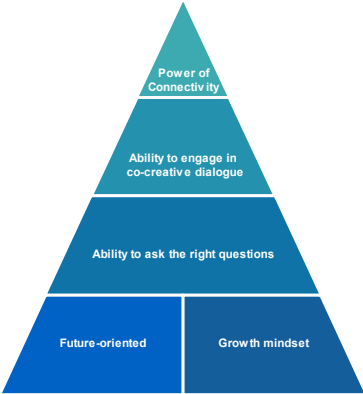## Example of Employee Development Programs

Program1 : The Future Co-creation Initiative	
Employee Development Program	The Future Co-creation Initiative is a unique program established by Yokogawa, aimed at building co-creative networks and fostering next-generation leaders. As a cross-organizational virtual team under the direct control of the president, the initiative bridges internal and external entities, creating value in solving social issues. The discussions revolve around the "2035 Future Scenario" created by scenario planning, promoting conversations that transcend generational and positional boundaries to address global and social issues. Building upon its previous success, the Initiative added a cross-organizational team of 18 selected members in 2022 to create the "2040 B2B2C Scenario," thereby adding depth to our layer of co-creation leaders. These leaders served as boundary spanners, connecting various internal and external communities, thereby enhancing Yokogawa's "Connect" purpose. Further enhancing the Initiative's impact, a new training program using generative AI was implemented, stimulating dialogues and improving the utilization abilities of our young employees.
Description of business benefits	The Future Co-creation Initiative emerged as a potent catalyst in 2022, empowering young leaders to embody a growth mindset and align with the Corporate Purpose. Recognized by over 15 external media, our progressive leadership development strategy gained visibility. The Initiative broadened its scope by introducing seminars with diverse industry experts, delivering recurrent, practical education for all staff. Crucially, our focus on generative AI competence led to significant business transformation and bolstered the potential of Yokogawa's main business, echoing our IA2IA (Industrial Automation to Industrial Autonomy) concept. Our co-creation leaders forged long-term value for all stakeholders, embodying Yokogawa's commitment to connect and co-create value. A testament to our innovative strides is our novel leadership development program, merging regional revitalization, cross-industry exchanges, future orientation, and workations, which ran thrice this year.
Quantitative impact of business benefits (monetary or non-monetary)	The Future Co-creation Initiative significantly expanded its influence in 2022. We increased our engagement with C-level individuals in the private/public sector to over 100 corporations. The Future Co-creation Community in collaboration with Waseda University also grew to encompass 33 corporations. In doing so, we enhanced the 'connecting power' intrinsic to Yokogawa's Purpose and expanded our stakeholder network. The initiative's members were recognised by external HR departments and managers for their forward-thinking leadership capabilities, which align with the demands of the generative AI era. The initiative's activities resulted in numerous invitations for session appearances and media interviews, greatly enhancing Yokogawa's public presence.
% of FTEs that participated in this program	5%

Develop future-oriented and co-creative leaders for the next generation

Extend brand image through future co-creation activities
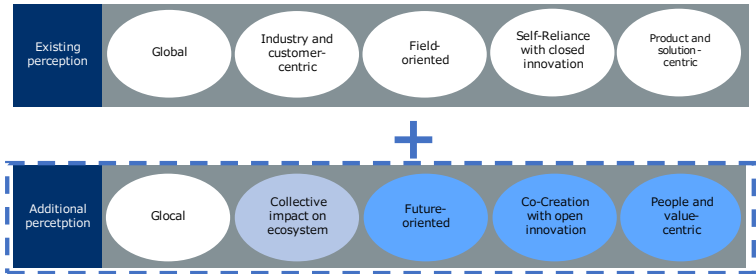
✓ **Focusing on the individual, we will fulfill our responsibilities for the future of our planet**
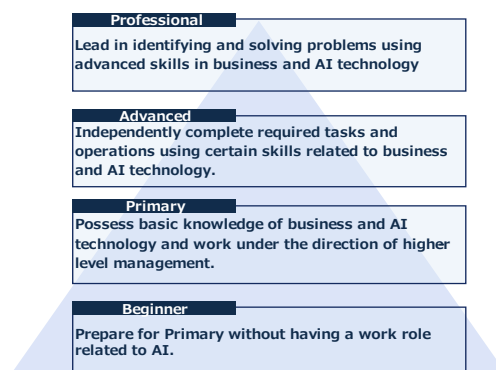✓ **Become a future-oriented, co-creative trusted partner**

Reference
https://www.yokogawa.com/solutions/featured-topics/future-co-creation-initiative/
https://www.wired.com/sponsored/story/co-creating-the-future/

Program2 : AI talent development program by AI Center of Excellence (AI CoE)	
Employee Development Program	Yokogawa's DX strategy addresses both Internal DX and External DX. Through Internal DX, we aim to be a Digital Enterprise (DE), improving employee productivity and reducing environmental impact. With regard to External DX, we will utilize the knowledge of DX gained through Internal DX to provide a variety of digital services that enable our customers to become DE, thereby contributing to business model transformation and reducing environmental impact. To promote DX, we are working to strengthen DX human resources globally. In DX, various DX Technologists, such as data analysts, cloud engineers, cybersecurity engineers, and AI/ML engineers, are required, and AI CoE is responsible for strengthening AI human resources including AI consultants and AI sales engineers as well as AI/ML engineers. The AI CoE is a cross-company organization in Yokogawa that concentrates its AI resources to develop and implement AI technologies focused on solving customers' problems. In addition, Ai CoE is engaged in friendly competition among employees through case studies and technology sharing, and provides educational programs to develop human resources who can utilize AI to produce results in business. Background of Human Resource Development Many of Yokogawa's customer challenges were solved solely by the manufacturing department. In recent years, however, as the challenges have diversified, there has been a need to ensure stable production and quality. To this end, Yokogawa understands our customers' problem-solving processes and provides a wide range of optimal AI solutions and human resources capable of utilizing AI technology in a harmonious manner to help customers solve their problems. We will develop AI human resources that can overcome these environmental changes.
Description of business benefits	Technology Exchange Meeting: The employees across organizations share examples of Yokogawa's use and development of AI to acquire knowledge and improve skills among employees. It was held 17 times in the past three years. Provision of in-house AI related e-learning courses: 18 e-learning courses have been developed in-house, including examples of Yokogawa's AI applications, and global employees can freely study these courses. Building and practicing the whole picture of AI employee's development: We set the target number of AI employees for each business and defined ideal images of the AI employees and its levels. In addition, a total of 46 individual skills were defined in 3 categories and a training curriculum was established for acquiring these skills. In FY22, we firstly focused on training Beginner and Primary AI employees, and in FY23, we will work to strengthen Advanced and Professional ones through this program.
Quantitative impact of business benefits (monetary or non-monetary)	・Technology exchange participants: Approximately 9% of all employees (3 years from FY20 to FY 22) ・Participants in e-learning courses related to in-house AI: Approximately 7% of all employees (3 years from FY20 to FY 22) ・Enrollment in the training curriculum set for FY 22: Approximately 1% of all employees (FY22) As a result, Beginner and Primary human resources increased by 20% in FY22, and overall human resources with AI skills increased by 13%. In FY23, we aim to increase the number of human resources with AI skills by 103% from FY22, and achieve the target numbers set for each business, thereby contributing to the business in Yokogawa.
% of FTEs that participated in this program	3%

Role definition of desired human resource image

	Role Title	Role definition of target human resources
Ideal Human Resource	AI Consultant	Understand customer issues and needs, and propose appropriate AI-based solutions to customers.
	AI Sales Engineers	Lead the consideration and proposal of AI-related solutions to specific customers' issues and needs, in terms of technical perspectives.
	AI Engineer	Carry out the necessary data acquisition and analysis, design, and implementation (including model development and incorporation into the product) in solving customer issues and developing the company's own services.
	AI Planner	Based on market trends and competitive research, consider the development of AI-based products and services for the company's products.
	AI User	Acquire basic knowledge of AI, understand industry trends and case studies, and consider the use of AI in their own work.

Level of desired human resources

Professional
Lead in identifying and solving problems using advanced skills in business and AI technology

Advanced
Independently complete required tasks and operations using certain skills related to business and AI technology.

Primary
Possess basic knowledge of business and AI technology and work under the direction of higher level management.

Beginner
Prepare for Primary without having a work role related to AI.

N0	Category	Sub-category*	Contents
1	Business	Innovation	Create processes and business models that did not exist before from limited information
2		Logical Thinking	In discussing ideas, issues, or solutions, grasp multiple related events structurally, correctly verbalize them, and build consensus with discussion partners.
3		Business Analysis (Issue Extraction)	Visualize existing/new operations and business flow and identify/specify problems
4		Approaches To Challenges	Consider feasible approaches to the problem
5		Project Conception/Promotion	Shows a vision for the operations and business and oversees and manages the entire operation making use of each technology to realize the vision.
6		Team Building	Communicate with team members to support career and skill development
7	Technology	Data Science	Understand and utilize the wisdom of artificial intelligence, statistics, and other information sciences
8		Data Engineering	Enable, implement and operationalize data science in a way that is meaningful and usable
9		IT in general	General IT knowledge and knowledge of the latest technologies required.
10	Business/ Technology Common	Literacy	Understand and explain the whole concept of AI
11	Mind	Will To Challenge	Ability to step into new areas without fear of failure
12		Flexibility	Ability to flatly accept environmental changes and differing opinions and incorporate what is beneficial
13		Grit/Energy/Courage	Ability to remain resilient in the face of challenges and continue to persevere to the end
14		Sense Of Responsibility	Ability to cover a scope of responsibility for the project for which they are responsible and to carry out the duties of the position in a professional manner
15		Adaptability	Ability to collaborate with members in various roles and to start newly assigned high-priority tasks without putting them off, even when the workload is heavy.
16		Eagerness To Learn	Ability to continue to learn and develop an interest in new knowledge that can be applied in practice

Reference

https://www.yokogawa.com/solutions/featured-topics/ia2ia/enablers-in-industrial-autonomy/
https://www.yokogawa.com/special/artificial-intelligence/