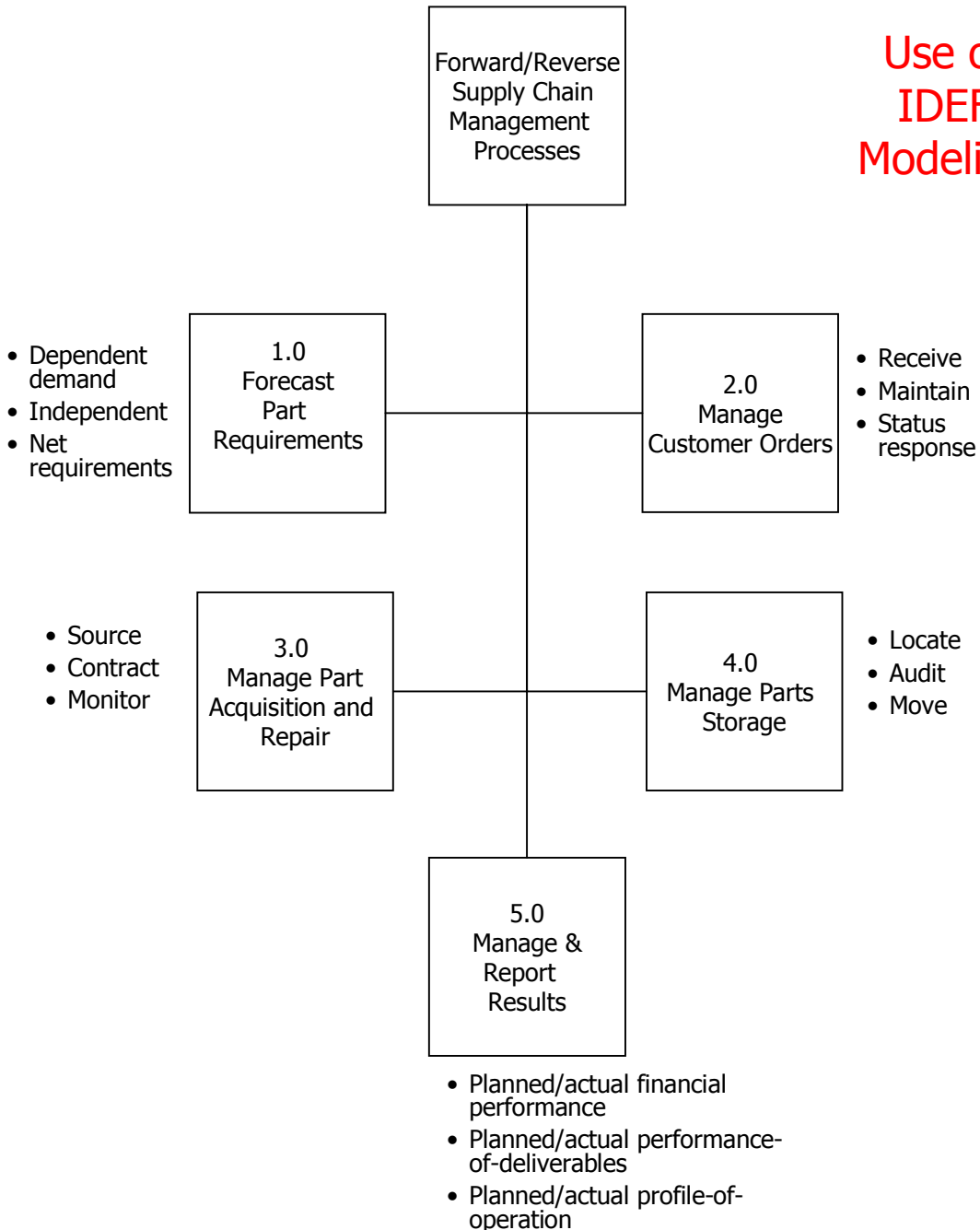
2. OCONUS w/Infrastructure profile (i.e. Japan)

3. OCONUS w/o Infrastructure profile (i.e. Afghanistan)

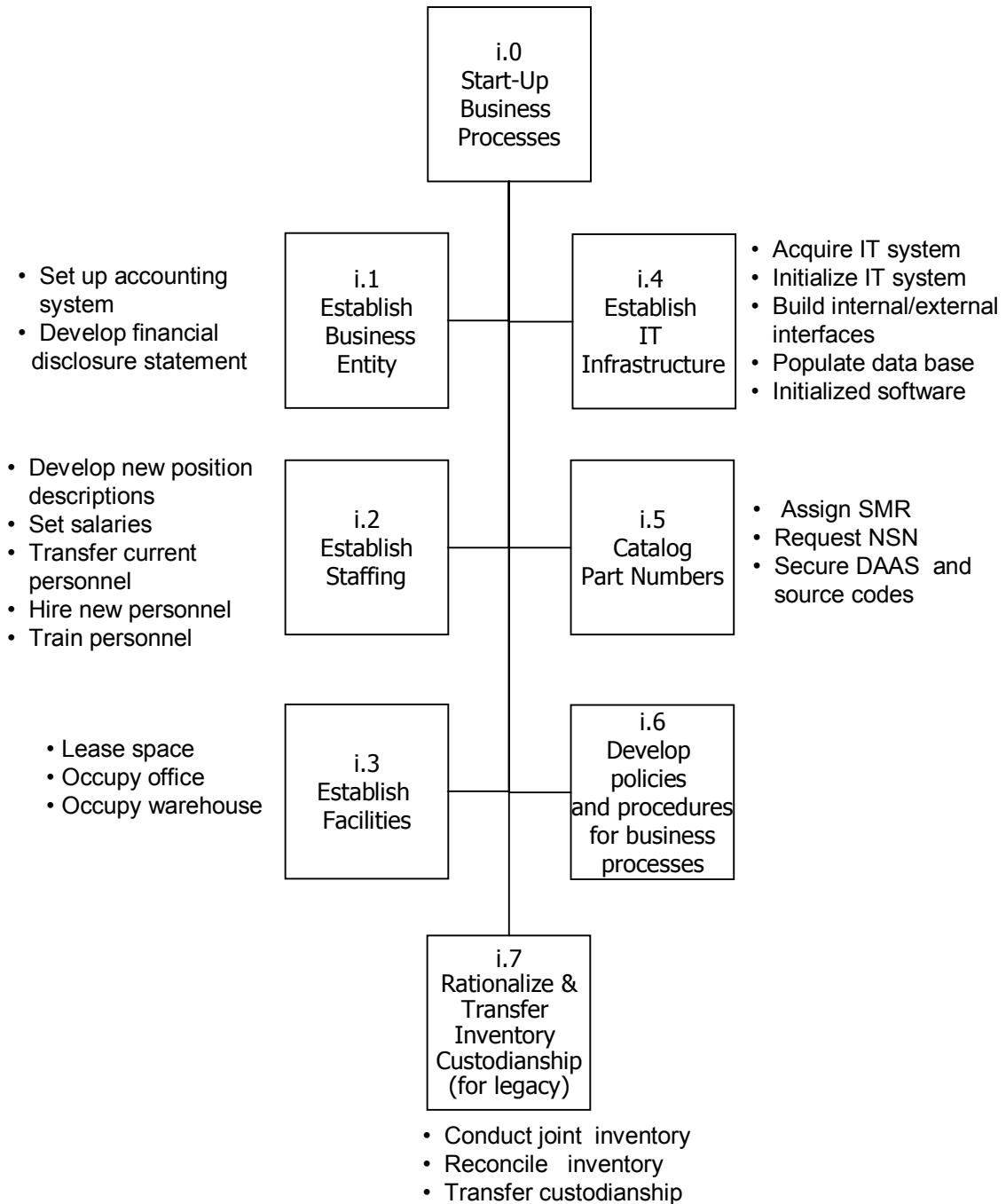
4. OCONUS Combat profile (i.e. Iraq)

Craft Recurring Processes

Use of IDEF Modeling



Craft Initialization Processes



Identify Direct & Indirect Expenditures

- Direct
 - Non-repairable parts acquisition cost
 - Repairable parts repair cost
 - Consumable parts acquisition cost
- Indirect
 - Personnel and their fringes
 - Office facilities
 - Warehouse facilities
 - Packaging materials
 - Transport
 - Administrative supplies
 - IT: application system/network software and hardware
 - Supplier visits
 - Customer visits

Forecast Direct Expenditures

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Macro Cost Drivers Index										
Inflation	1.000	1.020	1.040	1.061	1.082	1.104	1.126	1.149	1.172	1.195
System aging (increased demand)	1.000	1.020	1.040	1.061	1.082	1.104	1.126	1.149	1.172	1.195
Out-Of-Production/DMS (lot sizing cost increase)	1.000	1.020	1.040	1.061	1.082	1.104	1.126	1.149	1.172	1.195
Total Cost increase	1.000	1.061	1.126	1.195	1.268	1.346	1.428	1.516	1.608	1.707
Non-repairable parts, consumable parts + LRU repair costs (\$M)	\$9.05	\$9.6	\$10.2	\$10.8	\$11.5	\$12.2	\$12.9	\$13.7	\$14.6	\$15.4

Align Processes & Resources Employed

Index	Process	Indirect Resources								
		Personnel And Fringes	Office Facilities	Warehouse Facilities	Packaging Materials	Inbound Direct Parts Transport	Admin Supplies	IT: application/ system/ network software and hardware	Supplier Visits	Customer Visits
1.0	Forecast Parts Demand And Supply Requirements									
2.0	Manage Part Acquisition And Repair									
3.0	Manage Customer Demands									
4.0	Manage Parts Storage									
5.0	Manage and Report Results									

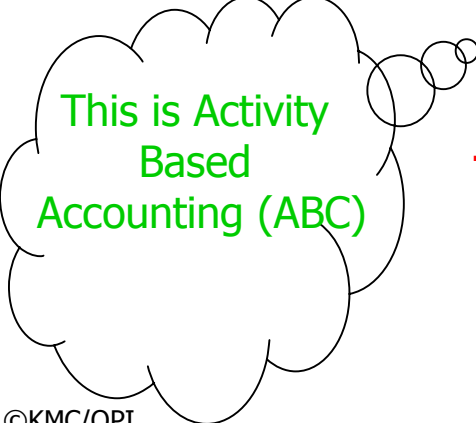
Forecast Process Activities

- # of active Part Numbers: 1,000
- # of inactive Part Numbers: 1,000 (very low/no activity within last 3 years)
- # of inactive items that will have any activity over 10 years: 5%
- Demand for additional part numbers and increased demand for active part numbers will be an estimated 2% per year
- Perform Log Engineering Analysis; Analyze ECP's For Logistics Impact, Assign Source, Maintenance and Recovery (SMR) Codes, Develop Maintenance Schema, Develop Changes to Technical/ Part Manuals, Forecast Part usage/ Adds And deletes From Inventory, Incorporate Approved Changes Into Baseline: .1% of PNs
- Assign/Re-assign Source Of Repair for repairables: .08% of PNs
- Catalog Parts; Assign SMR code For new/changed item, Research Stock Listed Items, Secure designator Code for item: 1.0% of PNs
- Catalog Parts; Prepare Technical Data support package When appropriate: .3% of PNs
- Catalog Parts; Request NSN For peculiar PN With no tech data, Request NSN for Common item: .7% of PNs
- Forecast Parts Demand And Supply Requirements; Collect & Analyze demand Data, Balance Forecasted demands with planned/ actual supplies: 200% of PNs
- Forecast Parts Demand And Supply Requirements; Analyze in Detail Reliability and planned preventive programs: 5% of PNs
- Forecast Parts Demand And Supply Requirements; Analyze installed base and changes in operational profiles: 15% of PNs

...and much more

Forecast Resources Employed Per Process Activity Forecast

- Program Manager: \$50/hr
- Professional: \$35/hr
- Non-Professional: \$25/hr
- Office space allocation per Full Time Equivalent (FTE): 150 square feet
- Office space cost per square foot: \$25
- Warehouse space per quantity stored: .2 square feet (materials stored 6 feet high)
- Warehouse space cost per square foot: \$18
- Material asset annual turnover for non-insurance items of: 2 turns
- Packaging cost for outbound shipments: \$5/package shipped
- Administrative costs (i.e. communications, supplies, others) per personnel: 10% of salary
- Inbound transportation costs, allocated to direct materials: weight per piece received of 2.5lbs and \$2/piece



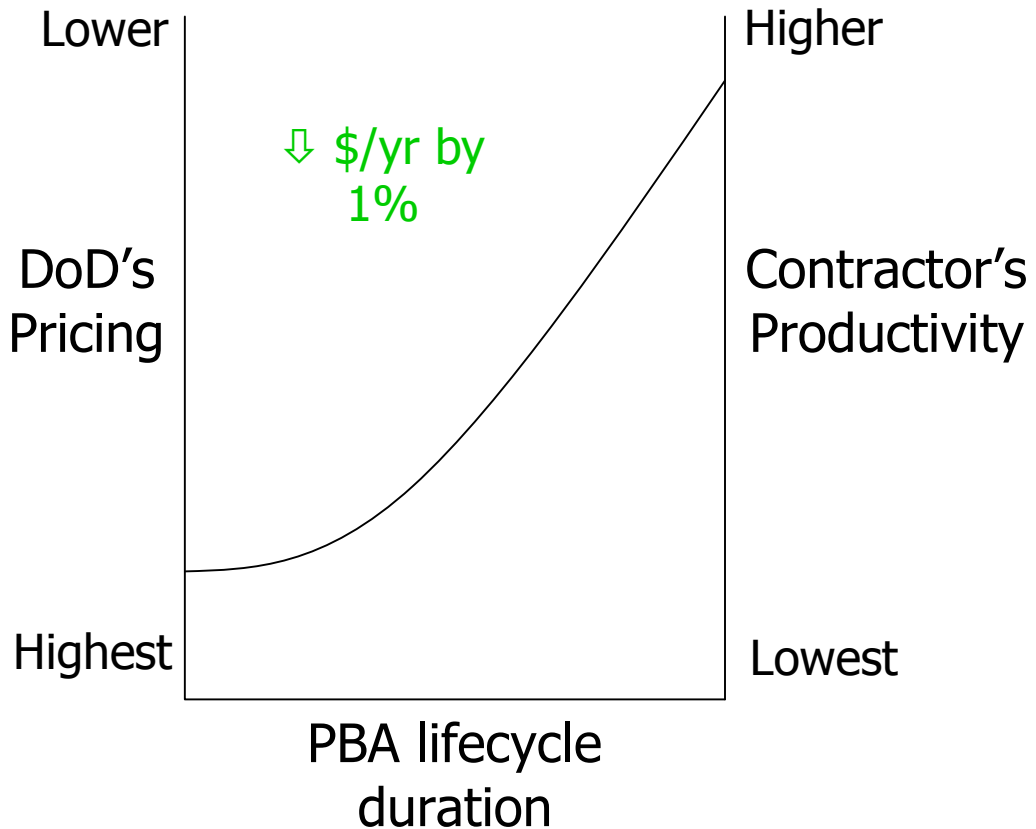
This is Activity
Based
Accounting (ABC)

...and much more

Forecast Resources Employed

Calculate	Index	Description	Quantity
Forecast	A	# of part numbers with safety stock levels to be reviewed per month	2,100
Forecast	B	# of parts reviewed per man hour (70% productivity)	7
A/B	C	# of man hours required/month	300
Forecast	D	Cost/man hour	\$50
C*D	E	Cost/period (used for income statement/cash flow)	\$15,000
Forecast	F	Man hour monthly capacity of an asset planner	150
C/F	G	Full time equivalent required (used for org structure)	2

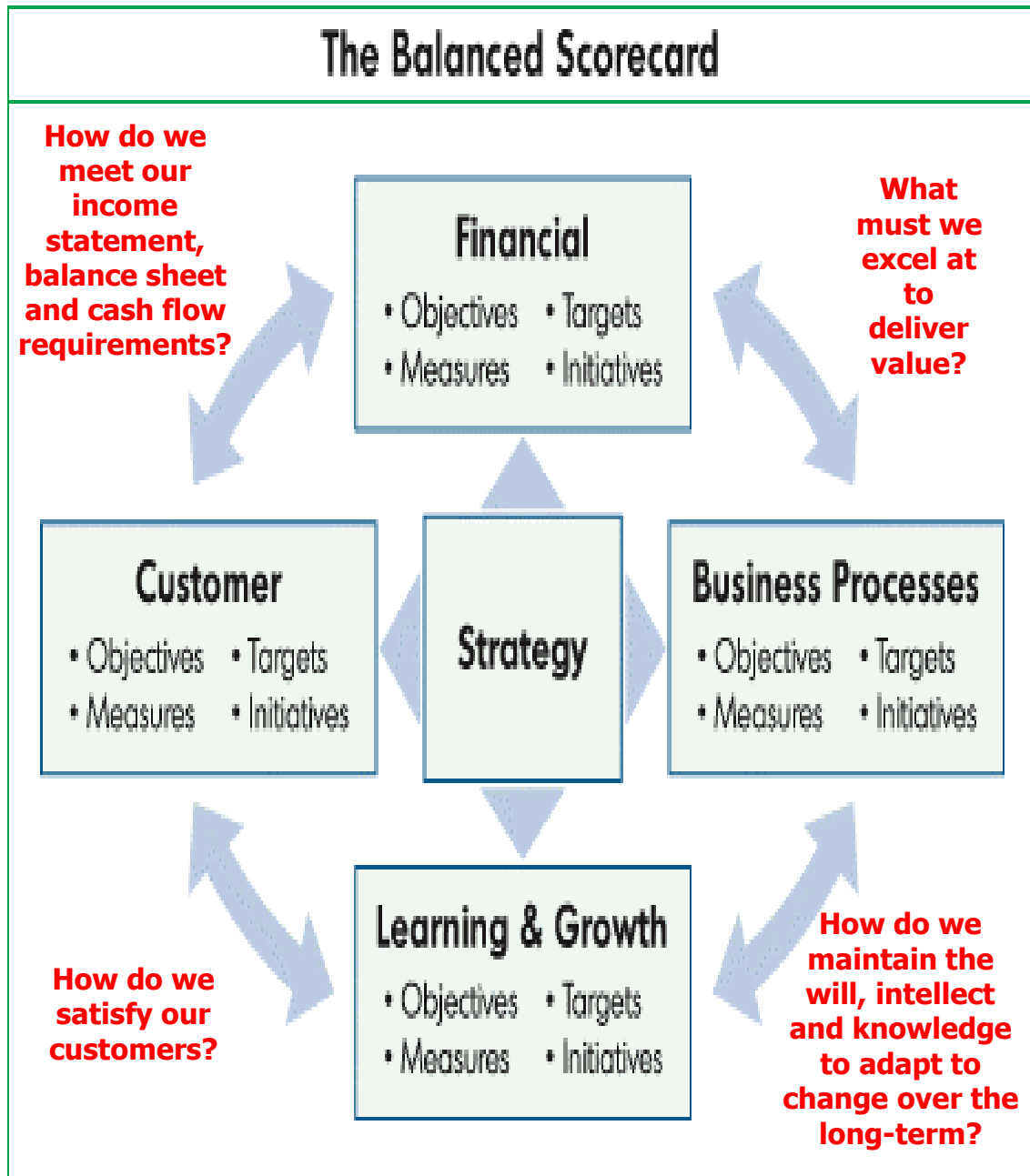
Define PBA Lifecycle Pricing Strategy



Concept

As contractor improves its productivity in delivering its offering to its customer, it will share its "savings" with the customer;
this is a basic tenet of capitalism

The Balanced Scorecard Is Used To Ensure A Systemic Approach



"The Balanced Scorecard – Measures that Drive Performance," by Robert Kaplan and David Norton, Harvard Business Review, 1992

Subjective Probability: Managing For Unfavorable Risks

	Known	Unknown
Known	I know there is a risk and its probability is known by me and others	I know there is a risk, but its probability is unknown to me, but known by others
Unknown	I don't know there is a risk, but others know that there is a risk and know its probability	I don't know there is a risk and others don't know that there is a risk..but something VERY bad could happen

Use all the resources available to you to manage risks....population of data sets are often too small to apply actuarial science concepts...you need "adults" to establish probabilities...and hopefully you will have as many right as wrong probabilities

Actual Data Input And Metric Variance Analysis

- Capture data; from where?
- Store data; in what data sets?
- Validate data; who can provide due diligence?
- Populate metrics
- Analyze data (an example)
 - Findings: safety stocks of part numbers were recommended to be changed, through software programs, 40% above plan
 - Conclusions: lead times for LRU repairs were lengthened by 35% due to new vendors. Also system hours of operation increased by 18% above plan
 - Recommendations: Work with new vendors to reduce LRU repair/overhaul cycle times. Watch hours of operation carefully and be ready to invoke higher prices to customer. Increase safety stock investment for short-term

Populating Indexes With Actual Data

Example	Contractor Data			Customer Data		
Data capture period	Data sets		Perform	Data sets		Perform
	Hours in period *	Hours lost to awaiting parts	Availability	LRUs returned within 3 days	LRUs issued	Return rate
7-1	10,000	210	98.1%	36	40	90%
7-15	9,500	152	98.4%	21	30	70%
8-1	10,500	103	99.1%	47	50	94%
8-15	10,000	50	99.5%	10	10	100%
9-1	10,250	405	96.1%	25	30	83%
9-15	10,500	106	99.0%	30	40	75%
Totals	70,750	1026	98.5%	160	200	80%
Mean	Of availability		98.4%	So what is the variance from the Profile-Of-Operations assured?		
Median	Of completion		98.7%			
Performance-Of-Deliverables assured			98.2%			

*system-units multiplied by hours