

## Transport & Logistics - Freight & Distribution

### *Business governance and business management*

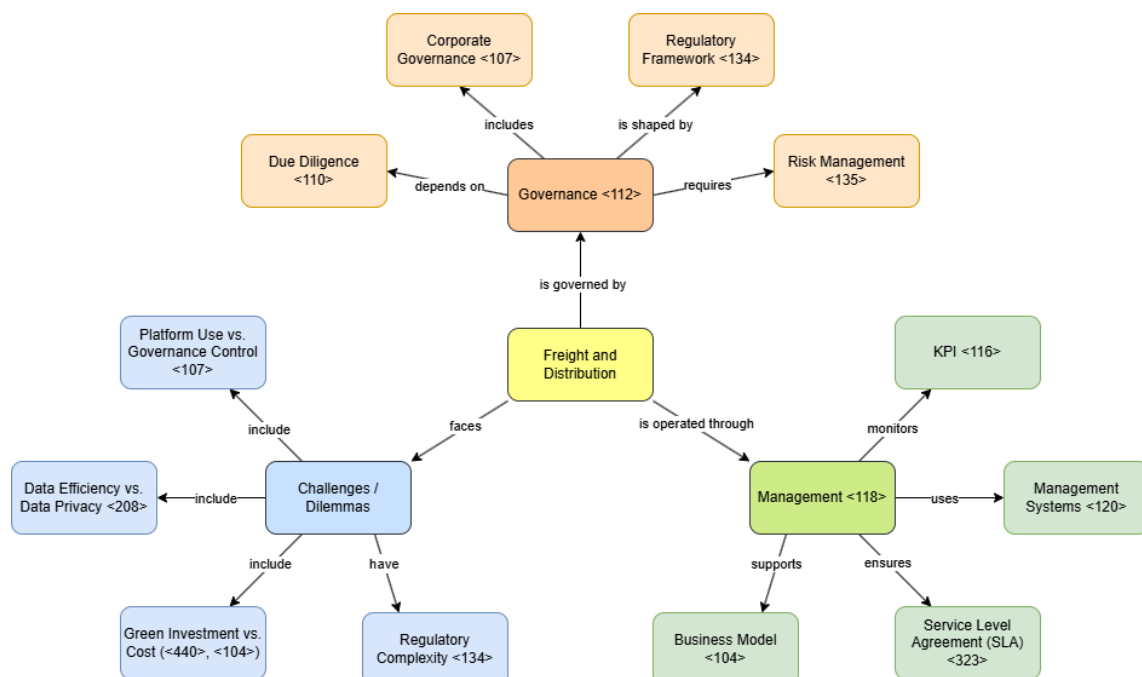
The Freight and Distribution sector is integral to the transportation and logistics industry, focusing on the movement of goods across various modes of transport, including road, rail, air, and sea. It involves the systematic planning, execution, and control of freight movement within supply chains, ensuring that goods flow seamlessly from manufacturers to retailers or end consumers.

This sector relies on effective Governance <112> and Management <118> to navigate complex logistics networks. Growing digitalisation, regulatory demands, and sustainability goals make these roles increasingly interconnected. Operators face strict Regulatory frameworks <134> such as customs laws, emissions standards, and digital freight data regulations like eFTI. Risk <135> oversight is essential and includes Operational Risk <317> such as delays, Cybersecurity <206> threats to digital platforms, and geopolitical instability that can disrupt supply chains. Sustainability targets must be integrated into the Sustainability Strategy<440> while aligning with Corporate Governance <107> principles and ensuring compliance <106> with environmental regulations and privacy standards.

Daily operations depend heavily on digital Management Systems <120> such as Learning Management Systems (LMS), which support routing, warehouse optimisation, and service tracking. To maintain reliability and competitiveness, companies must monitor KPIs <116> and comply with Service Level Agreements (SLAs <323>).

However, this landscape brings several strategic dilemmas. The use of real-time tracking enhances visibility but may conflict with Data Privacy <208> compliance. Environmental upgrades that support sustainability can also increase costs, creating tension with the Business Model <104>. Dependence on digital logistics platforms may undermine Corporate Governance <107> oversight, while efforts to harmonise rules across the EU must contend with the global diversity of Regulatory frameworks <134>.

Ultimately, governance and management in freight must work in tandem to balance operational efficiency, regulatory compliance, and long-term sustainability. This alignment is critical for ensuring business resilience and ongoing success in an increasingly complex environment.



# Agriculture & Farming - Agri-Food Processing & Distribution

## Business governance and business management

The Agri-Food Processing and Distribution industry is defined as the sector responsible for the transformation, packaging and movement of agricultural products from their primary sources, encompassing food manufacturing and the distribution of goods to consumers.

According to workforce development data from the Cambridgeshire & Peterborough region\*, the sector increasingly relies on skilled labor to meet consumer and regulatory expectations. These operations are guided by Management Systems <120> that ensure Compliance <106> with food safety, traceability, and quality regulations, supported by attentive Documented Information <109> and Records Management <132>.

Technologies supporting cold chain logistics are critical in maintaining these products. These are integrated through Integrated Management Systems <114> that streamline Processes <129> under defined Policies <127> and Procedures <128>. The reliability of such systems enables effective Audits <101> and continuous monitoring via KPIs <116> to meet both operational and regulatory goals.

Oversight is managed through Governance <112> structures and Corporate Governance <107> principles, where CxO <108> roles lead strategic efforts. These leaders ensure alignment with the organization's Mission <122>, uphold Ethical Values <111>, and exercise Due Diligence <110> across supply chains. A clear Organizational Structure <126> and defined roles using frameworks like RACI <131> enhance coordination and accountability.



\* - Cambridgeshire & Peterborough

<https://www.growthworkswithskills.com/lmi-hub/spotlight/local-industries/agriculture-food-processing/>

## Healthcare - Pharmaceuticals & Devices

### *Business governance and business management*

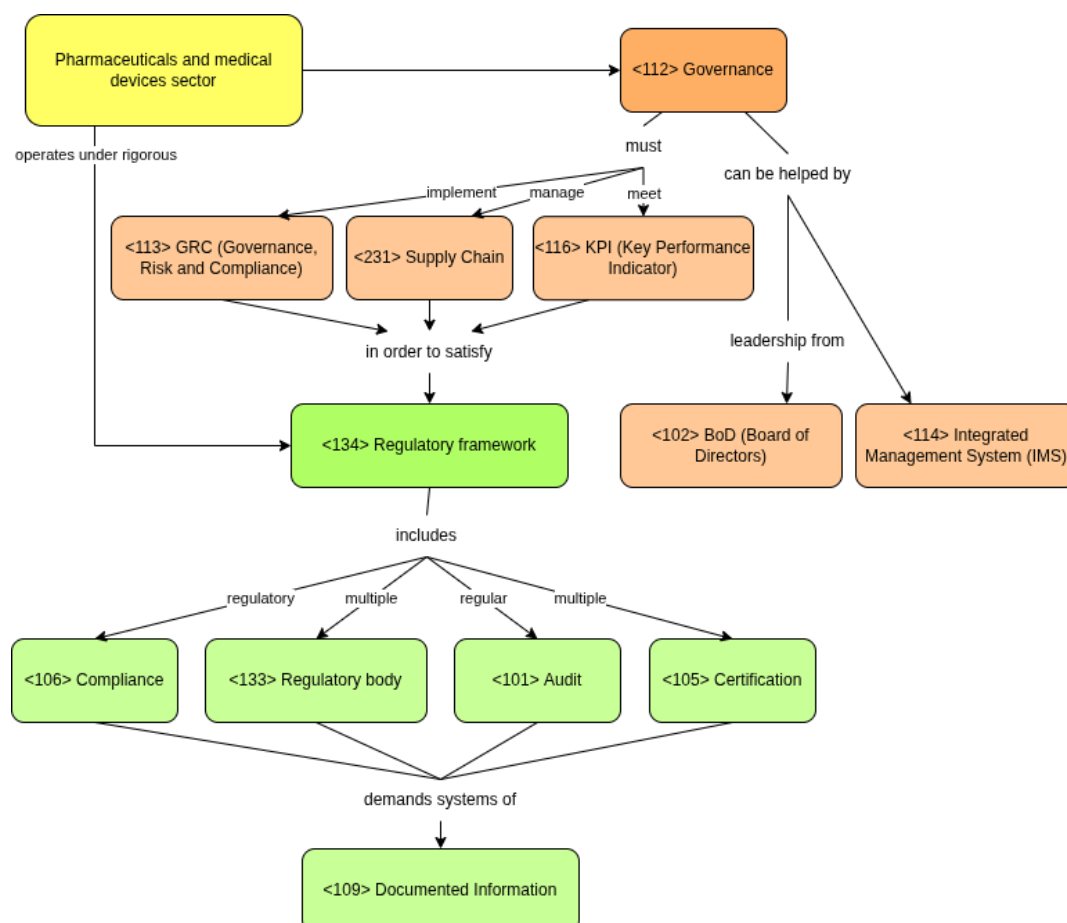
The pharmaceuticals and medical devices sector is a critical component of the healthcare industry. It is characterized by its essential role in delivering therapeutic and diagnostic innovations that support both individual and public health.

Consequently, the sector operates under some of the most rigorous regulatory frameworks <134>, where effective governance <112> must balance patient safety with Governance, Risk, and Compliance (GRC) (<113>) demands to effectively manage complex supply chains <231> and meet stringent quality standards.

Regulatory compliance <106> forms the foundation, with organizations needing to satisfy multiple regulatory bodies <133> including the FDA, EMA, and MDR. This demands comprehensive documented information <109> systems to ensure full product traceability from development through distribution. Regular audits <101> and certifications <105> like ISO 13485 validate these quality management systems.

Strategic governance requires alignment between innovation and compliance. Integrated Management Systems (IMS) <114> can harmonize these priorities, while leadership from the Board (BoD) <102> ensures proper oversight. Key metrics <116> should track both compliance performance and operational resilience.

In conclusion, a successful governance in this sector must create a system that is compliant and also adaptable. Embedding GRC <113> principles across all operations enables organizations to ensure patient safety while fostering a culture of innovation and adaptability.



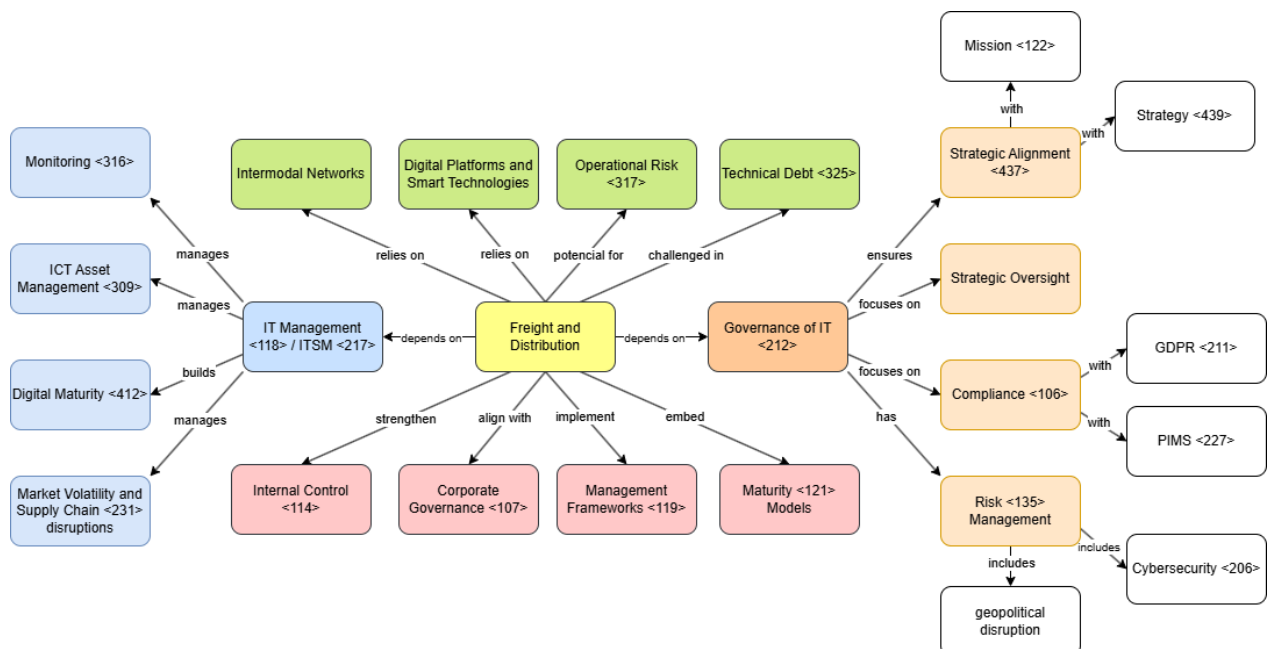
# Transport & Logistics - Freight & Distribution

## Governance of IT and IT Management

Freight and distribution, a core subdomain of the transport and logistics industry, increasingly relies on digital platforms and smart technologies. Managing the movement of goods across intermodal networks demands advanced IT coordination, presenting both opportunities and challenges for Governance of IT <212> and Management <118>. Ensuring alignment between Governance of IT <212>, which emphasizes strategic oversight, Compliance <106>, and value delivery, and ITSM (IT Service Management) <217>, focused on operations and performance, is critical.

These operations depend on Logistics Management Systems <120> and ICT Asset Management <309> tools, including Operational Technology (OT) <318> and telematics, for functions like inventory tracking and route optimisation. However, issues such as technical debt <325>, fragmented infrastructure, and disjointed data flows hinder effective coordination. Governance <112> must respond to increasing Compliance <106> requirements through frameworks like GDPR <211> and PIMS <227>, manage Cybersecurity <206> risks, and maintain Strategic Alignment <437> with the overall Mission <122> and Strategy <439> of logistics organisations.

Simultaneously, ITSM <217> must oversee hybrid infrastructures, ensure proper Monitoring <316> and Incident Response <310>, and build Digital Maturity <412> to stay resilient amid market volatility and Supply Chain <231> shocks. Advancing in this landscape requires Management Frameworks <119> that unify Management <118> and Corporate Governance <107> priorities, foster Maturity <121>, and reinforce Internal Control <114>—without which digitalisation may become a source of Operational Risk <317> rather than a driver of resilience.



# Agriculture & Farming - Agri-Food Processing & Distribution

## Governance of IT and IT Management

The Agri-Food Processing and Distribution industry encompasses processing, packaging and distribution of food and agricultural products. It includes activities such as food manufacturing, processing, logistics and distribution, bridging the gap between primary producers and end consumers.

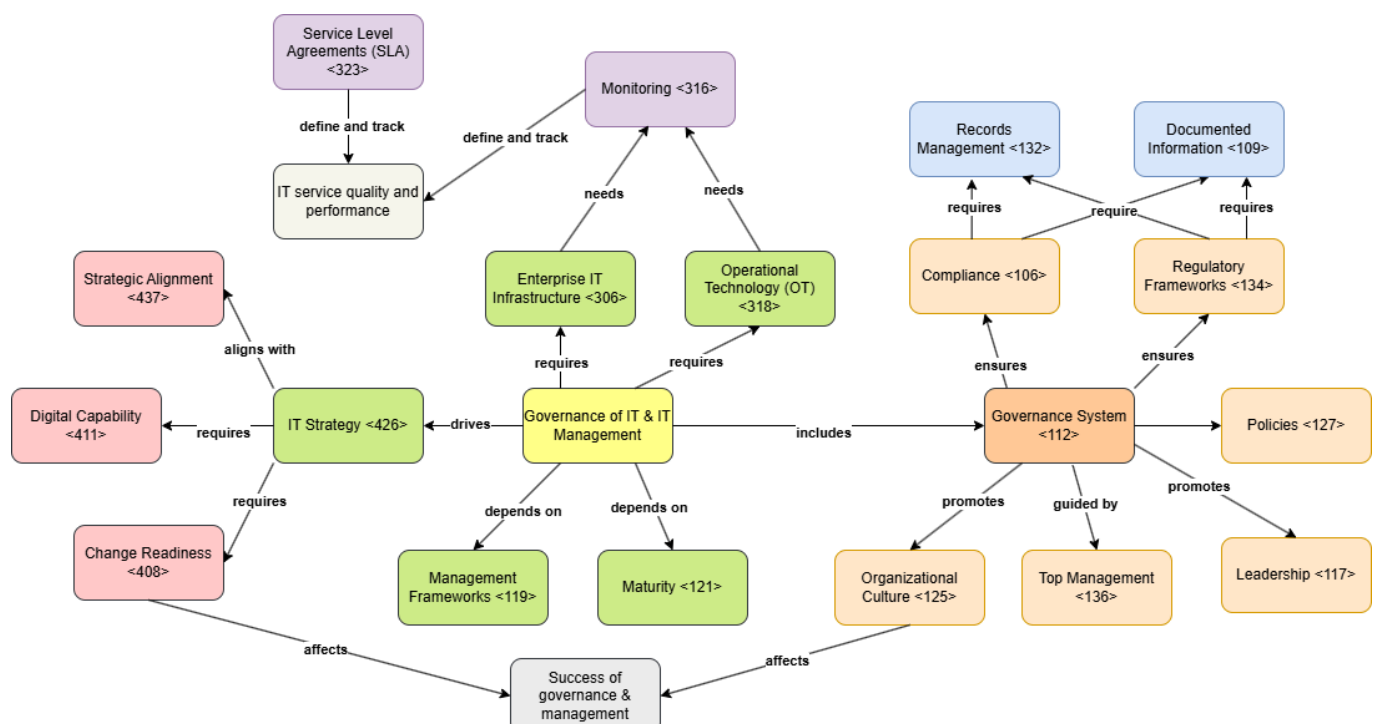
In this sector, Governance of IT and IT Management are critical to ensuring traceability and effective cold chain logistics. However, the sector often faces data fragmentation, where different actors operate isolated systems, hindering real-time coordination and complicating compliance <106> with sector regulations and broader regulatory frameworks <134>.

A well-structured governance system <112> helps align IT investments with business objectives, supported by top management <136> and guided by a clear IT strategy <426>. Yet in practice, many organizations—especially SMEs—lack the maturity <121> and management frameworks <119> needed for effective oversight and strategic alignment <437> between IT and business.

Cold chain logistics depend on Operational Technology (OT) <318> integrated with Enterprise IT Infrastructure <306>, often monitored using IoT devices. This integration introduces complexity and regulatory exposure, and, to handle this, organizations benefit from solid documented information <109> and records management <132> practices.

Clearly defined policies <127> and procedures <128> reinforce governance by fostering accountability, consistency, and preparedness for audit <101>. However, efforts to evolve these practices are often challenged by underdeveloped organizational culture <125> and low change readiness <408>.

Innovation and agility in the sector require more than technology—it takes clear leadership <117>, shared objectives, and the ability to coordinate IT and operations effectively. Strengthening this collaboration—frequently structured through service level agreements (SLAs) <323> and continuous monitoring <316>—is essential to delivering reliable and compliant services at scale.



## Healthcare - Pharmaceuticals & Medical Devices

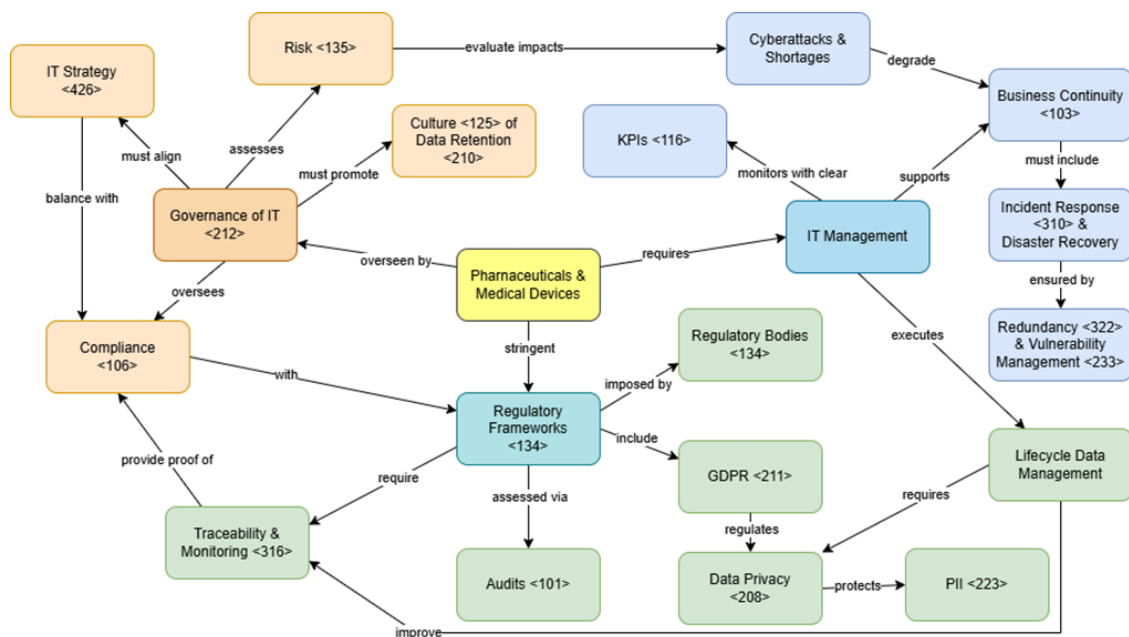
### Governance of IT and IT Management

The pharmaceuticals and medical devices subdomain of healthcare is characterized by the research, development and manufacturing of drugs and medical technologies, followed by their supply to authorized distributors and retailers. It produces life-critical products intended to diagnose, treat or prevent diseases. The industry operates under stringent regulatory frameworks <134>, and ITGM (Governance of IT <212> and IT Management) play a significant role in ensuring patient safety and quality assurance.

Pharmaceuticals and medical devices must comply with regulatory frameworks <134> set by bodies <133> like the FDA<sup>1</sup>, in the US, and EMA<sup>2</sup> or MDR<sup>3</sup>, in the EU. Ensuring data integrity across the entire product lifecycle, from R&D<sup>4</sup> to manufacturing and post-market, is essential to maintain traceability <316> for audits <101> and proof of compliance <106>. Data privacy <208> is another critical concern, enforced by GDPR <211> in the EU, requiring secure handling of sensitive patient data (PII <223>). These can be achieved through strong data management, zero trust <234> security and vulnerability management <233>, alongside fostering an organizational culture <125> of data retention <210> awareness.

Business continuity <103> a high priority, requiring risk assessments of potential disruptions caused by cyberattacks like medicine shortages or medical device malfunctions. Organizations must implement disaster recovery plans that include redundancy <322> backups and alternative power sources, to ensure continuous availability, especially for life-saving treatments.

IT investments <426> must align with business goals, such as accelerating drug development with AI <401> and improving device interoperability, while ensuring compliance <106>. Clear KPIs <116>, including system uptime, compliance metrics and cybersecurity <206> posture, are key to achieve high digital health maturity <412>.



1 - US Food & Drug Administration <https://www.fda.gov/>

2 - European Medicines Agency <https://www.ema.europa.eu/>

3 - Medical Device Regulation <https://www.medical-device-regulation.eu/>

### **BGM comparison - Transport & Logistics vs Agriculture & Farming**

Freight and Distribution and Agri-Food Processing and Distribution both rely on structured governance, but their priorities diverge. Freight operations emphasize efficiency, punctuality, and regulatory compliance, governed by formal Corporate Governance <107> and led by senior CxO <108> roles. Risks focus on logistics delays and regulatory issues, managed through GRC <113> frameworks and role clarity using RACI <131>.

Agri-Food, in contrast, must address food safety, perishability, and ethical concerns. Its governance integrates Ethical Values <111> and Governance <112> principles to maintain traceability and uphold Quality <130>. Cold chain logistics and Audits <101> play a central role, and Documented Information <109> ensures compliance.

While both sectors use Management Systems <120>, Freight focuses on route and warehouse optimization, whereas Agri-Food emphasizes quality control and traceability. Organizationally, Freight tends toward hierarchical Organizational Structures <126>, while Agri-Food often coordinates across diverse partners. Each one reflects its main objective, efficiency in Freight (Mission <122>) and safety and sustainability in Agri-Food.

### **BGM comparison - Agriculture & Farming vs Healthcare**

The Agri-Food Processing and Distribution and Pharmaceuticals and Medical Devices sectors share key priorities such as traceability and quality control <130>, but diverge significantly in their business governance <112> structures and management <118> models.

In pharmaceuticals, governance <112> is centralized and tightly regulated. Agencies such as the EMA and FDA enforce strict compliance <106> regimes, requiring full product lifecycle traceability and certified quality systems (e.g., ISO 13485, a form of certification <105>). Business governance is formalized, typically supported by boards of directors (BoD) <102> and compliance <106> units. Management <118> practices are process-driven <129>, focused on strategic alignment <437>, risk management <135>, regulatory assurance and controlled innovation.

In agri-food, governance <112> is more decentralized, reflecting the diversity of stakeholders, including smallholders, cooperatives, and large agribusinesses. Regulatory oversight focuses on food safety, environmental compliance, and supply chain <231> standards, but is often mediated by public agencies and sectoral organizations. Management <118> practices vary widely: while some firms implement integrated systems <114>, many actors rely on informal or cooperative mechanisms, influenced by scale, infrastructure, and local policy frameworks.

In summary, pharmaceuticals rely on hierarchical, compliance-based governance <106, 112> and formal organizational structures <126>, while the agri-food sector operates under flexible, multi-actor governance with heterogeneous management practices. Both depend on effective traceability, regulatory credibility, and certification <105> systems to succeed in complex and risk-sensitive <135> markets.

## **ITGM comparison - Transport & Logistics vs Agriculture & Farming**

Both *Agri-Food Processing and Distribution* and *Freight and Distribution* rely heavily on efficient and reliable information systems to manage complexity and ensure service quality. However, their approaches to Governance of IT <212> and IT Management reflect sector-specific priorities and challenges.

In Agri-Food, the emphasis lies in traceability, cold chain logistics, and compliance with safety and quality standards. Here, governance mechanisms must ensure that IT and Operational Technology (OT) integrate to support real-time monitoring (e.g., temperature, humidity), often using IoT. This calls for clear IT strategy, top management support <136>, and structured records management <132> to meet regulatory demands. Still, many agri-food SMEs struggle with low maturity <121> and fragmented systems, making strategic alignment <437> between IT and business difficult.

By contrast, Freight and Distribution is driven by efficiency, scalability, and interoperability across intermodal systems. Governance here focuses on performance optimisation, with an emphasis on SLAs <323>, real-time tracking, and warehouse automation. IT Management must ensure system availability, data integration, and continuous monitoring <316> across a vast network of actors. While large logistics providers often have mature governance models, smaller players may lack consistent IT policy frameworks <127>/<128>, affecting service reliability.

Both sectors face change resistance <408> and require strong leadership <117> to align evolving technologies with operational realities. Yet while Agri-Food governance often stems from regulatory pressure, Freight IT governance is usually performance-driven, aiming to reduce delivery times and costs.

## **ITGM comparison - Transport & Logistics vs Healthcare**

The niche of pharmaceuticals and medical devices prioritizes governance of IT <212> and IT management to ensure regulatory compliance <106> and patient safety, while freight and distribution emphasizes operational resilience and cost efficiency. Despite differing priorities, both manage complex IT systems <306>.

In pharmaceuticals and medical devices, ITSM <217> must be aligned to support secure drug development, EHRs integrity and medical device interoperability, all while adhering to strict regulatory frameworks <134>. This importance of compliance <106> requires focus on cybersecurity <206>, and as result CISOs <108> typically maintain high autonomy to mitigate data privacy <208> risks affecting patient safety or intellectual property.

In contrast, freight and distribution IT strategy <426> target route optimization, warehouse automation and real-time monitoring, aiming to reduce delays and costs. Unlike healthcare, CISO <108> often have less board <102> visibility unless major incidents occur, highlighting differences in cyber governance maturity <121>.

Cyber threats in both sectors have serious consequences. Pharmaceuticals and medical devices involve life-critical stakes needing fast incident response <310> and failover systems <308>. In freight and distribution, disruptions in supply chains <231>, especially for pharma, can lead to shortages and widespread societal impacts. Both sectors share a need for high digital maturity <412> to ensure business continuity <103> and adapt to disruptions <303>, such as re-routing shipments.

Additionally, traceability and monitoring <316> is crucial in both industries. Pharmaceutical and medical device organizations require documented proofs <109> to comply with stringent regulations <133>, while freight and distribution leverage real-time tracking to enhance logistics operations.