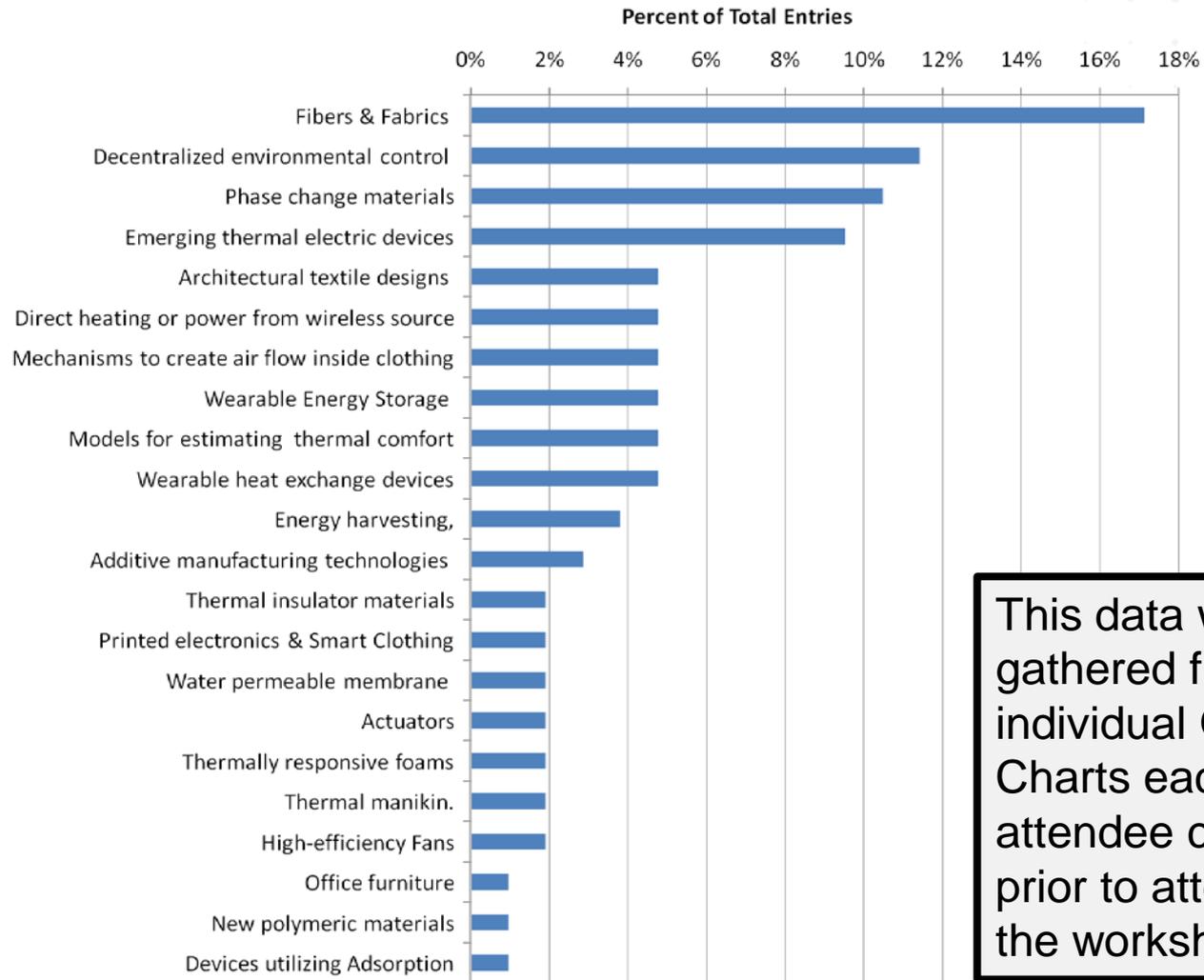


Closing Discussion Slides



This data was gathered from the individual Quad Charts each attendee created prior to attending the workshop.

Potential PTM Innovation Areas

Please check your top 5

- _____ Fibers & Fabrics with variable physical properties (spectral, thermal transport, electrical conductivity, ...)
- _____ Decentralized environmental control (wearable sensors comm. w/ HVAC system, radiant flooring, curtains)
- _____ Phase change materials
- _____ Emerging thermal electric devices
- _____ Architectural textile designs (variable loft)
- _____ Direct heating or power from wireless source (inductive, focused radiation,...)
- _____ Mechanisms to create air flow inside clothing (convective cooling)
- _____ Wearable Energy Storage (conformal batteries, thermal batt, gas tanks)
- _____ Segmental physiological models for estimating thermal comfort
- _____ Wearable heat exchange devices & heat pumps
- _____ Energy harvesting, including from the human body (Piezo, TPV, PV)
- _____ Additive manufacturing/wearable technologies
- _____ Thermal insulators (Porous nano-clays, aerogels, evacuated structures)
- _____ Printed electronics
- _____ Water permeable membrane
- _____ Actuators
- _____ Thermally responsive foams
- _____ Physiologically-controlled sweating thermal manikin.
- _____ High-eff Fans
- _____ Thermal management of equipment such as office chairs and desks
- _____ New polymeric materials
- _____ Devices utilizing Adsorption

Following the Breakout Groups' read outs; a questionnaire was distributed to all attendees for each to vote on their top five technical areas.

OTHERS:

Questionnaire Answers are Overlaid in RED

