Integrated Business Planning for Upstream Oil & Gas Implementation Overview









We'll discuss

- Undesirable impacts of uncoordinated planning and results areas from IBP
- IBP concepts and tools
- Roles & responsibilities
- Tips and traps for implementing





Nexview Consulting draws from established methodologies and many experiences to help clients achieve alignment and improve performance and results

Services specific to upstream

- Integrated Business Planning
 - Improve coordinated planning and integrate with the budgeting processes as well as the leadership management system
 - Process improvement in the underlying processes
- > Information systems evaluation, selection, and implementation
- Organizational design & change
- Supply chain management
- Change management
- Training & coaching

Differentiators

- Boutique firm specializing in IBP and supply chain for the upstream value chain
- Holistic approach emphasize performance improvement, results management, behavior change, leadership development
- Low overhead model and use of only highly experienced consultants strengthens our value proposition; Global network of highly-experienced consultants accommodates multigeography projects





















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Firestone





ESTĒE LAUDER



We are led by three Principals and supported by a strong peer network of experienced consultants

Eric J. Tinker, Mng Principal

20 years in management consulting leading complex change in the US and internationally



- Projects have delivered over \$500MM in benefits
- Client experience ranges from start-ups to leadership of large, complex, multi-geography business transformation for global corporations
- Prior leadership roles at Deloitte Consulting, Celerant Consulting, Plan4Demand, Hughes Aircraft
- Qualifications
 - MBA University of Southern California -Finance & Entrepreneurship
 - MS Mechanical Engineering, California State University -Northridge
 - BS Aerospace Engineering, Syracuse University
 - Certified Public Accountant

Jonathan Gilbert, Principal

- 25 years improving service reducing cost, and improving efficiency
 - Versatile leader across the supply chain with differentiating expertise S&OP and logistics
 - Industry background in energy, chemicals, retail, manufacturing, and distribution
- Prior consulting roles at MTG, Corven, Denali Group
- Industry leadership and VP level roles in supply chain at BOC gasses and NuCO2
- Qualifications
 - MBA Stern School of Business, New York University
 - BS Krannert School of Business at Purdue University

Roy Zerner, Principal

28 years as a consulting and industry supply chain leader



- Projects have delivered over \$1.1B in benefits
- Industry background in consumer products, high-tech, chemicals, and industrials
- Strategic and tactical expertise throughout the supply chain
- Prior leadership roles at Ernst & Young/CapGemini, Accenture
- Industry leadership and Director level roles in supply chain Del Monte, H.J. Heinz, and Allied-Signal
- Qualifications
 - Ph.D. Candidate UCLA
 - MBA Indiana University
 - BS Chemical Engineering, Virginia Tech



Nexview Consulting helps clients achieve alignment within their organizations to improve performance and results



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Eric J. Tinker – Mng Principal

- 19 years in management consulting leading complex change in the US and internationally
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Chevron









































Gaps in planning and coordination have mounting consequences



Improving these areas can often result in tens of millions of dollars!

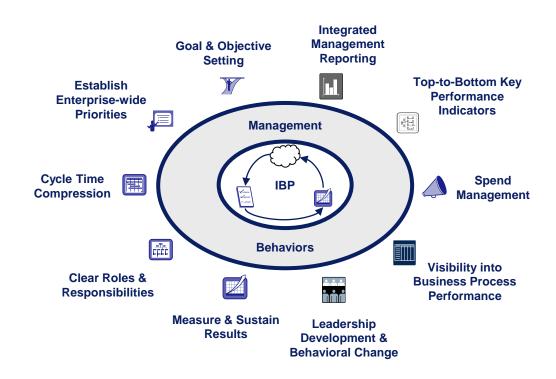


IBP Definition

IBP is a structured leadership process for managing the plan on a month-to-month basis that enables cross-functional planning, decision making, and performance management across the business.

Key characteristics include:

- Alignment of planning and decisions to "operationalize " the strategy of the company
- ➤ One set of consistent plans used throughout the organization
- Layered system of KPIs define accountability
- > Reduced time to cash and improved spend management
- Sr. Management led, exception-based
- ➤ Management of gaps to plan, while there's still time for action
- > Leadership development and improved teamwork
- > Platform for continuous improvement





IBP is not new, but it is new to upstream

Integrated Business Planning

Sales & Operations Planning

Mat'l Reqmts Planning (MRP)

Manufacturing Planning



Balancing Supply and Demand



Integrating
Financial Planning
& Other Key
Functions



Coordinated
Decision Making
and Continuous
Improvement

- 1950's 1970's
- Supply driven
- Detailed planning of production and procurement
- Less focus on working capital
- Less competition

- 1980's 1990's
- Demand driven
- ERP detail enables roll-up to IBP planning level
- Competition increasing, globalization increasing
- More focus on working capital

- 2000's 2010
- Demand driven
- Financial planning
- Product Management
- Global IBP across multiple business units
- Expansion beyond traditional manufacturing
- Improved IT decision support
- More focus on working capital, lead time reduction, flexibility
- More use of low-cost labor markets
- Supplier integration
- Improve or be eliminated

- 2010 and beyond
- Wider acceptance as the driving planning process
- Extension to business partners
- Improved simulation and quantification
- More focus on disaster response and contingency planning



IBP links the value chain to resolve interfacing issues

IBP On-shore Permits & Title Sub-surface Drilling, Completions, Infrastructure Leasing Location Operations. **Evaluation &** Selection Work-overs. Construction Disposal Reserves Common Issues Inconsistent throughput capacity across the rig fleet, rig loading, ■ Frequent changes to rig schedule and drill locations and ready to drill locations Rig types and contracting not synchronized ■ Process steps out of sync or bottleneck not optimized ■ Marking infrastructure and contracts not always synchronized

- Permitting delays and re-work
- **■** Long cycle times
- Budget and forecast (and revisions) not well communicated
- Lack of visibility and/or communication on lease expirations and /or PUD status
- with production
- Material and service crews not synchronized
- Production shut-in and/or downtime losses
- Risk assessment not well coordinated throughout organization

Off-shore

Sub-sea **Evaluation &** Reserves

Leasing

Extraction Planning

Location Selection Permits & Title

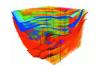
Exploration Drilling

Development Drilling & Construction



Processing, Gathering, Transportation

Operations, Work-overs, Decommissioning



















Examples of situations that can be managed through IBP include

Scenarios

Assets need to be rebalanced across the field to maximize profitability (well changes)

Changes in execution performance require decisions to balance production, capital spend, and reserves

Constraints in supplied equipment, materials, or contracted services affect the future forecast or require prioritization of development

Corporate allocates more or less capital – how do we adjust? Or how do we proactively plan what we could do with more capital?

Oil/Gas prices change requiring investment and operating decisions

Acquisition/divestiture discussions and implications for investment and operations

Infrastructure discussions (tankage, pipeline vs. truck/rail/ship), outsource vs. build, matching timing with production

Planned production exceeds processing and take-away or infrastructure capacity

Sales price possible vs. cost for meeting a quality specification

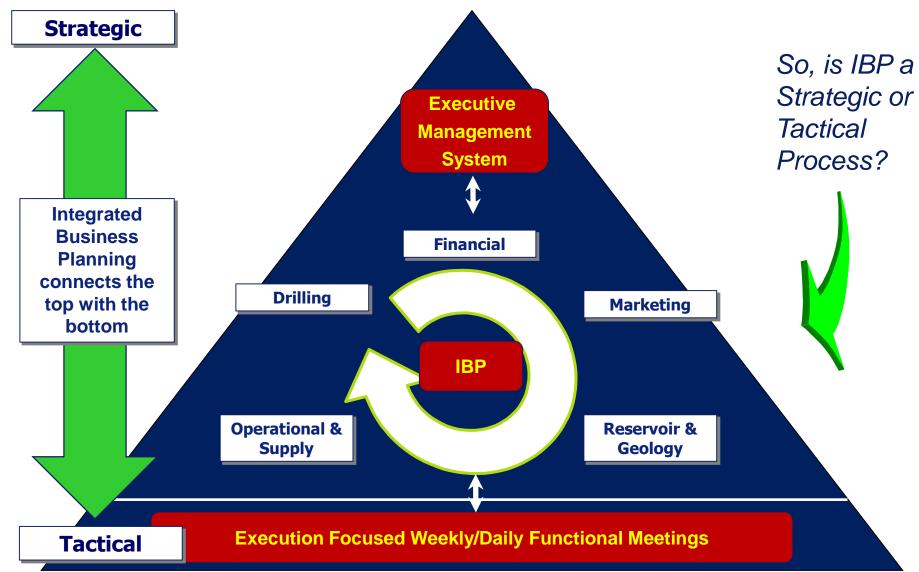
Weather/disaster planning & recovery

Work-over and recomplete decisions

Use of processing capacity for others vs. use for own development

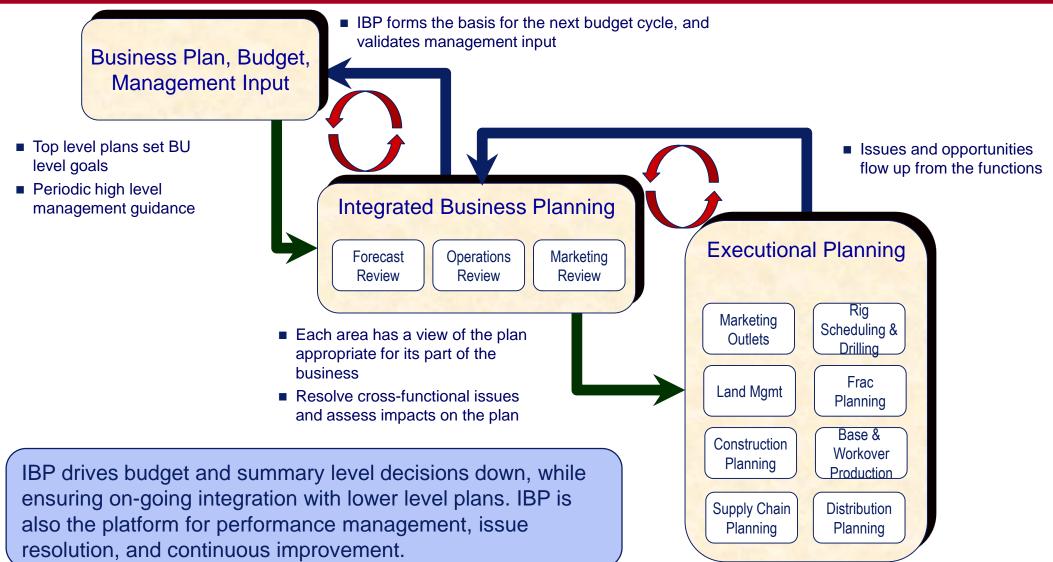


Integrated Business Planning links the executive management system to the tactical processes and execution



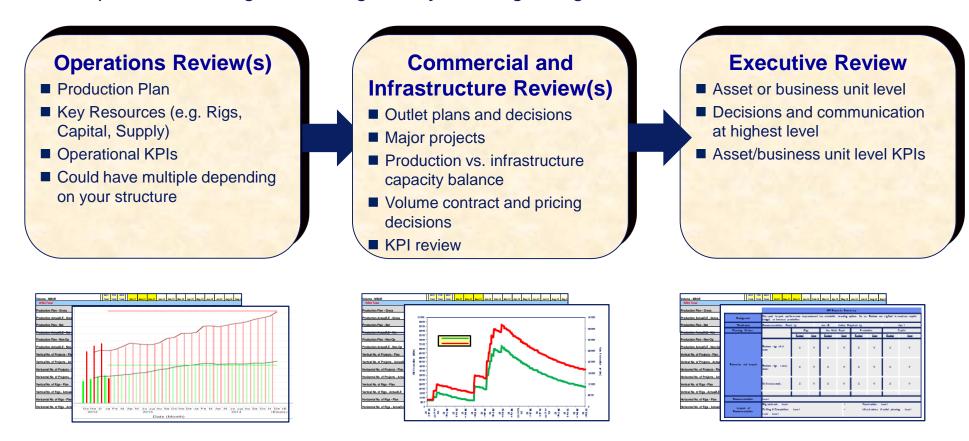


IBP connects the higher level business plan with lower level execution



The idea is to manage the whole of the business, by managing the parts, then bring them together for cross-functional collaboration and issue resolution

The specific IBP design would align with your budget, organizational, and data structures.



Each meeting has a supporting numerical view of the plan most meaningful for them as well as supporting charts and/or scenario summaries to support decision making.



Each component IBP meeting has 3 main parts

KPI Review of Recent Performance (30% of meeting, backward looking) Discussion and Decision
Making on Cross Functional
Issues (40% of meeting, 3-24 mo
forward looking)

Expl & Prod, Operations	Finance	Marketing
Drilling	Supply Chain	Geology & Eng

Possible examples include:

- Rig addition opportunities
- Infrastructure constraints
- Material/service/land constraints
- Reallocation of resources across the field

Provide
Inputs to
Forecast/Bud
get Cycle
(30% of meeting
forward looking)

Linking leaders through IBP builds winning teams.



Oh no! This sounds like more meetings, do we really need more of them?

- ➤ **Yes** if you want to have a regular structured format to coordinate planning and make decisions
- Yes if you want everyone to get the same message and get common agreement
- ➤ **Yes** if you want to resolve business problems collaboratively to maximize the whole
- ➤ Yes if you want to have a discussion about business performance with key team members in the room
- ➤ Yes if you want to generate ideas, develop leaders, and make informed decisions while there's still time to right the ship
- Yes − if you want to eliminate many of the "informal" meetings and decisions that happen as a result of not doing this

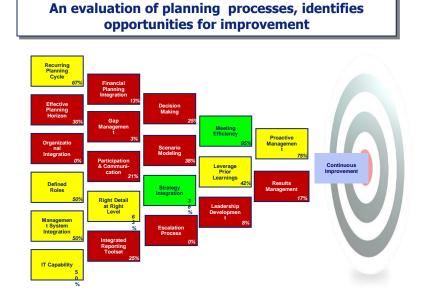


The existing meeting structure should be reviewed and perhaps updated to integrate with an IBP design.

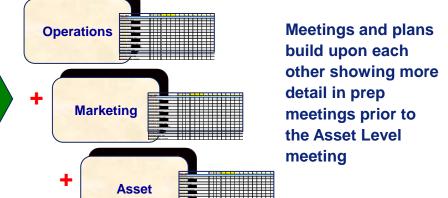


It's just not just about the meetings, the elements of IBP work together to create the foundation for continuous improvement

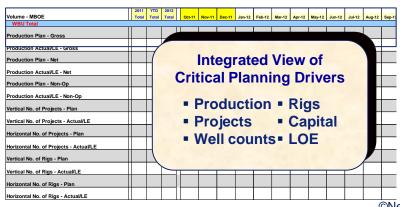
Nexview Best Practice Performance Arrow



A series of monthly meetings are grounded in the part of the plan and business each are accountable for



The plans and discussion build up to a consolidated operating and financial plan



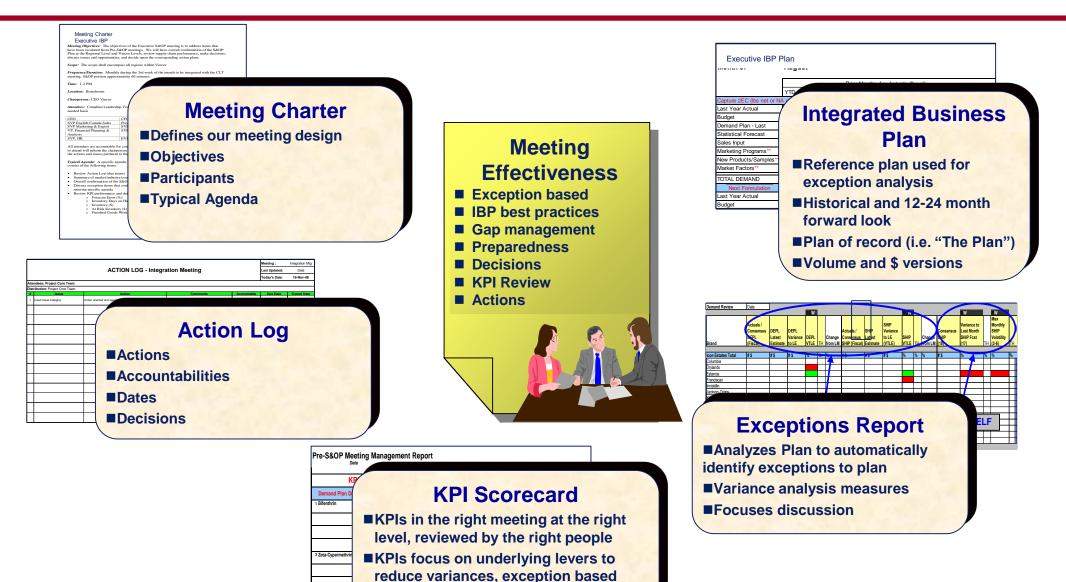
IBP helps to align and distribute accountability throughout the organization





Each IBP component has a specific set of supporting tools

■Baselines & targets



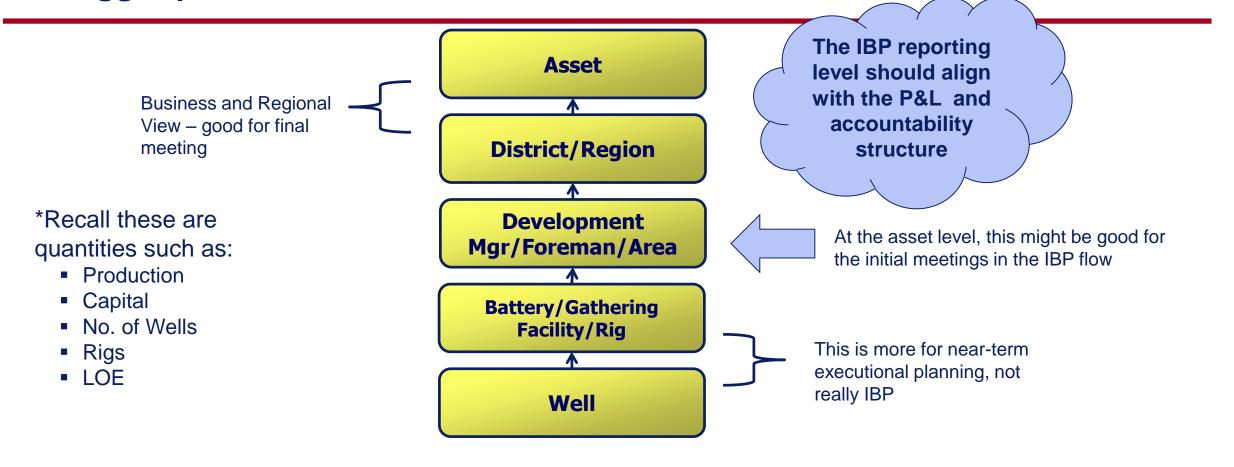


For the executive review, business unit level plans should be supplemented by scenario summaries for decision making

	IBP Scenario Summary											
Background	Our spud to spud performance improvement has created/is creating options for us: Reduce our rig fleet to meet our capital budget, or increase production.											
Timeframe	Recommendation	Req'd by		Jan 15	Action	Required	by	Apr 1				
Planning Drivers		5	No. Wells S		Spud Production			apital				
		<u>Budget</u>	New	<u>Budget</u>	New	<u>Budget</u>	<u>New</u>	<u>Budget</u>	New			
	Reduce rigs all at once	х	Y	х	Y	х	Y	x	Y			
Scenarios and Impact	Reduce rigs – ramp down	х	Y	x	Y	х	Y	x	Y			
	Drill more wells	х	Y	x	Y	x	Y	x	Y			
Recommendation	Insert											
Impacts of Recommendation	Rig contracts -Drilling & CompLand - insert		nsert			 Construction - insert Infrastructure & outlet planning – insert 						



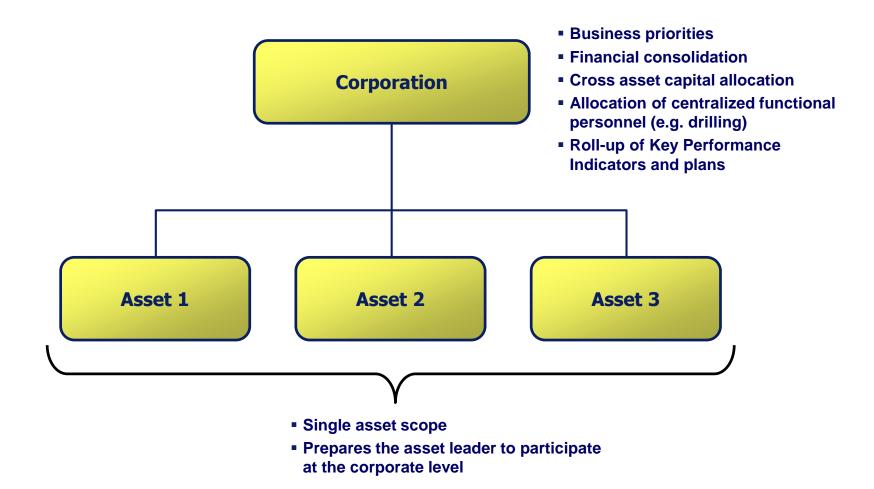
Our planning quantities* and discussion should be at a level that enables a bigger-picture discussion and view



The underlying detail must roll-up to the high level view, and when a high level change is made, it needs to cascade down to the detail.

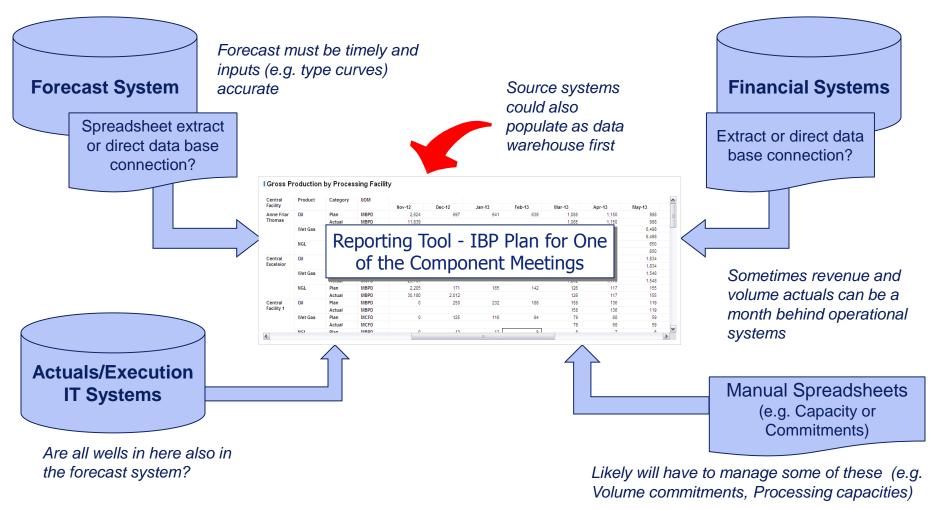


IBP can be done at both the Asset and Corporate Levels





IBP reporting systems usually pull from several systems throughout the company and an architecture needs to be defined



Ability to relate data through a common well → rig/facility → sub-asset hierarchy is needed to relate the data on one report.



Roles need to be defined and supported

Role	Business Responsibilities	Project Responsibilities				
IBP Sponsor	 Member of the executive team Ensures participation and decisions are made through IBP 	Communicates the vision and provides executive guidanceAllocates resources				
	■ Drives and demands results					
	Leads monthly process and provides continuity across IBP components	Project manager and change leader at all levels				
IBP Leader	■ Coaches component leads and sponsors	■ Leads training and design efforts				
	■ Manages agenda and coordinates executive IBP meeting	■ Interface definition & coordination				
	■ Often a planning leader					
	■ Executive leader of a function	■ Executive guidance for their IBP component				
Component Meeting Sponsor	■ Owns the output and results of area performance	Assists with peers as required				
Оронзон		■ Resourcing in their area				
	■ Up and coming executive leader	■ Project Lead for their area				
IBP Component Lead	■ Key role in their area	■ Develops reports, KPIs				
	■ Coordinates inputs and facilitates their IBP component					
Toom Mombou	■ Supports IBP Component Lead in preparation, analysis,	■ Supports Team Leads				
Team Member	and resolving exceptions	■ Could be IT support				



Nexview's experience shows there are 8 key levers to focus on for IBP success

Sponsorship Design **Vision Executive IBP Organizational** Change Marketing Integration **Operations Alignment** Review Meeting **Review** Management Infrastructure Review **Enabling Reports & Tools** Results **Technology** ©Nexview Consulting, LLC

We recommend defining a set of maturity characteristics for your growth path

MATURING

scenarios presented

Cross functional

in IBP for further

Plan updates cover

key input to next

Gaps addressed in

IT automation enables

focus on analysis

Root causes on KPI

KPI results improving

constant rolling period

IBP plan serves as the

analysis

budget

time to act

variance

IBP supports

interactions with

Corporate Sr. Mgmt

Maturity Dimensions

- Mechanics
- Design and Best Practices
- IT Enablement
- Behaviors
- KPI Management & Results

BASIC

- Lagging (Not IBP)
- Discussion of plans and operations is month to month – react to changes in the business
- Plan updated on an adhoc basis, not well communicated
- Planning horizon shorter than lead times needed by operations and marketing
- Decisions made informally without quantitative impact on whole

- IBP components aligned with org structure and how the asset is managed
- IBP roles in place, meetings occur
- Planning horizon covers longest lead time items
- Summary/basic reports manually prepared, available centrally
- KPI scorecard measured against targets
- Leadership owns

FUNCTIONAL

- Discussion balance between review and forecast
- Plan updated to match frequency of changes in the business
- Exception focused and sub-process gap discussions not excessive in IBP
- IBP plans are the single plan of record
- IBP used as the process for making decisions
- IBP meetings confirm results of underlying planning and decisions are rolled down

consistent in source, view Consulting, LLC

Data hierarchies

systems

wns

LEADING

- Scenarios analyzed beforehand and summarized in IBP meetings with financial implications
- Leaders collaborate within IBP process on best decision for the whole
- Broad understanding of decision limits/escalation process
- IT systems support scenario analysis and flexible hierarchy changes
- Planning horizon extended as needed
- Actions drive KPI performance

We suggest a scorecard to measure progress

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Maturity stages can be tracked over time for continuous improvement

IBP Maturity Schedule

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Component 1	Plan	0	1	1	1	2	2	2	3	3	3	3	4
Component	Actual	0	0	1	1	1	2	2	3				
Component 2	Plan	0	1	1	2	2	2	2	3	3	3	3	4
Component 2	Actual	0	0	1	1	1	2	2	3				
Component 3	Plan	0	1	1	1	1	2	2	3	3	3	3	4
Component 3	Actual	0	0	1	1	1	2	2	3				
Component 4	Plan	0	1	1	1	1	1	2	2	3	3	3	4
Component 4	Actual	0	0	1	1	1	2	2	3				
Component 5	Plan	0	0	0	1	1	1	2	2	2	3	3	3
Oomponent 5	Actual	0	0	1	1	1	2	2	3				
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Overall	Plan %	0%	21 %	21 %	32 %	37 %	42 %	53%	68%	74 %	79 %	79 %	100%
	Actual Tot	0	0	5	5	5	10	10	15	0	0	0	0
	Actual %	0%	0%	26%	26%	26%	53%	53%	79%	0%	0%	0%	0%













Before jumping into an improvement project, it's important to conduct an assessment

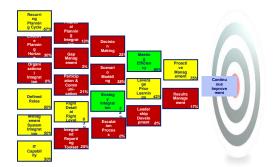
- Assessments serve four vital purposes by enabling the team to:
 - Create a common understanding of the as-is
 - Create a common vision of where to go and what the gap is
 - Define the metrics to show results
 - Invest stakeholders and generate momentum for change

If the assessment is skipped, you may lose momentum when a challenge arises in the project, or when the next "urgent" matter arises.

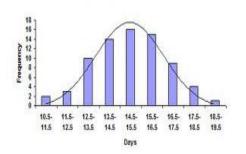
Key steps in an assessment include:



Interview stakeholders



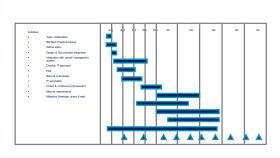
Assess as-is processes/capabilities relative to best practices and determine gaps



Complete quantitative studies on potential improvement areas



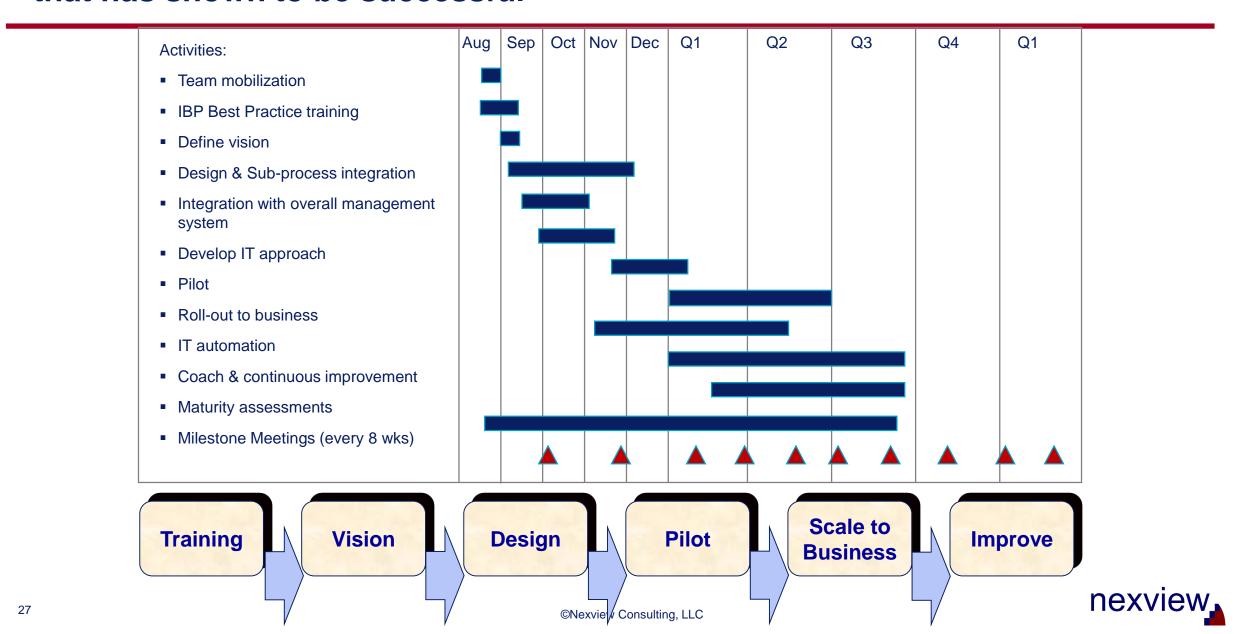
Quantify improvement opportunities



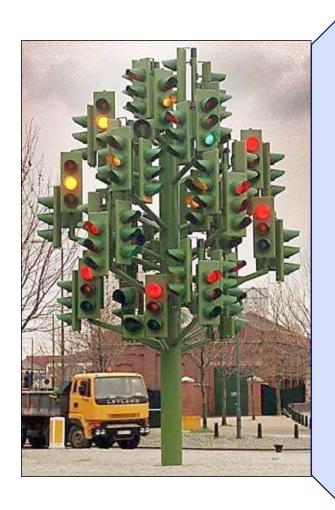
Define scope and project



While specific project timelines vary, we recommend an overall sequence that has shown to be successful



Both tangible and intangible Change Management practices need to be tailored to the specific situation



Methods for Leading and Managing Change

Coaching at all levels – "WIFM"

Celebrating wins, Root-causing missteps

No surprises

Communicating the Vision

Communication Plans

Stakeholder Analyses

Defined Roles & Responsibilities

Project Structure (e.g. Team Charters, Milestones, Project Plans)

Project Reviews

Results Management

IBP Meeting Effectiveness Reviews

Action Logs

Team Effectiveness Reviews

Change Implementation Schedule

Desired Outcomes

- People are communicated to
- People are bought in
- People know what to do
- People got what they thought they were going to get
- People feel successful
- The "old way" disappears
- Results
- Sustainability
- Culture change

Tips and traps when implementing IBP include:

- Remember the 8 levers
- Conduct an assessment first and commit improvements to measurable results
- Plan for training and roll-out sessions
 - Executive session during design phase, set expectations
 - Wider communication meetings to those perhaps not directly involved
 - Just in time training during the roll-out of the meetings
- ➤ Pilot the roll-out with a "friendly" business unit or area of the business, we want to show a quick wins and success up front
- > Roll-out to other areas in a manner that matches your capacity to support (meetings, data preparation, training stakeholders)
- > Start the Executive IBP meeting in month 2 or 3 of the rollout
- Don't underestimate the data assembly/IT requirements
- Measure operational and financial results
- Projects need communication plans, project management, and change management
- ➤ Get it 60-80% right, launch, and fix the rest as you go
- Each group takes about 3 cycles to be able to discuss the full scope of their business



If you'd like some more information on IBP

See the website

- Case studies
- > Articles and blog postings
- Survey results
- ➤ Video on the 3 day training course

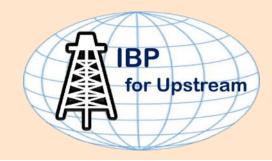
Join our group on LinkedIn

- Exchange ideas with like minded professionals
- Keep connected with IBP thought leadership
- Access to experienced IBP professionals for specific issues

Contact us

We are happy to answer questions and exchange ideas

nexviewconsulting.com_



info@nexviewconsulting.com

800.631.4842 2800 Post Oak Blvd, Su 4100 Houston, TX 77056

