Reshaping the SA Economy
Industrial rejuvenation and innovation systems

A/Professor John Spoehr
Why we are here

• Preventing deindustrialisation in SA
  – Critical task

• Today
  – Forum for researchers, industry development practitioners (including local Gov’t)
  – Sharpen focus on areas for collaboration over medium term
  – University of Adelaide: portfolio of capabilities
    • contributing to industrial diversification
  – Practitioners’ responses inform researchers and vice versa

• Later
  – Engage industry with clearer value propositions
• Rethinking industrial rejuvenation
  – Learn from international and national experience
• When there’s been an economic shock (end of auto industry)...
  – What responses have succeeded?
• Foundations for Industrial Rejuvenation Report
  – Build regional innovation system
  – Leverage industry agglomeration
  – Smart specialisation: build specialisations on competitive advantage
  – Align specialisations strategy to
    • High demand growth
    • Technology foresighting (complex value chains)
  – Build co-design and ‘market shaping’
  – Integrate industry development with urban regeneration
Crisis and Change

Closing the Motor Vehicle Industry: The Impact on Australia

Map series by Local Government Area, Australia
Automotive Closure Shock

AUSTRALIA
Projected loss of
-198,826 jobs

Source: WISER & WEIR
Employment change (no.) for place of work by LGA
3 months (1 qtr) after closure
Employment change (no.) for place of work by LGA
1 year (4 qtrs) after closure

Source: WiSeR & NIEIR
Employment change (no.) for place of work by LGA
2 years (8 qtrs) after closure
Employment change (no.) for place of work by LGA
3 years (12 qtrs) after closure
Employment change (no.) for place of work by LGA
4 years (16 qtrs) after closure
Industry Transformation

• SA has very short time to effect transition to new manufacturing opportunities
  – Based on core capabilities related to auto, but not on building cars
  – Centred on SMEs
  – Essentially defensive strategy in short to medium term
    • If successful will not compensate for the scale of losses
    • But will help retain core engineering, technology and organisational competences that would be lost otherwise

• Retain platform for longer term
  – 21st century high value, high skill, high living standards model of economic and social development
    • Without this, taking the low road of reduced living standards is a fait accompli

• Innovation based industry development Needs understanding of global and domestic drivers of economic and social change development
  – Fore sighting and integrated problem solving, new institutions
SA’s evolving innovation system
The future

- New organisations for the future
- Rise of intermediaries (e.g., Fraunhofer)
  - Combine advanced technology with business model innovation (multi-disciplinary)
  - Connectivity – researchers, industry, government, end-users
  - Knowledge rich and provide knowledge brokerage
  - Accelerate learning, application and diffusion
    - ‘Action research’
  - Understand complex value chains
    - Demand and technology forecasting functions
- Stretton Centre
Thank you
Accelerated Industry Transformation

Lance Worrall
The Atlas of Economic Complexity: Mapping Paths to Prosperity

Source: Hausmann & Hidalgo et. al., 2011

Map of the World colored according to ECI Ranking.
Value chain/opportunity mapping

• Manufacturing supply chains – increasing complexity – opportunities
• Demand/supply/capability matrix
  – Demand and technology fore sighting
  – Profile local industry capabilities
  – Identify in scope product categories
  – Pinpoint capability gaps and further validate target opportunities
  – Matrix – hierarchy of high value credible product/market segment opportunities
• Repeatable and suited to accelerated industry transformation
Thank you