

Introduction to ICTA and its goals

Examples & lessons through cooperation



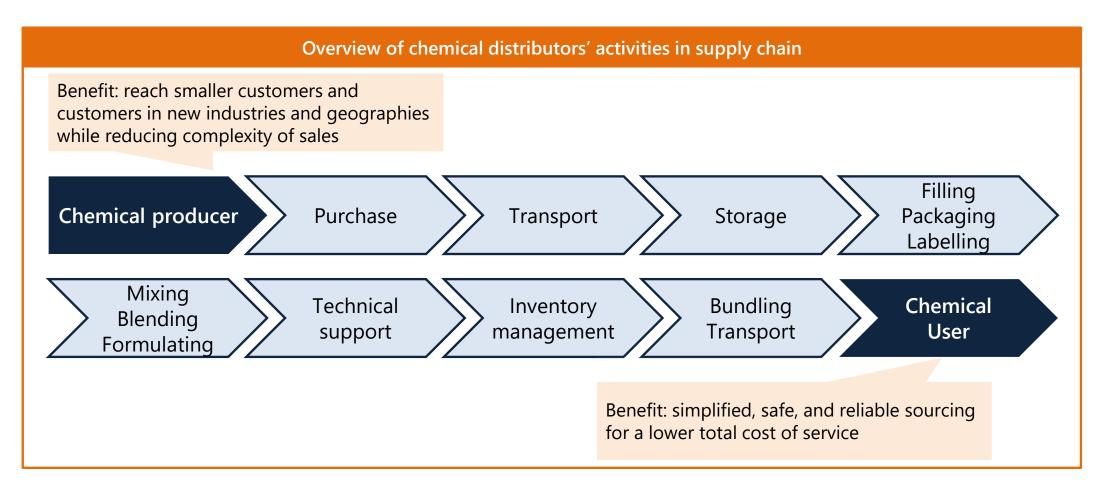
Content

Overview chemical distribution industry

2 A global industry: digitalization

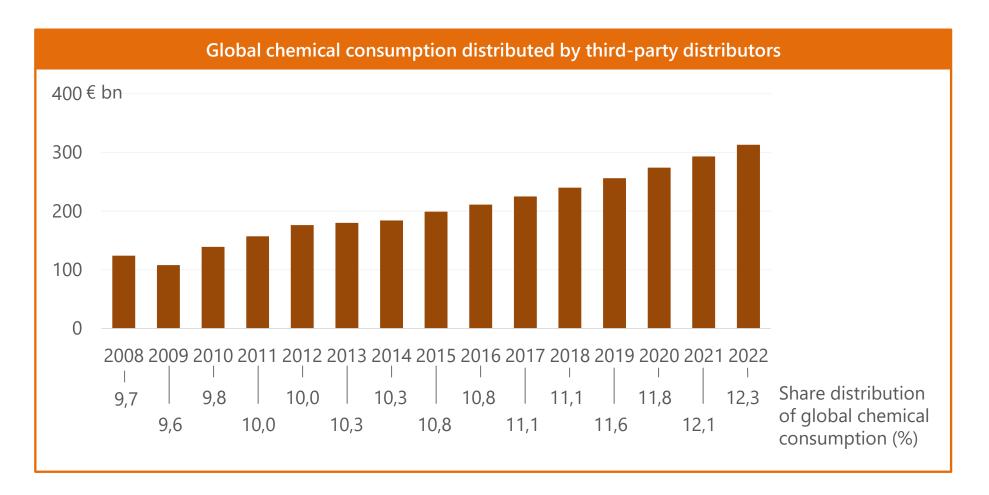


Chemical distributors fulfil a value-adding function in the supply chain





ICTA represents the interests of the global chemical distribution industry, which accounts for a total turnover of well over € 200 bn



From: BCG 'Third Party Chemical Distribution: demand outlook, trends, business outlook and impact of digitalization', June 2017



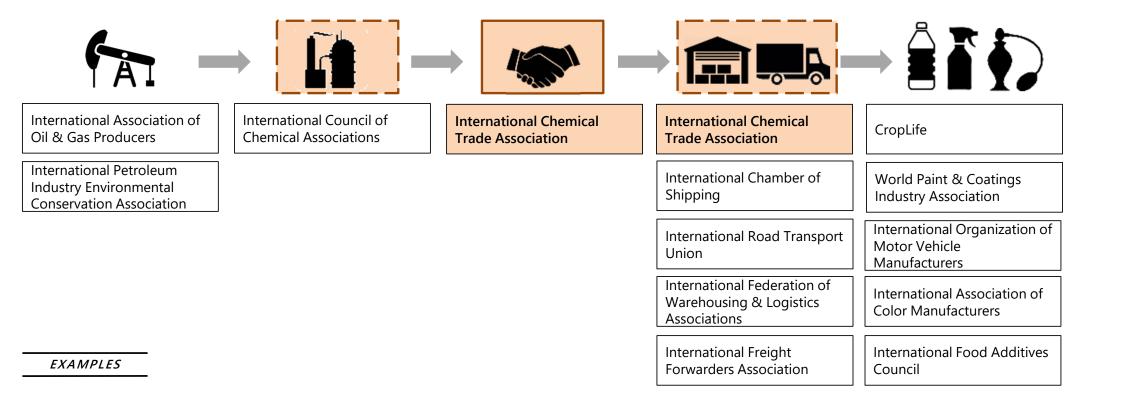
International distributors have added value anywhere, but especially in Brazil

Brazilian chemical industry stagnates	 Brazilian chemical industry is 8th largest worldwide Chemical industry's production volume has stagnated It accounted for 2.5% of national GDP in 2018, but down from 3.6% in 2004 Use of installed capacity in chemical industry dropped from 87% in 2007 to 73% in 2018 	 Source chemical input for production processes efficiently Establish sales coverage in new geographies
Challenges for chemical companies operating in Brazil	 Bureaucracy and complexity of tax system Recession of recent years High logistical costs For chemical industry, logistics costs are 7% of revenues (max. 4% in EU) Logistics costs for chemicals in Brazil increased 7.4% (2016-2018) Result of reliance on highways (i/o rail, water) and low-quality of roads 	 Manage bureaucracy and taxes Access to specialized sales force with local knowledge Supply chain expertise and bundling of transports Maintain flexibility Reduce investment costs



Distributors help overcome challenges

ICTA represents the chemical distribution industry on a global level





ICTA has both association members and direct company members





Aside from Associquim Sincoquim, ICTA has three direct members with subsidiaries in Brazil



ICTA International Chemical Trade Association

Based on its purpose and pillars, ICTA works for the interests of the global chemical distribution industry

Pillars	Advocacy	Knowledge & Communication	RC/RD	Global network
Selected medium term objectives	Influence SAICM, GPE, OPCW, UN TDG & GHS	Inform membersExternal relations	Move towards global harmonization	Establish strong links between members and with ICCA, India, China



Advocacy: ICTA represents in the interests of the chemical distribution industry globally

Institute	Meeting		Location	Date
SAICM	UN Negotiations SAICM post 2020	WL	Bucharest	March 2020
ICC	Annual India Chemical Industry Outlook Conference	RS	Mumbai	February 2020
JCIA & Mitsui	Meeting on cooperation	RS	Tokyo	October 2019
DoS	International Secure Trade & Border Control Conference	PN	Edinburgh	October 2019
G7	Global Partnership Chemicals WG	PN	Paris	October 2019
Interpol, FBI, DoHS	Chemex conference	PN	Lyon	October 2019
ICCA	General Assembly	EN	Helsinki	October 2019
IMCD	Meeting on cooperation	RS	Mumbai	October 2019
ICC	Safe chemical handling workshop	RS, WL	Mumbai	October 2019
CPCIF	CEO Roundtable at Annual Conference	RS	Hangzhou	September 2019
OPCW	Meeting on cooperation	EN, RS, WL	The Hague	September 2019
ICCA	Meeting on cooperation	RS	Brussels	September 2019
OPCW	Partner Training on Chemical Security	DL	The Hague	August 2019
ISC3	Advisory Board Meeting	PS	Bonn	June 2019
CPCIF	Conference China Responsible Care Promotion	RS	Beijing	April 2019
ICC Chem. Corp.	Meeting on cooperation	RS	New York	March 2019



Knowledge & Communication: ICTA has three working committees dealing with the challenges

SSHE	 Authorisation & restriction Data sharing Traceability & recall 	 Safety , Health Site and employee safety Product safety Education & training Human rights Labelling and GHS 	<i>Environment</i>Climate changeCircular economyPollutionWaste
B Transport & Security	 <i>Transport</i> UN Recommendations on TDG Import & export restrictions Safety & quality assessment systems 	 Security Chemical weapon Dual use goods & (Cyber) Security Terrorism 	
C RC/RD	 Capacity building Sustainability Harmonisation of programmes KPI reporting 	Third party verifieValue chain response	

Knowledge & Communication: Overview of recent key activities of ICTA working committees

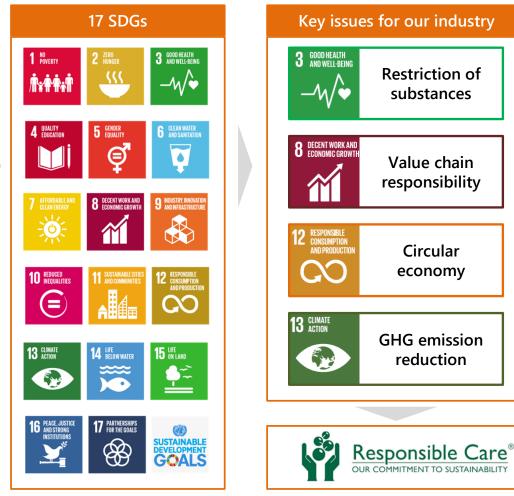


RC/RD: Sustainability is a key topic for ICTA and its members

Vision ICTA for a sustainable world

"ICTA members want to contribute to a future in which future generations can live well within the boundaries of the planet. The goal is a healthy earth with prosperous inhabitants and an ideal equilibrium between economical, ecological and social interests"

Key ESG-factors for a sustainable world				
Social	Governance			
Human rights	Risk management			
Working conditions	Compliance			
Child labour	Accounting			
Relation w. society	Competition			
Relation w. gov.	Corruption			
Equal opportunity	Ethics			
Product safety				
Product liability				
Education and training				
Privacy				
	Social Human rights Working conditions Child labour Relation w. society Relation w. gov. Equal opportunity Product safety Product liability Education and training			





RC/RD: RC/RD provides the framework for the chemical supply chain to work responsibly and sustainably

Responsible Care/ Responsible Distribution

- Launched in 1985 for the chemical manufacturing industry, chemical distribution industry joined in 1995
- Requires formal commitment from each CEO to the 8 Guiding Principles
- RC/RD companies commit themselves to continuously improve the environmental, health, safety and security performance of their operations and products
- They also commit to transparency and engaging with society
- Adjusted in 2019 to include value chain responsibility
- The RC/RD programs create an incentive for validating its implementation by an independent third party auditor



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RC/RD: Examples of what the chemical distribution industry actually *does* to increase sustainability

	Alliances	Associations United Nations Global Compact Global Reporting Initiative**		
	Environment	 Targets to reduce energy use (MWh), emissions (tCO2e), hazardous waste (kg), spills (#) Use hybrid vehicles, compensate business trips, stimulate biobased products 		
Activities	Social & gov.	 Targets to reduce LTI, WSJ test, code of conduct, gifts and entertainment policy Whistleblower system, mandatory code of conduct training module with test 		
	Supply chain	 Supplier assessments (incl. onsite audits) and supplier performance engagement Reinvest profits partly into supply locations, work with UNGC suppliers 		
Audits		RESPONSIBLE CARE [®] Contraction of the second secon		
PhilanthropyStudent sponsorships, support emergency ser revenue for product to NGO		Student sponsorships, support emergency services, fund raising events, percentage of sales revenue for product to NGO		



Global network: ICTA cooperates with key partners from industry and government

	 Memorandum of Understanding with ICCA in 2018 Mutual members of ICCA RC LG & ICTA RC/RD Committee Joint lobbying on key policy issues (e.g. SAICM) 	WWW.Icca chem.ord
	 Memorandum of Understanding with ICC in 2018 Speaker at Annual India Chemical Industry Outlook Conference Joint workshop on chemical safety in Mumbai 	INDIA CHEMICAL INDUSTRY OUTLOOK COndustry 4.9 - Implications for Chemican Ustry, Feedstronger (MMMBA)
	 Memorandum of Understanding with CPCIF in 2019 Speaker at China Petroleum and Chemical Intl. Conference Participant in CEO Roundtable 	an化工行业国际产生。 业取出 SII V月18
OPCW	 Towards Memorandum of Understanding with OPCW Partner Training on Chemical Security Member of OPCW Industry Working Group 	



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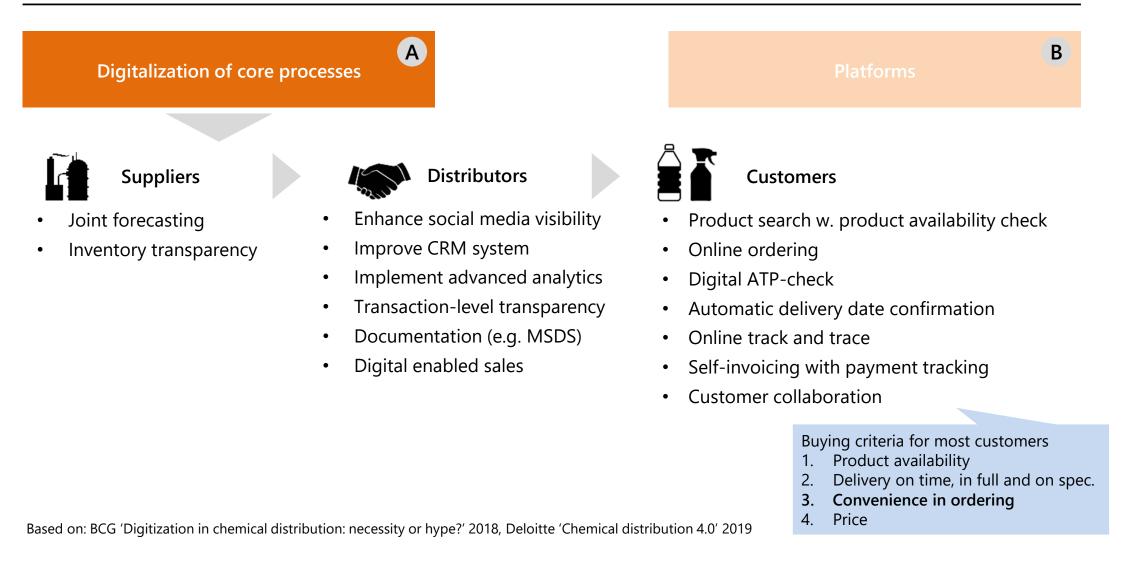


Chemical distributors are increasingly involved with digitalization

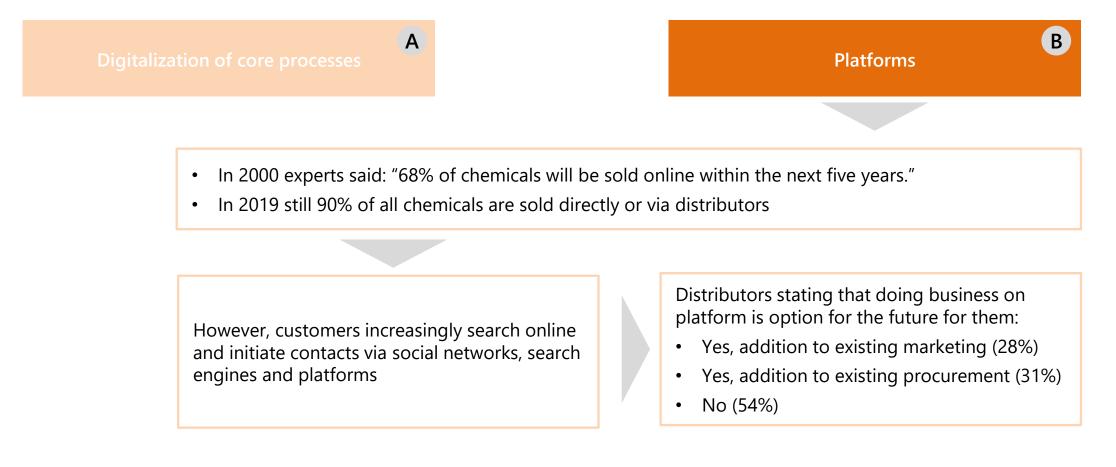
Drivers	 Generate new business and grow sales (67%) Enhance operational efficiencies (63%) Simplify structures and reduce costs (61%) 		
Digitalization activities	 Digitalization of core processes Enhance "social media" visibility Improve CRM system Redesign website and implement advanced analytics Develop "web-shops" including on-line payment 	PlatformsJoin a platformDevelop a platform	



Chemical distributors are increasingly digitalizing their core processes

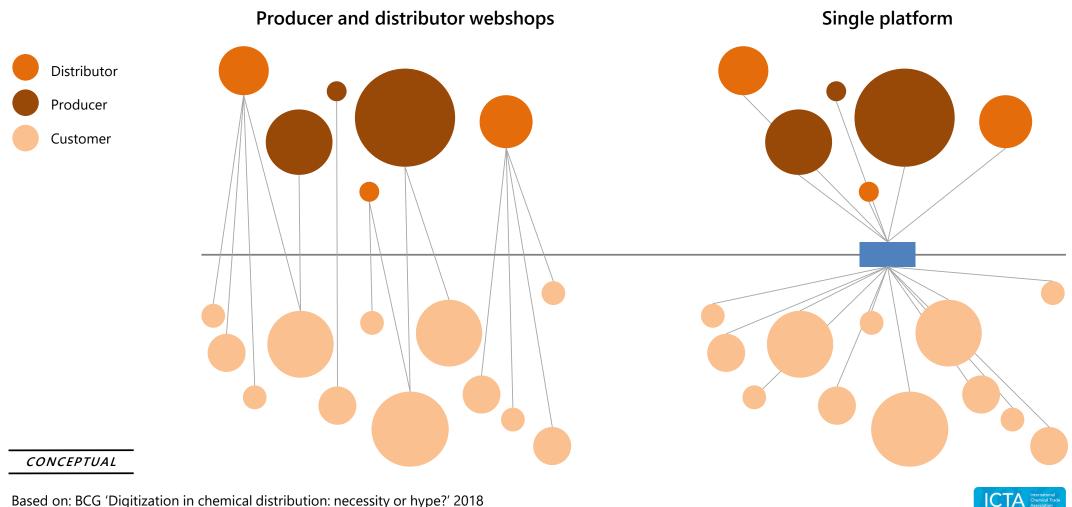


Increasingly, chemicals will be sold through platforms



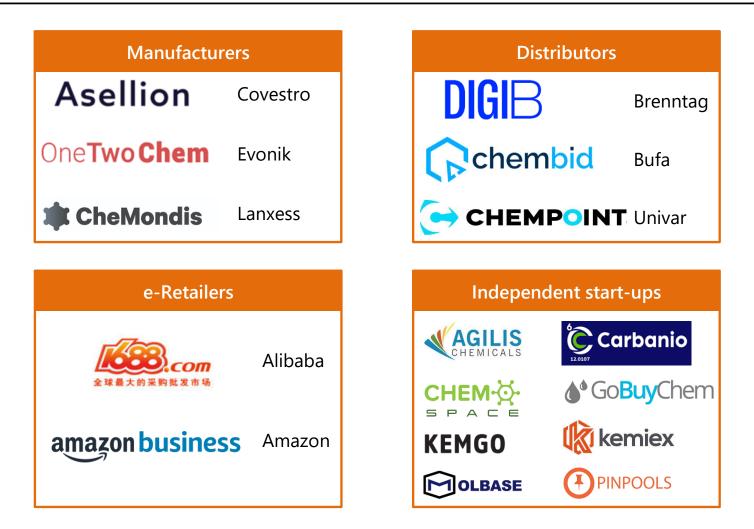


The digitalization of processes and making use of platforms results in different chemical supply chains



Based on: BCG 'Digitization in chemical distribution: necessity or hype?' 2018

Several new chemical online platforms have been set up





Given the obstacles and differences across products and markets, a variety of digital solutions is expected to co-exist

Drivers	 Generate new business and grow sales Enhance operational efficiencies Simplify structures and reduce costs 61%
Obstacles	 Complexity of product attributes, regulatory complexity, packaging, delivery terms, etc. Rarely standardized orders, so manual intervention required Need for technical f2f interaction to have mutual value creation (e.g. tailored formulating) Customers may need financing support High barriers to exit (e.g. switching costs)
Expectation	 Platforms will become cheaper Platforms suitable for readily available, non-hazardous products with high order frequency In other segments the costs are expected to remain higher than benefits Likely not one "Chemazon", but several successful solutions across products and markets

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Based on: Deloitte 'Chemical distribution 4.0' 2019, DistriConsult 'Digitalization in Chemical Distribution – a reality check'

Potential future fragmented digital landscape of chemical distribution industry

Manufacturers



Web shops around their differentiated products, crossselling complementary products and services online

Logistical Service Providers (LSP's)





- End-to-end supply chain services for bulk products
 - Delivering services to startups and e-retailers

Platforms

- Readily available, standard, non-hazardous products with high order frequency
- Cooperate with LSP's for bulk products

Start-ups

- Offer online product finding services
- Conduct auctions
- Matchmaker for spot bulk chemicals trades
- Neutral platform for multiple mid-sized chemical distributors or complementary principals

Chemical distributors

 Develop own web shop or operate joint web shops with principals



- Focus on markets where customers need products from different principals
- Develop or subscribe to e-platform



Chemical distributors can expand sales through digitalization of processes and using platforms, but their companies must be ready for it

Indicators of resilience	. Indicators of vulnerability	
Value add business	Drop shipping business	
Multi-product/multi-principal	Single product customers	
Exclusive contracts	No/little contracts	
Bulk-breaking, advantaged warehouses (std. products)	Low value add for standard products	
Own formulations/recipes	Mere product sales	
Value added services (sampling, return, handling,)	No value added services	
Joint product/application dev with suppliers/customers	No joint development	
System linkages with customers/principals	No system linkages	
Seamless order entry, tracking, re-ordering	Largely paper processes	
Face-to-face contacts focusing of solutions and new businesses (supported by digitized standard processes)	Face-to-face contacts focusing of solving tra problems	ansactional
Real value formulations, compounds for specific applications	Artificial sophistication of formulations ("pro	oftitols")



Thank you for your attention!

