AI Ecosystem in Social and Health Services (SOTE) – AI Vision 2035

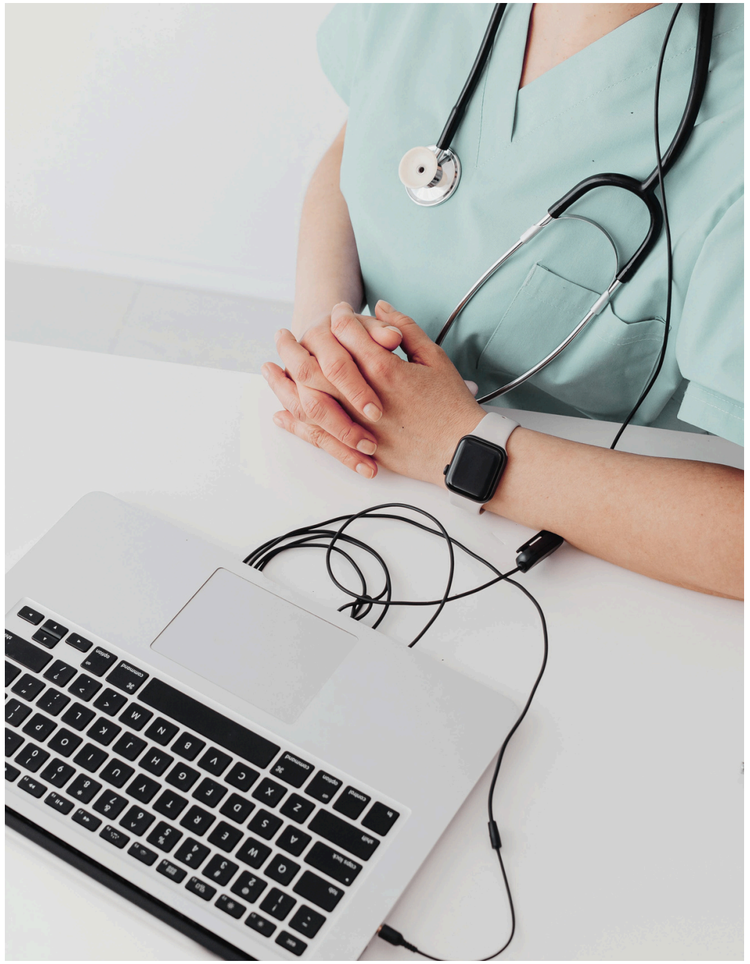
DigiFinland

Abridged results of the vision work
May 2025

Summary: AI vision 2035

The joint AI vision 2035 of the SOTE AI ecosystem describes how artificial intelligence can be used to reform healthcare and social welfare.

- Around 300 members of the SOTE AI ecosystem participated in the vision work Polis discussion and two workshops in March–April 2025.
- **Based on the ecosystem's proposals, a future of "strong healthcare and social welfare AI" was formed, where artificial intelligence will have a significant impact on service provision and will also make independent decisions**.
- An AI coach will enhance people's wellbeing and health, as well as strengthen their own role in prevention. The coach will support the management of personal health data and help in finding the right service. Access to care will become faster.
- Artificial intelligence will coordinate prevention at both individual and population level. Automated screenings, individual services, and treatments will support broad national prevention efforts.
- With the help of artificial intelligence, health and social services will be accessible to everyone across Finland. Open and easy-to-use AI-based services will be available in public spaces and at home.
- The roles of healthcare and social welfare professionals will diversify. More time will be freed from routine tasks to work directly with clients. As a virtual colleague, artificial intelligence will produce analyses and suggestions to support the work. The work will also include demanding supervision of automation.
- Artificial intelligence will be able to independently carry out assessments of the need for services as well as selected diagnostic and care processes. In clinical work and knowledge-based management, the focus will shift from data collection and analysis to drawing conclusions and making decisions. The processes of knowledge-based management will become automated.



Summary: recommended actions

National and regional guidance and legislation	• Support and coordinate the broad adoption of AI use cases proven useful and cost-effective in wellbeing services counties. Explore possibilities for automated individual service paths and the AI coach.
Education and increasing competence	• Increase the AI and digitalisation skills of healthcare and social welfare professionals, as well as the capabilities of healthcare leaders competence in in managing digital transformation. Enhance general AI literacy and ensure access to AI for all.
Data and its utilization	• Standardise healthcare and social welfare data structures and ensure data quality and availability for the development and utilisation of AI models.
Service production and use cases	• Identify the first service and care pathways suitable for automation. Conduct RDI collaboration to develop mobile healthcare and social welfare services. Develop the utilisation of genetic data.
Collaboration and responsibility	• Support cooperation between the public and private sectors. Ensure the impact and responsibility of healthcare and social welfare AI. Engage in dialogue about the effects of healthcare and social welfare AI on individual actions.

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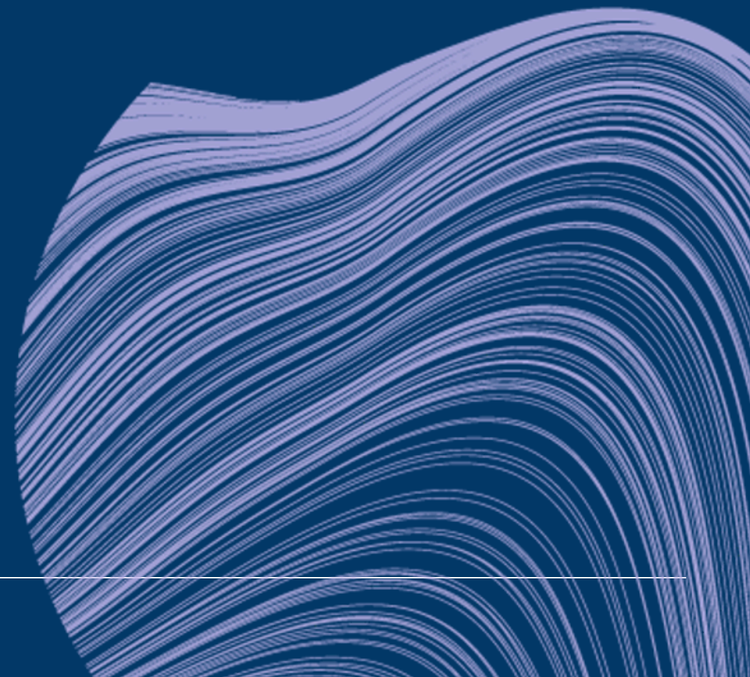
AI vision 2035 of the SOTE AI ecosystem



AI vision 2035 of the SOTE AI ecosystem

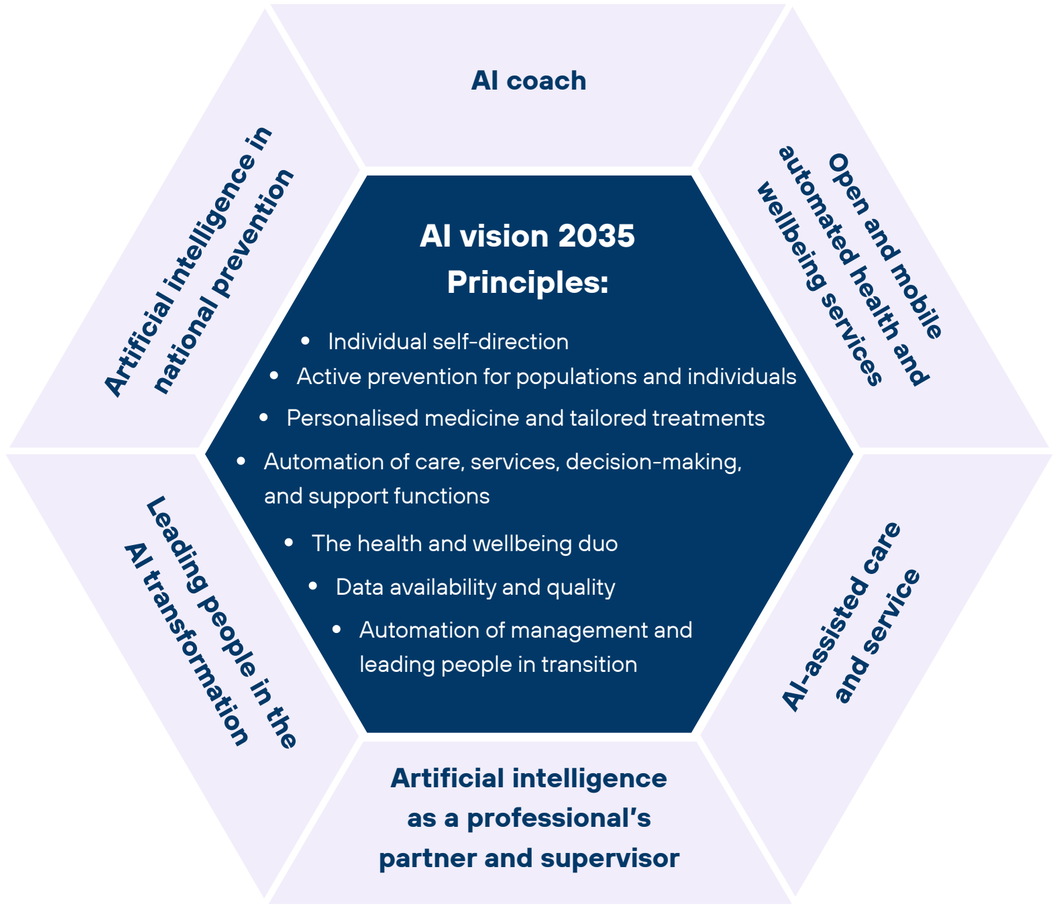
"**AI is revolutionizing** not only medical care but also the operating models of primary healthcare, social services, and prevention. **AI will strengthen** people's ability to take care of their own wellbeing and enables new kinds of services that are more personalised and accessible. **With AI working alongside and under the supervision of healthcare and social welfare professionals, productivity and impact can be raised to an unprecedented level.**"

Vision 2035: the role of artificial intelligence in the healthcare and social welfare sector

AI has become integrated into individuals' daily lives, the provision of health and social services, as well as leadership.

Prevention, automation, personalised services, and self-direction are emphasised in service provision. Accessibility and equality are ensured.

Healthcare and social welfare professionals guide and supervise collaborative AI and automation. Leadership and direct human interaction have become distinct from knowledge-based management, which is largely automated and optimised by artificial intelligence.



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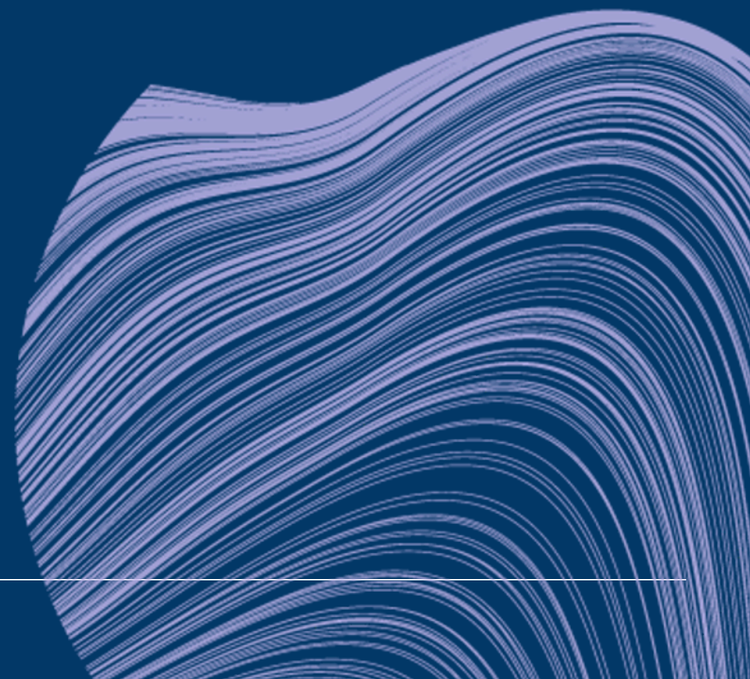
Introduction



Weak or strong healthcare and social welfare AI 2035? Towards radical progress

Healthcare and social welfare AI 2025:

AI is utilized in narrow tasks, especially in specialized healthcare (imaging, analysis of vital functions, predictive models) and medical research.

In primary healthcare and social welfare, risks and service needs are predicted, and tools that ease professionals' work, such as AI-assisted documentation, are being piloted.

Strategic choices and development:

- Can we trust the information produced by AI and the decisions it makes?
- Will AI-generated decisions be allowed, for example in service needs assessments and diagnostics?
- Can different data sources be made compatible and information flow smoothly between systems?
- Can legislation and mechanisms be implemented to ensure clear responsibility, ethical standards, and cybersecurity for AI-generated health and social services?
- Will AI interaction and, on the other hand, social behavior develop sufficiently so that AI can support individuals in their daily lives without causing psychological or social harm?
- Can the AI transformation be successfully managed in a way that satisfies all stakeholders?
- Will technological breakthroughs materialize, such as quantum computing, general artificial intelligence, humanoid robots in everyday environments, and fully personalized medicine?
- Is there sufficient investment capacity for radical change?

YES: Radical advancement

- Client participation and well-being at the center
- Extensive automation and robotization of services
- The healthcare and social welfare system prevents issues, ensures equality, and monitors ethics
- Leadership aims for the desired future and coaches stakeholders through the change

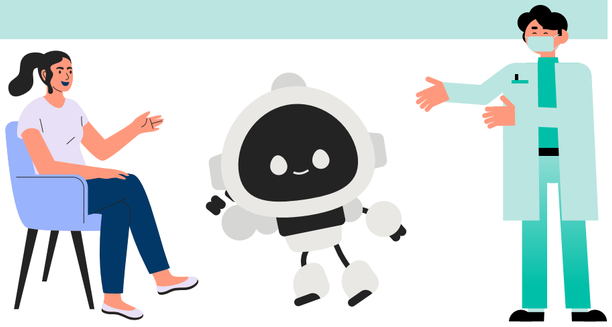
NO: Cautious progression

- System efficiency is the focus
- Minimal automation of services
- AI is just one imperfect tool among many
- Leadership aims to preserve and protect the system from threats

Weak or strong healthcare and social welfare AI in 2035? Towards radical progress

Strong healthcare and social welfare AI in 2035

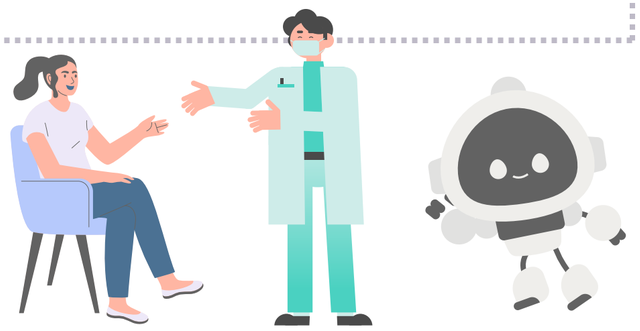
- Interactive AI has replaced a significant part of the professional's work and enables extensive well-being, self-care, and prevention both individually and autonomously by the individual
- Professionals supervise AI services and provide remote care.
- Some professionals specialize in physical in-person care, which is largely robotized as well
- The focus of the healthcare and social welfare system is on prevention and the efficient delivery of individually tailored services and treatments
- The ethics of healthcare and social welfare AI are monitored proactively



VS

Weak healthcare and social welfare AI in 2035

- AI remains a supportive tool for professionals, and the role of professionals as guardians of services and care remains strong
- Automated decision-making is permitted in certain low-risk services and treatments
- The focus of the healthcare and social welfare system remains on increasingly individualized treatments and, on the other hand, on making services for the elderly more efficient
- Service needs and health risks are anticipated in diverse ways, but mainly at the population level, and interventions are ineffective
- Individuals make wide use of various private AI health services provided by companies



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Harnessing the potential of AI in the transformation of health and social services: Towards the future

Benefits and significance of AI

The SOTE AI ecosystem's vision of the benefits and significance of AI in the future of healthcare and social welfare. Compiled based on the results from the Polis platform and workshops.

1. AI facilitates service interactions and increases clients' role as promoters of their own wellbeing and health

- AI frees professionals' working time for client interaction and more demanding tasks
- Citizens' own role grows, and AI guides citizens, reducing the role and need for professionals
- AI streamlines and improves the progress of social welfare clients through services, increases client satisfaction, and prevents problems

2. AI automates management and enables economically sustainable operations

- AI expands professionals' job descriptions and employment opportunities
- The ability to adopt AI is critical
- Data-driven management becomes automated, while people management is emphasized; leadership support improves satisfaction during change
- AI enables sustainable economy and international competitiveness

3. AI increases collaboration among different actors and accelerates healthcare and social welfare development

- Strong cooperation between the public and private sectors and easier procurement increase the benefits of AI in healthcare and social welfare
- Humanity and safety are preserved in healthcare and social welfare when utilizing AI
- The risks of AI are sufficiently managed

4.

Conclusions and recommended actions

Conclusions

Results of engaging the SOTE AI ecosystem

1. AI changes the healthcare and social welfare system and the nature of work

- Over 5 to 10 years, healthcare and social welfare AI will evolve from supporting healthcare and social welfare professionals to becoming collaborative intelligence and increasingly autonomous healthcare and social welfare automation that initiates, directs, and supervises entire but precisely defined service and care processes.
- The work of healthcare and social welfare professionals will be eased by automation of routine tasks but will also become more demanding, as remaining responsibilities will involve accountable and unpredictable tasks. Professionals may specialise either in physical, in-person care requiring direct interaction or in remote, knowledge-based supervisory roles monitoring and guiding clients' health as well as the activities of AI agents and robots in service provision.

2. The citizen's role as a maintainer of wellbeing grows

- Citizens and clients are increasingly expected to be able to utilize AI themselves to maintain their wellbeing and manage their health with the help of AI and robotics. The personal AI wellbeing coach acts as a guide to services and support for wellbeing in everyday life: initially with simple features, but evolving into a more versatile and interactive assistant. Self-measurement is needed to provide comprehensive data for training AI models, enabling AI to produce personal forecasts and tailored care pathways.
- Extensive automated prevention: AI identifies both social and health-related risks and actively offers self-care pathways (via the personal AI coach). At the population level, AI plans appropriate preventive measures and monitors their effectiveness.

3. Leadership in technological transformation

- Leadership in the field of healthcare and social welfare is increasingly about managing the technological transformation within the system. Leading people through change becomes a key skill as knowledge-based management and services become more automated. The role of organisational AI planning is strengthened.
- The public sector will continue to be responsible for service provision, but companies will actively participate by offering various value-adding AI services. The renewal of procurement processes will enable the rapid adoption of innovative AI solutions.

Conclusions

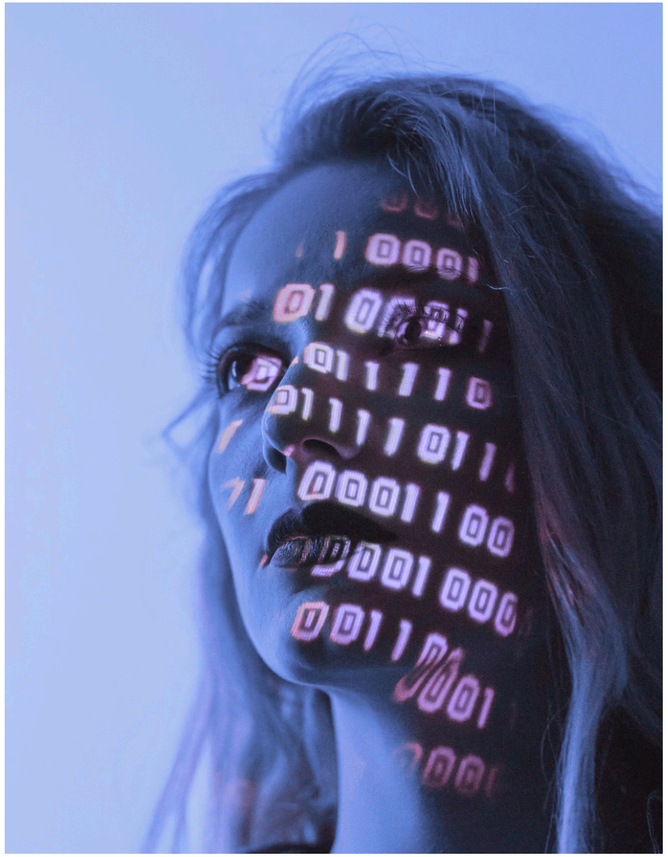
Results of engaging the SOTE AI ecosystem

4. Service provision and technological infrastructure are being renewed

- AI and cloud services are expected to extensively utilise both national and European infrastructures for data, computing, and application – while the external data protection and cybersecurity wall is intended to remain high, internal interpretations of data protection, for example, will become more permissive.
- Quantum computing may bring a significant qualitative leap in the potential of AI, which will also be reflected in robotics, personalised medicine, and the automation of developing medicines and other treatments. AI, becoming increasingly equal to and in some areas more intelligent than humans, will act as a partner, colleague, and decision-maker in everyday life and working life.

5. Ethics and impact as boundary conditions for the use of AI

- Extensive development work is required to improve the quality of data—its compatibility, coverage, completeness, timeliness, and non-discrimination—in order to make AI models accurate, reliable, and equitable. In addition, new methods must be developed to combine healthcare and social welfare data with other information relevant to health and wellbeing, such as air quality, weather data, and data on employment and housing.
- Ethical discussion and evidence of impact are needed to ensure that the disruptive uses of AI can be implemented in ways that are broadly acceptable.



Recommended actions

Achieving the AI vision requires collaboration among various actors, increased understanding, strong guidance, and effective implementation.

1. National and regional guidance and legislation

- All wellbeing services counties will prepare a plan for the extensive adoption of **AI use cases that are proven useful, cost-effective, and low-risk or risk-free**. Development will be coordinated nationally. The plan will utilise collaboration with education, research, and development actors.
- Wellbeing services counties will be supported in the rapid **implementation** of the plan through measures such as funding support, incentives, and increasing understanding and competence.
- Opportunities for autonomous decisions made by AI and the first **automated service and care** paths to be implemented nationally will be identified. The related responsibilities will be defined.
- **Necessary legislative** amendments will be identified and implemented.
- The feasibility and acceptability of **an AI coach** will be explored.
- Possibilities to create SOTE AI models incorporating **multi-content data** (e.g., air quality, employment data) will be investigated.

2. Education and increasing competence

- **The competence of healthcare and social welfare professionals in AI and digitalisation will be increased, as well as the competence of SOTE leaders in managing digital transformation.** Basic education for healthcare and social welfare professionals will include more information about technological opportunities. As automation increases, methods will be developed to ensure care expertise and services even in challenging situations.
- **Citizens' competence and opportunities to take care of their own wellbeing using AI will be ensured.** Access to AI for all will be guaranteed (devices, connections, AI literacy). Equality will be supported through open, universally available health AI services. Citizens' ability to produce and utilise measurement data and to use automated self-care and informal care paths will be developed. SOTE digital and AI literacy will be increased through open, easy online courses and other channels.
- **Understanding of individual** responsibility, obligations, and needs as an AI user will be increased: for example, can individuals be required to use SOTE AI, and can incentives be created for this? What kind of competence and development does widespread AI use require?

Recommended actions

Achieving the AI vision requires collaboration among various actors, increased understanding, strong guidance, and effective implementation.

3. Data and its utilisation

- **Unified healthcare and social welfare data** structures are essential to ensure compatibility across Finland and equal access for citizens. It must be defined what data is measured and how, so that basic forecasting and risk identification can be implemented.
- **The shared use of healthcare and social welfare data will be facilitated** to support the development and use of large AI models. Collaboration with European actors will be carried out in model development.

4. Service provision and use cases

- One or **more service, care, and self-care paths that can be implemented automatically will be identified.** Automation will proceed in phases, involving professionals and clients.
- Collaboration will be established with **transport and robotics research and development** to advance the development of mobile automated healthcare and social welfare services and transports.
- The use of AI in **genetic data** analysis and disease prediction will be developed.

5. Collaboration and responsibility

- **Collaboration models between the public and private sectors** will be described, and procurement will be reformed to support the rapid adoption of AI innovations.
- **Responsibility and ethics** of healthcare and social welfare AI will be ensured nationally. A mechanism and metrics will be created to secure impact, equity, and ethics in the long term, including environmental effects—for example, a Wellbeing AI Ombudsperson who oversees the rights of clients and professionals.

5.

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Let’s do it together.

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