# NPI Workgroups Management System

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## Abstract

Global organizations with virtual teams and its resources located in different geographical locations have a growing concern on the impact of turnaround time and work-life balance. The main challenges are the coverage due to the gap in time zones, consequently assigning work to the available resources at the time. This limits the ability of others to get the desired exposure and gain expertise to collaborate and at the same time not having a balanced work bandwidth. The work inventory was analyzed in an effort to balance the work for all employees in the virtual teams. Results indicate that by deploying a workgroups management system for the NPI team, the workload was evenly distributed between the groups and each individual, but also providing the opportunity to collaborate as a single unit. This not only improved the turnaround time, but it also helped balanced the work-life conditions of the team as a whole.

## Introduction

**Hewlett Packard Enterprise**

Hewlett Packard Enterprise is a global IT company. It owns one of the largest supply chain organizations globally, where all of the supply chain resources are located across the world to support global fulfillment. Within the software supply chain, New Product Introduction (NPI) Engineers are a team located across the Americas.

Working with **virtual teams** provides its own set of challenges.
- Gap in time zones impacts turnaround time
- Subject Matter Expertise limited
- Incoming work assigned reactively
- Unbalanced distribution impacting work-life balance
- Limited trainings and development

The **NPI Workgroups Management System** project goals:
**Reduce overwork** conditions to improve quality and work-life balance.
**Increase backup** coverage globally in order to improve turnaround time response.
**Expand the knowledge**, accountability, and exposure to additional product lines for all Engineers within the Software Supply Chain team.

## Research

The idea of workgroups in a virtual team is a way for individual contributors to effectively balance bandwidth and share knowledge.
- Trust and communication were identified as the main challenges for managing virtual teams [1].
- Subject Matter Expert is defined as a specialist in specific competencies [2].
- Job rotation plays an important role to continuous improvement by the use of training and problem-solving ability [3].
- Working long hours is unhealthy [4].
- Employees working long hours go through greater conflict between their work and personal roles [5].

## Results

### Table 1
### Subject Matter Experts by Business Units

| Business Unit | SME Count |
| --- | --- |
| Software | 4 |
| Networks | 4 |
| Storage | 4 |
| Servers | 4 |

### Table 2
### Turnaround Time Improvements

| Task | Pre-Workgroups | Post-Workgroups |
| --- | --- | --- |
| Customer/Factory Elevation | 3 days | 1 day |
| Bill of Material Setup | 1 day | 0.25 day |
| Pilots Testing | 4 days | 2 days |

**SME expansion** - Periodic reviews indicate that knowledge has expanded through job rotation.
Table 1 details SME distribution across business units, with the opportunity to distribute SME resources for balanced coverage.

**Improvements** - The deployment of the workgroups proved a positive impact on productivity, quality, and turnaround time.
Table 2 demonstrates turnaround time improvements with workgroups deployment.

**Inclusion and diversity** - The geographic distribution had an impact on how the individuals in the group perceive the cultural differences and adapt to work together as a team.

**Leaders** maintain one-to-one and staff meetings among relevant activities that are essential to maintain individual contributors motivated. The team as a whole continues to exists and is accountable within the organization on their roles and responsibilities. Figure 1 details the essential engagement strategies for virtual teams.
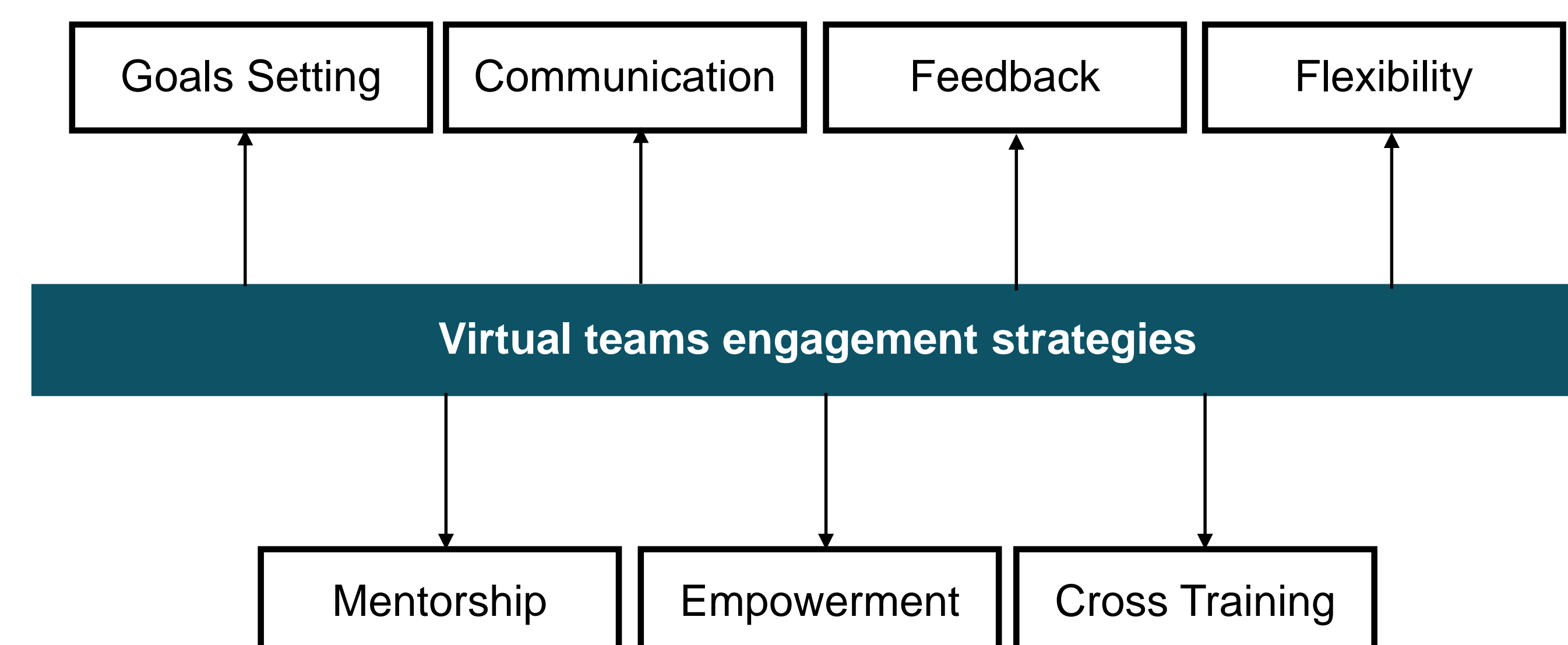


Figure 1
Engagement strategies

## Methodology

**Analyze** – Perform a work inventory and bandwidth analysis to establish workgroup structures.
**Design** – Define workgroup schema based on data analysis.
**Development** – Establish cross training plans between workgroup members to enhance coverage.
**Deploy** – Switch operations to a broader and knowledgeable structure in a high-performance culture.
**Continuous Improvement** – Execute periodic analysis to shift resources.

## Conclusions

The idea of establishing a NPI Workgroups Management System provides a way for leaders with global virtual teams to reduce overwork conditions, improve quality, and work-life balance. Figure 2 details the finalized workgroup schema deployed for the SW SC NPI team.
- It enhances backup coverage globally to improve turnaround time response.
- Enable employees to expand knowledge, accountability, and exposure to additional product lines.
- The teams are able to rotate product ownership, increasing confidence.
- Each individual gets bandwidth for professional development to get exposure to work on projects
- It evens out each member on workload to achieve a healthy work-life balance.
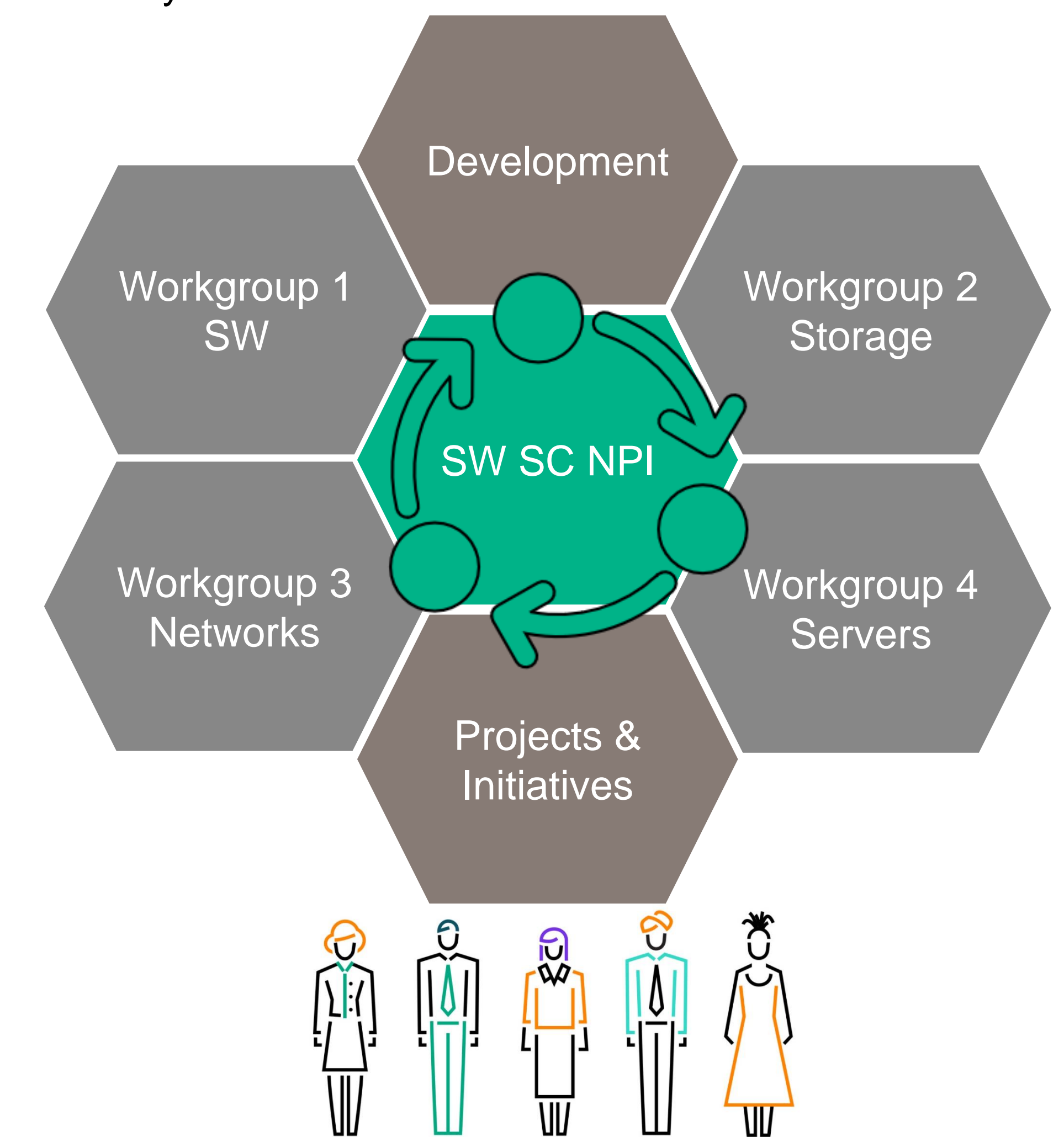


Figure 2
Workgroups schema

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