



## The Role of Civil Service and the Human Resource Management Policies Required for the Government of the Future



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# Contents

Chapter I : Research Background and Purpose of This Paper

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Chapter II : Prerequisites for the 21st Century Civil Service Systems

---

Chapter III : The Role of Future Governments

---

Chapter IV : Competency Elements for Future Public Officials

---

Chapter V : Four Ideal Types of Talents Required for Future Societies

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Chapter VI : The Direction of Personnel Policy Required for Future Governments

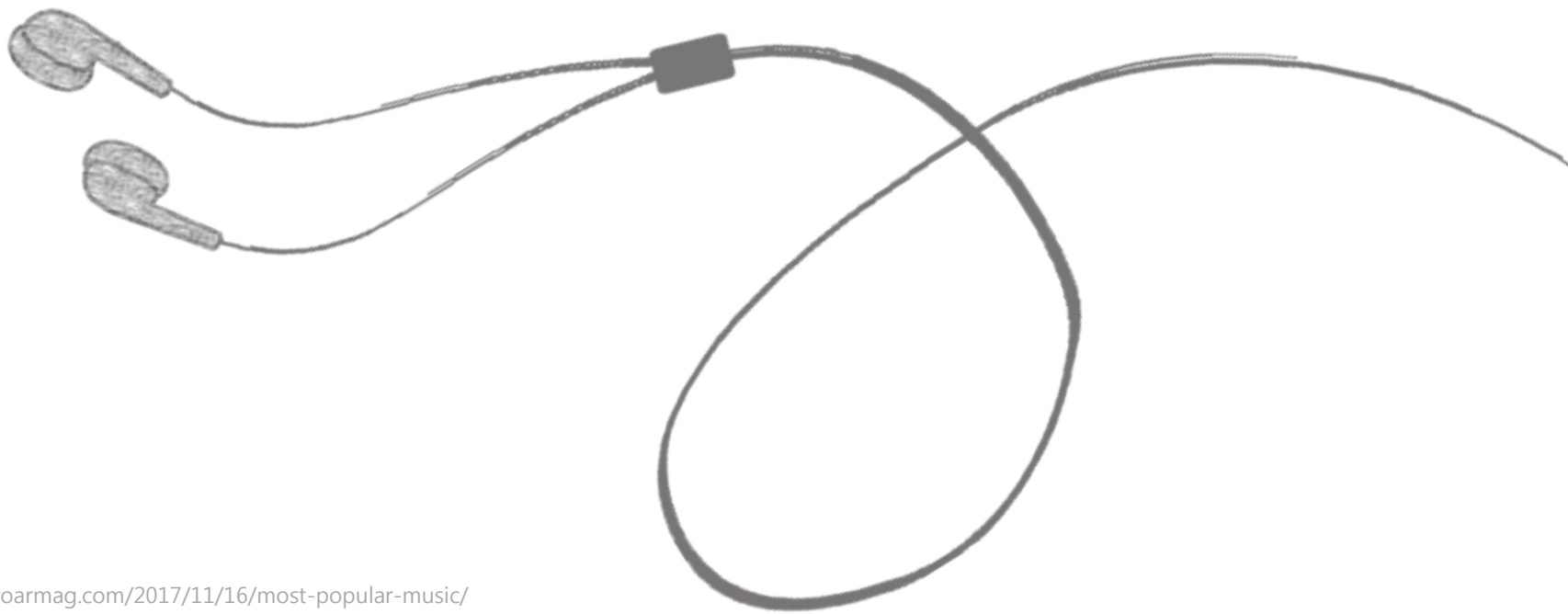
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# Chapter I.

## Research Background and Purpose of This Paper



◆ **Future societies : significantly differ from our current societies**

- The primary reasons : slow economic growth, an aging population, increased frequency and intensity of natural disasters, instability in energy supply and demand.
- Other factors : the development of smart devices, reduced consumption patterns, sluggish investment, income disparity and the decline in employment

◆ **Due to the Internet and the social networking revolution, future governance might not be in the hands of the government alone**



- ◆ The future of governance lies in networks that include government, business, NGOs and civil society on multiple scales and levels from global institutions to neighborhoods and tribal councils
  
- ◆ Governments of the future will need to adapt and continuously evolve to create “value”
  
- ◆ They also need to build their capacities to operate effectively in complex, interdependent networks of organizations and systems across public, private and non-profit sectors to co-produce “public value”
  
- ◆ The civil service systems, in most countries, require considerable modernization
  - Current civil service systems are traditionally structured, rigid, inward-looking and based on outdated competencies
  - In addition to increasing their networking and collaboration, governments need to be more transparent, flexible and participatory

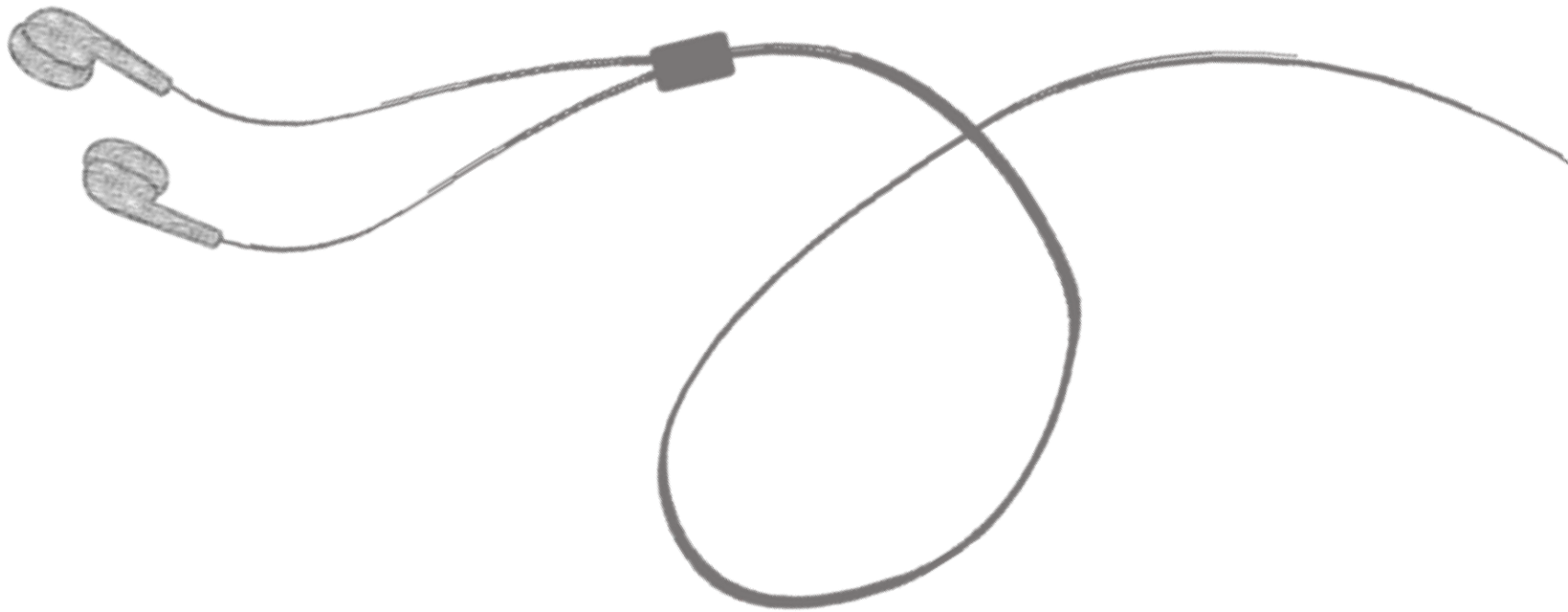
- ◆ This paper aims to examine what factors are causing rapid changes in the world and briefly analyze how they will affect the operation of government
- ◆ It also evaluates the preconditions of public service systems for future governance and presents the features and necessary characteristics civil servants require to effectively operate within this system
- ◆ Finally, it presents the human resources policy required by future governments, with respect to recruitment, training and continuous education, retainment, performance appraisal, compensation and civil service welfare

purpose



## Chapter II.

Prerequisites for the 21<sup>st</sup> century Civil Service Systems



- ◆ Structures and procedures need to be simplified and streamlined so that civil servants can network among themselves and with others and innovate
  - Highly hierarchical public organizations
  - Work is organized in compartmentalized departments
  - Procedures and practices : cumbersome and inefficient and seldom provide the scope for initiative and innovation
  
- ◆ Any modernization requires special programs that teach public management, while guiding employees to work actively and collaboratively
  - Civil servants quickly learn to work in organizational compartments
  - Information and knowledge are jealously guarded and kept within individual organizational units
  - Rivalries exist between different agencies vying for recognition and funds
  - Initiative and efficiency are frowned upon, particularly among frustrated and disillusioned tenured staff, while management styles are often traditional and either paternalistic or authoritarian



- ◆ “Open government” initiatives need to be introduced to promote the sharing of information and to increase transparency
  - The sharing of information and knowledge facilitates the involvement of other actors in the delivery of services, while also enabling civil servants to take advantage of information resources through cloud computing.
  - The creation of common data platforms that can be shared among various agencies would facilitate information exchange and sharing among civil servants
  
- ◆ Recruitment systems, including examinations and interviews, should be modernized to facilitate the recruitment of employees with new competencies and skills
  - In addition to knowledge, selection methods should assess the attitudes and behavior of candidates
  - Remuneration systems should be able to reward civil servants who are particularly effective, innovative and engaged

- ◆ Future governments should draw their personnel from all sectors of society, particularly at the managerial level and facilitate the movement of human resources to and from the civil service and other sectors of the economy and society
  - Most civil service systems have rigid procedures in place, when it comes to the exchange of staff



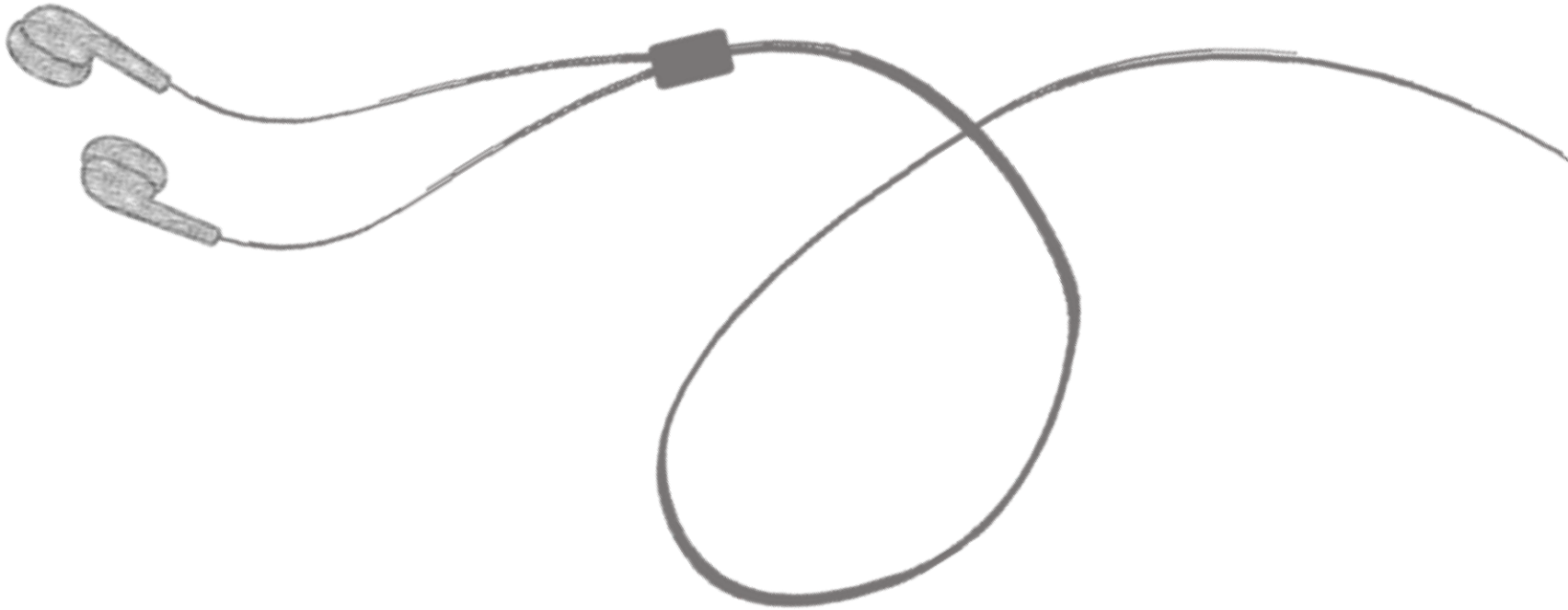
- ◆ The training programs should also focus on building proficiency in collaboration, networking, public-private partnerships and citizen engagement. Furthermore, competencies in using social networks and current information infrastructures should be embedded in the core syllabi
  - While public administration schools and institutes offer a strong curriculum in traditional disciplines, such as political science, economics and other social sciences, they are weak in developing the newly required competencies and behaviors

- ◆ In sum, without the reform of traditional bureaucracy, the government will be unable to coordinate and guide future changes.
  - In this sense, traditional bureaucracy should be dismantled creatively and a new Human Resources (HR) system should be established.
  - Creative dismantling is a structural process that reforms HR systems in line with fundamental changes of the future, rather than aiding the growth of the existing HR systems.



# Chapter III.

## The Role of Future Governments





- ◆ **Governments need to enable people rather than simply provide solutions**
  - Focus on finding and solving problems outside of government
  - **Build platforms**, hold partners accountable for targeted outcomes
  - Open their services to choices and **manage crowdsourced campaigns and competition**
  - **Governments will assume the role of solution recruiters**
  - **Governments will not be the exclusive problem solvers, but will compete with ordinary citizens, private companies and social enterprises to provide the best solutions available**
  - **“mutual advantage” or “shared value”** is no longer a vague slogan, but a fundamental business strategy for the future.



◆ Governments that can provide “made-for-me” services

- Rather than providing customized services to the public, the government should be able to offer personalized services
- Personalized services will be made more attainable by using robots and artificial intelligence. In this instance, a public servant should be an analyst, who contemplates and determines the combination of the necessary elements for “made-for-me” public services tailored for each individual



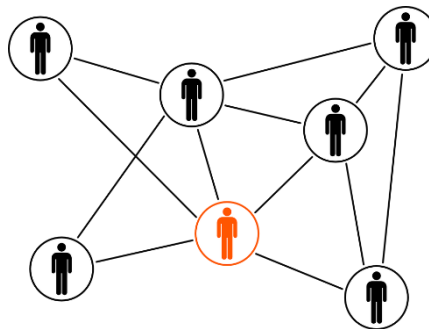
◆ **Future governments need to build distributed governance**

- The accessibility and affordability of **social, mobile and cloud technologies** allow **groups of ordinary citizens to have a voice on tough societal problems**
- In a similar manner to the way of Wikipedia, many people will be able to participate in government decision-making activities.
- **The power and authority of the government need to be distributed** and thus governments need **to build systems that can cope with this new situation.**



◆ Governments administrations need to become “flatter”

- The term “flattening” refers to decreasing the distance between the government and the people in a variety of ways, the use of social media, mobile devices and mapping tools.
- It refers to increasing participation through online deliberation, consultations, surveys and other communication modalities
- Committing to open data resources that provide citizens and businesses with greater access to public information in easy to use, and searchable electronic formats
- Flattening also means decreasing the hierarchical distance between top management and line personnel and removing bureaucratic red tape.



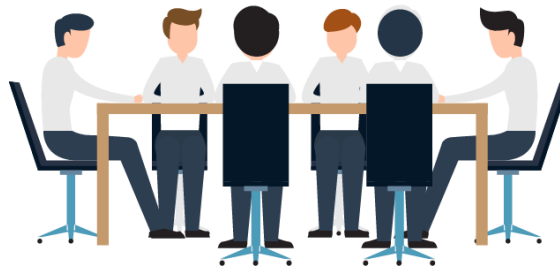
### ◆ Governments must be agile

- Agility and adaptability are critical to effective and innovative governments
- Successful governments can organize themselves to marshal public and private resources quickly in response to challenges.
- Of equal importance is the ability of governments to **de-organize themselves** when specific structures and processes are no longer needed.
- This requires an agile workforce comprised of highly skilled and knowledgeable workers with broad problem-solving capabilities and armed with real-time data and business intelligence.



◆ Governments need to be tech-enabled and tech-savvy

- Governments of the future must be fully tech-enabled with a tech-savvy workforce
- Policy, legal and regulatory frameworks and processes must be redesigned to align with the dynamics of the networked world.
- Information infrastructures must support new modes of collaboration, information and intensive governance.
- Even in the poorest regions, good examples of service innovation have been propelled by inexpensive mobile and wireless technologies.

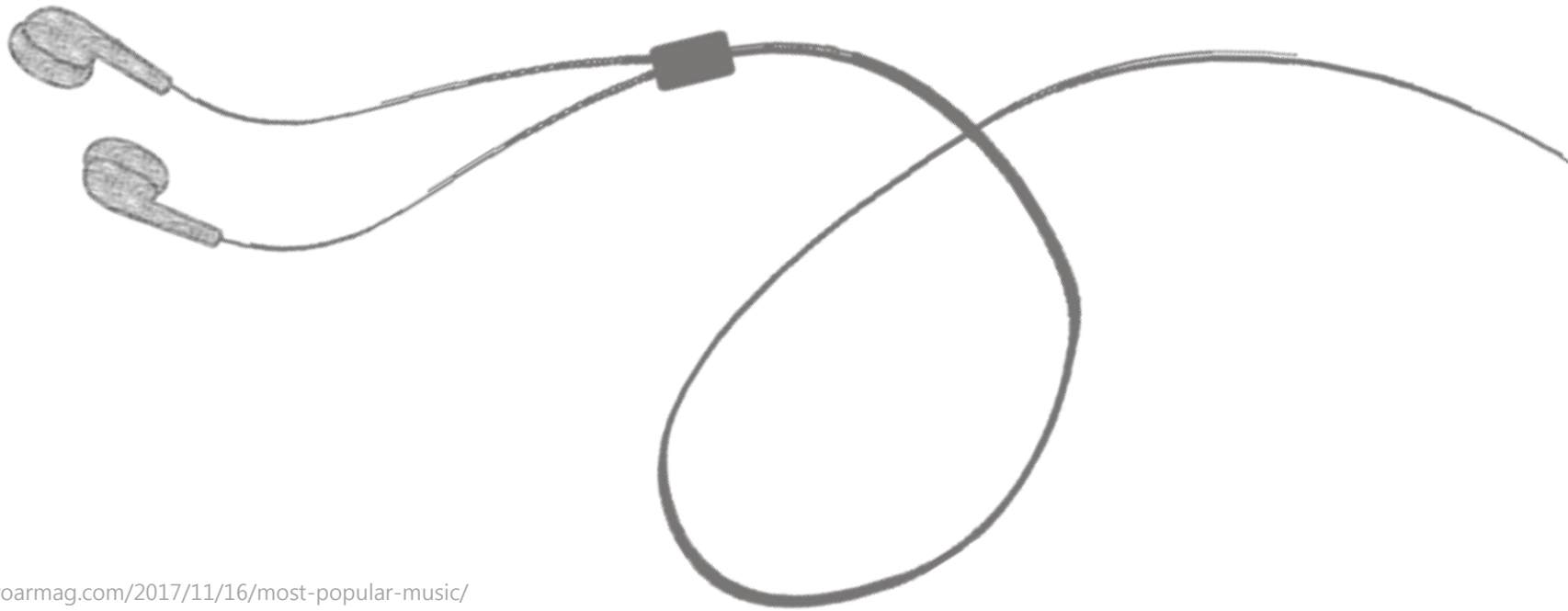






## Chapter IV.

# Competency Elements for Future Public Officials



◆ **Ability to create value** through collaboration and combination

- Future public servants need to be able to create value **by combining the ability to collaborate and utilize and disseminate pertinent information efficiently.**

◆ **Ability to lead and respond to future changes**

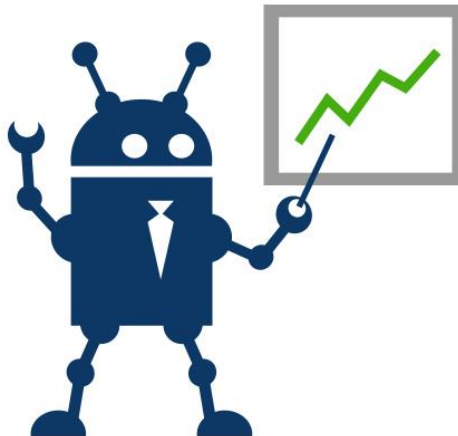
- As a period of a fundamental paradigm shift is approaching, one that is different from the Industrial Revolution, the role of the government will regain importance.
- In this context, one could say that the ability to lead and respond to change **will be a critical key competency to possess.**
- When civil servants were leading change for the future, the country enjoyed high economic growth and industrial development; when they did not lead such change, the country found itself in a slump of low growth and economic depression (Korea's experience)



◆ Ability to communicate through speculation and sensitivity

- In the future, efficient communication between civil servants, machines and citizens will be of vital importance.
- This is particularly true in cases where machines replace routine tasks.
- Public servants will have to focus on expanding their ability to communicate based on their emotional capacity and their human intuition; skills that cannot be substituted by a machine.
- While the development of artificial intelligence can be analogous to human experience,  
it seems unlikely that machines will possess the human thought and sensitivity

- ◆ Ability to possess experience and policy implementation capabilities centered on new technologies
  - Robots equipped with artificial intelligence and big data analysis capabilities will be able to provide faster and more precise services to the individual than civil servants can currently provide
  - Robots can provide clerical services to individual civil servants, and thus be freed to devote their time to performing higher-level policymaking and implementation tasks
  - Public officials should acquire more expertise and executive capabilities than they currently possess



- ◆ Ultimately, future public officials should possess greater levels of experience, creativity, sensitivity and flexibility so that they cannot be replaced by robots or machines.
- ◆ In other words, future civil servants should have the ability to utilize machinery in their quest for creative innovation in performing their policy making and implementation tasks

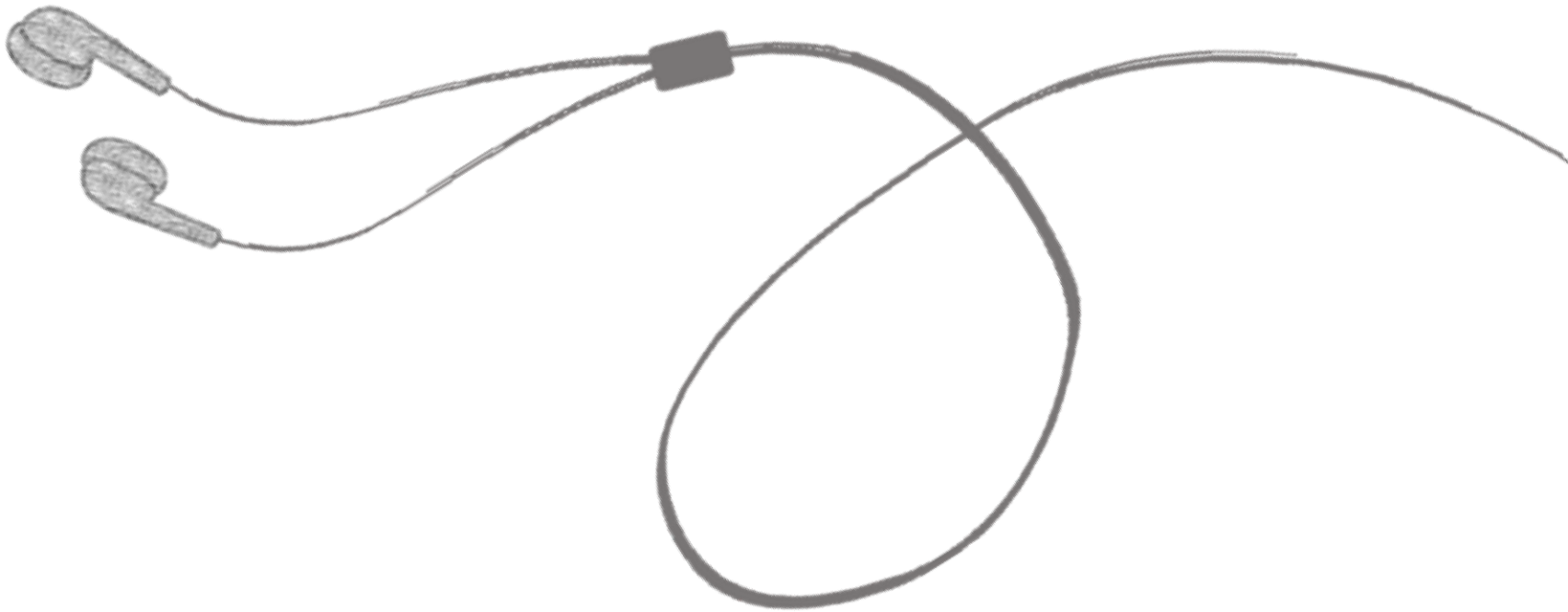






## Chapter V.

### Four Ideal Types of Talent required for Future Society



- ◆ **The pathfinder type: responds flexibly, presents vision and leads adventure and change**
  - A "pathfinder type talent" is a person who is capable of being flexible and responsive to uncertain and rapidly changing environments
  - In this context, this type of person is not limited by a formal and retentive way of thinking and behavior; instead can present an alternative vision and lead adventure and change
  - An individual possessing this type of talent will most likely have a strong will to both challenge and pioneer changes in the increasing uncertainty of the future environment and possess the ability to make quick and accurate situational judgments
  - This type of individual will have the curiosity to find out what is natural and the ability to discover the hidden problem

- ◆ **The fusion-collaborative (H-letter) type:** possessing specialized knowledge in specific areas, and equipped with the H-letter type knowledge system or thinking ability
  - The “H-letter type talent” refers to a talented person with an H-knowledge system or thinking ability, that is, someone who possesses expertise in a specific area but is also capable of communicating effectively with specialists in other areas of expertise
  - They can initiate the creative destruction of administration and policies based on the old paradigm, by uniquely interpreting specialty areas and fusing them with others
  - They can clarify theoretical concepts and put them into practice, allowing people to experience the outcome, by combining research and management skills in specialized areas



- Last, but not least, these individuals possess the ability to gather the necessary support from networks to accomplish a variety of tasks
- **The best virtue of this type** of talented individuals, that has emerged in recent years, is their **'professionalism and collaboration'**, a feature **that will become increasingly important in the coming years**



- ◆ **The creative, information-combining (Lego) type:** creates or resolves new and emerging issues by combining, editing and aligning information and knowledge
  - “Lego-type talent” refers to a talented person who can analyze, combine and align information and knowledge to resolve new and previously unforeseen problems.
  - Unlike the puzzle individual type, who usually provides the correct answer, **this type of talent can develop new combinations and provide new solutions through the utilization of accumulated experience**
  - They co-create ideas and subsequent solutions by assuming the role of a hub in coordinating internal and external networks.
  - Moreover, **they recognize and practice bold deconstruction and recombination as a natural creative process.**



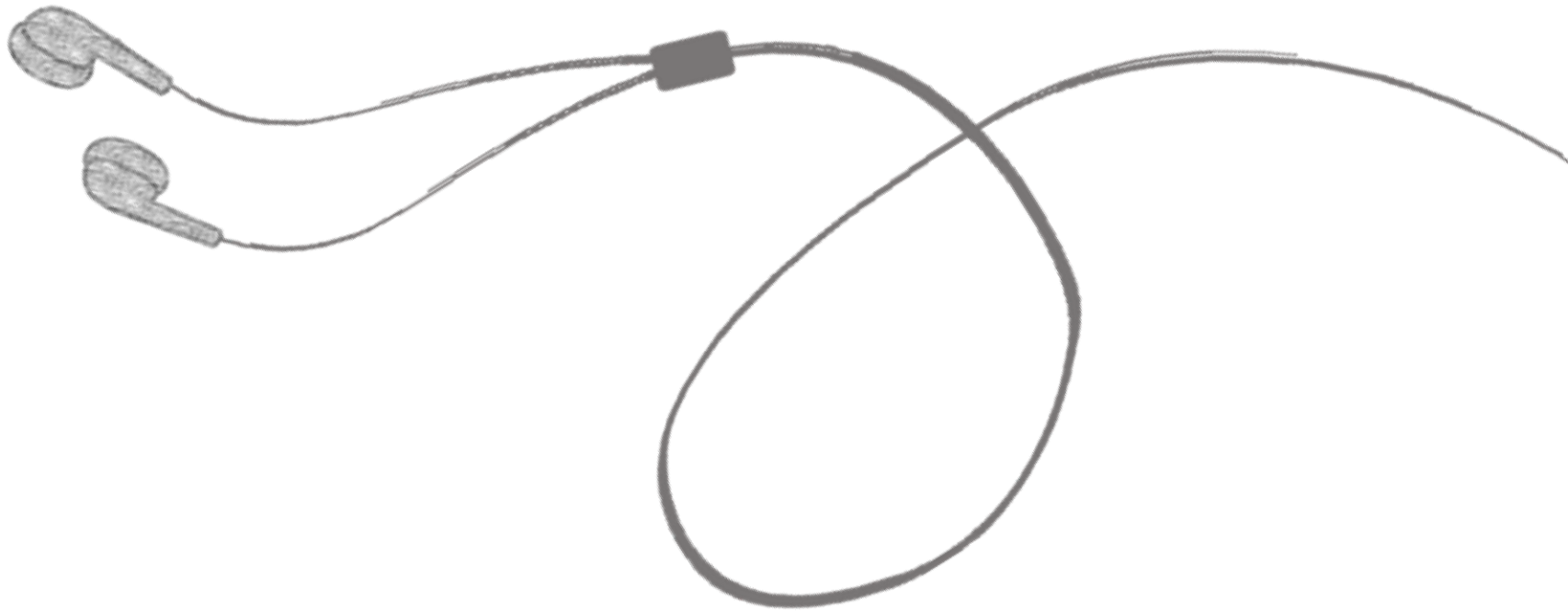


- ◆ **The emotional sympathetic (Renaissance) type:** possesses the human ability and desire of a public official reflected in policy making and administrative services provision
  - A “renaissance type talent” is an individual who can put the human ability and desires of public officials into policymaking and service provision with creativity, sensitivity and a speculative ability that machines cannot substitute.
  - Despite the development of “advanced artificial intelligence,” there are still some human-specific characteristics that cannot be replaced. In other words, although artificial intelligence will eventually evolve to possess intuition and creativity, humans will continue to dominate in this capacity
  - These individuals think of collaboration as a genuine and natural process by communicating and empathizing based on the philosophical presence and self-identity of human beings
  - Moreover, they understand the value of diversity with abundant sensitivity and they attach great importance to mutual emotional sympathy



## Chapter VI.

# The Direction of Personnel Policy Required for the Future Government



### ◆ Diversification and customization of recruitment and appointment

- Existing public servant selection systems are centered on memorization written tests, aimed at selecting adaptive bureaucrats who can adjust well to the bureaucratic organizational and functional framework
- It seems that there needs to be considerable diversification and customization of the recruitment and appointment processes, leading to a convergent job-centered recruitment system that aims to locate future talents
- Future public officials can no longer be dependent on bureaucratic organizations, but rather they need to act as autonomous functionaries separate from “artificial intelligence bureaucrats.”
- In the future, selection systems must be customized to select individuals who may fit into the aforementioned four types of talent: the pathfinder, the fusion-collaborative, the creative information-combined, and the emotional sympathetic types



- It is necessary to establish “Public Service Competency Standards (PSCS).” These standards systematically organize content including knowledge, technology, and literacy, required for public officials to perform their duties in public service
- To ensure access to future-oriented talented individuals, diversification and customization of recruitment and appointment systems must be based on a convergent job-centered selection system
- This system should be prepared to select talent suitable to the needs of each central and local government and have the ability to make it available in a timely and appropriate manner
- A recruitment system that can select global talent with international minds and abilities is also required

### ◆ Expansion of the employment of technicians in response to technological development

- Due to the revolutionary development of technologies such as information and communication technologies, biotechnology and nanotechnology, technological convergence and practical breakthroughs have increased rapidly, thereby laying the groundwork for further technological development
- In line with these changes, public employment should also expand recruitment in the technical field
- In the long-term, it is necessary to balance the proportion of technical and administrative personnel by attracting and recruiting individuals with technical education and experience to public offices in tandem with the scale and speed of the technological revolution
- In this context, the recruitment of fusion-type technocrats should be expanded. Artificial intelligence and big data techniques should be used to establish and operate a workforce plan systematically, and to allocate the optimal combination of labor in an organizational structure

- The three major specialists expected to be the most important for the tasks of the future are big data experts, programmers, and technology policy executives. It is necessary to establish a big data field and create four new job categories within it, namely: data businesspersons, data creators, data developers, and data researchers
- For cybersecurity, it will be necessary to attract programmers and cybersecurity experts to public office and train them as public officials. As demonstrated in the case of “Cyber Fast Track in the United States,” there is an option of using programmers and cybersecurity experts from outside the government by stimulating publicity and patriotism, or by providing incentives to attract them to the government



### ◆ Developing skills : learning culture & training systems

- Developing a learning culture in the public sector will require much more than well-coordinated training. Leadership development and online training are the two highest priorities for OECD countries in terms of learning and development
- While these may prove helpful, countries will also need to use a broader range of tools, such as mentoring, coaching, networking, peer learning, and mobility assignment to promote learning as a day-to-day activity integrated into the jobs of civil servants
- Employee development is a pillar of any skills strategy, particularly in civil service sectors with high levels of job security and low overall turnover.
- Learning opportunities have been highlighted as an important element of employer branding strategies.
- Moreover, ensuring a learning culture will become increasingly important given the high speed of change and technological advancement.
- Lifelong learning will be essential to move forward in a career, as an organizational strategy that enables people to modernize and cope with change

### ◆ Utilize cutting-edge technology and strengthen collaboration with machines

- Experiential education and training through virtual and augmented reality technology should be strengthened
- It will be possible to conduct training through simulation using virtual or augmented reality in the future. Rather than one-sided knowledge transfer, it will be possible to teach through knowledge sharing and empathy. In addition to case studies, role-play and on-the-job training will have a particularly dramatic effect
- The use of virtual and augmented reality will be effective in measuring the current level of ability necessary to meet job requirements and fill the gaps discovered
- The effect of education will be maximized when it is experienced personally rather than achieved through listening, viewing, or reading
- To educate public ethics and norms. For example, simulating conflicts of interest or conflict situations that may arise during work will enable training on how to cope with these difficult situations



- To reduce anxiety regarding job relocation and improve adaptability by simulating the adaptability necessary when personnel are moved in advance. It could also provide a virtual experience of the re-employment site after retirement, and it will help develop a career development plan for employees.
- **The most effective increase is expected to be in the field of crisis management, including disaster response or security management.** We can maximize prevention and response abilities **by simulating scenarios of a myriad of crises that cannot otherwise be predicted and experienced in advance.**



### ◆ Automation technical training should be introduced

- The need to assess or cultivate **the ability to use these technologies in real-life situations is becoming a reality** because AI, robotics, and drone technologies are replacing a significant portion of people's work
- It will not be possible for machines to be held accountable for the social **problems** that arise after governments become fully committed to the policy decision
- This is already clear given that **the debate regarding the responsibility of accidents during the operation of automated automobiles has already begun.**
- Therefore, it is a special requirement of public office that the ability **to cope with the operation and use of machines or their malfunction, and the ethical use of machines, should be continuously taught in accordance with technological development, rather than the full automation of work**

### ◆ The human ability of speculation and the strengthening of vocation and value education of public officials

- As machinery replaces human tasks, efforts will be necessary to save certain human qualities.
- Future talent should be cultivated through intensive education based on human-oriented capacities and public values, using new technology
- In other words, the capacity of human nature, including sensitivity and speculation to meet evolving duties according to the development of new technology, and to devote itself to the vocation and value education of public officials must be promoted



### ◆ Utilizing multi-talented personnel in human resources management

- A personalized Career Development Plan (CDP) system based on artificial intelligence will be instituted
- Public officials will be able to make plans for their entire life cycle, including retirement. Ultimately, fulfilling the organization's need to utilize labor and match the desires of its employees to their career needs will be feasible
- **Goal management experts** : this function directs performance management and consulting from goal setting for staff or teams to schedule management and evaluation. HR will take the lead role in the strategic utilization of labor to maximize organizational performance and cultivate an individual's sense of achievement through the realization of goals



- **Simulation experts** : simulation, which is mainly used in the basic level of labor planning, will be developed in different dimensions due to the emergence of artificial intelligence. Combined with virtual and augmented reality, utilization will also spread throughout the whole processes of personnel administration. The level of future predictions will be accurate and precise
- **Management experts** : without accurate information, apart from organizing a task force, HR personnel are limited in how they can react during a crisis. In the future, accurate personnel information will be updated in real time, and this will dramatically improve labor placement abilities in response to various crises
- **Emotion consultants** : humans will be overwhelmed or alienated by the spread of machines, and human sensibility will become more important in producing creative ideas. **In order to identify differentiated existential values from those of machines, humans will be more dependent on emotion or philosophy**



### ◆ Planning the workforce through the use of AI and big data

- The existing labor plan is a simple process of predicting vacancy occurrence and establishing a recruitment plan, which is the main content of the labor plan, and the prediction cycle is very short due to inaccurate forecasting abilities
- **The use of AI and big data is expected to highlight the workforce planning process as a strategic and core element of workforce management.** In line with the goals of the organization, it will be possible to systematically establish and operate a mid to long-term, and short-term, labor plan
- It will be possible to arrange optimal labor for organizational structures such as project teams and official organizations
- **Complex management techniques, such as the aforementioned simulation and linear planning, will be possible by utilizing artificial intelligence and big data**
- HR will be able to enter various variables, including political considerations of the top personnel into the calculation formula

### ◆ A performance evaluation system based on collaboration and value creation

- “Coopetition” (Cooperation and competition) is a new concept that should be introduced in the future. **If a performance evaluation is based on this concept, there will be a positive synergy effect in both competition and collaboration.** Coopetition is **the evaluation of the contribution to the public ecosystem that requires a symbiosis between cooperation and competition**
- In order to establish coopetition, it is necessary to go beyond the incentive for government sharing and fully integrate the management and sharing of government information and knowledge.
- Here, technology platforms including Complex Adaptive Systems and Cloud Computing systems should be designed the Complex Adaptive System provides information on how to collaborate and network. It provides guidance on how to collaborate with anyone inside and outside the government

- **A ubiquitous performance evaluation system is also necessary.** A new concept is emerging to indicate that evaluations should be done in real time, rather than by waiting. A system that can evaluate and provide feedback in real time through a collaborative platform, for example, will be necessary.
- **Future advanced technologies applied to solve the problems will be ubiquitous sensing technology, which means that sensors will exist anytime and anywhere.** This will enable “multidimensional on-the-fly evaluation,” in which supervisors and various other people can participate as evaluators anytime, anywhere
- **This will make it possible to improve the objectivity and fairness of performance evaluations, and the link between performance and compensation, by drastically reducing the occurrence of human error and mutual distrust**





- ◆ **Rationalization of flexible remuneration and retirement system should be established**
  - As the status of public officials is legally guaranteed, the issue of retirement in public service has not been examined very often. However, due to the development of medical technology and the extension of the average life span, discussions about an “Optimal Turnover Model” will inevitably be raised
  - **The cause and effect relationship among age, health status, and work efficiency will vary widely among individuals.**
  - **Therefore, a “customized retirement system” should be introduced in the mid- to long-term**
  - The mental and physical health status of public officials is measured scientifically and regularly through sensing technology, and the standard of retirement is adjusted for each individual



- **Modularization of the wage peak system will also be necessary.** All personnel administration will be operated using a personalized model based on artificial intelligence; therefore, artificial intelligence can design customized wage peak models for each individual
- In the future, **the meaning of retirement will be blurred, and an opportunity will be opened for anyone to retire at any time.** Effective measures to induce retirement will be necessary for public servants who are unfit in aptitude or whose performance is low
- It will be necessary to support “searching for other jobs” or to “develop one-on-one skills” for re-employment. It would be desirable for employees to acquire expertise through public education, informal club activities, and research meetings that are separate from their current jobs
- **It will be possible to conduct self-tests including tests on aptitude and competence, through a pre-virtual experience of re-employment fields, using virtual and augmented reality technology**

### ◆ Expanding the customized civil service welfare system

- In the future, it is expected that working time will shorten, while that for leisure and entertainment will increase. Meanwhile, various welfare demands will expand
- Be necessary to separate welfare demand by group, **using big data to analyze the welfare demand of public servants, and then design and provide customized welfare services based on individual welfare history**
- Be particularly necessary to pay attention to health service options, which are expected to be effective in meeting welfare needs



- It is recommended that customized healthcare services include the following.



- First, it is necessary to design a medical service option based on the results of collecting and analyzing information, such as body data, health records, and life and social activity patterns of public officials, using remote sensing technology.
- Second, the type of work, time of retirement, and leaves of absence could be personalized. As noted above, individual recommendations may be presented based on the health information that is automatically collected and analyzed.
- Third, new welfare demands should be identified according to those of the consumer. It is particularly necessary to meet the welfare needs of mental health, including mental psychotherapy or suicide prevention treatments, due to the feeling of boredom or exposure to psychotropic medicines that will result from the replacement of labor by machines

### ◆ Expanding the customized civil service welfare system

- A trickle-down welfare system is also recommended . **The Slobbie** tribe has been emerging in the United States since the mid-1990s. **It refers to people who have taken a step away from fierce competition and place importance on their mental stability and family**
- **It means “slow but better-working people” who value the mind more than substance and the home more than achievement.**
- The Slobbie will also appear in public office. Despite the arrival of artificial intelligence and robotics, continued adherence to the current working style will reach a peak in the workload.
- Technological advances will drastically shorten the time required per unit of work, which will result in the fragmentation of the work unit. **The explosion of information will also lead to excessive work and time pressure.**



- Slow-walking culture should be spread.
- A connection shelter should be created. Currently, even outside of working hours, people are exposed to work-related communications anytime and anywhere, and so work invades daily life. It will be necessary to provide a place to take a genuine break by blocking this all-access cyber environment.
- In the mid- to long-term, artificial intelligence will need to recommend the appropriate workload and level of quality for each working hour and take measures to guide the workload continuously. This will be set at the level of the human work environment and will maximize the effectiveness of performance management as an individualized goal management system.





Thank You