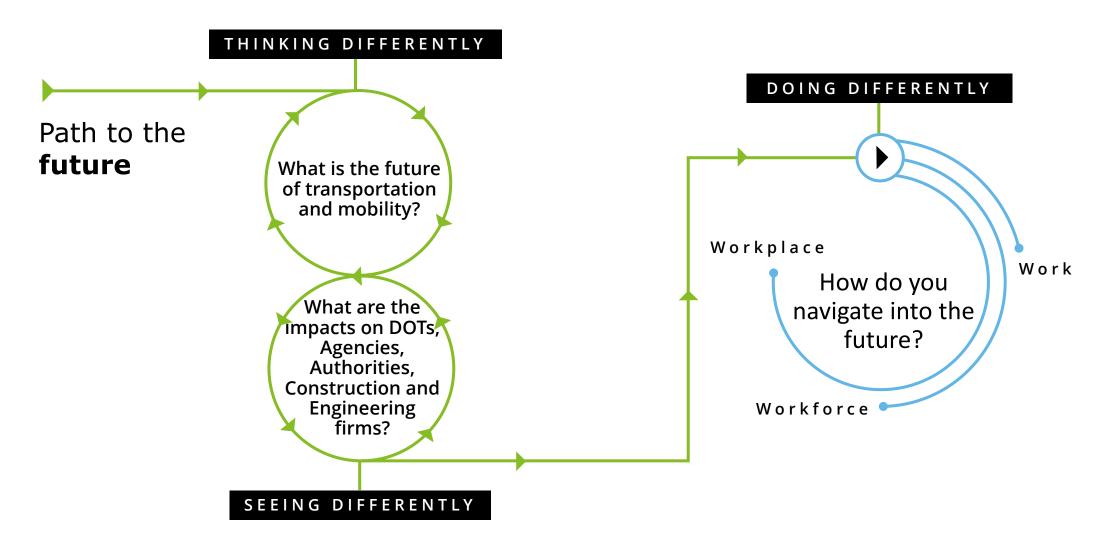
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Trends, Technology, Disruptors & the Impact on the Future of Work in Transportation J. Bryan Nicol - Managing Director, Deloitte Infrastructure & Capital Projects

November 8, 2018

Core Questions for Every Transportation-related Organization



Macro Trends in Transportation

Five macro trends will shape the future of transportation and fundamentally redefine the role of your organization



Social

Mobility preferences are shifting in response to changing demographics – urbanization is decreasing generational demands for personal vehicles and creating diverging needs across urban and rural areas.



Technology

Across the transportation ecosystem, emerging technologies are changing the funding, planning, design, construction and operation of transportation



solutions. **Economic**

Alternative revenue streams and monetization structures are shifting investment strategies and enabling new technologies.

Macro Trends in Transportation

Five macro trends will shape the future of transportation



Environmental

Global recognition of resource dependencies and environmental impacts are putting pressure on transportation agencies and driving the development of alternatives.

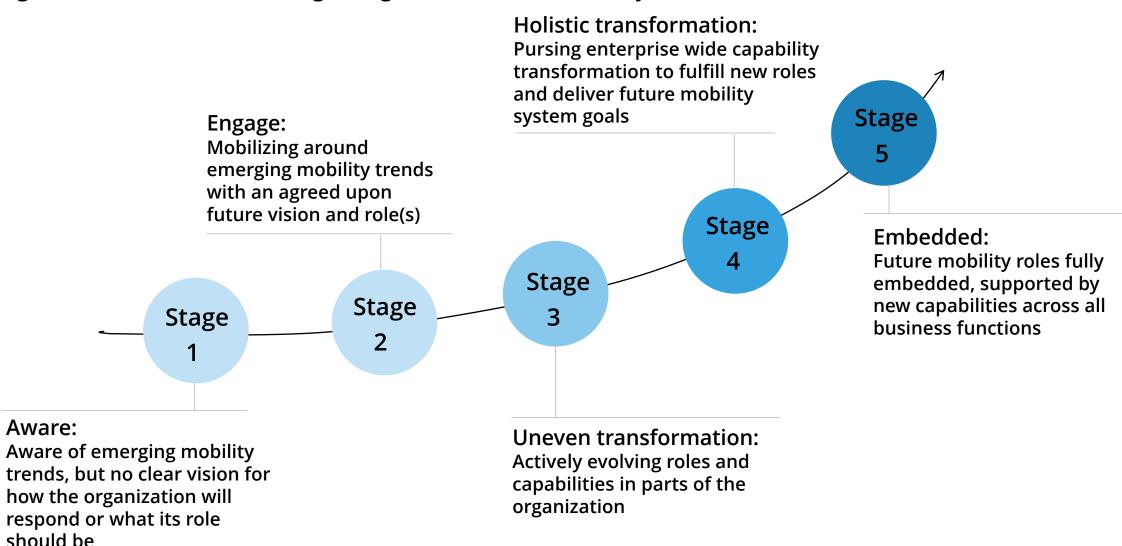


Government

Government is increasingly expected to integrate data, digital, and design to deliver transparent services, facilitate economic development and enhance quality of life.

Future of Mobility Maturity Curve

The Organizational Path to Embracing Change in the Future of Mobility



Three Dimensions of the Future of Work

Shifts will occur across all three dimensions



WORK

The fundamental nature of the activities performed by both humans and machines to achieve organizational goals



WORKFORCE

The portfolio of talent and skills (not just full time employees think gig workers and crowdsourcing too!) to perform the work



WORKPLACE

The physical and virtual structures and practices utilized to maximize collaboration, productivity, and consistency of the talent experience

Three Dimensions of the Future of Work



HOW is the nature of the work changing? WHAT work should be augmented by technology or automated entirely? WHAT work will require essentially human skills?



WORKFORCE

WHO can perform the work of the future?

WHAT skills are necessary to perform the work?

HOW do you close the gap between current and future skills by tapping into alternative talent pools or upskilling the current workforce?



WORKPLACE

WHERE should the work be located?

WHAT physical design and technologies should be used to maximize productivity, collaboration and the worker experience?

HOW should organizations shape the workplace culture and policies?

A Sample "Net New" Career

An Autonomy Engineer is an illustrative example of a "net new" career resulting from emerging technologies

NEW FOCUS AREA OF WORK

Empower the workforce to harness technology advancements through rapid experimentation with new technologies

EVOLVING SKILLS

- Data mastery
- Agile thinking
- Human-centered design
- Digitally native with technologies like cognitive automation/ artificial intelligence
- Logic and algorithms analysis
- Internet of things competency

NEW CAREER EMERGING



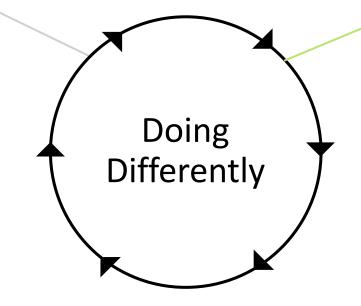
Autonomy Engineer

An engineer who plans, delivers, operates, or maintains connected and autonomous infrastructure and technology

Your Choice in a Complex Future of Constant Change

Status Quo

- the choice to manage reactively
- this choice promises inefficiency, unrealized performance, and organizational chaos.



Bold and Proactive

- the choice to lead proactively
- this choice delivers new work, increased efficiencies and a new workforce skilled to meet the demands of your customers

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QUESTIONS ?





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QUESTIONS?



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