- General
    - Telecom
        - No advancement of phones, still hand switched lines
        - No radio/wireless communication
        - Probable heavy reliance on telegram and courier
    - Energy
        - Nuclear will not be researched
        - Solar will not be possible
        - Very little reliance on batteries will stymie that industry entirely
    - Commerce
        - With no telecom or digitally backed accounting systems banks will remain small and local
        - Large industries will have to be formed around constantly transferring account information between big players in the economics field
        - Things like the stock exchange will be next to impossible
        - Very slow if any international growth
    - War
        - Pacific theater would most likely run longer, no research into nuclear bombs would prevent the total surrender of japan
        - The cold war would most likely be avoided entirely
        - International relations would still be handled entirely in person
        - News could only spread as fast as people so war crimes and disasters would be more commonplace.

- Technology - All of the following would not be possible/would never receive advances passed analogue applications.
    - Location - fundamentally impossible without high speed computing.
        - GPS
        - Radar
        - Lidar
    - Entertainment - all would be relegated to analogue due to lack data storage.
        - Video
        - Picture
        - Audio
    - Data storage
        - Tape - potentially possible to read/write with purely analogue, albeit incredibly bulky and would be slow.
    - Scientific models
        - Theoretical simulation
        - Spread analysis
        - Quantum theory
    - Advanced Monitoring /controller systems - circles back to energy, but everything would be far less accurate and would need extra human oversight.
    - Security - No cameras or microphones

    - Medical
        - No ability scan for anything - tumors/blockages/breaks ect
        - Much more limited maternity care
        - Far less research into advanced diseases and viruses

- Travel
    - Aviation
        - No high tech spy/recon aircraft
        - No modern navigation systems
    - Automotive
        - No High efficiency engines
        - No electronic controllers
        - No electric vehicles

- Exploration
    - Space
        - Unlikely that moon landing would have been possible
            - No way to communicate with astronauts,
            - No automated systems on spacecraft
            - Manual adjustments for all flight variables
        - No enhanced imaging telescopes
            - Limited to silver halide photography and traditional telescopes
        - No satellites to monitor near earth region or local planets
    - Deep Sea
        - No ability to scan ocean floor
        -

    - Topological
        - No way to catalog vast stretches of land, penetrate the dense undergrowth of the rainforest ect
        -
- Sociological
    - Art
        - Only traditional art forms would be possible.
        - Videogames would be impossible.
        - Fiction would be less common than it is today as research and publishing would need to be done analog.
    - Music
        - Synthesizers and other digital instruments would not be possible.
        - Entire genres of music would never exist.
    - Subcultures
        - The computer age created many fandoms and subcultures that simply would never have sprung forth if not for the advent of the digital computer.

- Incidental (speculation)
    - Probable expansion of the rail system in america to expedite information transmission via courier
    - No silicon valley/hollywood
        - Dramatic shift in US leadership, Reagan for one, was elected in part for being a well known actor and had there been no large entertainment industry may not have been known at all.
    - Communism and other totalitarian ideologies would most likely blossom with little to no large scale pushback.
        - Police states like the USSR, the CCP, the DPRK ect.'s power is inversely related to the ease with which their subjects can communicate and share information.
    - Unlikely possibility of US surveillance state.
        - Programs like the Patriot act that used technology to spy on citizens would not be possible due to the size and spread of the US.
    - Less global interconnectedness
        - Without instant and even moderately quick forms of communication there would be no "global community"
    - Likely fewer monopolies and oligarchs.
        - At least in the US people would not have the capability to concentrate enough power or resources over a wide enough area to gain enough meaningful power.
        - There still might be oil and rail millionaires, but the thousands of tech billionaires could not and would not exist.
    - Probable worsening of conditions in the third world
        - Most of the aid and charity sent to developing nations is only possible due to widespread media coverage of general terrible conditions or conditions after a natural disaster.
        - A large portion of the exploitation that happens in third world countries is due to foreign fighting over rare resources used in advanced electronics, not only would we not need them, we wouldn't be able to scan for them to know they're there in the first place.
    - Cooler/more tepid political landscape
        - Without phones/the internet/radio people would only be able to engage locally with their community and would not (or rather would be less likely to) fall into echo chambers and extreme ideologies
        - Conversely people who are already indoctrinated into extreme ideologies or religions would have a more difficult time breaking away as they would be much less likely to see any difference of opinion in their local community.
    - Technological advances in mechanical miniaturization
        - If scientific advancement in digital computing was not possible and only mechanical computing was used it is likely that we would have made

strides in switch miniaturization as we did with chip miniaturization in our actual timeline.

- Potentially overall less damage to the planet.
    - Deep rock mining for rare earth metals for advanced electronic and green energy has done more lasting damage to the earth than it will offset, if we had never had the technology to necessitate the mining of those minerals, and lacked the capability to support the global population numbers and increased lifespans of humans that we have today, even the reliance on gas and coal would have done net less overall damage than we have done currently.
- Smaller human population
    - Limitations in science and medicine would not just lead to a shorter overall lifespan of humans globally, but a return to far greater complications in childbirth and early death from illness.

The original “digital” computers were in fact electro-mechanical not truly digital, they were still considerably large computers, albeit just small enough to fit inside submarines during the second world war, and were used to “quickly”, relative to a human, solve trigonometry equations for hitting moving targets with torpedoes. If we are to assume that these electronically driven mechanical switches were as far as the technology progressed, never advancing to vacuum tubes let alone transistors, the effects on modern history would be stark and wide stretching.