



Creating a positive health & safety culture through Behavior Based Safety

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Overview

- The Bahrain Petroleum Company (BAPCO) BSC (c) is one of the largest and the oldest oil companies in the Middle East dating back to **1936**
- BAPCO Refines over **265,000 barrels** of crude a day
- Sixth of crude from Bahrain Fields while the remainder is pumped from Saudi Arabia in pipelines extending 27 kilometers over land and a further 27 kilometers under the sea before reaching the Northwest of Bahrain
- There are a total of **25 processing units** at the Refinery with a capacity to refine various products including Liquefied Petroleum Gas (LPG), Naphtha, Gasoline, Kerosene, Aviation Turbine Fuel, Low sulfur Diesel Oil, Heavy Lube Distillate, Fuel Oil, and Asphalt
- There are more than **170 storage tanks** at different sites with a total capacity of over **14 million barrels**
- BAPCO is the largest employer in the country employing **3800 full-time employees** and more than **1300 contractors** which reach 2500 contractors during shutdowns



Our philosophy

- The only acceptable safety performance is when everyone goes home everyday without an injury
- To create an environment that encourages all employees to cooperate and be actively involved in the Company H&S initiatives because they want to rather than having to
- Responsibility & ownership of individual and fellow worker safety is with every employee
- The driver for safety is within every individual
- Outstanding safety performance should be celebrated
- Do what you say you are going to do *“walking the talk”*

Positive H&S culture can be Created When :-

- Upper Management are in support of H&S
- Middle Management are actively involved
- H&S is an integral part of our Business
- High level of participation of all employees
- Existence of comprehensive H&S programmes
- Safety performance and behavior is recognised
- Hazards are communicated and corrected
- On – the - Job & Off – the - Job awareness Programmes
- Employees have positive perception and attitude
- Incidents are thoroughly investigated to uncover root causes and to learn from them
- Team work is encouraged to create a safe working environment
- H&S performance is measured
- Behavior Based Safety Process is implemented

Bapco's Health & Safety Programmes & Systems



- EHS Policy – Management Commitment
- Industrial Safety Committee (ISC)
- H&S awareness & training
- Contractors' Safety Program
- Employees & contractors engagement
- Process Safety Management (PSM)
- OHSAS 18001:1999
- Operational Excellence (OE)
- H&S Key Performance Indicators (KPIs)
- Programs & systems review



ENVIRONMENT, HEALTH AND SAFETY POLICY (EHS)  **سياسة البيئة والصحة والسلامة**

Bapco, an integrated oil company, is committed to the protection of the environment and to the health and safety of its employees, contractors, customers, the surrounding community and the general public.

The Company believes that Environment, Health and Safety (EHS) are integral parts of its business and culture and seeks continual improvement to assure full compliance with the laws and regulations of the Kingdom of Bahrain. In the absence of local rules and regulations, internationally accepted standards will be applied, as appropriate, to the local conditions. Bapco will pursue the application of sound EHS management and operating practices to minimise any deleterious impact of its operations.

The primary responsibility for communicating and implementing this policy rests with Management. Accordingly, Bapco will provide sufficient resources and will encourage the involvement of all employees and contractors. In addition, Bapco will provide EHS awareness and training programmes to enable Management, employees and contractors to satisfy their EHS responsibilities both within and outside Bapco.

In pursuit of this EHS policy, Bapco will develop specific guidelines, standards and clearly defined procedures. Effective communication channels will be maintained with the Government of the Kingdom of Bahrain and other stakeholders including the general public.

تلتزم شركة نفط البحرين (بابكو) التزاماً مطلقاً بحماية البيئة وموظفيها صحة وسلامة موظفيها ومشاركتها وزبائنها والمجتمع والجمهور عامة.

وؤمن الشركة بأن المحافظة على البيئة والصحة والسلامة جزء لا يتجزأ من أعمالها ومن ثقافتها المؤسسية، ونسعى باستمرار نحو تحسينها بحيث تلتمس تماثلها مع القوانين والاشتراطات التي تصدرها حكومة مملكة البحرين، وفي حالة غياب الأنظمة والاشتراطات المحلية، نلتزم الشركة بتطبيق النظم المعتمدة دولياً في هذا المجال وبما يتناسب مع الظروف المحلية. كما نولي الشركة اهتماماً خاصاً بتأهيل الأساسيات الإدارية المحلية فيما يتعلق بالبيئة والصحة والسلامة، بالإضافة إلى التوافق مع القوانين التي تصدر من أية الجهات المحلية لتعملها.

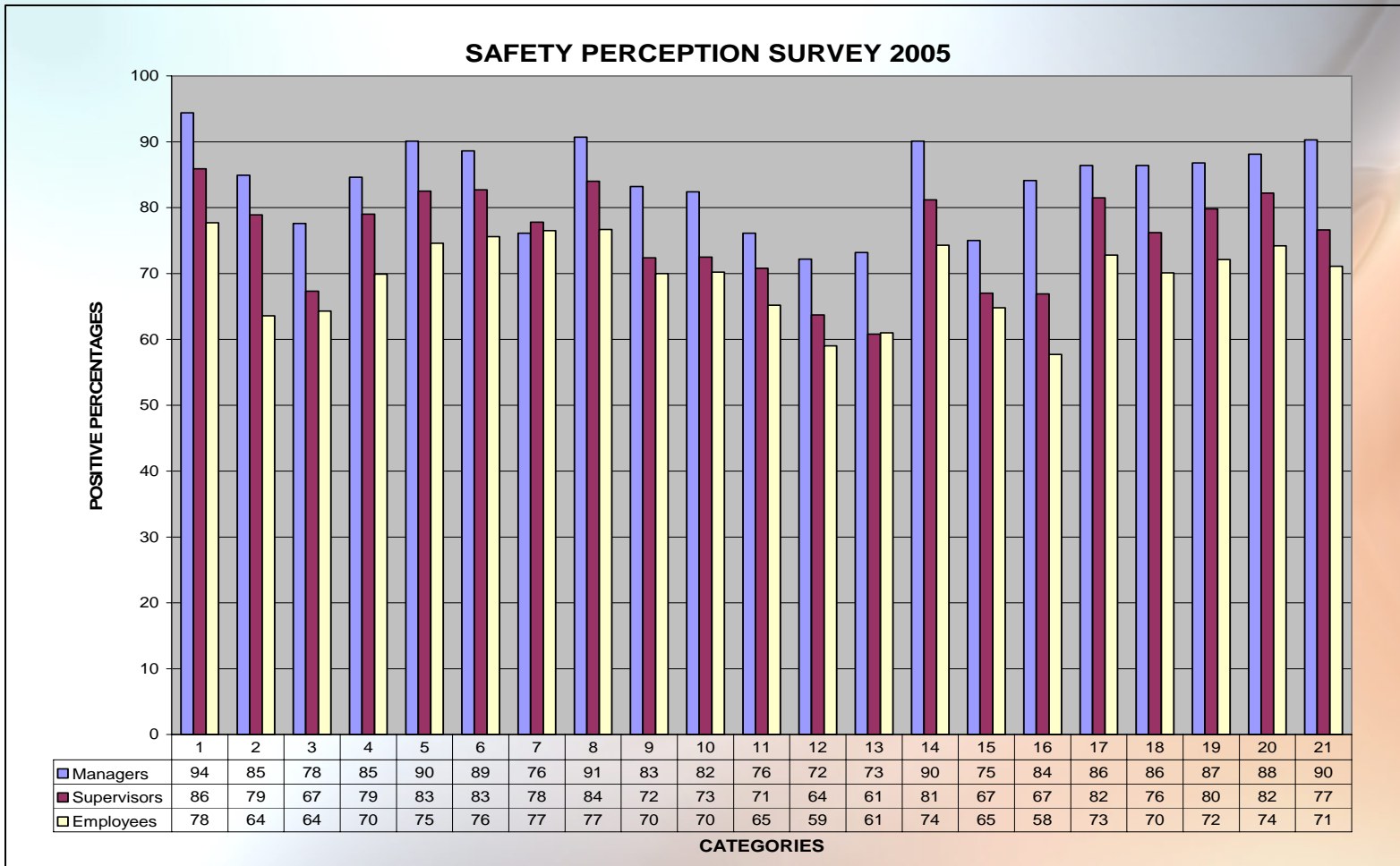
وتقع المسؤولية الرئيسية لإعمال هذه السياسة وتنفيذها على عاتق الإدارة ومن هذا المنطلق ستوفر بابكو الموارد الكافية وسنقوم بتشجيع مشاركة جميع الموظفين والمقاولين في هذا الشأن، وبمساندة إلى ذلك، ستطرح بابكو برامج توعوية وتدريبية لتتجه للإدارة والموظفين والمقاولين فهم مسؤوليتهم المتعلقة بتطبيق البيئة والصحة والسلامة داخل الشركة وخارجها.

وفي نطاق تنفيذ هذه السياسة ستقوم بابكو بإصدار الإرشادات والمعايير ووضعية الإجراءات الواضحة وسنواصل أيضاً على المحافظة على قنوات الاتصال الفعالة وتعزيز التنسيق القائم بينها وبين الجهات المختصة في حكومة مملكة البحرين وغيرها من أصحاب المصالح الأخرى بما في ذلك عامة الجمهور.

Safety Perception Survey (SPS)

- **Objectives of this survey:**
 - To assess existing safety culture
 - Measure gaps in perception between Management, Supervisors & Employees
- An internationally recognised module was obtained for conducting the survey
- It consisted of 100 questions covering 21 categories
- Required 95% Statistical Confidence Level & Involved
 - Management and Managers
 - Supervisors
 - Employees
- 461 individuals participated in this survey & 100% response rate obtained

Safety Perception Survey (SPS) - Results

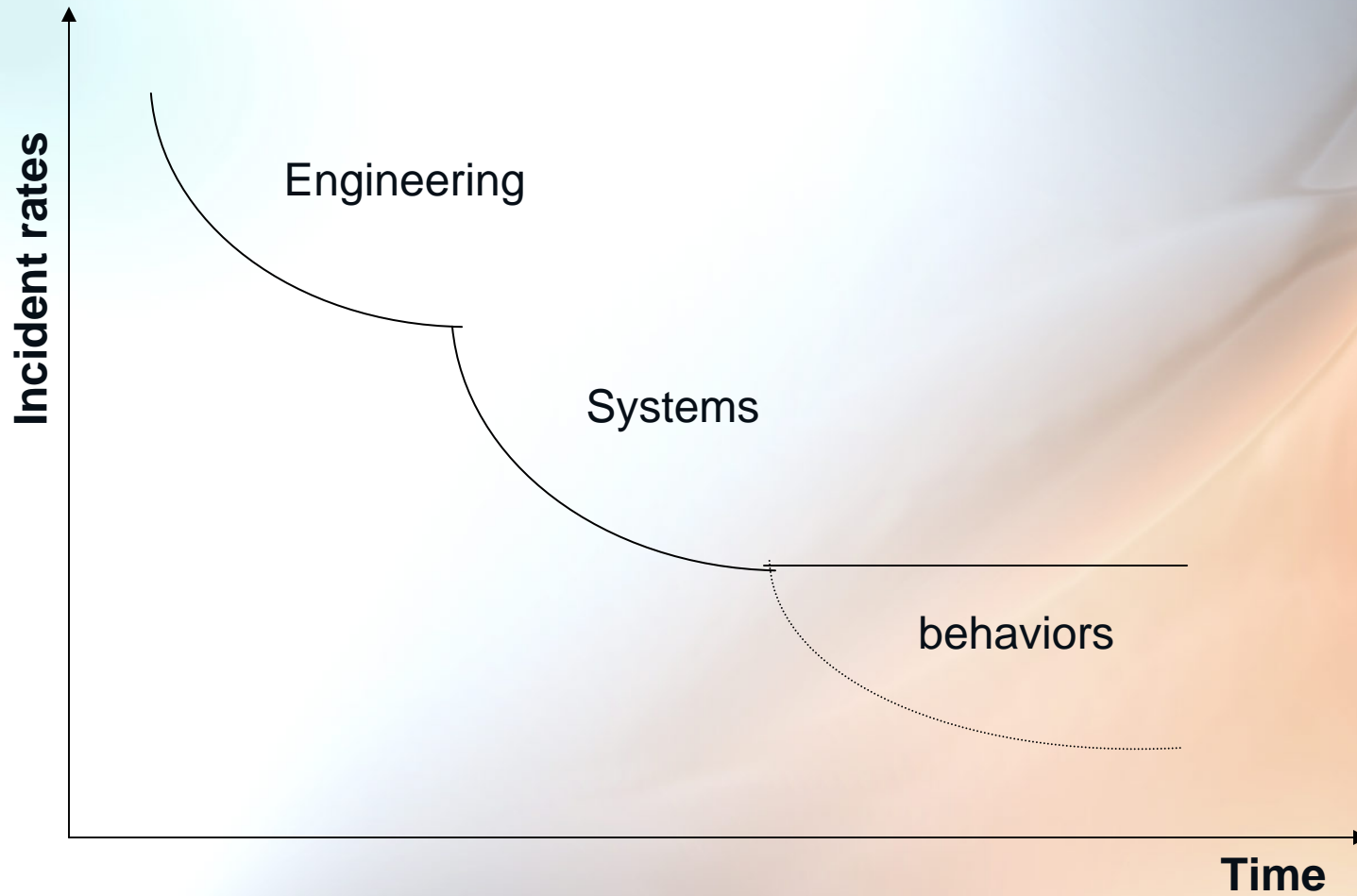


Why BBS

- **Safety Perception Survey (SPS) conducted in 2005 noted that a significant gap exists between the safety perception of management Vs employees**
- **Major H&S milestones were achieved but we were not able to achieve our target of ZERO accidents & incidents**
- **ILO various studies showed that majority of accidents causes are attributed to Human Behaviours**
- **Operational Excellence (OE) audit conducted by Chevron identified that human behavior element need to be integrated into Bapco's H&S management Systems**



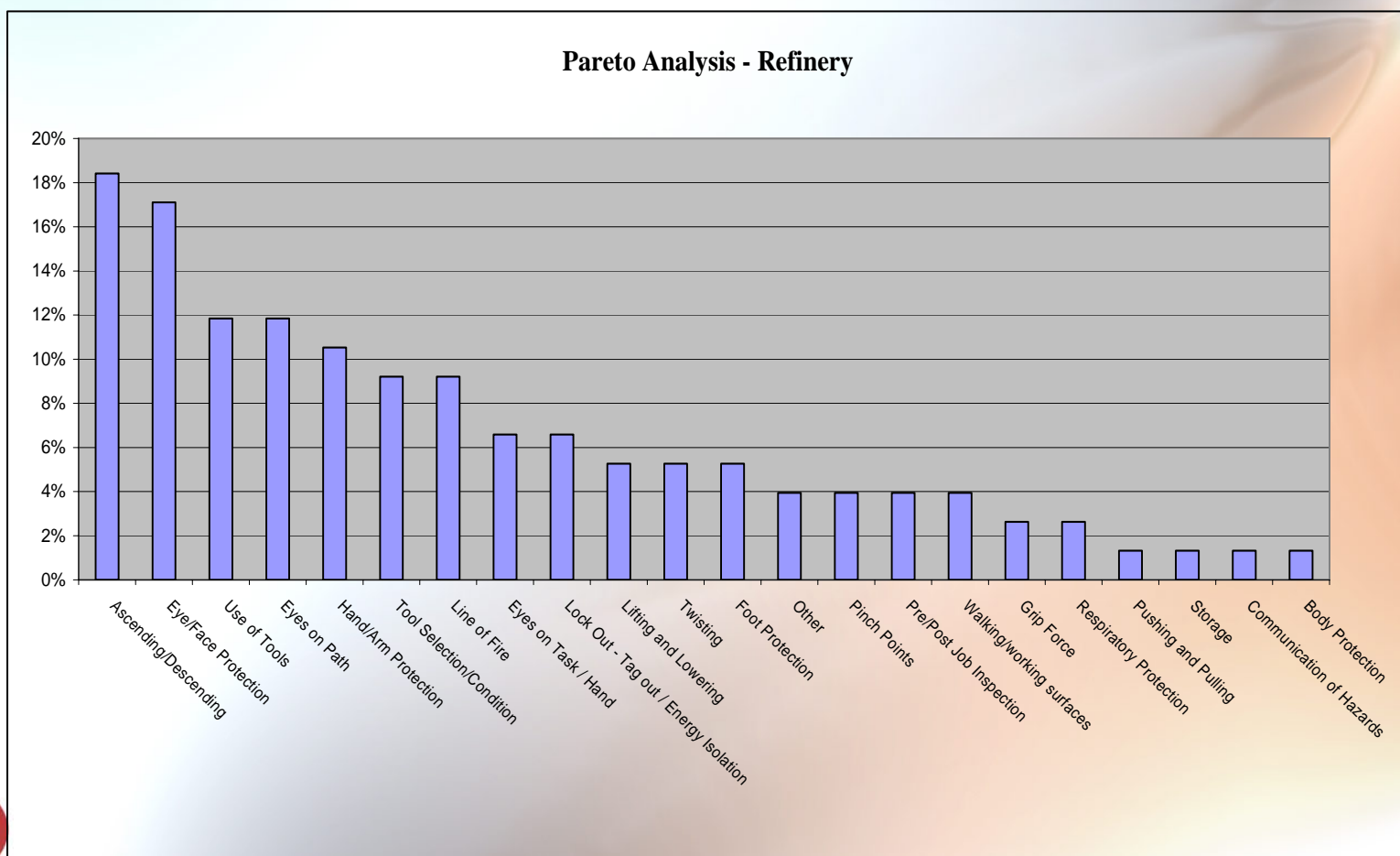
Impact of human behavior on safety



Source: Change in Mind

Rationales for BBS

- **More than 90% of Bapco accidents are attributed to human behavior**

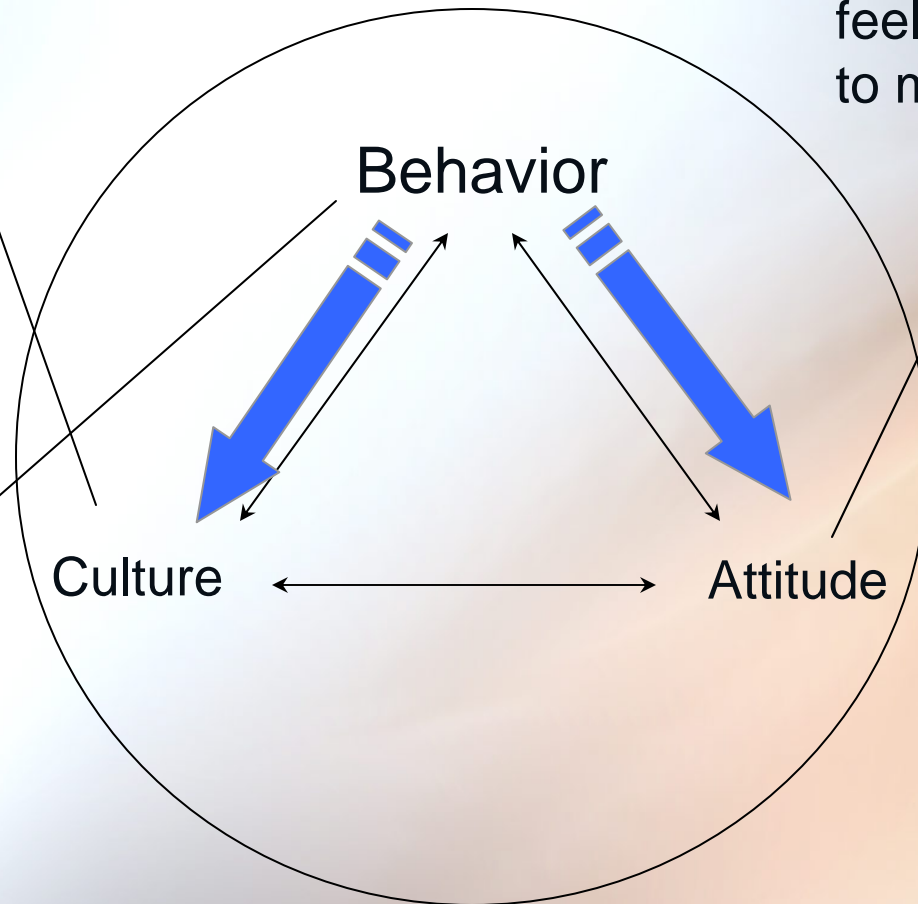


What influences behavior

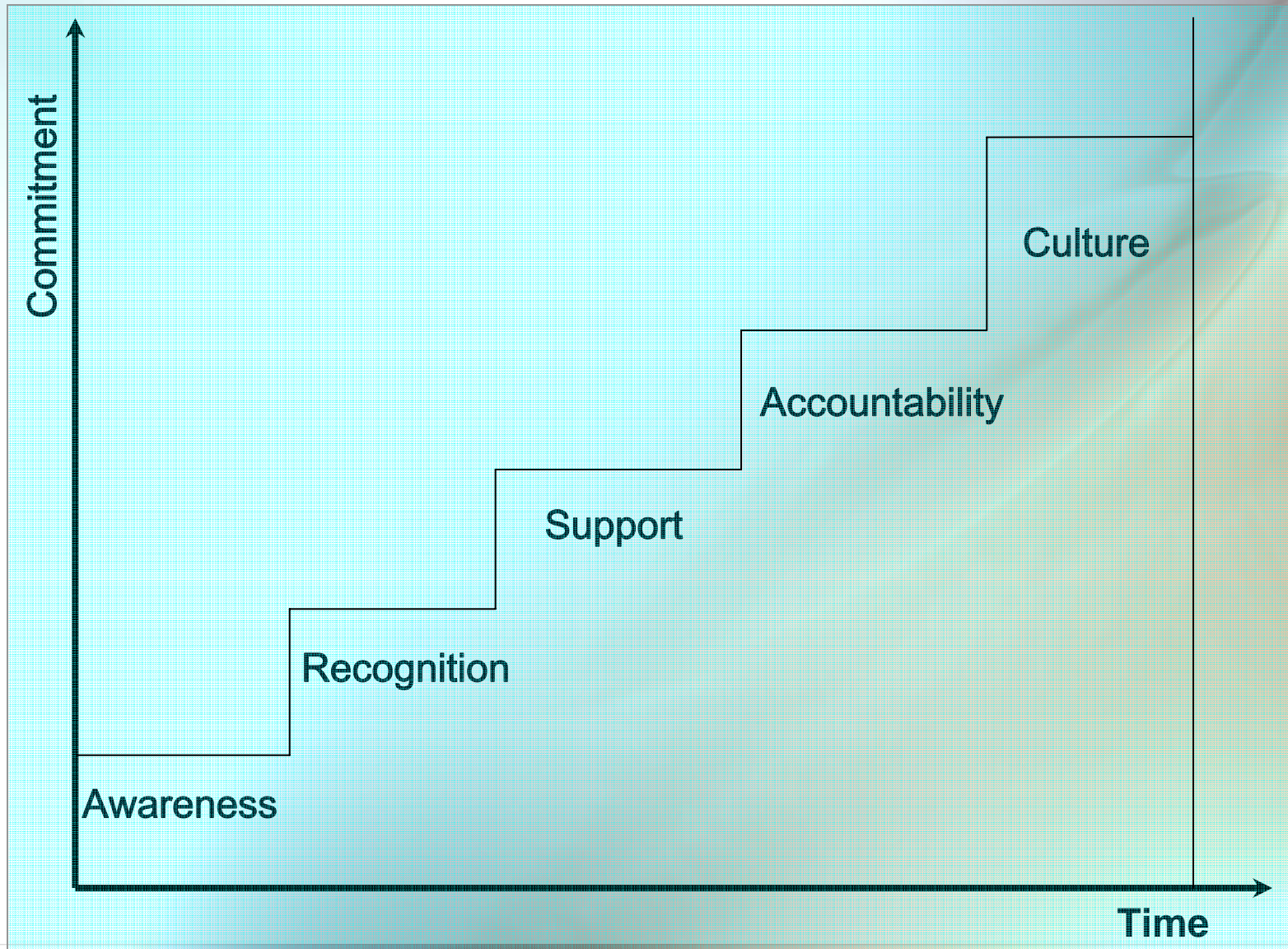
Refers to the collective values of peoples in the organization (i.e. things we do around here)

Refers to beliefs & feelings which is hard to measure

Refers to an observable acts or failure to act which is easier to measure & manage



Creating a positive culture

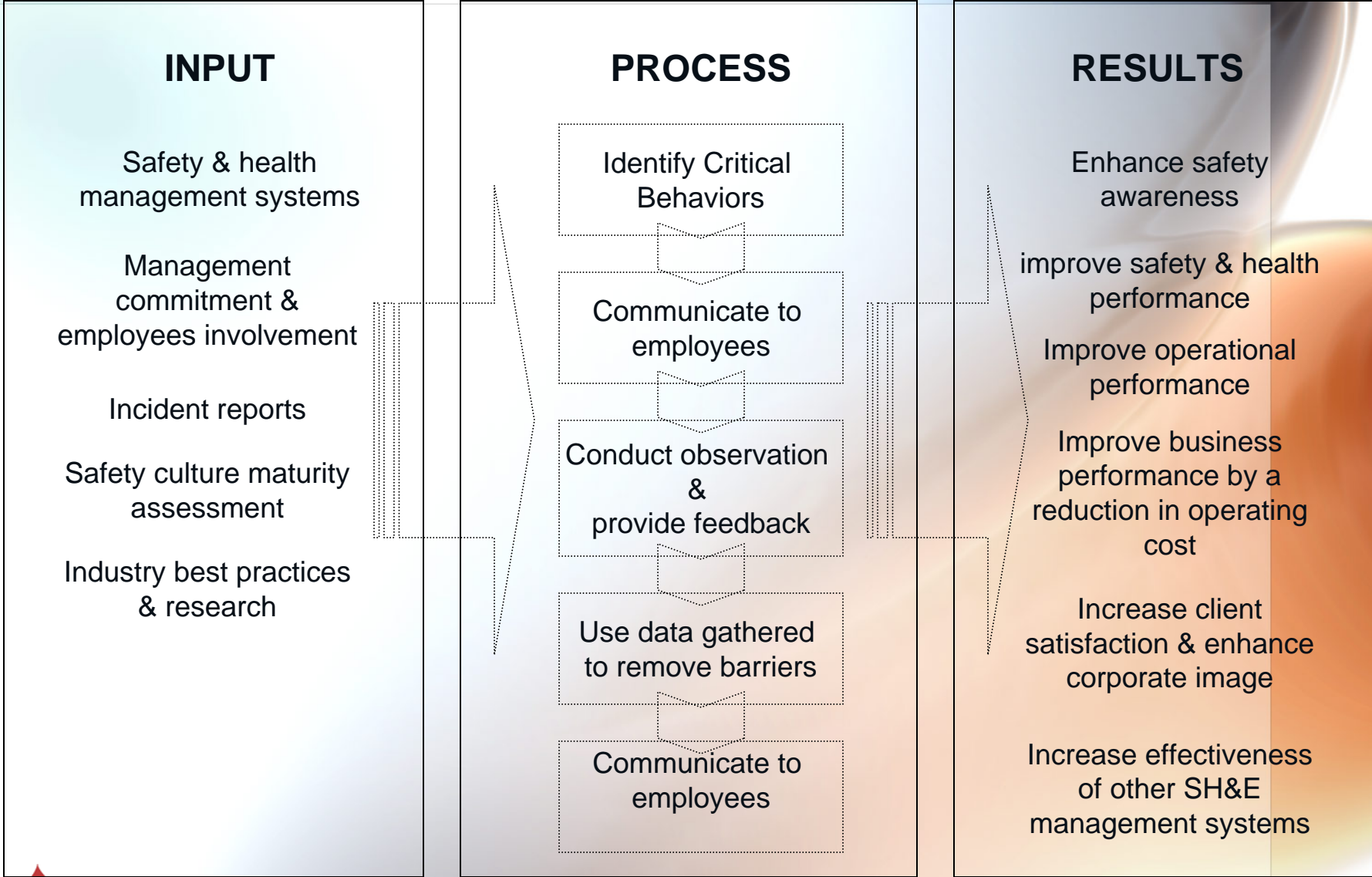


Background on BAPCO BBS

- BAPCO started its BBS initiative in November 2006
- Full implementation will be achieved towards end 2008
- Three fulltime employees are involved in the implementation of BBS
- Three Steering Committees from employees were formed
- Employees are briefed on BBS & its progress on a regular basis
- BBS initiative is called “BOOST” – Behavior Observation Obtains Safe Trends



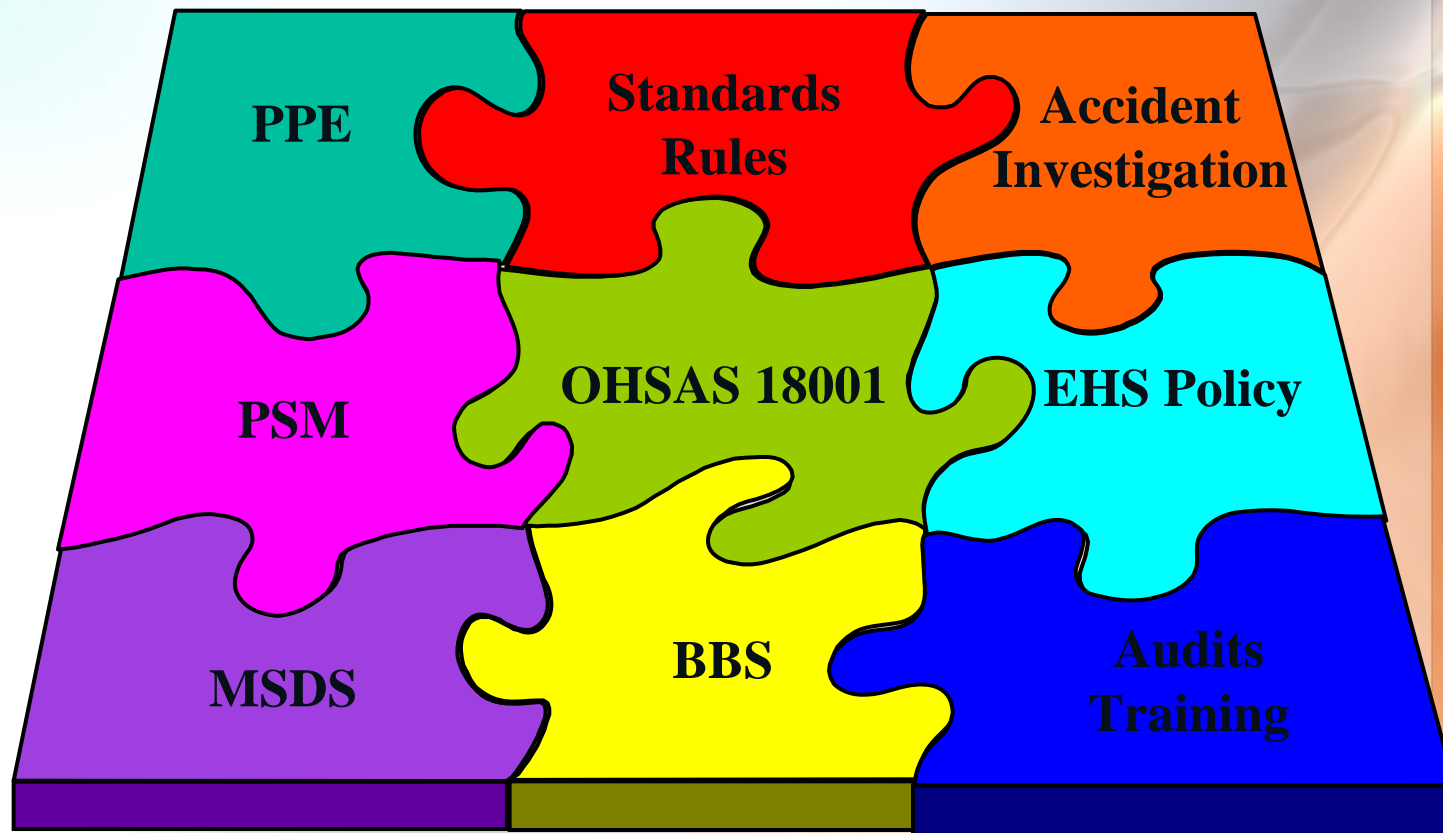
Behavior based safety framework



Factors influence the success of BBS

<u>Enablers</u>	<u>Barriers</u>
Management commitment to the process	Lack of management support
Middle management understanding of the behavior based safety process principles	Little or no involvement of middle management
Middle management involvement & support for the process	Little or no involvement of the workforce
Workforce involvement in the implementation and sustainability of the process	Lack of resources
Effective H&S management systems	Placing blame on individuals
Provision of adequate resources	
A workforce who are already active in H&S	
Utilizing the notion of “no name, no blame”	
Keeping the process evergreen (e.g. introducing something new on annual basis)	

BAPCO integrated S&H management



Safety news headlines

- *“Bapco safety performance remains one of the best in the industry”*
- *“Bapco win a top safety award”*
- *“Contractor safety continues to improve at Bapco”*
- *“Bapco launches Behavior based safety to the next level of safety performance”*
- *“Bapco obtains OHSAS 18001 Certification”*
- *“Working in Bapco is safer than home!”*

“The behavior of people in business is not another issue to be considered – it is at the center of every business decision”

Aubrey C. Daniels

Bringing out the best out in people (1994)



Thank you

