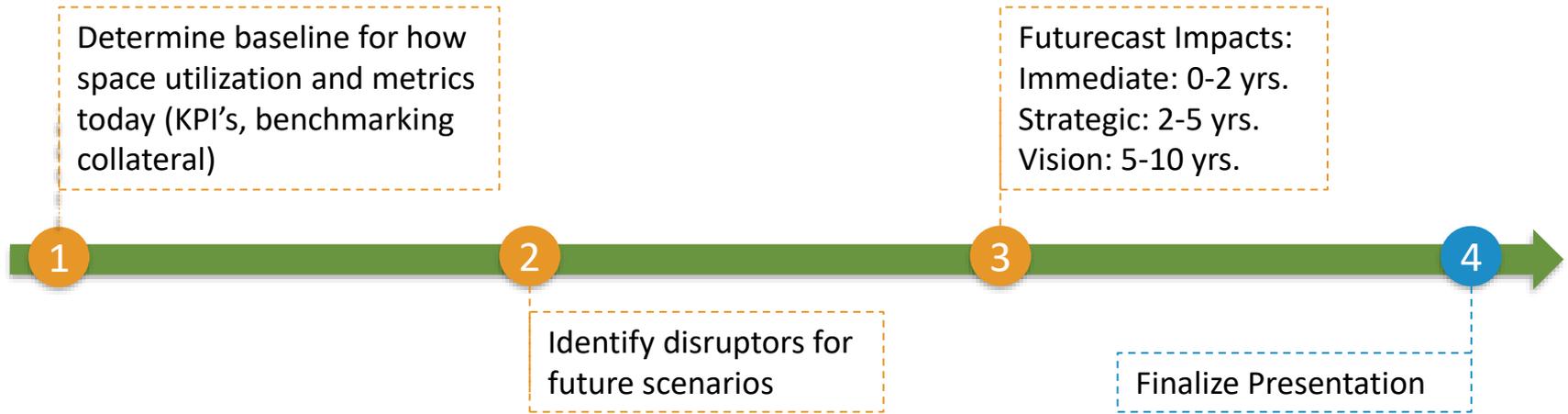




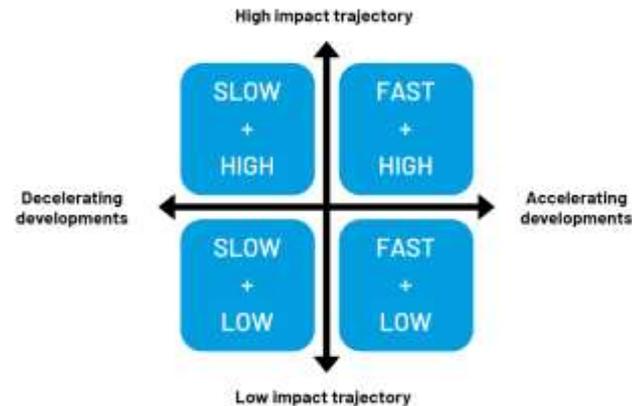
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Space Utilization & Metrics

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Tools Implemented:





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Education	Infrastructure	Government	Geopolitics	Economy
Remote learning lowers the barrier of entry for college (more prolific + educated workforce)	G5 revolutionizes speed and access and changes data consumption	Chief Safety Officer / Industrial Hygienist for office environment	3) Increased regulations creates a nationalist approach to growth	Recession caused by C19 and oil crisis reduce severely operating budgets
Distributed workforce now located in suburban offices, closer to universities. This could drive innovation, job opportunities for college interns/grad, reduced employment costs, etc.	1) Increase WFH demand more infrastructure (internet speeds, etc.) in suburban locations. Technology has to reconsider new security protocols and sol'ns.	Social distancing measures incorporated into Code requirements? Temporary or long term?	3) Global labor pool	1) Distributed workforce opens up tertiary markets for labor arbitrage and financial savings – with global HR implications.
	2) 5G allows for teleportation and enhance communications	Data Privacy legislation develops new issues in the world		2+3) Best for all is best for one, or best for one is best for all – cultural differences
	IP privacy concerns – how to protect in a virtual world? SEC compliance?	Infectious Disease inspectors as part of the building process – construction environment		



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Public Health	Demographics	Environment	Media / Telecomm / Social	Wealth Distribution
<p>4) Pandemic mitigation considerations influence code regulation for space, operations, HR, etc.</p>	<p>Longer life spans change retirement models</p>	<p>Reduced travel and manufacturing stabilizes global warming</p>	<p>Peer pressure forces behaviors (masks, social distancing)</p>	<p>5) Economic drivers (technology access) create 2 classes of citizens (have and have not)</p>
<p>5) WFH requires employers to re-evaluate HSE / ergonomic set-ups and funding solutions.</p>	<p>Gender specific solutions – restrooms? (India, Middle East)</p>	<p>Health cost plummet due to sustainable environmental solutions + employee effectiveness</p>	<p>Naming and shaming companies who are not doing the right thing</p>	
<p>Hygiene chain of custody – use blockchain for connectors – Chinese QR code</p>			<p>4) Social rating for companies practices on health and safety (Glassdoor)</p>	

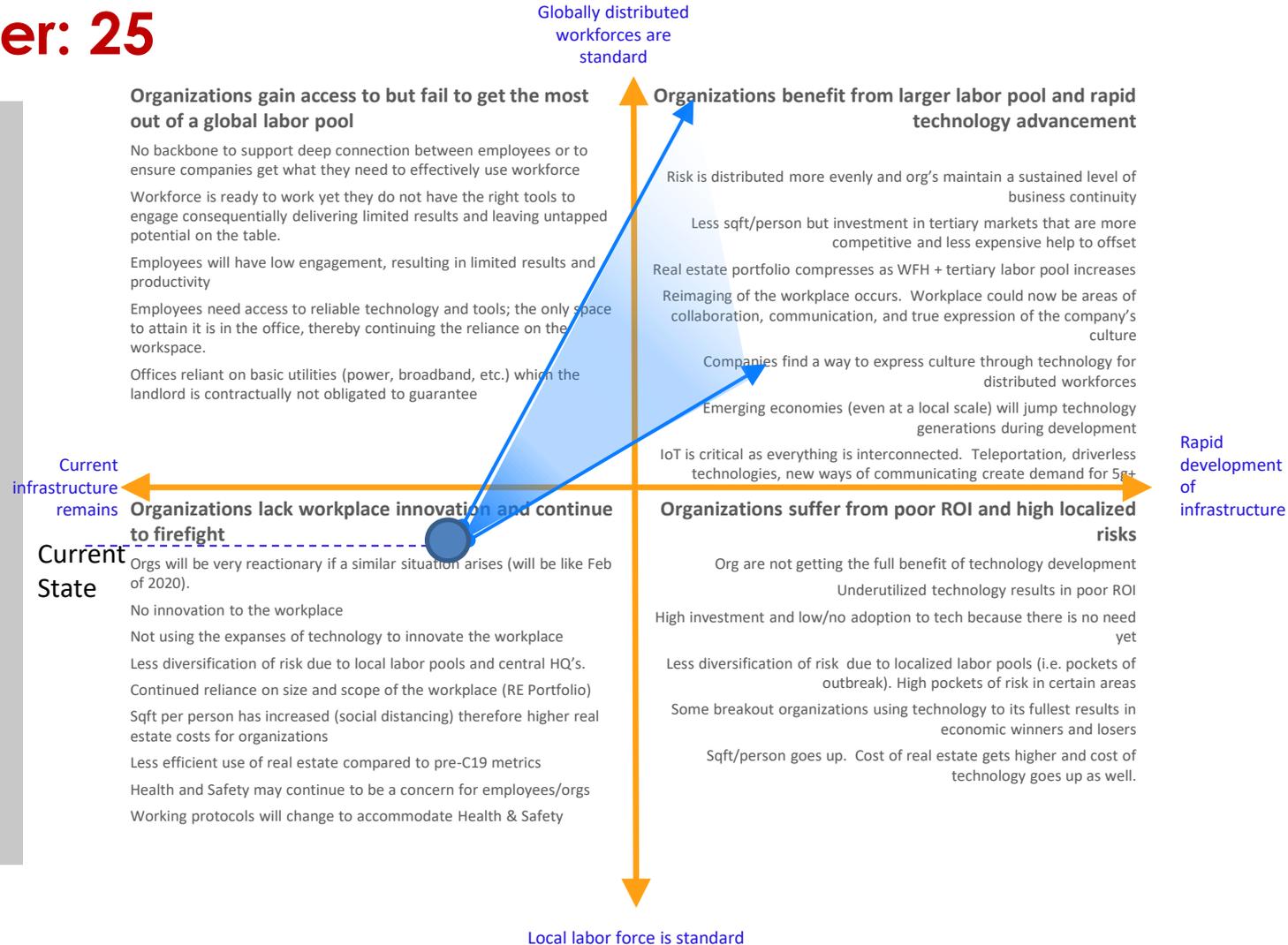


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Technology Infrastructure vs. a Distributed Workforce: C19 put most organizations into uncharted water and resulted in a high degree of reactive decision structures. Post C19, successful organizations will capitalize on the WFH learnings by compressing real estate and tapping into global, tertiary labor markets. They will put increased emphasis on the technologies that improve distributed work thereby fast-tracking innovations in technology. Company culture expression will evolve into the physical and digital workspace.





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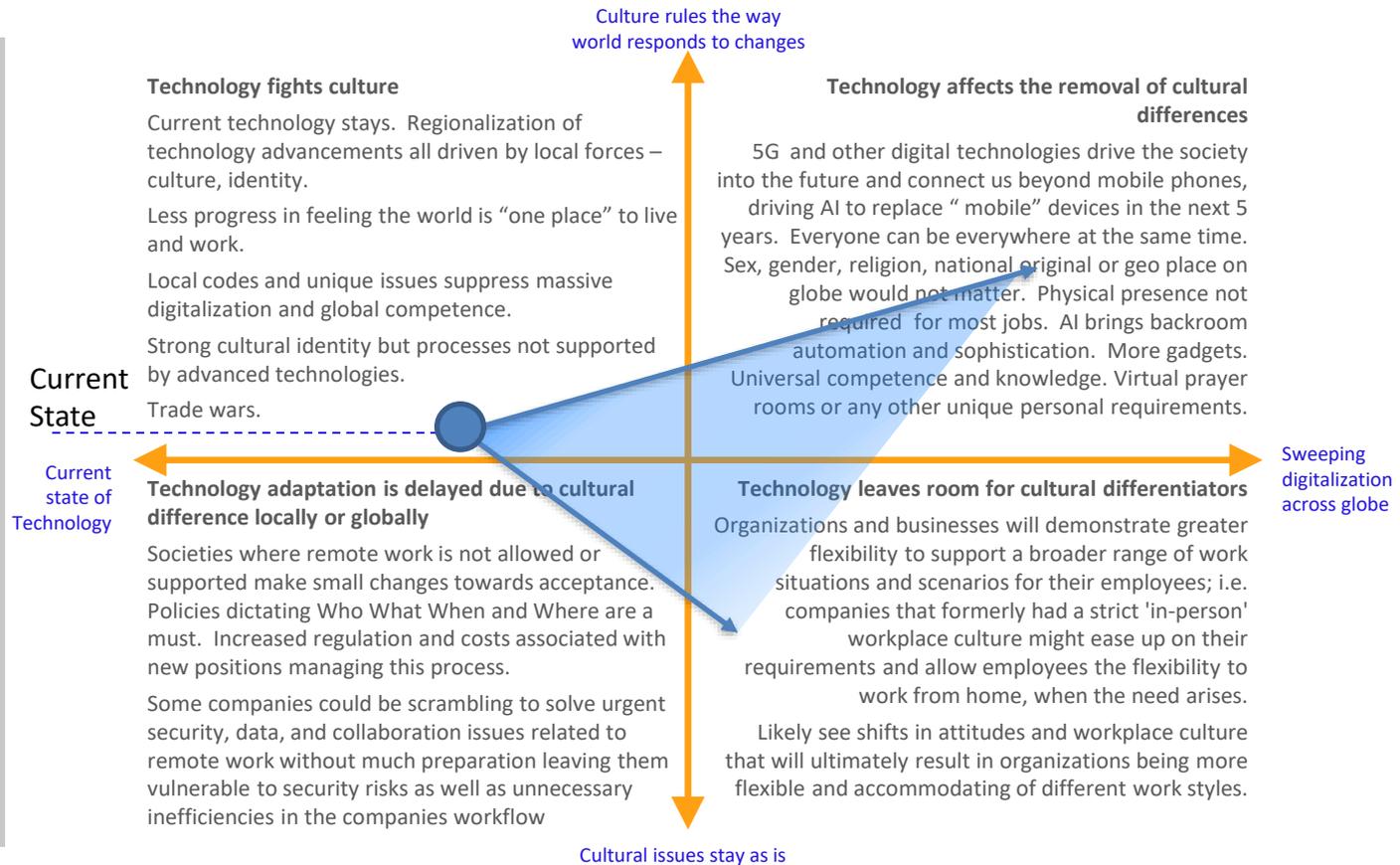
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Technology vs. Cultural Influences

5G/ Teleportation and cultural influences

The COVID-19 pandemic has forced people and businesses to adapt to remote working and related technology regardless of the level of their preparedness. While we might have expected our working environments, processes, and routines to evolve over time, we've been thrown directly in the deep end. Companies will be forced to make enhancements in their technology platforms including 5G, virtual calls, and Teleportation. Cultural differences might be gradually removed with the technology acceleration and adaptation; or, because of cultural uniqueness, technology won't be implemented at the same level throughout the world.





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Technology vs. Cultural Influences

Pre Covid 19 Metrics	Post Covid 19 Metrics
Technology supportive of ad-hoc mobility	Robust technology infrastructure to provide widespread mobility <ul style="list-style-type: none"> • Staff, brand, talent (KPI: satisfaction metrics?, “downtime” metrics?) • KPI: Digital meeting data. I.e. average number of meetings per person, average number of ppl invited/joining per meeting, tools used in meeting (digital whiteboard, PowerPoint, etc.)
Digital tools developed	Digital collaboration tools enhanced – DocuSign and other digital authority and approval tools
Office provides a place to create culture, work relationships and trust – HR	Tools to develop culture and trust need to be re-evaluated for a predominantly virtual work environment (KPI: Work survey?) KPI: Utilization based on community. Challenge is how we get together without being together.
Productivity metrics a mixture of performance and presenteeism	Productivity metrics based on digital connectivity (Wi-Fi, home office set up) and performance, and impact on team and culture
Global Workforce with poor technology infrastructure	Poor infrastructure will leave some markets less developed with lower economic opportunity; strong influence on building up these markets to tap cheap and smart workforce
Technology that supports the physical space – utilization, dashboards	Enhanced Technology that supports the virtual space – teleporting, virtual reality, AI for capacity analysis and exposure tracking; AI for back office operations (KPI: % meetings in person vs digital (# of meeting room seats occupied)
Employee Handbook	“Cultural Ambassadors” positions and virtual playbooks
Communications	“Siri” translators in all languages



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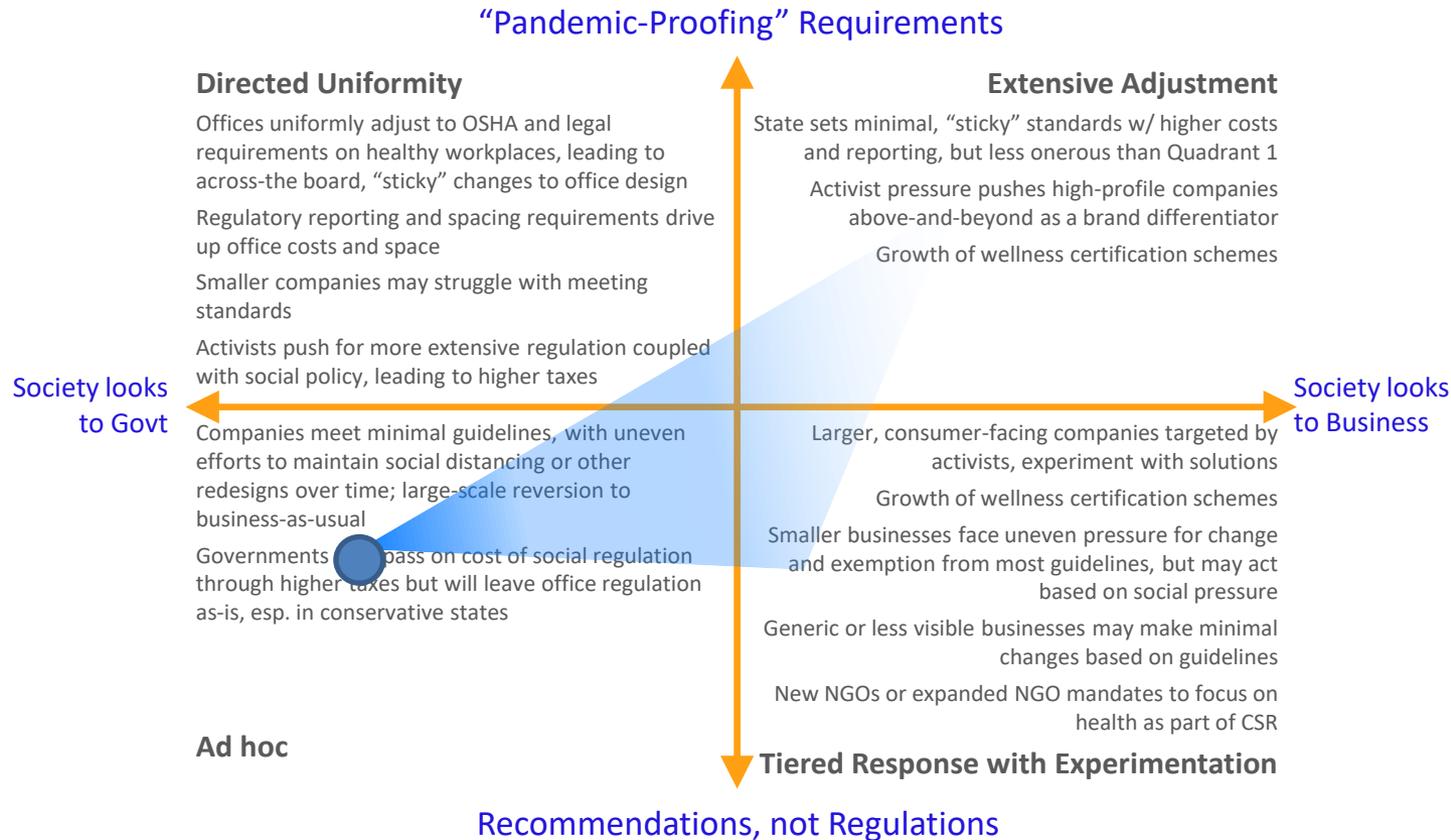
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Pandemic Considerations vs. Social Ratings

Pandemic Considerations vs Social Rating:

Since the pandemic, both governments and civil society have been trying to grapple with who should be responsible for responding to the pandemic. Companies will demand flexibility and recommendations rather than risk legal liability and burdensome requirements. Activists will be trying to determine whether to focus on government targets for social and economic policies, or whether to pressure corporations to act. We believe both groups will take a mixed approach but that which group is given responsibility will shape (a) the cost and (b) uniformity of responses.





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Pandemic Considerations vs. Social Ratings

Pre Covid 19 Metrics	Post Covid 19 Metrics
Health and Wellness Certification is starting to catch on in big companies to attract talent, but strictly optional	Health and Wellness Certification gains added weight, may add more categories/measures (e.g. optimal humidity and temp. to reduce viral transmission, space between persons), may become more important than other certifications
Health and safety regulation does not center space per person	Regulatory definitions expand and regulatory authority may extend to new agencies
Emergency response systems not primarily concerned with viral transmission	Viral training and response systems implemented, new capabilities for contact tracing rolled out
Employee satisfaction surveys ask general questions about wellness programs	More pointed questions about health in surveys; possible expansion to annual reporting
Employees felt safe coming to the office – no metric needed	Public sentiment will need thresholds to define psychological comfort with coming back to the office (Transit solutions, policies to contain transmission, PPE, Vaccine, etc.) KPI: Environmental Metrics: Temp, Co2, IAQ, Humidity, etc Space Syntax (“Urban planning” metrics). Metrics that score safety like “Walkability”, average distance between sanitation zones, “number of hand sanitations by location” (like water bottles saved from fountains),
Facility Managers focused on standard office provisions	New parameters inclusive of building policy, social distancing enforcement, business continuity
Architectural planning models with high density	New metrics and planning focus on communal space vs. individual space



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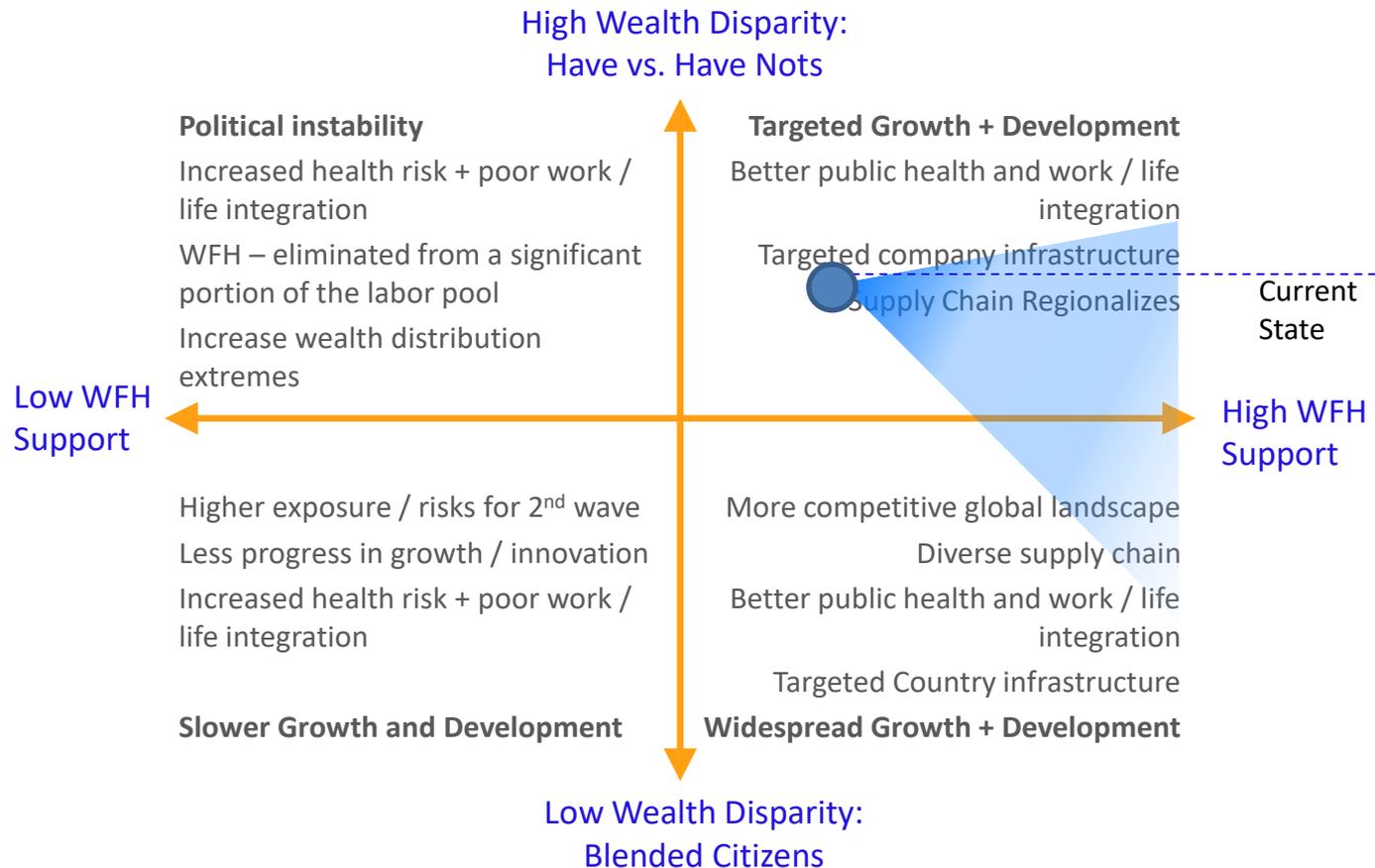
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Public Health Impacts vs. Wealth Disparity

Public Health Impacts vs. Wealth Disparity:

The wealth disparity is currently very great. The country's wealth divide also impacts how it can provide infrastructure and tools to work remotely, which in turn impacts companies ability to harness technology and new work solutions. As we move forward, we believe the focus will be on more WFH / Remote solutions, but how far down the rabbit hole will this go? Will we start looking at a remote worker with global considerations like India or Bali? Or a more Regional approach like Austin?





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Public Health Impacts vs. Wealth Disparity

Pre Covid 19 Metrics	Post Covid 19 Metrics
Traditional office infrastructure	% of organization / employees who have remote tools and satisfaction rates for: <ul style="list-style-type: none"> • HR policies • Internet solutions • Office Setups + reimbursement policies • Software that supports remote work
Productivity measurement based on presenteeism	Productivity measurement based on digital footprint (MS Analytics), performance based
Cultural Metrics (Best Places to Work or other HR surveys)	Cultural Metrics do not change, but which areas of focus in the questionnaire will be revised / evaluated (Best Places to Work or other HR surveys)
CRE Economic Indicators (Sq. Ft., Rent costs per person or per seat)	CRE Economic Indicators (Sq. Ft., Rent costs per person or per seat), however less focus than previously because it will be much smaller
No tracking of ESG metrics	ESG rating by Bloomberg or Dow Jones Index
Personal information protected by HIPPA Regulations	Personal data potentially shared for exposure tracking, liability for exposure to virus?