DistriConsult

Digitalisation in Chemical Distribution
Hype vs. Hope: Where is Reality today?

Presentation

9º EBDQUIM

Encontro Brasileiro dos Distribuidores de Produtos Químicos e Petroquímicos

São Paulo, SP / Brazil – 10. March 2020

© DistriConsult – 2020
Personal & confidential

Digitalisation in Chemical Distribution

Contents

- Chemistry 4.0: Circular Economy & Sustainability
- Definitions: Digitisation vs. Digitalisation
- Digitalisation in the Chemical Distribution Industry
- Digital Marketplaces (Platforms)
- Survey Results
- Challenges and Opportunities for Chemical Distributors

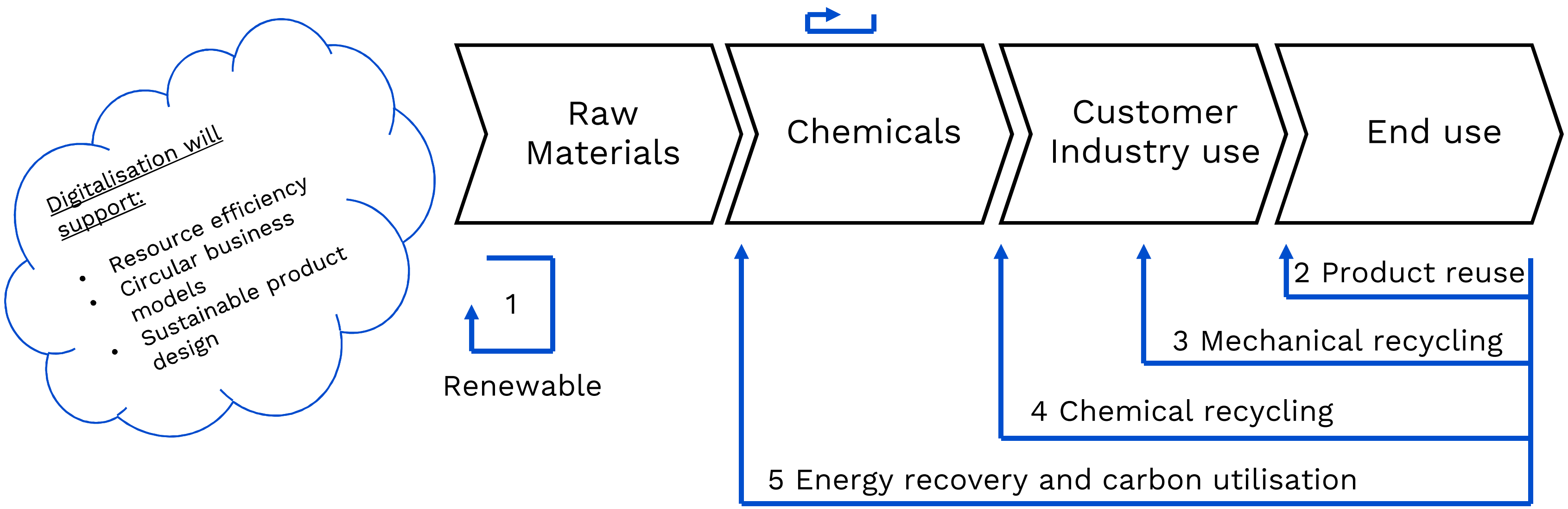
© DistriConsult – 2020
Personal & confidential

Chemistry 4.0: The Circular Economy

A key Role to play for the Chemical Industry

- Increased Resource Efficiency ➡ “Use less”
- Increased lifespan of products, materials and components ➡ “Use longer”
- Re-use, recycle, recovery (material/molecule/energy) ➡ “Use again”

Circulating molecules through five loops



Maximising the utility of existing molecules

Source: VCI, Accenture

Digitalisation versus Digitisation

Clarifying the Terminology

“There is no digital transformation or digitalisation without digitisation of paper and processes …”

- **Digitisation**: transformation from analog to digital sources and data
- **Digitalisation**: Use of digital technologies and data in order to create revenue, improve business, replace and transform processes with data at the core
- **Digital Transformation**: Fully leveraging the opportunities of Digitalisation in a strategic way, in order to actively transform business activities, processes, competencies and models

A key question to ask yourself:
Is our organisation truly “process ready”?

Source: I-Scoop.com; DistriConsult analysis

© DistriConsult – 2020
Personal & confidential

Digitalisation means “many things to many people”

Three distinct Areas of Emphasis

Utilising internal and external data …

Optimisation of business processes

Optimisation of production processes

… in order to establish new models and solutions for competitive advantage, value creation and customer satisfaction

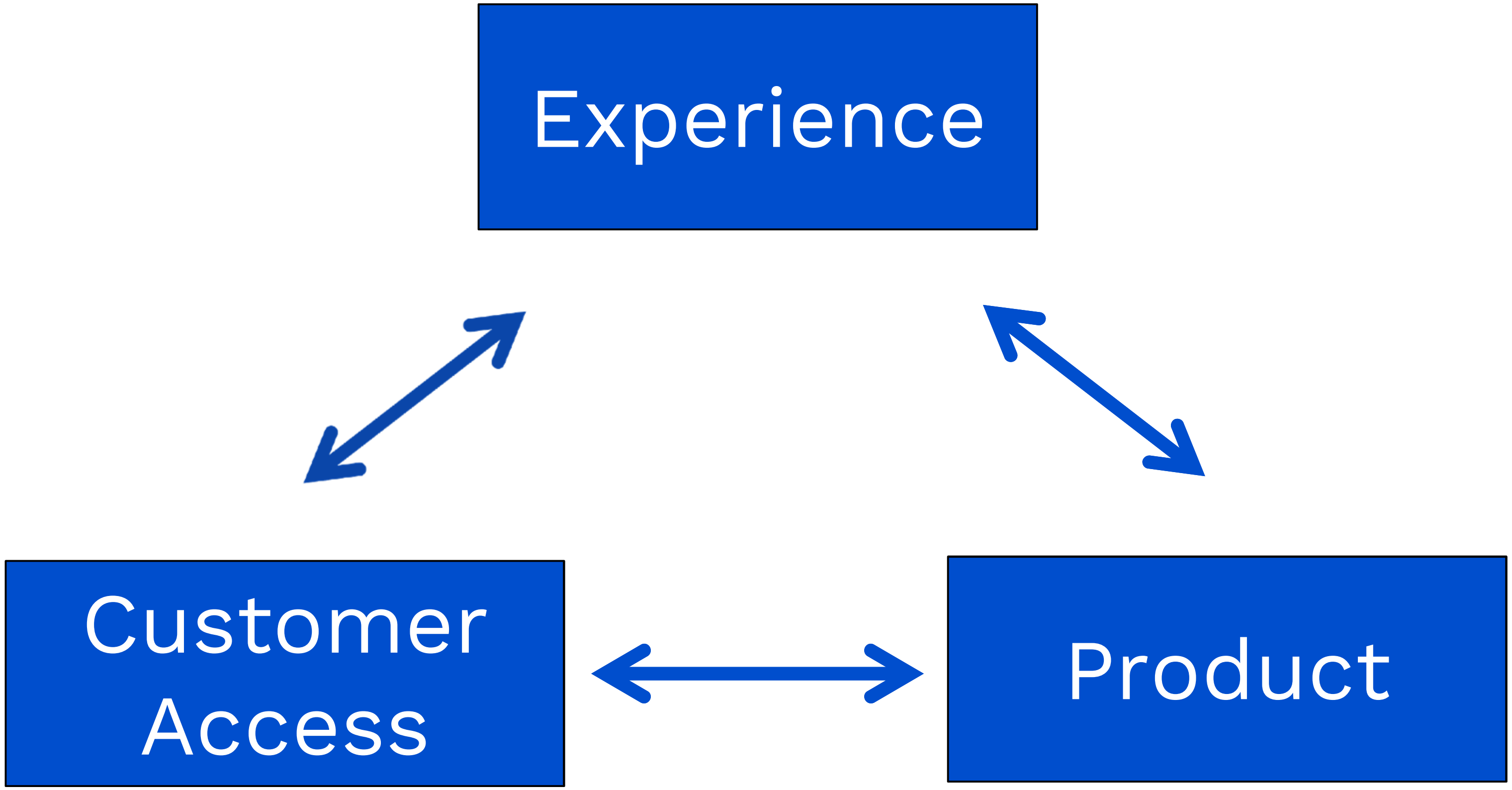
1. Data transparency and digital processes include **collection and utilisation of digital data** from all operational processes within a corporation
2. Data-based operational models **use the data to support decision making and to achieve efficiency**, often combined with external data (e.g. from markets, customers etc.)
3. Digital business models describe **value creating structures**, which can fundamentally change existing processes, products and models

Source: VCI Chemie 4.0, DistriConsult analysis

© DistriConsult – 2020
Personal & confidential

Customer access is an increasingly critical step

Analytical Framework



Source:IMD (Prof. Misiek Piskorski), DistriConsult analysis

© DistriConsult – 2020
Personal & confidential

What does this mean for Chemical Distribution?

Challenges and Opportunities

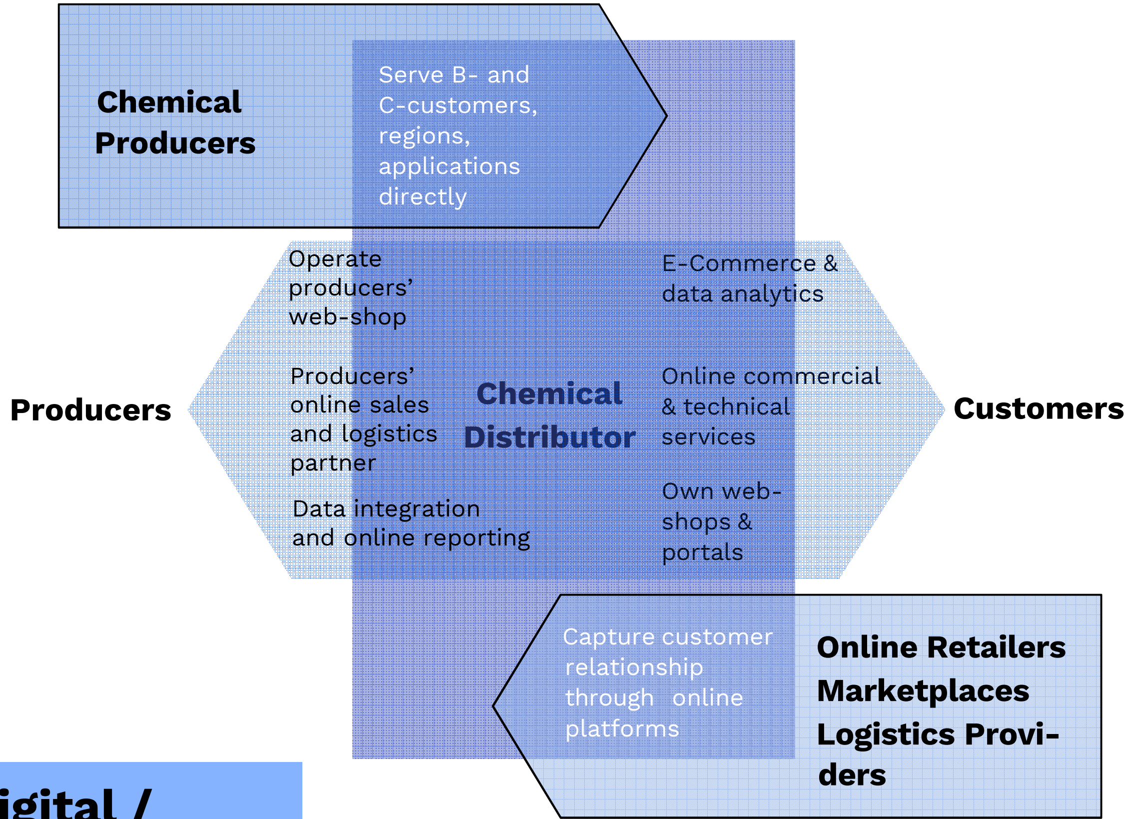
Chemical producers may attempt to access classical "distribution accounts" (smaller customers, applications or regions) via digital operating models …

… so Distributors will need to:

- Explore and capture digitally enabled cost reductions
- Identify and mitigate cyber security risks (keep control of owned data)
- Explore and capture own e-commerce activities

… but:

disruptive platforms will be limited for product categories involving a high level of application engineering e.g. Specialty Solutions and Performance Chemicals



Opportunities for own digital / e-commerce activities or with principals

Sources: Deloitte

Digital "channels" run by producers and intermediaries

Digital "Ecosystem" and Key Drivers

Schematic

Buyers' product need

Search Engine(s)

- chembid (DE)
- Chemberry (CH)
- GOOGLE (US)
- [Specialchem (FR)]
- UL Prospector (US)

"Conventional Sales"

Platform(s)

- 1688.com [Alibaba] (CN)
- CheMondis (DE)
- ECHEMI (CN)
- GoBuyChem (UK)
- KEMGO (US)
- KEMIEX (CH)
- Knowde (US)
- Molbase (CN)
- OKCHEM (CN)
- OneTwoChem (DE)
- PINPOOLS (DE)

Webshop(s)

- Brenntag Connect (NL / DE)
- Asellion (NL / DE)
- MyUnivar.com (US / CA)

Software Vendors

- Agilis (US)
- [Elemica (US)]
- Impratech (UK)
- SAP Ariba (DE)

Sellers' growth initiatives

Source: DistriConsult analysis

© DistriConsult – 2020
Personal & confidential

Platforms, market places and dedicated search engines

Frequently quoted “independent” Digitalisation Initiatives

No.	Name	Internet	Type	Comments
1	chembid GmbH & Co. KG (DE)	http://www.chembid.com	Search engine / marketplace	Founded and owned by German formulator / distributor Büfa; distributor Stockmeier took a minority share in spring 2019
2	ChemMondis GmbH (DE)	https://www.chemmondis.com	Marketplace	Founded by LANXESS; is reported to seek a broader investor base
3	GoBuyChem (UK)	https://www.gobuychem.com/	Marketplace	Founded by Bharat Bhardwaj, a petrochemicals trader in the UK; acts as counterparty in transactions
4	KEMGO (US)	https://www.kemgo.com/about	Marketplace	Founded by Ralph De Haan and Joseph Naaman (Co-CEOs); international scope
5	KEMIEX (CH	https://www.kemiex.com	Marketplace	Founded by Pau Franquet and Oriol Saludes (Co-CEOs), two ex-investment bankers at UBS; strong focus on “Life Sciences” and selected key product lines; highly “curated” offering
6	PINPOOLS (DE)	https://de.pinpools.com/	Marketplace	Founded by Alexander & Heribert-Josef Lakemeyer, two brothers and entrepreneurs; active since summer 2017; mostly covering “technical” applications (“verticals”)

Source: Company websites, DistriConsult analysis

© DistriConsult – 2020
Personal & confidential

Not every use case has a digital solution

Marketplaces / Web-shops have Limitations

More suitable ...

- “Simple”, standardised products
- Small quantities
- Non-ADR goods
- Repeat purchases
- Limited product bundling
- Supplier / distributor goes for “lowest delivered cost” approach
- Customer prefers spot purchases (and is willing to take risks)
- Transactional buyer(s)

Less suitable ...

- Complex products that are part of a “performance system”
- Initial purchases requiring supplier qualification / extensive product testing
- Joint development situations
- ADR goods or special hazmat needs
- High degree of product bundling
- Supplier / distributor goes for “highest perceived value” approach
- Customer prefers contracted supply (at lower perceived risk)
- Relationship buyer(s)

Source: DistriConsult analysis

© DistriConsult – 2020
Personal & confidential

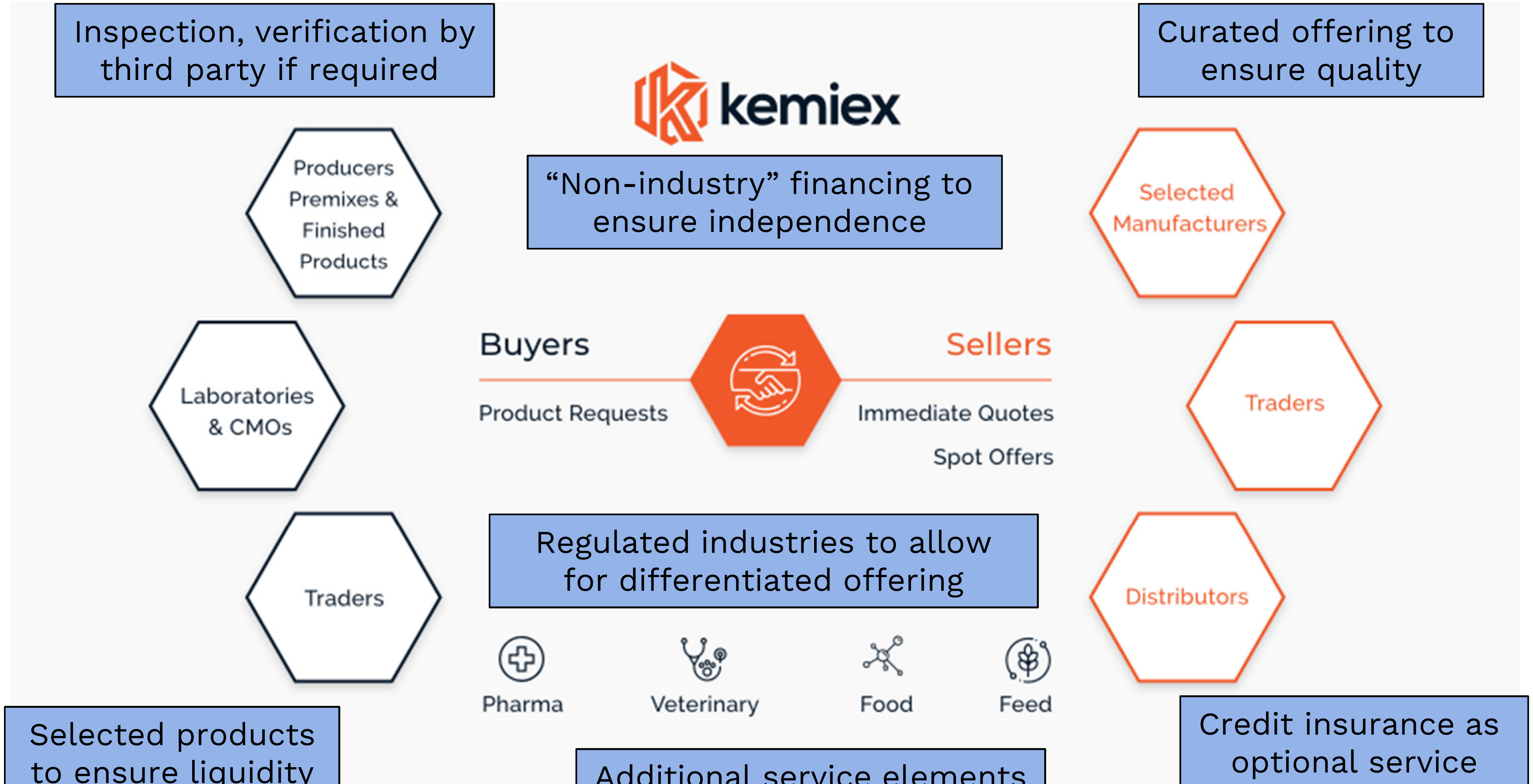
Insights from outside the industry clearly add value

KEMIEX (https://kemiex.com) as a "Differentiated Offer"

Inspection, verification by third party if required

Curated offering to ensure quality

"Non-industry" financing to ensure independence



Regulated industries to allow for differentiated offering

Selected products to ensure liquidity

Additional service elements under development

Credit insurance as optional service

Source: KEMIEX website, DistriConsult analysis

© DistriConsult – 2020
Personal & confidential

Why B2B is nowhere near B2C

Challenges for Marketplaces

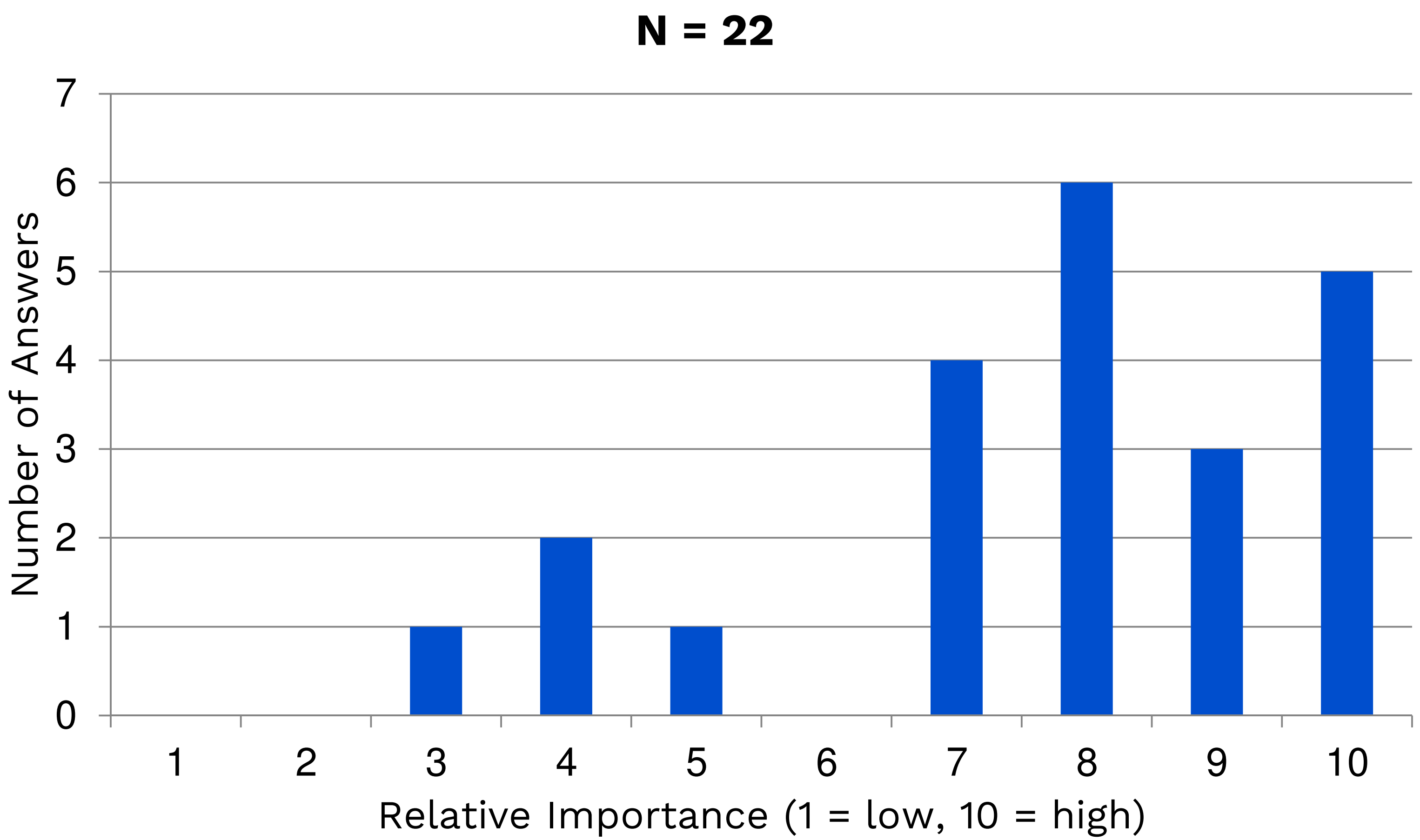
- **Technical Level**
  Interface with ERP / CRM; upload & updating of product data (incl. products grades, packaging type, delivery terms)
- **Individual Level (i.e. "Culture")**
  Adoption of new technologies; humans prefer well established procedures and processes
- **Company / Corporate Level**
  Increased visibility of prices makes differentiation difficult; highly sensitive nature of data used in process
- **Industry Level**
  "Transparency" as the core value proposition for buyers is often problematic for suppliers; often pre-qualification and approval of suppliers in a complex process; many industry-specific requirements; relationships do matter indeed

Source: Lars Schmitt in Journal of Business Chemistry 2019/03, DistriConsult analysis

© DistriConsult – 2020
Personal & confidential

Digitalisation seen as “very relevant” for the industry

Relative Importance of Digitalisation



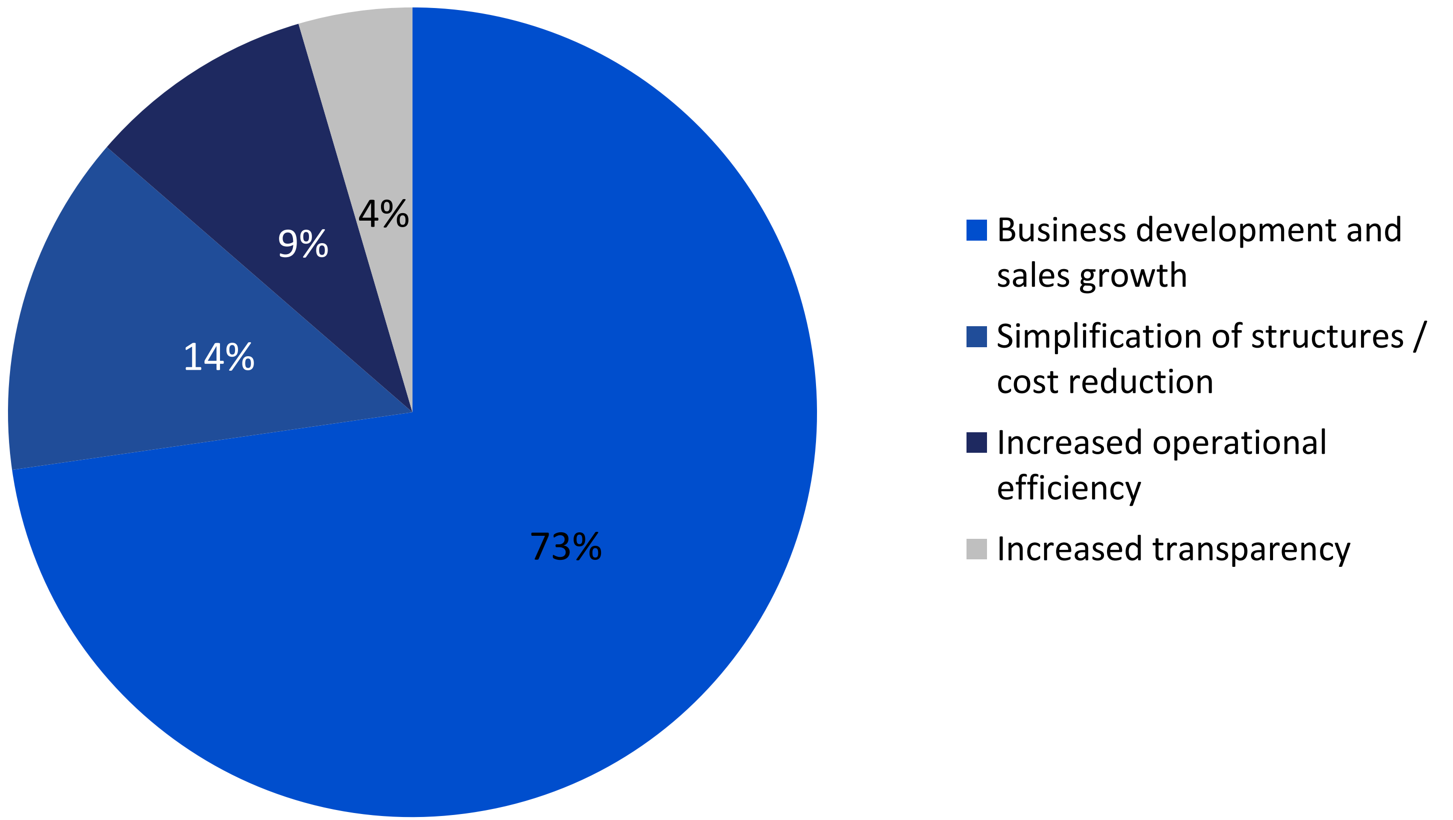
Source: BIZUP & DistriConsult survey and analysis

© DistriConsult – 2020
Personal & confidential

Digitalisation seen as “very relevant” for the industry

Reasons (Drivers) for Digitalisation

N = 22

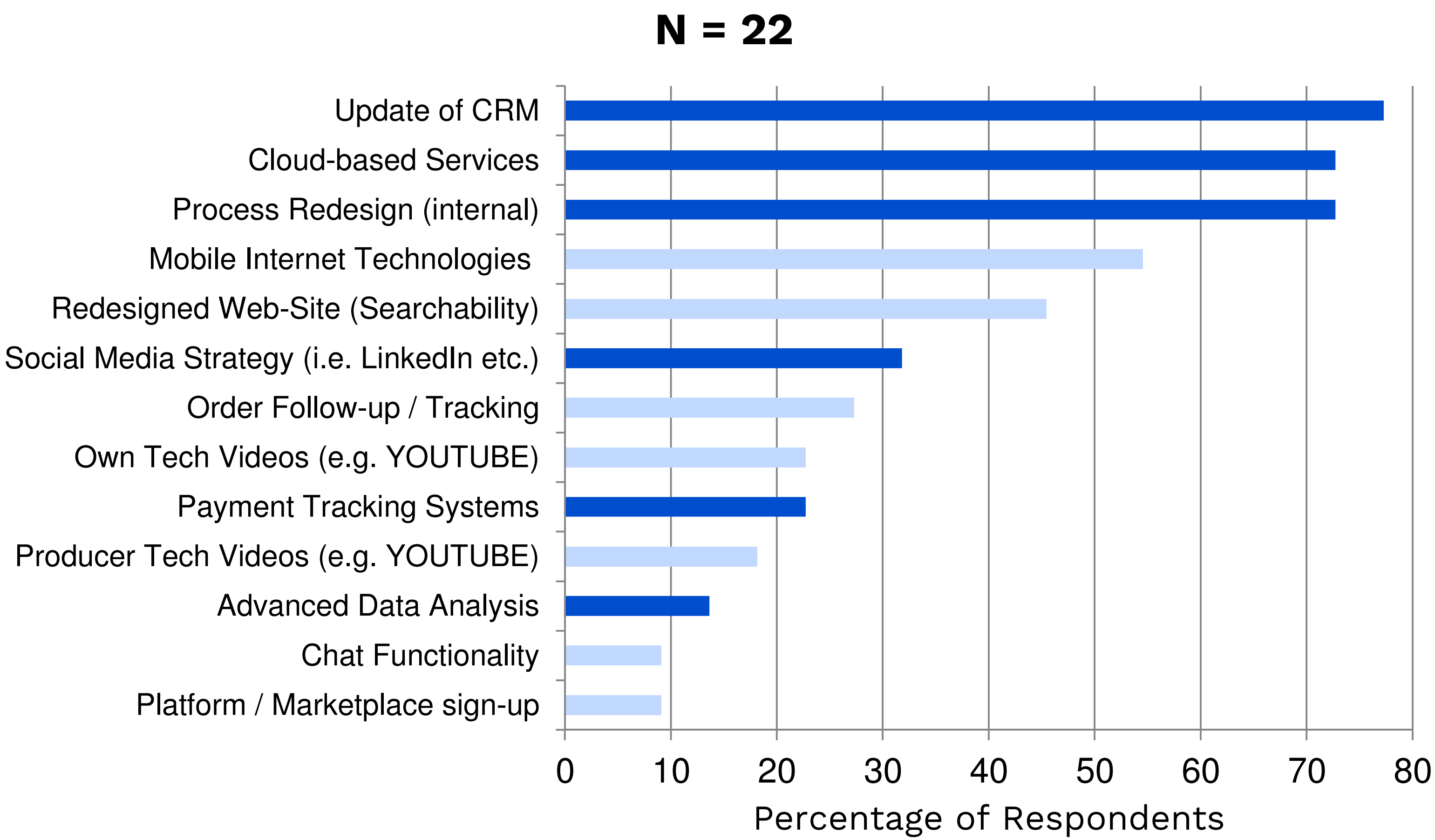


Source: BIZUP & DistriConsult survey and analysis

© DistriConsult – 2020
Personal & confidential

Digitalisation does mean many different actions

Digitalisation: Company Infrastructure vs. Customer Interface



Source: BIZUP & DistriConsult survey and analysis

© DistriConsult – 2020
Personal & confidential

Platforms do not yet play a significant role in Brazil

Knowledge and Use of Platforms

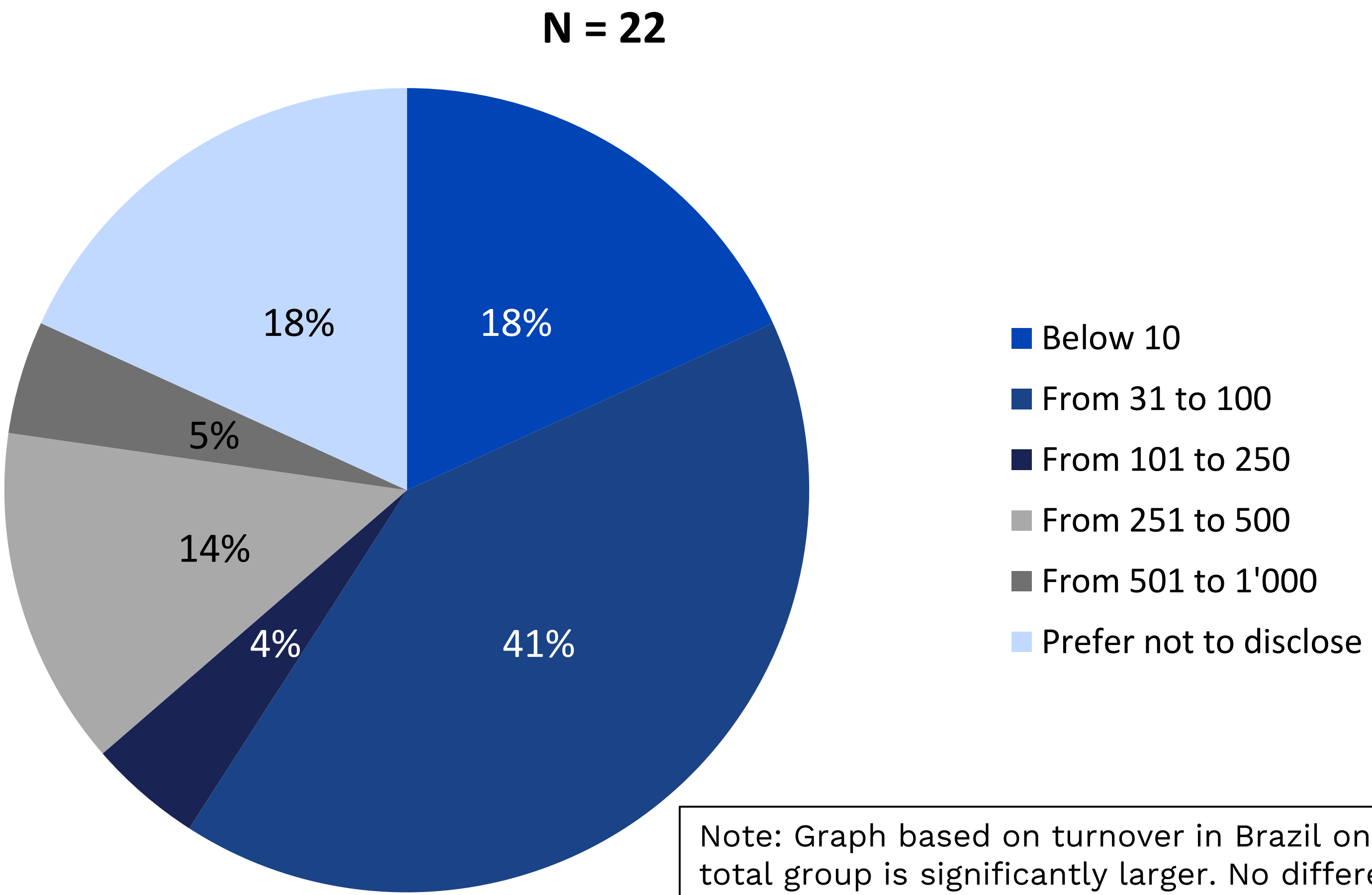
- Most of the respondents are not yet familiar with B2B platforms
- Besides Alibaba (1688.com) few other platforms dedicated to "chemicals" are really known to distributors in Brazil
- Only 2 out of 22 respondents have registered / done business on such platforms
- Platforms used to buy consumables, e.g. via Doodow, Fenix, Mercado Livre, NEI etc. are more widely known
- The chemical distribution industry in Brazil is quite likely not yet mature enough and hence lagging Europe / the U.S. in its use of digital platforms
- Shipments to Brazil would be a challenge for suppliers located abroad

Source: BIZUP & DistriConsult survey and analysis

© DistriConsult – 2020
Personal & confidential

Our survey covers a diverse range of companies

Respondent Turnover in Brazil in US$ mn (self declared)



Note: Graph based on turnover in Brazil only, even if total group is significantly larger. No differentiation between “agency” and “distribution”.

Source: BIZUP & DistriConsult survey and analysis

© DistriConsult – 2020
Personal & confidential

Chemical Distribution 4.0 –Where are we today?

DistriConsult Assessment

- The transition will be evolutionary, rather than transformational: we strongly advise you to **“watch and adapt”**
- **Distributors must be seen as “being part of the game”**
- For a **“transactional” type of purchase** (e.g. industrial chemicals, spot or simple repeat business) a **partial move to B2B-platforms and e-commerce is conceivable;** distributors should ensure a presence there
- As know-how and data are crucial for application-based products and tech-driven markets, digitalised communication (e.g. chats, blogs, webinars, bots) will help to **gain efficiencies**
- Managing the individual touch points with suppliers and customers is key, **being mindful of how much transparency is needed and/or justified**

Source: Company interviews, DistriConsult analysis

© DistriConsult – 2020
Personal & confidential

Chemical Distribution 4.0 – Where are we today?

DistriConsult Assessment – cont'd

- **Data security and ownership** will become an increasingly critical issue, with EU regulation (GDPR) seen as a standard setter
- The resulting **business models need to be customised**, considering many individual parameters, including geography, market served, competitive position and strategic intent
- A **"one size fits all" approach will not suffice** to satisfy evolving stakeholder demands
- Individual process steps can be augmented with digital tools, but **the "all encompassing" solution is not yet on the horizon**
- **Distribution is by definition a "local" activity at its core**
- **Relationships will continue to matter**, not for everybody, but for a sufficiently big group of downstream formulators

Source: Company interviews, DistriConsult analysis

© DistriConsult – 2020
Personal & confidential

Chemical Distribution 4.0 – Getting the basics right

Practical Considerations

- Digitise company data including relevant archives
- Introduce (if not done yet) and/or upgrade CRM system
- Raise awareness within workforce and start developing respective "digital" skills
- Evaluate and introduce new forms of delivery for technical service elements, e.g. chats incl. chat-bots to answer simple / recurring questions, webcasts / webinars, YOUTUBE videos for basic training
- Explore opportunities for enhanced data analysis (i.e. use of Business Intelligence "BI" and later Artificial Intelligence "AI" tools)
- Monitor the developments of the currently emerging platforms and "test" one or more (as not all of them may survive)

Source: Company interviews, DistriConsult analysis

© DistriConsult – 2020
Personal & confidential

Chemical Distribution 4.0: Digitalisation

Summary

- Opportunity vs. threat
- Some things are different from last time, such as Cloud Computing or Software-as-a-Service
- The customer interface matters and preferences in the market do change
- “Lowest delivered cost” versus “highest perceived value” … the “basic rules of marketing” are still valid in the digital age …
- The digital channel for B2B is here to stay … it’s above all a question of the share-of-market it will take …
- Digitalisation requires top-level attention

Be the partner of choice for Digital Transformation to your Principals and your Customers!

Source: Company interviews, DistriConsult analysis

© DistriConsult – 2020
Personal & confidential

DistriConsult is a specialised advisory practice

Contact

Guenther Eberhard

Managing Director

DistriConsult GmbH
Säntisstrasse 69C
8820 Wädenswil
Switzerland

Fon: +41 (0) 44 680 14 31
Fax: +41 (0) 44 680 14 32
Cell: +41 (0) 79 607 19 69
eMail: geberhard@districonsult.com
Web: www.districonsult.com

<u>Our co-operation partner for Brazil:</u>

Danilo Timich

Partner & Co-Founder

BIZUP Business Leverage
Rua Dr. Luiz Migliano, 1986 - 9th Floor/Room 912
05711-001 Morumbi
São Paulo - SP / Brazil

Fon: +55 (0) 11 29 25 70 71
Cell: +55 (0) 11 996 56 85 50
eMail: danilo.timich@bizupconsulting.com.br
Web: www.bizupconsulting.com.br

© DistriConsult – 2020
Personal & confidential