BAB IV

KESIMPULAN

Pertanyaan utama pada analisa yang dilakukan penulis adalah untuk menjawab **"Bagaimana teknologi 5G Cina dapat menjadi ancaman bagi Amerika Serikat?"** – Pertanyaan penelitian ini dijawab penulis dengan menggunakan pendekatan konsep *threat perception* dan *cybersecurity threat.* Dengan melihat bagaimana teknologi 5G Cina dapat menjadi potensi ancaman bagi keamanan siber Amerika Serikat didasari oleh persepsi ancaman yang dirasakan oleh Amerika Serikat terhadap Cina. Diikuti dengan potensial-potensial terhadap bagaimana Cina dapat melakukan *cyberattack* terhadap Amerika Serikat dengan cara memformulasikan simulasi skenario yang membuat 5G menjadi ancaman yang dielaborasikan berdasarkan data yang mendukung.

Dalam penelitian ini, penulis terlebih dahulu menganalisis bagaimana 5G adalah teknologi yang memiliki signifikansi untuk diimplementasikan secara global. Menunjukan bagaimana teknologi 5G dapat menjadi salah satu dari prioritas Amerika Serikat perihal perkembangan teknologi. Hal ini dilakukan dengan melihat pengimplementasian 5G dalam sektor komersial masyarakat dan perkembangan teknologi. Diikuti dengan pengimplementasiannya dalam sektor industri dan kota. Hasil analisa menunjukkan bahwa 5G memang memiliki peran signifikan dalam meningkatkan kualitas kehidupan. Mulai dari sektor masyarakat hingga perkembangan urban. Menunjukkan 5G memang sebuah teknologi signifikan.

Selanjutnya peneliti menganalisis kebijakan-kebijakan Amerika Serikat dan Cina mengenai pengimplementasian. berdasarkan hasil analisa segmen

tersebut, terlihat bahwa Cina cenderung ingin aktif untuk menyebarkan teknologinya di berbagai negara sebagai bentuk inisiatifnya dan mengupayakan meningkatkan statusnya untuk tidak memiliki ketergantungan terhadap teknologi negara Asing. Amerika Serikat disisi lain cenderung membuat kebijakan yang berorientasi memitigasi ancaman-ancaman yang ada dari negara kompetitornya. Hal ini menunjukkan bahwa mereka memandang pengimplementasian 5G di arah yang berbeda. Amerika Serikat sudah sensitif terhadap perkembangan teknologi Cina. Dan sudah mempersepsikan beberapa faktor yang membuat Cina dinilai sebuah potensi ancaman.

Kesimpulan selanjutnya adalah bagian dari bab analisa, dimana penulis mencoba untuk menganalisis bagaimana teknologi 5G bisa dijadikan media ancaman oleh Cina sehingga menciptakan rasa kerentanan terhadap ancaman bagi Amerika Serikat. Bab ini didasari oleh persepsi Amerika Serikat dalam melihat perkembangan 5G Cina. Dimana Amerika Serikat dapat merasakan kegelisahan apabila Cina berhasil mendominasi penerapan teknologi 5G dalam skala global. Dengan Cina mendominasi teknologi tersebut Amerika Serikat akan merasa persepsi ancaman yang meningkat terhadap negaranya. Kekhawatiran atas potensi ancaman akibat penerapan teknologi 5G di dominasi oleh Cina membuat Amerika Serikat memunculkan reaksi yang menyesuaikan dengan kepentingannya dalam menanggapi upaya agresif Cina dalam kebijakannya perihal penerapan teknologi 5G.

Untuk melihat potensi ancaman terhadap keamanan siber Amerika Serikat, penulis menentukan 4 elemen yang dianalisa berpotensi menjadi ancaman

berdasarkan konsep *cybersecurity threat*. Aktor 5G, Infrastruktur 5G, teknologi pintar yang diperdaya 5G, dan rantai pasokan 5G adalah elemen yang difokuskan oleh penulis. Hasil pertama adalah menganalisis aktor yang dapat di sponsori negara sebagai elemen yang dapat mengancam Amerika Serikat. Melihat 2 perusahaan andalan Cina yang berkontribusi dalam penyebaran teknologi 5G dalam skala global bisa terikat dengan Undang-Undang Intelijen Nasional Republik Rakyat Cina. Sebagai perusahaan berbasis Cina, artinya apabila Cina mengobligasikan perusahaan untuk bergerak di bidang intelijen siber, perusahaan tersebut harus patuh sesuai dengan ketentuan.

Elemen ancaman selanjutnya adalah bagaimana 5G menjadi alat spionase. berdasarkan hasil analisa penulis, salah satu fenomena dimana infrastruktur utama 5G yang merupakan menara seluler 5G dapat dimanfaatkan sebagai alat spionase akibat adanya perangkat yang dikenal sebagai *stingray device*. Perangkat tersebut dianggap sebagai perangkat yang dapat menerima transmisi data layaknya menara seluler asli. Sebagai pertimbangan, ada argumen dukungan pula bahwa Cina dipersepsikan berpotensi menjadi ancaman bagi keamanan siber Amerika Serikat yang karena Cina terkenal juga sebagai *surveillance state,* dimana status tersebut penulis anggap sebagai argumen bahwa Cina sudah cukup mengenal dan memiliki pengalaman dan kapabilitas dalam melakukan spionase melalui teknologi jaringan.

Elemen ketiga adalah teknologi pintar, 5G merupakan salah satu teknologi dasar untuk perkembangan industri dan modernisasi teknologi yang sudah ada. Namun dalam pengimplementasian teknologi berbasis Cina, ada

ancaman yang muncul. Ketergantungan terhadap infrastruktur 5G Cina membuat Cina memiliki *leverage* terhadap negara penerima teknologi. Hal ini menjadi ancaman bagi keamanan siber sebuah negara. Amerika Serikat menuduh Cina pernah menggunakan infrastruktur sibernya untuk melakukan pemantauan terhadap markas rudal Amerika Serikat. Hal ini membuat 5G yang memiliki spesifikasi yang lebih tinggi sebagai ancaman yang meningkat tingkat bahayanya.

Elemen terakhir yang dianalisis penulis adalah rantai pasokan 5G. Rantai pasokan 5G bersifat kompleks tapi terhubung satu sama lain untuk membentuk produk akhir. Namun, disini merupakan peluang bagi Cina untuk memasang alat seperti *microchip*. Aktivitas seperti ini membuat Amerika Tidak percaya terhadap rantai pasokan yang melibatkan aktor Cina. Studi kasus menunjukkan bahwa Amerika Serikat telah menemukan *microchip* dalam infrastrukturnya yang dilacak terimplementasi saat di dalam komponen dari infrastruktur tersebut masih di tahap manufaktur di Cina. Menjustifikasi klaim Amerika Serikat bahwa Cina adalah aktor yang tidak bisa dipercaya. Dan ketergantungan terhadap kontribusi Cina dalam penerapan teknologi dalam skala global akan memuncul kan isu yang sulit terdeteksi.

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